

A guide to 41 Thorpe Way, Cambridge, CB5 8UJ

Contents

1 Our house: your home	3
1.1 Contacts	3
1.2 Neighbours	3
2 Around the house	4
2.1 Hall	4
2.2 Lounge	4
2.3 Kitchen	4
2.4 Dining room	4
2.5 Garage	5
2.6 Stairs, Boiler Cupboard, Loft	5
2.7 Bedroom 1	5
2.8 Bedroom 2	5
2.9 Bedroom 3	5
2.10 Bathroom	5
2.11 Loft	6
2.12 Gardens	6
2.13 Front Garden: bins, beds and tap	7
2.13.1 Miscellaneous tasks	8
2.13.2 Monthly tasks	8
2.13.3 Yearly tasks	9
2.14 Rear Garden	9
2.15 Side Path	10
2.16 Tasks	11
2.16.1 Miscellaneous tasks	11
2.16.2 Yearly tasks	11
2.16.3 Greenhouse	11
3 Electricity, Gas and Water	12
3.1 Light bulbs	12
3.2 Internet and telephony	12
3.3 Solar PV information and how to best use electrical appliances	12

4	Safety and Insurance	15
4.1	Pets	15
4.2	Subletting	15
5	Decoration	16
5.1	Picture hanging	16
5.2	Paint	16
6	Maintenance	17
6.1	Doors	17
6.2	Locks and windows	17
6.3	Reporting problems	17
7	Local transport, shops and amenities	18
7.1	Transport	18
7.1.1	Public transport	18
7.2	Cycling	18
7.3	Late night travel	18
7.4	Health Centre	18
7.5	Shops	19
7.6	Green Box Schemes	19
7.7	Restaurants	19
7.8	Pubs	20
7.9	Football, fitness and other sports	20
7.10	Green spaces	20
8	What is not allowed	21
A	Manuals	22
A.1	Washing Machine	22
A.2	Dishwasher	60
A.3	Boiler	105
B	Certificates	122
B.1	Energy performance (EPC)	122
B.2	Gas	127
B.3	Electrics	127
C	House description	144

Last updated: 28/04/2019

1 Our house: your home

41 Thorpe Way has been my home on and off for more than a decade. However, my career has taken me elsewhere, so instead I hope you can enjoy it. It is a three-bedroom semi-detached house that has been upgraded significantly since we bought it. The windows are UPVC double glazed, the heating uses a state-of-the-art boiler system and the roof has electric solar panels to save you money. An energy efficiency rating of 89 reflects these upgrades. The house was renovated in 2015 to include new floors upstairs, a fresh paint job, a new kitchen floor, a greenhouse and extra insulation. The bathroom is only a few years old and is still in very good condition. We really hope you enjoy living here as we did. Our guide below is both to the house and local features, we hope you find it useful. Please let us know of mistakes and/or typographical errors by emailing <mailto:rob.izzard%40gmail.com>.

If you have problems in the house, for example with something broken or malfunctioning, you should contact the letting agents. You can also contact us at the above email address, especially if you do not understand how something works, but not about maintenance and safety checks: these are responsibility of the letting agent. Naturally, in the unlikely situation that you have a problem with the letting agent or us, we will try to sort things out amicably.

The full address of the house is 41 Thorpe Way, Cambridge, CB5 8UJ, United Kingdom.

1.1 Contacts

Your first point of contact is our agent, Radcliffe and Rust of 351-353 Newmarket Road, Cambridge, CB5 8JG, <http://radcliffeandrust.co.uk>, 01223 307 898. If you really do need to contact us, please email if possible.

- Dr. Robert Izzard (owner)
<mailto:rob.izzard%40gmail.com> +44(0)7931069467

In the event of an emergency, you should contact the emergency services (police, fire, ambulance) by calling **999**. You can also contact the local council in the event of some problems (see their website <https://www.cambridge.gov.uk/>).

1.2 Neighbours

Number 39 is currently (April 2019) empty. Silvia and Simone live at number 43: they are lovely people who appreciate a quiet life, please be amicable towards them (no late night noise, etc.). Walter lives at number 47 and is also a great guy who knows us well.

2 Around the house

The house is on two floors in late-1980s style which has been updated and redecorated. There are front and back gardens and a garage to the side.

2.1 Hall

Upon opening the front door you reach the hall which leads into the rest of the house. The front door has a standard Yale-type lock and a deadlock (both these should have new lock and key sets fitted in spring 2019). Both can be opened from outside with appropriate keys, and both can be opened from the inside without a key, so you cannot be trapped in the event of a fire. There is a cupboard in the hall which contains the yellow meter cupboard key (see Section 3). The front door has a plastic seal over the window to better keep in heat in the winter because the door is North facing.

The door to the garage can be bolted (top and bottom) from inside the house for added security and a more airtight seal. We highly recommend this to keep the heat in during the winter months.

2.2 Lounge

The lounge has its original laminate flooring: it's not in perfect condition, but still looks mostly fine. The back patio doors lead into the rear garden (see Section 2.14). There is no key lock for the doors, rather a turn screw lock that is easy to use in the dark and in the event of a fire. The back door can only be locked from the inside by lifting the handle up to engage the locking bolts and then turning the lock. Please lock the back door when you are out and/or not present to observe the entrance. The lock mechanism and bolts require occasional lubrication, for example with WD40, so if the door fails to close easily please lubricate it before trying to force it.

2.3 Kitchen

The kitchen has a gas hob/oven, fridge/freezer (new in 2018), top-of-the-line Samsung dishwasher and a high-quality Bosch washing machine. The manuals for these are either on top of the fridge or in the Appendix of this document.

The extractor fan (above the gas hob) filters can be washed in the dishwasher. It is your responsibility to keep them clean and make sure there is no build up of fat, dust or detritus: this would constitute a fire risk. They were cleaned prior to renting out the house.

There is a fire blanket near the hob/oven: please check this is present: any problems with this should be reported to the immediately.

The stopcock, control tap for the outside (front garden) tap, and the meter for the water supply are under the kitchen sink.

2.4 Dining room

The small room downstairs is known as the dining room, although we most recently used it as an office and book storage room. Naturally it is up to you what you choose do with it, except that it is not designed to be used as a permanent bedroom. A wardrobe and drawers are provided in this room.

2.5 Garage

2.5 Garage

We haven't kept a car in the garage in a long time, it has been mostly used for bicycle storage and brewing! The floor is insulated with polystyrene and the wooden front doors are layered on the inside with fire-resistant polystyrene insulation boards (*Jablite Premium* Insulation Board). A Yale lock protects the door which can be further bolted from the inside. A lawnmower and ladder (for accessing the loft) are provided in the garage.

The wooden door does not fit quite as well as it used to 30 years ago when it was installed, sorry about that. You can remedy this simply by following the instructions in Section 6.1.

2.6 Stairs, Boiler Cupboard, Loft

The stairs are carpeted. They lead to the three bedrooms, the bathroom and the loft. At the top of the stairs is the boiler cupboard which houses, unsurprisingly, the boiler. Also, the trap door leading to the loft is in the ceiling at the top of the stairs. To access the loft you will require a step ladder which is in the garage: please be careful when using the stepladder. The loft is boarded so you can use it to store belongings. The solar photovoltaic (PV) inverter is installed in the loft: please do not interfere with it and do not turn it off (unless there is a fault that requires this, naturally). The bubble wrap that is used to insulate the greenhouse during winter is also stored in the loft.

2.7 Bedroom 1

The main bedroom is the largest in the house. It has been refitted with a light-coloured, laminate floor and white paint so you can savour the sunlight through the south-facing Velux windows. The windows themselves were recently refitted with state-of-the-art, soft-coated, Pilkington-K glass filled with argon. The blinds on the windows are easily pulled down, and are spring-loaded so you only have to move the base of the blind towards the window to close them. *Please do not force the blind* because this will cause it to jam. Used properly, these blinds will not jam. Should they, you can unscrew them to release the mechanism, replace the blind and then screw them back into place. There is a small storage cupboard at the north end of the room.

2.8 Bedroom 2

Details are similar to bedroom 1 but this room is a bit smaller. This room has two storage cupboards.

2.9 Bedroom 3

The front-facing bedroom has laminate floor and was recently repainted white.

2.10 Bathroom

The bathroom was refitted a few years ago and is generally in good condition. The sink has a mirror next to it. There is also a convenient shaving point left of the sink.

The shower works well and has mains pressure from the condensing boiler. You can adjust the temperature using the taps. The bath works similarly. The corner shelf of the

shower is showing a little wear and tear but should still be perfectly functional. You are responsible for providing a shower curtain: we used one from John Lewis which resists mould well even after some years (<https://www.johnlewis.com>).

The toilet has a half-flush function to save water. If the flush button should break please let us know (replacements can be ordered simply on Ebay, it is not necessary to replace the mechanism in its entirety). The toilet occasionally blocks: this is just because the connector pipe is a little too small for hefty users (such as me!). You will have to unblock it in this case by use of the toilet brush (or similar) and then try again after it drains (but the floor will flood with repeated flushes, so please avoid this).

The cupboard under the sink has a slightly broken hinge but still shuts.

You are responsible for keeping the room dry and free from mould. We recommend the purchase of a dehumidifier to achieve this (for example, from <https://www.meaco.com/>, I have had their “20L low energy” dehumidifier for years and it is excellent).

2.11 Loft

The loft hatch at the top of the stairs provides access to the loft space which can be used to store items that are not too heavy. The loft “floor” is insulated with fibreglass and fire-resistant *Jablite Premium* Insulation Board to keep you warm. You can access the hatch by careful use of the provided stepladder (in the garage).

2.12 Gardens

The gardens are designed specifically to *not* be over sanitised. They are havens for local wildlife: we have seen at least twenty bird species, many bees (including burrowing bees which emerge in the spring but are harmless), butterflies, moths and grasshoppers, as well as squirrels, hedgehogs, mice and the occasional frog. It is a *requirement* of living in 41 Thorpe Way that you protect the animals and especially their habitat in the garden. There is no reason why you cannot happily live with them! For this reason, herbicides, pesticides, insecticides and similar nasty chemicals are banned from use in the garden except in dire circumstance. If you need to, say, keep insects from taking over the roses, use the hose to wash off the insect or spray on a dilute washing up liquid solution (use, say, Ecover which is biodegradable). Please do not prune everything so hard that the birds, insects and other animals have nowhere to live! Also, pets are not welcome in the house because of the damage cats and dogs do to both the garden and the animals that live in it.

You will have to keep the sycamore seeds from growing in the garden (and the gutters!): they quickly grow large and become a problem. These are numerous because of the trees in the cemetery at the back of the house. While the trees are beautiful, they will make many of seedlings that look like those shown in the image below and will grow out of control, especially in the flower beds, the patio and the gutters. In the lawn they can be mown, but in the beds they will need to be removed by hand. It’s cathartic work!

2.13 Front Garden: bins, beds and tap



2.13 Front Garden: bins, beds and tap

The front and back gardens connect along the side of the house which is protected by the side gate. A weatherproof (black, plastic-coated) padlock is provided to prevent casual thieves from walking through here. Keys for this are provided.

The three bins go in the front garden near the gate. You have a black bin for general waste, a green bin for garden/organic waste and a blue bin for recyclable waste. Please see the Cambridge City Council guide to learn what goes in which bin <http://www.downgardenservices.org.uk/treeseedlings.jpg> and when they are collected <https://www.cambridge.gov.uk/bin-collection-calendar>.

The front garden consists of several main areas:

- The west flower bed contains (from south to north) roses with wooden obelisk (these are white and red David Austin roses that are stunning in the summer), a red safe bush which flowers until late autumn, a tall buckthorn tree¹, and a (probably) dead magnolia near the front corner under the lamppost (it seems not to have survived the beast from the east winter of 2017/18).
- The driveway. Please do not kill all the plants that are growing up through the driveway: they are harmless! Most of this is clover and other wildflowers which are wonderful food for the local bees. Just keep it trimmed occasionally and you'll get on fine with it. You may need to top up the gravel tracks if you have a car and you will occasionally have to brush the gravel back into its tracks.
- The front flower bed. At the front this has primroses and cowslips which flower all year around, often even throughout the winter. The nasturtiums that were also there in 2017 but may or may not have survived the nasty 2017-18 winter. The north-east corner contains giant oriental poppies which are gorgeous in late spring and should survive many seasons (let me know!). The east bed contains strawberries which have survived every frost so far. You will need to learn to look after strawberries – they are delicious but may need thinning out.

Note that Cambridge Water's water supply valve is located in the front flower bed under a metal cover. Please do not cover this with soil or plant matter!

¹ <https://www.woodlandtrust.org.uk/visiting-woods/trees-woods-and-wildlife/british-trees/a-z-of-uk-native-trees/purging-buckthorn/> or maybe it is a dogwood, sorry, I'm not a tree expert!

2.13 Front Garden: bins, beds and tap

- The grass lawn. You will have to cut, feed and aerate the lawn. Please see <https://www.rhs.org.uk/advice/profile%3FPID%3D413> for instructions on how to look after a lawn. In the centre of the lawn is the cherry tree which has a small flower bed around it. Inside here are many flowers which should come up in summer and are very pretty. We know the lawn is not perfect: there is some moss in it and the surface is not very flat. This never bothered us too much, it's not designed for lying on and – being north facing – is not usually as warm as the back garden. That said, **you must not park cars or other vehicles on the lawn, or do anything that damages the lawn.** We say this because previous occupants have used the lawn as a driveway: you *must not do this*.
- The broadband connection cable runs from the street through the front flower bed (where the strawberries currently are located), alongside the fence and then into the house. **Please do not dig into the cable!**
- The south bed contains mostly hellebores which flower wonderfully in the winter months, even against the north-facing wall (see <https://www.rhs.org.uk/advice/profile%3FPID%3D113> for details on care). Please keep them well watered. There are also some alpine strawberries which grow in the bed: these taste wonderful in the summer and provide excellent cover.
There is a well-established bush near the front wall which should be kept cut back to prevent it overwhelming the hellebores: it will give you beautiful yellow flowers.
- There is a hook for a flower basket by the front door.

A number of other flowers, such as sweet peas, also grew in the front garden: their descendants may still be there. The north-west corner near the road was used as a wildflower region and attracted many butterflies and bees. I would highly recommend maintaining this aspect. There are a number of shrubs along the border with number 39: these will need pruning on occasion.

There is a tap on the front wall which is covered by an insulated pot when not in use (this prevents it from freezing in cold weather, although this has never happened even without the pot). This tap can be connected to the hose pipe which runs around the side of the house (you may find the hose in the garage). **Please turn off the tap when not in use.** The tap can be isolated using the valve under the sink in the kitchen.

2.13.1 Miscellaneous tasks

Check that the gutter drains properly and clean it out as required (do not attempt to remove material from the gutter on the roof, this is a task that should be arranged through the agent). Remove weeds if they annoy you or start to overwhelm the grass.

2.13.2 Monthly tasks

Lawn mowing, aeration.

2.14 Rear Garden

2.13.3 Yearly tasks

You will need to prune the buckthorn tree where possible but please do not do anything that requires more than simply pruning. Every few years the tree needs professional trimming: please get in touch with us if it reaches this state. You may need to prune the hellebores, shrubs along the border with number 39 and various other plants as required.

2.14 Rear Garden

The rear garden is a lovely, south-facing, quiet spot which is perfect for barbecues, relaxing and bird watching. It backs onto the cemetery which is – unsurprisingly – very quiet indeed. The garden is accessed from the side of the house or through the patio doors. There are two lights outside which can be plugged in using the socket in the lounge left of the patio doors at the base of the wall.

- The lawn requires the same attention as the front lawn (mowing, feeding and aerating as appropriate). However, please be very careful – especially in spring – because the lawn is also a wildlife home. In particular, in the spring time you will see many burrowing bees that live underground. These are **not dangerous** if you leave them alone.
- The flower bed nearest the house faces south and so has warm-loving plants including (from west to east) a lavender, wysteria (please tie this up when necessary), roses and rosemary. In spring grape hyacinths and tulips erupt from the ground, while later in the summer nasturtiums and dahlias grow happily. The ground is mixed with soil to keep it well drained. There is an insect hotel at the base of the rose bush, please lease this where it is.
- The east side includes the barbecue which should require no explanation (it works, but only burn dedicated charcoal in the barbecue, not other fuels like wood and/or furniture). An ivy bush runs along this fence and requires trimming in the winter (November is good). **Do not** trim this hedge during the spring and summer when birds use it for nesting and do not trim it too short that the birds cannot use it as habitat. Essentially: do not be over zealous with the trimmers!
At the north edge of this side is a large water butt which stores plenty of water for the garden. If this stops filling, you should check that the downpipe from the gutter is not blocked with leaves (I have installed a blocking device to prevent this but it may still happen eventually).
Near the base of the wall is the RCD (residual current device) which protects the electrical connection to the greenhouse.
- The west side has a small pond at the southern end. **You must keep this pond topped up with water so that any animal that falls in it can easily get out and so the local birds and animals can drink from it.** In the pond is a plant which the birds use as a perch: if it dies, please replace it. The pond is surrounded by bluebells and hyacinths, with a yellow-raspberry bush near the border with number 39. There are holly bushes near here to prevent the cats from intruding. The west border contains wallflowers and phlox which flower wonderfully in the summer. Its northernmost edge

has oregano and gooseberry, followed by sweet williams. The gooseberries should flower in the summer, try to get the fruit before the birds do!

- The south border has the pond at its western edge, and the greenhouse to its east. There are three main fruit bushes: a tayberry and two raspberries. In the middle of the border is a triple-pear tree: this has three types of pear on it and has already fruited despite being only a few years old. **You must keep the pear tree well watered!** Just to the west of this is a gorgeous teasel which produces many flowers yearly. Along the back is a winter jasmine growing up the fence, please look after this because it provides amazing winter colour. By the greenhouse are more oriental poppies, sweet williams, foxgloves, forget-me-nots and daisies (bellis).

The south border backs onto the cemetery which you can access from Newmarket Road. This brings the potentially undesirable brambles from outside the garden, but you can learn to live with them. Trim them if you must, but I highly recommend waiting for them to flower, then trim the spiky leaves and leave the flowers: you will end up with a crop of wonderful tasting blackberries.

- All along the west and south borders are alliums which flower in late spring and early summer, as well as crocuses, hyacinths and tulips. Try not to chop these down, they are not weeds and will provide you with much joy.
- In the south-east corner is the greenhouse. This is 6ft x 8ft in size, and is pinned into concrete slabs at its base. It has a size *louvre* window which can be manually opened and closed. The roof contains two automatically opening windows. The temperature at which these open can be changed by turning the knobs on them. The greenhouse has two power sockets which are protected by a weatherproof housing and an RCD (*residual current device* which is near the water butt on the wall of the house). The cable to the greenhouse runs along the side of the garden. **Be very careful not to dig through this cable!** There are hooks hanging off the greenhouse roof. The thicker, stronger hooks can be used for with hanging baskets. The thinner hooks are designed to attach twine to support plants. We have grown many plants such as tomatoes, aubergines, sage, parsley and chillies in the greenhouse. It is also ideal for starting off seedlings in the spring with a propagator. A greenhouse brings much joy to a garden especially in somewhere like Cambridge which has quite a lot of sunshine if not a great deal of intense heat.

2.15 Side Path

The path along the side of the house can be used to grow plants as well. It only gets some late afternoon sun, but does see a large fraction of the sky. We used to put troughs along the edge of the house with hops in the them: these grew happily up the trellises on the side of the house.

2.16 Tasks

2.16 Tasks

2.16.1 Miscellaneous tasks

Check that the gutter drains properly and clean it out as required. Check that the downpipe to the water butt functions correctly (occasionally it gets blocked by leaves). Remove weeds from the patio as necessary.

2.16.2 Yearly tasks

Trim the ivy in November (be careful not to trim this in the spring or summer when the birds use it to nest and as cover). Chop back the growth around the greenhouse to allow maximum light in. Clean out the greenhouse. Clean out detritus from the pond (but be careful not to damage the pond plants) and refill the pond. Remove ivy from the south-east corner of the house.

In summer you will have to trim the raspberries when appropriate.

2.16.3 Greenhouse

Every year the greenhouse requires a full clean (including the windows to remove algal growth). Removal of surrounding weeds is required (especially growing over from the cemetery – you may find it easier to go into the cemetery and chop the brambles from the other side). Bubble wrap should be used for the winter if you are going to heat the greenhouse (this is stored in the loft).

3 Electricity, Gas and Water

If you have any problem with the electrics, gas or water, please isolate the supply and obtain professional help through our agent before attempting to fix the problem yourself.

The gas, electricity and solar photovoltaic (PV) meters are in the cupboard by the front door. This is opened with the meter key which is stored in the hallway cupboard. Please ensure this key remains in the hallway cupboard after use. From time to time we will contact you by email to obtain readings from the meters: you are required to reply as soon as reasonably possible when we do so.

The electrical supply consumer board, also in the cupboard by the front door, contains a circuit breaker which, if it trips, indicates a fault either in the system or in an appliance. Please try to make sure you isolate and fix any fault before turning the circuit breaker back on. **If in doubt please seek professional advice.**

The solar-PV meter shows how much energy has been generated by the solar cells. You can monitor the solar PV power generation in real time (see Section 3.2 below). From time to time you will be asked to send the solar-PV meter reading to Rob by email ().

The water meter and stopcock are located under the kitchen sink. The isolating tap for the hot water is in the boiler cupboard upstairs.

3.1 Light bulbs

Please use *only* fluorescent or LED bulbs. Old-fashioned **filament bulbs are strictly banned** from the house, as are any new bulbs over 25W in power. There are two lamps above the kitchen sink which are halogen bulbs: if these should fail, please replace them with modern LED bulbs instead.

The bulb in the front bedroom is an LED bulb with a darkness-triggered timer on it which stays lit for three or six hours after sunset. You can use this to give the impression that the house is occupied even when you are out.

3.2 Internet and telephony

The house is connected to the Virgin optic fibre network and you can access broadband services, as well telephony, through this. Other companies will probably offer supply as well, although the BT and Sky connections used to be more expensive *and* slower. Please note that the broadband connection cable runs through the front garden: **do not dig into it!** Section 2.13 describes its location in more detail.

3.3 Solar PV information and how to best use electrical appliances

When you have internet access, please connect the *Solaredge* home gateway kit – stored in the lounge under the stairs – to your router (Fig. 1). This allows us and you to access real-time and historical information about the solar energy supply, allows fault detection by *Solaredge* and allows one to determine whether it is a good time to use appliances (i.e. when it is sunny!). Please contact Rob by email at rob.izzard@gmail.com to obtain the required login information for the *Solaredge* portal. There is also an app for Android and Apple phones and tablets. Technical details regarding the kit are at <https://www.solaredge.com/uk/products/communication/solaredge-home-gateway-kit#/>.

3.3 Solar PV information and how to best use electrical appliances



Figure 1: The Solaredge gateway kit. You should find this under the stairs. Please connect its power supply to the mains and its ethernet cable to your internet router.

The solar cells generate up to about 4 kilowatts of power on a sunny summer's day at peak times (around 12pm-2pm) but are useful throughout the year, even in the winter. You can save most power, hence most money, by using electrical appliances during these peak times: the solar power will be used by you first, only the unused excess is sent to the grid. The washing machine and dishwasher both have built-in timers up to the task of having them run at appropriate times. When your power use is less than that generated, you draw no power from the national electricity grid and hence reduce your electricity bill. Please note: Feed-in tariff and export payments go to Rob to pay off the large investment required to pay for the cells: you still get free electricity when it is available so you still benefit greatly from the solar panels. We bought our power through Ecoticity, who provide 100% green electricity. Given the impending climate disaster, please also choose a green supplier if you can.

About once every three months you are required to send Rob the solar-PV meter reading. You can find the meter in the cupboard, a photo of it is in Fig. 2, it has a sticker on it saying **PHOTOVOLTAIC SYSTEM**. I know this sounds obvious, but you'd be amazed how the previous tenants were confused by this! Also in the meter cupboard is a big round yellow off-switch and an RCD device (for the solar panels only) in case of a fault. Please do not turn the PV system off manually unless you have a very good reason to do so! Even if you are going away, or when you move out, you do not need to turn the PV system off. You should leave it on to feed power to the grid as much as is possible.

3.3 Solar PV information and how to best use electrical appliances

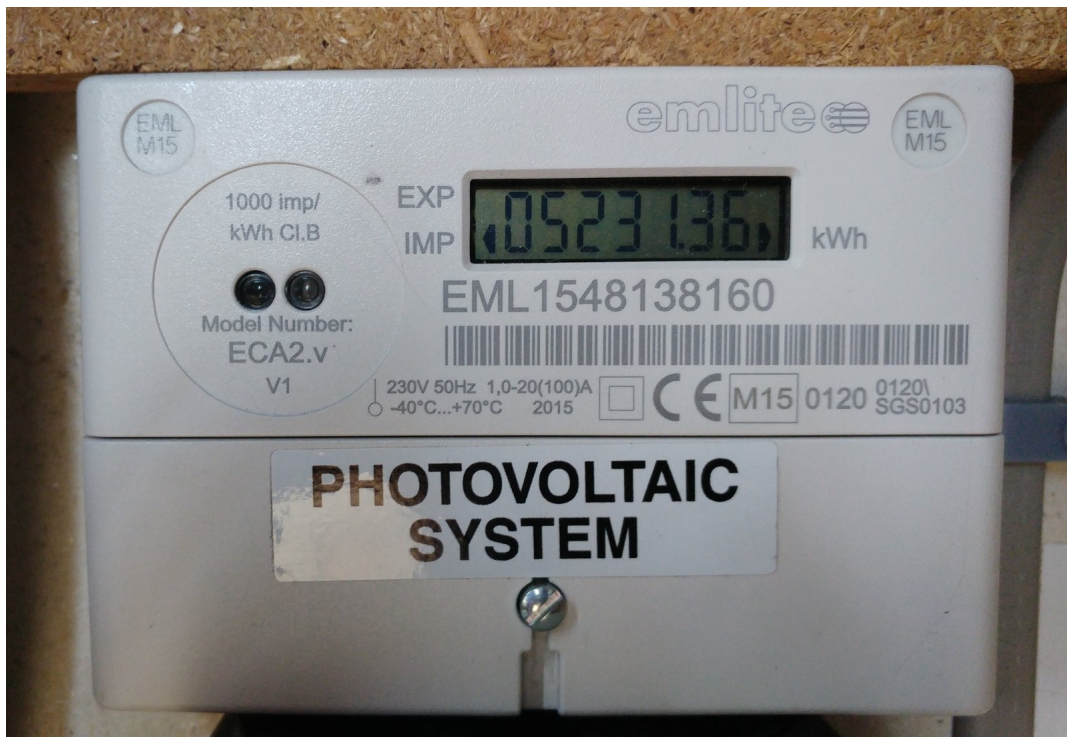


Figure 2: The solar-PV meter in the meter cupboard. Its LCD display contains the number you will have to email to Rob every few months or so.

4 Safety and Insurance

The house has several fitted carbon monoxide and smoke alarms. The smoke alarms are sensitive, so you may have to open the doors and windows when cooking. Sorry about this, but it is necessary. There is also a heat alarm in the kitchen. There is a fire blanket next to the gas hob, please check that this is in place prior to losing it and do not remove it.

When leaving the house, please check that windows are shut and doors are locked. You are responsible for security: while the house is insured by us, your belongings are not and it is up to you to obtain insurance for them.

Common sense is the key to a safe house. Escape routes should not be blocked. The front and back doors are the natural escape routes from the house, and these can always be unlocked from the inside.

4.1 Pets

Large pets, especially cats and dogs, are not welcome to avoid damage to the house and garden, and allow the wildlife that lives in the garden to survive. Small pets that cause no damage and do not interfere with the garden (by littering or killing wildlife) should not be a problem, but please contact us to ask first.

4.2 Subletting

Subletting is *strictly forbidden*. You are, naturally, welcome to have guests whenever you like, but if you want to rent out rooms to others, or have someone living long-term in the house who is not mentioned in the tenancy agreement, then the insurance is invalid *and* you are in breach of the tenancy agreement. There will be no exceptions to this rule.

5 Decoration

5.1 Picture hanging

Please use only **command strips** (or similar) on the paintwork and learn how to remove them using the recommended technique that should not damage the paintwork. We had no problems with these: they leave little or no residue, and 99% of the time do not remove paintwork. Command strips are available for hanging pictures and can be hooks or *Velcro*. Please see https://command.3m.co.uk/3M/en_GB/command-gb/hooks-strips/

5.2 Paint

Most of the house is painted in Dulux white emulsion which is easily available at local hardware stores such as B&Q, Wickes or Homebase. Some spare paint has been left in the garage: this must be well stirred prior to use.

Note: some rooms have been redecorated in early 2019. The paint in the garage may no longer be suitable: please use common sense if any redecorating is required.

6 Maintenance

6.1 Doors

One disadvantage of wooden doors is that they expand and contract a small amount, leading to them sometimes jamming slightly. However, this can be easily, and cheaply!, fixed by rubbing a small amount of Vaseline (or similar petroleum jelly) around the edge of the door. This acts as a lubricant and prevents the door from sticking. Please do this once per year around the front door and the garage door and you'll find it is *much* easier to open and close them.

6.2 Locks and windows

You may need to lubricate locks and window levers, for example with oil or WD 40, to keep them turning efficiently. This is particularly true with the patio doors to the rear garden. A little oil also prevents door hinges from creaking. The keys to the window locks are in a pot in the kitchen.

6.3 Reporting problems

Please report problems first to the letting agent. In case of emergency, see 1.1.

7 Local transport, shops and amenities

7.1 Transport

The house's location provides access to local public transport, cycle routes and the A14.

7.1.1 Public transport

Bus C3 (direction "Fulbourn" or city centre) goes from the other side of Thorpe Way: the stop is visible from the front door. However, it is often easier to wait for the bus to go past and then walk to Dudley Road (the other side of Ditton Lane) and pick it up there. There is no return ticket from Thorpe Way: it is the same price as a "Dayrider", so buy one of these. This bus goes to the city centre, then the main railway station, then Fulbourn. The return bus, from the city centre, is from St. Andrew's street.

Alternatively, from Newmarket Road by Marshall's airport one can pick up the Park and Ride and numbers 10, 11 and 12 buses. These may be quicker than the C3 because their route is straight down Newmarket Road rather than through the local housing estates.

The new Cambridge North railway station is only 10 minutes away by bicycle on the other side of the river. A new bridge across the river to Cambridge North and Chesterton is planned to be built in 2019: this should reduce the journey time significantly although by bicycle it is already quite quick if you travel via the *Green Dragon* bridge.

Cambridge airport, "Your East of England gateway", is about 10 minutes' walk away to the south <http://www.cambridgeairport.com>.

7.2 Cycling

Cambridge is a cycling city for good reason: it is flat, the local infrastructure is some of the best in the country and a bike is the only way to get around in a predictable time (motor traffic can often be terrible). The fastest route into the city is along Newmarket Road, but the safest and most pleasant route is undoubtedly by the river through Ditton Fields/Stourbridge Common/Midsummer common (see 7.10).

Cycling route information can be found at <https://www.cambridgeshire.gov.uk/residents/travel-roads-and-parking/cycling/cycle-routes-and-maps/>. The Cambridge Cycling Campaign is at <http://www.camcycle.org.uk/>.

7.3 Late night travel

The last C3 bus from the city centre leaves around 2340. However, if you are coming from London to the rail station you may well find you miss this, so a taxi is the best way to get to 41 Thorpe Way (about 10 minutes and, at the time of writing, £10). The largest taxi company in Cambridge is Panther (01223 715715 <https://www.panthertaxi.co.uk>) and they have always given us excellent service.

7.4 Health Centre

The *East Barnwell Health Centre* is at the west end of Thorpe Way, near the junction with Ditton Lane

<http://www.eastbarnwellhealthcentre.co.uk/>. This has doctors (general practitioners or GPs)

7.5 Shops

and nurses. There is a pharmacy, *Ditton Pharmacy*, next to the health centre <http://dittonpharmacy.co.uk/>.

7.5 Shops

The local corner store, at the junction of Thorpe Way with Ditton Lane, is the *One Stop* where there is also a cash machine. Next to this is a butcher's, a fish and chip shop and the pharmacy (see above).

A ten minute walk away are the shops on Newmarket Road, at the junction with Barnwell Road. These include a *Spa* grocery, a Chinese takeaway, the *Codfather* fish and chip shop, a takeaway pizza place (*Papa John's*) and a laptop repair shop. Heading east past *Marshall's* is a petrol station with a *Marks and Spencer* food outlet.

Towards town is the *Tesco* on Newmarket Road which forms part of the retail park (where there are many choices of shop and restaurant). Alternatively, and a similar distance away, there is a *Sainsbury's* at the other end of Barnwell Road. Just around the ring road in Trumpington is a *Waitrose* and there is an *Aldi* on Histon Road in central Cambridge. Mill Road is famous for its international and cosmopolitan selection of shops. In Cambridge town centre you have a *Sainsbury's* supermarket, *John Lewis* department store, many other stores and restaurants, and the wonderful *Cambridge Wine Merchants*, as well as many excellent pubs such as the *Maypole*, *Cambridge Blue*, *Kingston Arms*, *The Mill* and the *Cambridge Brew House* to name just a few.

There is a garden centre nearby in Horningsea (*Scotsdales* <https://scotsdalegardencentre.co.uk/store/horningsea/>), a few kilometres north along Ditton Lane. They have a cafe which is not bad, and while the prices for garden equipment and plants are a little steep, the service is excellent.

7.6 Green Box Schemes

Cambridge is lucky to have the excellent *Cambridge Organic Food Company* (<https://www.cofco.co.uk/>) provide a green box scheme which takes its produce from local providers whenever possible and delivers. We highly recommend them and their excellent choice of local products.

7.7 Restaurants

The best local curry house is the excellent *Pipasha* on Newmarket Road which is rated by the "Cambridge Curry Crew" page on Facebook as the best in the town. It is indeed excellent. There is also the *Navadanja* on Newmarket Road which has a mention in the Michelin Guide. However, the best curry in town is undoubtedly *Prana* on Mill Road: it needs to be tried!

The Wrestlers on Newmarket Road is not far away and has excellent Thai food. Next to *Pipasha* (on Newmarket Road) is a Chinese takeaway (quality unknown), there is also a Chinese takeaway next to the nearby *Spa* shop on Barnwell Road (quality unknown). The local fish and chip shop (on Ditton Lane) rebrands itself every couple of years. There may be good reasons for this!

If you head north to Fen Ditton there is the *Ancient Shepherds'* pub which has food too (see below) and if you head even further north to Horningsea there is a Michelin recommended restaurant *The Crown and Punchbowl*. In my experience they serve short pints and bad risotto – yet still they maintain their recommendation. . . judge for yourself.

If you are desperate, there is always *McDonald's* on the Newmarket Road–Wadloes Road junction. There is also a roadside kebab van on Newmarket Road in the evenings near to *McDonalds*. As I said, only if you are desperate.

7.8 Pubs

There are three pubs in the nearby village of Fen Ditton. The best way to get to them is to walk north up Ditton Lane, then turn left at the traffic lights along the footpath by the horse paddock, then turn right (north) and follow the path into the centre of Fen Ditton (this will take about 20 minutes). Of the three pubs, the *Ancient Shepherds* has decent beer, friendly owners and good food, the *King's Head* has beer that I can best describe as *not great* (alternatively: *vinegar*) and a “*you're not from round 'ere*” bunch of locals, and the *Plough* has a great view on the river, but uses this to overcharge for below-average, industrial food and distinctly average beers. These are, of course, subjective opinions: yours may vary.

Other than these, the nearest pub is the *Wrestlers* on Newmarket Road (near *Tesco*) which has excellent Thai food and a good beer selection. There is also the *Thirsty* beer garden on the river Cam in the Museum of Technology, at the back of the *Tesco*, which is open in the evenings (check their website at <https://www.wearethirsty.co.uk/>). *Thirsty* serves excellent beer and has visiting food trucks: expect to pay a lot for food that may – or may not – be good.

There are many excellent pubs in Cambridge, perhaps the best are (in no particular order) the Cambridge Blue, Kingston Arms, The Maypole and a number of other places down Mill Road. There are trendy offerings too, but you often pay only for the name.

7.9 Football, fitness and other sports

The *Abbey Stadium* is only a 15-minute walk away. Cambridge United typically struggle in the 2nd division, but the games are fun if you like that sort of thing. The language on a match day is colourful. Avoid the Peterborough games: emotions run high on such days!

The *Abbey Leisure Complex* is nearby and has a swimming pool (<https://www.cambridge.gov.uk/abbey-pool-complex>). A new ice rink is being built nearby which should open in autumn 2019 (<https://cambridgeicearena.com/>).

7.10 Green spaces

There is a nearby playground on Thorpe Way (turn right out of the house and follow the road for about 400 metres). The cemetery at the back of the house is also very peaceful and you can walk around it during the day.

The river Cam is easily accessible by turning left at the end of Thorpe Way: turn right into Ditton lane and walk to the crossing with the traffic lights. Cross and follow the path alongside the field with the horses. You will reach a footpath on the right which leads to Ditton Fields, the meadow next to the river. If you want to walk into the city centre, this is the most pleasant of all available routes.

Within cycling distance are the beautiful *Wicken Fen* nature reserve and *Anglesey Abbey*.

8 What is not allowed






























- *Smoking is banned everywhere on the premises.*
- *Bonfires are banned everywhere on the premises.* If you have material of which you would like to dispose, please use the bins, council disposal mechanisms or, for organic waste, the council-provided compost bin. Please *do not* use the barbecue to burn anything except charcoal.
- *Subletting is not allowed under any circumstances.*
- *Please respect the neighbours.* The house is semi-detached, and noise travels. Most people fully understand that, but some do not and we have little tolerance for anti-social behaviour.


















A Manuals









A.1 Washing Machine

The washing machine is a Bosch WAQ284S0GB. Information is online at <https://www.bosch-home.co.uk/product-list/exclusive/WAQ284S0GB>.

Overview of programmes

Programme/Type of laundry/Information	Settings
<p>Name of the programme</p> <p>Brief explanation of the programme and for which fabrics it is suitable.</p>	<p>Max. load;</p> <p>* Reduced load for Speed Perfect  setting</p> <p>Temperature</p> <p>Spin speed (depending on model)</p> <p>Possible programme settings</p>
<p>Cottons</p> <p>Hard-wearing fabrics, heat-resistant fabrics made of cotton or linen.</p> <p>Cottons + Prewash: Divide detergent between compartments I and II</p> <p>Note: The Speed Perfect  setting is suitable as a short programme for lightly soiled laundry.</p>	<p>Max. 8 kg/4* kg</p> <p> - 90 °C</p> <p> ... 1400 rpm</p> <p>Eco Perfect , Speed Perfect , Reduced Ironing , Aqua Plus </p>
<p>Easy-Care</p> <p>Textiles made of synthetic or blended fabrics.</p> <p>Easy-Care + Prewash: Divide the detergent between compartments I and II</p>	<p>Max. 3.5 kg</p> <p> - 60 °C</p> <p> ... 1200 rpm</p> <p>Eco Perfect , Speed Perfect , Reduced Ironing , Aqua Plus </p>
<p>Mixed Load</p> <p>A mixed load of fabrics made of cotton and synthetic fabrics</p>	<p>Max. 3.5 kg</p> <p> - 40 °C</p> <p> ... 1400 rpm</p> <p>Eco Perfect , Speed Perfect , Reduced Ironing , Aqua Plus </p>
<p>Delicate/Silk</p> <p>For delicate, washable fabrics, e.g. made of silk, satin, synthetic fibres or blended fabrics (e.g. silk blouses, silk scarves)</p> <p>Note: Use a detergent that is suitable for machine-washing delicates or silk.</p>	<p>Max. 2 kg</p> <p> - 40 °C</p> <p> ... 800 rpm</p> <p>Eco Perfect , Speed Perfect , Reduced Ironing , Aqua Plus </p>
<p> Wool</p> <p>Hand- or machine-washable fabrics that are made of wool or contain wool;</p> <p>Particularly gentle wash programme to prevent shrinkage of laundry, with longer programme breaks (fabrics rest in the detergent solution)</p> <p>Notes</p> <ul style="list-style-type: none"> ■ Wool is of animal origin, e.g.: Angora, alpaca, llama, sheep. ■ Use a detergent that is suitable for machine-washing wool. 	<p>Max. 2 kg</p> <p> - 40 °C</p> <p> ... 800 rpm</p> <p>-</p>

Programme/Type of laundry/Information	Settings
Rinse  / Spin  Programme for spinning or rinsing. Note: If you do not want to spin and instead want to rinse, select the additional programme setting Aqua Plus  .	Max. 8 kg - ▽ ... 1400 rpm Reduced Ironing 
Drain  the rinsing water, e.g. after setting ▽ (Rinse Stop)	Max. 8 kg - ▽ ... 1400 rpm -
Butter/Oil Textiles made of synthetic or blended fabrics. Notes <ul style="list-style-type: none"> ■ Do not allow stains to dry in, and remove any solid residue beforehand. ■ The temperature progression, soaking time and drum movement are all adjusted depending on the type of stain. ■ Stains are treated optimally without the use of additional special detergents. 	Max. 3.5 kg ❄ - 60 °C ▽ ... 1200 rpm Eco Perfect  , Speed Perfect  , Reduced Ironing  , Aqua Plus 
Red Wine Textiles made of synthetic or blended fabrics. Notes <ul style="list-style-type: none"> ■ Do not allow stains to dry in, and remove any solid residue beforehand. ■ The temperature progression, soaking time and drum movement are all adjusted depending on the type of stain. ■ Stains are treated optimally without the use of additional special detergents. 	Max. 3.5 kg ❄ - 60 °C ▽ ... 1200 rpm Eco Perfect  , Speed Perfect  , Reduced Ironing  , Aqua Plus 
Tomatoes Textiles made of synthetic or blended fabrics. Notes <ul style="list-style-type: none"> ■ Do not allow stains to dry in, and remove any solid residue beforehand. ■ The temperature progression, soaking time and drum movement are all adjusted depending on the type of stain. ■ Stains are treated optimally without the use of additional special detergents. 	Max. 3.5 kg ❄ - 60 °C ▽ ... 1200 rpm Eco Perfect  , Speed Perfect  , Reduced Ironing  , Aqua Plus 
SuperQuick 15' Extra-short programme of approx. 15 minutes, suitable for small items of lightly soiled laundry	Max. 2 kg ❄ - 40 °C ▽ ... 1200 rpm -

Programme/Type of laundry/Information	Settings
Shirt/Blouses Non-iron shirts/Blouses made of cotton, linen, synthetics fibres or blended fabrics. Note: Wash shirts/blouses made of delicates/silk in Delicates/silk programme.	Max. 2 kg ✖ - 60 °C ☞ ... 800 rpm Eco Perfect  , Speed Perfect  , Reduced Ironing  , Aqua Plus 
Dark Wash Dark fabrics made of cotton and dark easy-care fabrics Turn laundry inside-out before washing.	Max. 3.5 kg ✖ - 40 °C ☞ ... 1200 rpm Eco Perfect  , Speed Perfect  , Reduced Ironing  , Aqua Plus 



Consumption values table

Programme duration, residual moisture, energy and water consumption for the main washing programmes (approximate information)

Programme	Load	Energy consumption*	Water*	Programme duration*
Cottons 20 °C	8 kg	0.30 kWh	75 l	2 1/2 h
Cottons 40 °C	8 kg	1.00 kWh	75 l	2 3/4 h
Cottons 60 °C	8 kg	1.12 kWh	75 l	2 3/4 h
Cottons 90 °C	8 kg	2.25 kWh	85 l	2 3/4 h
Easy-Care 40 °C	3.5 kg	0.64 kWh	58 l	1 3/4 h
Mixed Load 40 °C	3.5 kg	0.54 kWh	51 l	1 h
Delicate/Silk 30 °C	2 kg	0.19 kWh	35 l	3/4 h
Wool 30 °C	2 kg	0.17 kWh	40 l	3/4 h

Programme	Approximate information on the residual moisture**		
	WA...28...	WA...24...	WA...20...
	Max. 1400 rpm	Max. 1200 rpm	Max. 1000 U/rpm
Cotton	48 %	53 %	62 %
Easy-Care	40 %	40 %	40 %

* The values may deviate from the specified values depending on the following factors: water pressure and hardness; water inlet temperature; type, amount and soiling of laundry; detergent used; fluctuations in the power supply; and additional functions selected.

** Information on residual moisture based on programme-dependent spin speed limits and maximum loads.


en Supplementary sheet for the installation and operating instructions










Programme	Approximate information on the residual moisture**		
	WA...28... Max. 1400 rpm	WA...24... Max. 1200 rpm	WA...20... Max. 1000 U/rpm
Delicate/Silk	30 %	30 %	30 %
Wool	45 %	45 %	45 %

* The values may deviate from the specified values depending on the following factors: water pressure and hardness; water inlet temperature; type, amount and soiling of laundry; detergent used; fluctuations in the power supply; and additional functions selected.

** Information on residual moisture based on programme-dependent spin speed limits and maximum loads.

Most efficient programmes for cotton fabrics

The following programmes (standard programmes, indicated by ) are suitable for cleaning normally soiled cotton fabrics and are the most efficient with respect to combined energy and water consumption.

Standard programmes for Cottons in accordance with the directive (EU) no. 1015/2010		
Programme + Temperature + Button	Load	Programme duration
Cottons +  °C +  Eco Perfect 	8 kg	4 h
Cottons +  °C +  Eco Perfect 	4 kg	4 h
Cottons +  °C +  Eco Perfect 	4 kg	4 h

Programme setting for testing and energy labelling in accordance with Directive 2010/30/EU with cold water (15 °C).
The specification of the programme temperature is based on the temperature stated on the care label in the fabrics. The actual washing temperature may deviate from the stated programme temperature for energy-saving reasons.

Notes

- This additional sheet is a part of your operating and installation instructions. Retain all documentation for subsequent use.
- Much more important information can be found in your operating and installation instructions.

WAQ284S0GB / ...

9000965826 (9410)





Register your new Bosch now:
www.bosch-home.com/welcome



Washing machine
WA...



en Instruction Manual and Installation Instructions

Your new washing machine

You have chosen a Bosch washing machine.

Please take a few minutes to read and become familiar with the advantages of your washing machine.

To meet the high quality demands required by Bosch, every washing machine that leaves our factory is carefully checked to ensure that it functions correctly and is in perfect condition.

For more information on our products, accessories, replacement parts and services, see our website www.bosch-home.com or contact our after-sales service centres.

If the operating and installation instructions describe different models, any differences will be pointed out at the relevant points in the text.



Read these operating and installation instructions before switching on the washing machine.

Display rules

⚠ Warning!

This combination of symbol and signal word indicates a possibly dangerous situation. Not heeding the warning can cause death or injuries.

Caution!

This signal word indicates a possibly dangerous situation. Not heeding the caution can cause property and/or environmental damage.

Note/tip

Information about the optimum use of the appliance/any other useful information.















1. 2. 3. / a) b) c)

The steps are represented by numbers or letters.




■ / -

Lists are represented by a small box or a dash.

Contents

 Intended use4	 Operating the appliance13
 Safety instructions4	Preparing the washing machine13
Electrical safety.4	Select programme/switch on the appliance.13
Risk of injury.5	Change the programme default settings13
Safety for children.5	Placing laundry into the drum13
 Environmental protection6	Measure and add detergent and care products14
Packaging/used appliance.6	Start the programme15
Tips on economical use6	Childproof lock15
 Getting to know the appliance7	Adding laundry15
Washing machine.7	Changing the programme.16
Control panel8	Cancel the programme16
Display panel8	Programme end16
 Laundry9	Removing laundry/switching off the appliance.16
Prepare the laundry9	 Sensors16
Sorting laundry9	Automatic load sensing.16
Starching10	Unbalanced load detection system . .16
Dyeing/bleaching10	 Setting the signal17
Soaking10	 Cleaning and maintenance18
 Detergent10	Machine housing/control panel. . . .18
Correct selection of detergent10	Drum18
Saving energy and detergent11	Descaling18
 Programme default settings ...11	Detergent drawer and housing18
Temperature11	Detergent solution pump blocked . .19
Spin speed11	The drain hose at the siphon is blocked20
Ready in time12	Filter in the water supply blocked . .20
 Additional programme settings12	 Faults and what to do about them20
Speed Perfect 12	Emergency release20
Eco Perfect 12	Information on the display panel21
Rinse plus.12	Faults and what to do about them. . .22
Water Plus12	
Easy Iron.12	

en Intended use

 After-sales service	23
 Technical data	24
 Positioning and connecting	24
Included with the appliance	24
Safety instructions	25
Installation surface	25
Installation on a base or a wooden joist floor	25
Installation on a platform with drawer	25
Installing the appliance in a kitchenette	25
Removing the transport locks	26
Hose and cable lengths	27
Water inlet	27
Water outlet	29
Levelling	30
Electrical connection	30
Before washing for the first time	31
Transportation	31

- The washing machine may be used by children over the age of 8 years and by persons with reduced physical, sensory or mental capacity or by persons with a lack of experience or knowledge if they **are supervised** or have been **instructed** by a responsible person. Children must not carry out any cleaning or maintenance work without supervision.
- This appliance is intended for use up to a maximum height of 4000 metres above sea level.
- Keep children under the age of 3 years away from the washing machine.
- Keep pets away from the washing machine.

Read the Instruction Manual and Installation Instructions and all other information supplied with the washing machine and use the machine accordingly.

Retain the documents for subsequent use.

* depending on the model

 **Intended use**

- For private domestic use only.
- The washing machine is suitable for washing machine-washable fabrics and hand-washable wool in water containing detergent.
- To be operated with cold* mains water or cold and hot* mains water (max. 60 °C), and standard detergents and care products which are suitable for use in washing machines.
- When measuring out the amount of all detergents, additives, care products and cleaning agents, always follow the manufacturer's instructions.

 **Safety instructions**

Electrical safety

 **Warning**
Danger of death!

There is a risk of electric shock if you touch live components.

- Never touch or hold the mains plug with wet hands.
- Only pull out the mains cable by the plug and never by the cable, as this could damage it.

Risk of injury

Warning **Risk of injury!**

- When the washing machine is lifted by its protruding parts (e.g. the washing machine door), the components may break off and cause injuries. Do not lift the washing machine by protruding parts.
- If you climb on the washing machine, the worktop may break and cause injuries. Do not climb onto the washing machine.
- If you lean on the washing machine door when it is open, the washing machine may tip over and cause injuries. Do not lean on the washing machine door when it is open.
- Reaching into the drum when it is turning can cause injuries to hands. Do not reach into the drum when it is turning. Wait until the drum has stopped turning.

Warning **Risk of scalding!**

When you are washing at high temperatures, there is a risk of scalding if you come into contact with hot water e.g. if hot water is being drained into a wash basin.

Do not reach into the hot detergent solution.

Safety for children

Warning **Danger of death!**

If children play with the washing machine, they may get into life-threatening situations or injure themselves.

- Do not leave children unattended near the washing machine.
- Do not let children play with the washing machine.

Warning **Danger of death!**

Children may lock themselves in appliances, putting their lives at risk.

For appliances that have reached the end of their service life:

- Disconnect the mains plug.
- Cut through the mains cable and remove it, along with plug.
- Destroy the lock on the washing machine door.

Warning **Risk of suffocation!**

Children may become wrapped in packaging/film or packing parts if allowed to play with them, or they may pull them over their heads and suffocate. Keep packaging, film and packaging parts out of the reach of children.

 **Warning**
Risk of poisoning!

Detergents and care products may be poisonous if consumed.

Keep detergents and care products out of the reach of children.

 **Warning**
Eye/skin irritation!

Detergents and care products may cause irritation if they come into contact with the eyes or skin.

Keep detergents and care products out of the reach of children.

 **Warning**
Risk of injury!

When you wash at high temperatures, the glass in the washing machine door gets hot.

Do not let children touch the hot washing machine door.

 **Environmental protection**

Packaging/used appliance



Dispose of packaging in an environmentally-responsible manner.

This appliance is labelled in accordance with European Directive 2012/19/EU concerning used electrical and electronic appliances (waste electrical and electronic equipment - WEEE).

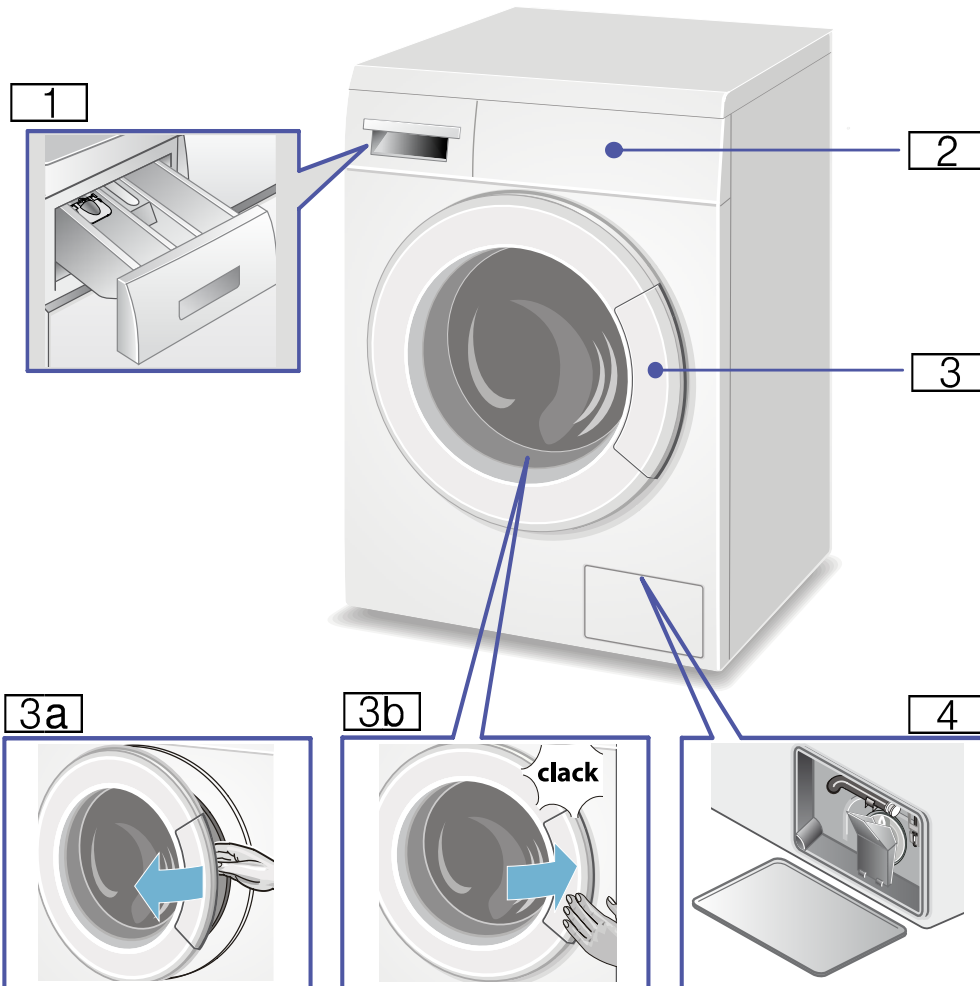
The guideline determines the framework for the return and recycling of used appliances as applicable throughout the EU.

Tips on economical use

- Always fill the appliance with the maximum amount of laundry for each programme.
Overview of programmes →: Supplementary sheet for the operating and installation instructions.
- Wash normally soiled laundry without a prewash.
- The selectable temperatures apply to the care labels on the textiles. The temperatures in the machine may deviate from this so that you get the optimum mix of energy-saving and washing results.
- **Energy-saving mode:** The display panel light goes out after several minutes, Start button flashes. To activate the light, press any button. Energy-saving mode is not activated if a programme is running.
- If the laundry is subsequently dried in a tumble dryer, select the spin speed according to the tumble dryer manufacturer's instructions.

Getting to know the appliance

Washing machine



- 1** Detergent drawer
- 2** Control/display panel
- 3** Washing machine door with handle

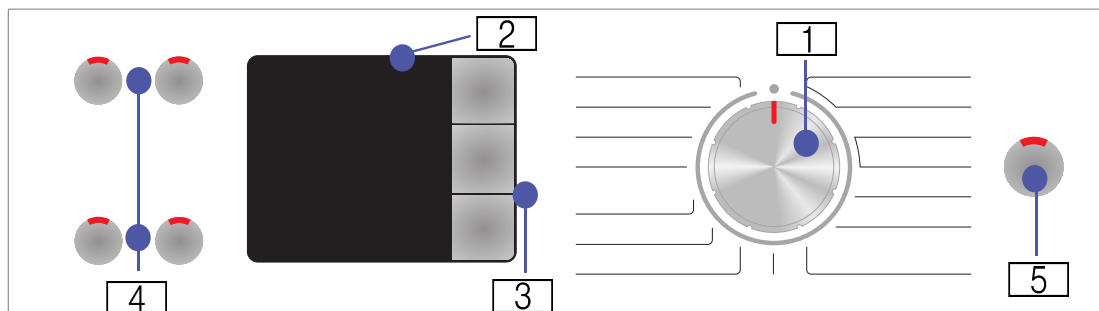
- 3a** Open the washing machine door
- 3b** Close the washing machine door
- 4** Service flap with or without a drainage hose*

* Depending on the model

en Getting to know the appliance

Control panel


Note: You can find possible programme default settings and additional programme settings in the overview; these differ depending on the model.



1 Programme selector for selecting a programme and switching the machine on and off via the "Off" position.

2 Display panel for settings and information.












3 Programme default settings:
Temperature, spin speed and "Ready in" time.
Changing the programme default settings
→ Page 11.

4 Additional programme settings : Speed Perfect , Eco Perfect , Easy Iron, Water Plus or Extra Rinse. Selecting additional programme settings → Page 12.

5 Start button for starting, interrupting (e.g. to reload laundry) and cancelling a programme.

Display panel

Note: The table shows possible setting options and information in the display panel; these differ depending on the model.

Setting options and information for the selected programme		
 - 90 °C	Temperature	in °C (degrees Celsius);  = cold
 ...1400 	Spin speed	in rpm (revolutions per minute);  = Rinse hold
1:30	Programme duration	Depends on the programme selection in h:min (hours:minutes)
1 - 24 h	Ready in time	Programme ends after ... h (h = hours)
8.0 kg	Max. load	in kg (kilograms)
Symbols for the programme sequence and information		
   -  -: Wash, rinse, spin, programme duration or end.		
 : Open the washing machine door, add laundry .		
 : Childproof lock		

Laundry

Prepare the laundry

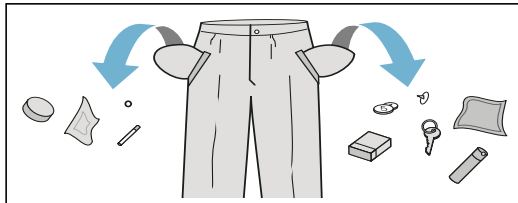
Caution!

Damage to the appliance/fabrics

Foreign objects (e.g. coins, paperclips, needles, nails) may damage the laundry or components in the washing machine.

You should therefore note the following tips when preparing your laundry:

- Empty any pockets.










- Look out for metal items (paperclips, etc.) and remove them.
- Wash delicates in a laundry bag (tights, underwired bras, etc.).
- Close any zips; button up any cover buttons.
- Brush sand out of pockets and collars.
- Remove curtain fittings or place curtains in a laundry bag.

Sorting laundry


Sort your laundry according to the care instructions and manufacturer's information on the care labels, depending on:

- Type of fabric/fibre.
- Colour:
Note: Laundry may discolour or not be cleaned correctly. Wash white and coloured items separately. Wash new bright fabrics separately the first time you wash them.

- Soiling:
Wash laundry with the same level of soiling together.
Examples of levels of soiling:
 - **Light:** Do not prewash; if necessary, select the additional programme setting SpeedPerfect .
 - **Normal**
 - **Heavy:** Load less laundry, select a programme with prewash
 - **Stains:** Remove/pretreat stains while they are fresh. First, dab the stain with soapy water/do not rub. Then wash the items of laundry with the appropriate programme. Stubborn or dried-in stains can sometimes only be removed by washing several times.
- Symbols on the care labels:
The numbers in the symbols indicate the maximum washing temperature that may be used.
 - : Suitable for a normal washing process; e.g. Cottons programme.
 - : A gentle washing process is required; e.g. Easy-Care programme.
 - : An especially gentle washing process is required; e.g. Delicate/Silk programme
 - : Suitable for washing by hand; e.g.  Wool programme.
 - : Do not wash the laundry in the machine.

Starching

Note: Laundry must not be treated with fabric softener.

Starching is possible in all wash programmes if liquid starch is used. Measure starch into compartment  in accordance with the manufacturer's instructions (clean first if necessary).

Dyeing/bleaching

Dye should only be used in normal household quantities. Salt may damage stainless steel. Always follow the dye manufacturer's instructions.

Do **not** use the washing machine to bleach clothes.

Soaking

1. Pour soaking agent/detergent into compartment **II** according to the manufacturer's instructions.
2. Turn the programme selector to the Cottons 30 °C programme.
3. Press the start button.
4. After approx. 10 minutes, press the start button again to pause the programme.
5. After the required soaking time, press the start button again, if the programme is to be continued or changed.

Notes

- Load laundry of the same colour.
- No additional detergent is required; the soaking solution is used for washing.

Detergent

Correct selection of detergent


The care label is crucial for selecting the correct detergent, temperature and treatment of the laundry. → See also www.sartex.ch

Visit www.cleanright.eu to find further information on detergents, care products and cleaning agents for domestic use.

- **Standard detergent with optical brighteners**
Suitable for heat-resistant white laundry made from linen or cotton. Select the Cottons / cold - max. 90 °C programme.
- **Detergent for colours without bleach or optical brighteners**
Suitable for coloured laundry made from linen or cotton. Select the Cottons / cold - max. 60 °C programme.
- **Detergent for colours/delicates without optical brighteners**
Suitable for coloured laundry made from easy-care fibres, synthetic fibres. Select the Easy-Care / cold - max. 60 °C programme.
- **Mild detergent**
Suitable for delicate, fine fabrics, silk or viscose. Select the Delicate/Silk / cold - max. 40 °C programme.
- **Detergent for woollens**
Suitable for woollen fabrics. Select the Wool / cold - max. 40 °C programme.

Saving energy and detergent

For light and normal soiling, you can save energy (lower washing temperature) and detergent.

Saving	Soiling/note
Reduced temperature and detergent quantity as per the recommended dosage 	Light No visible dirt or stains. Clothing has taken on some body odour, e.g.: <ul style="list-style-type: none"> ■ Light summer/sports clothing (worn for a few hours) ■ T-shirts, shirts, blouses (worn for up to one day) ■ Guest bed linen and hand towels (used for one day) Normal Visible dirt or a few light stains, e.g.: <ul style="list-style-type: none"> ■ T-shirts, shirts, blouses (sweat soaked, worn a few times) ■ Towels, bedding (used for up to one week)
Temperature as per the care label and detergent quantity as per the recommended dosage for heavy soiling	Heavy Dirt and/or stains clearly visible, e.g. tea towels, baby items, work clothing


Note: When measuring the amount of all detergents/additives/care products and cleaning agents, please always check the manufacturer's instructions and information. → Page 14

P+ Programme default settings

Note: You can find possible programme default settings in the overview; these differ depending on the model.

The programme default settings for all programmes are preset at the factory and are displayed in the display panel after the programme is selected.

Temperature

( 40°C 60°C)

Depending on the programme progress, you can change the temperature (in °C) before and during the programme.


Press the temperature button repeatedly until the required temperature is displayed in the display panel. The maximum temperature that can be selected depends on the programme which has been selected.

Spin speed

(**Centrifug.;** )

Depending on the programme progress, you can change the spin speed (in rpm; revolutions per minute) before and during the programme.

To do this, press the spin speed button repeatedly until the required spin speed is displayed in the display panel. The maximum speed that can be selected depends on the model and programme that has been selected.

Setting : Rinse hold. The laundry remains in the water after the final rinse to prevent creasing if the laundry will not be taken out of the washing machine immediately.


Ready in time

(⏸)

Before starting the programme, the programme end Ready in time can be preselected in hourly increments (h = hours) up to a maximum of 24 hours.

1. Select the required programme.
Note: The programme duration is displayed in the display panel.
2. Press the Ready in button repeatedly until the required number of hours is displayed in the display panel.
3. Press the Start button.
The set Ready in time is now active. The selected programme starts automatically and ends after the selected number of hours. After the programme has started, the programme duration, e.g. 2:30 (hours:minutes) is displayed in the display panel.



Adding laundry after the Ready in time is active:

1. Press the Start button.
2. **YES** and  lights up in the display panel. The washing machine door can be opened and laundry can be added.
3. Close the washing machine door.
4. Press the Start button again. The preselected time continues to run.


Additional programme settings

Note: You can find possible additional programme settings in the overview; these differ depending on the model.

Speed Perfect

( **Speed Perfect**;  **Turbo Perfect**)

Washes in a shorter time but with a washing outcome comparable to that of the programme without selecting the


additional  Speed Perfect/
Turbo Perfect programme setting.

Note: Do not exceed the maximum load for the programme. See the supplementary sheet for the operating and installation instructions; programme overview.

Eco Perfect

(**Eco Perfect**  )

Energy-optimised washing by reducing the temperature while achieving washing result that is consistent with the standard program.

Note: The washing temperature is lower than the selected temperature. The Allergie/Hygiene/Sensitive program is recommended for washes with particularly high hygienic requirements. If you do not have an Allergy/Hygiene/Sensitive program on the program selector, select a higher temperature or select the additional preset Speed Perfect  program.

Rinse plus

(**Extra** )

Extra rinse. For areas with very soft water or for an even better rinsing result.

Water Plus

()

Increased water level and additional rinse cycle, extended washing time. For areas with very soft water or for an even better rinsing result.

Easy Iron

(**Fácil** )

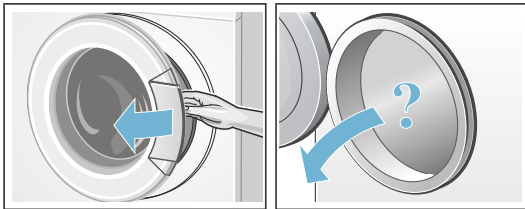
For gentle final spin with subsequent fluffing. Residual moisture in the laundry is slightly increased.

Operating the appliance

Preparing the washing machine

Note: The washing machine **must be correctly installed** and **connected**.
From → *Page 24*.

1. Plug in the mains plug.
2. Turn the tap on.
3. Open the washing machine door.
4. Check that the drum is completely drained. Drain if necessary.



Select programme/switch on the appliance

Note: If you have activated the childproof lock, you must first deactivate it before you can set a programme.
→ *Page 15*.

Use the programme selector to select the required programme. Can be turned in both directions.

The appliance is switched on.

The **programme default settings** and loading information for the selected programme appear in the display panel:

- The programme duration,
- The preset temperature,
- The preset spin speed and
- The maximum load.

Change the programme default settings

You can change the programme default settings:

To do this, repeatedly press the required button for the programme default settings until the required setting is displayed in the display panel. Then press the "Start" button to start the programme.

The programme default settings are not saved when the appliance is switched off.

Programme default settings
→ *Page 11*.

Placing laundry into the drum

Warning **Risk of death!**

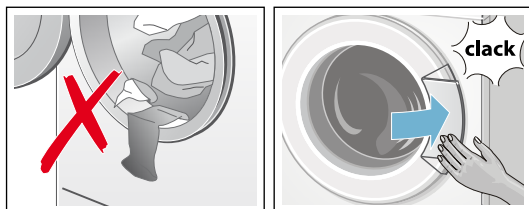
Items of laundry pretreated with cleaning agents that contain solvents, e.g. stain remover/cleaning solvent, may cause an explosion after being loaded into the washing machine. Hand-rinse these items of laundry thoroughly beforehand.

Notes

- Mix items of laundry of varying sizes. Laundry items of different sizes distribute themselves better during the spin cycle. Individual items of laundry may lead to imbalances.
 - Observe the maximum specified load. Overfilling has a negative impact on the washing result and promotes creasing.
1. Unfold presorted items of laundry before placing them in the washing drum.

en Operating the appliance

2. Make sure that no items of laundry are trapped between the washing machine door and the rubber seal, and close the door.



Measure and add detergent and care products

Caution!

Damage to the appliance

Cleaning agents and agents for pretreating laundry (e.g. stain removers, prewash sprays, etc.) may cause damage if they come into contact with the surfaces of the washing machine. Do not allow these agents to come into contact with the surfaces of the washing machine. If necessary, immediately wipe away spray residue and other residues/droplets with a damp cloth.

Measuring

Dose the detergents and care products according to:

- Water hardness. Ask your water supply company.
- The manufacturer's specifications on the packaging.
- The amount of laundry.
- Soiling → Page 9.

Filling

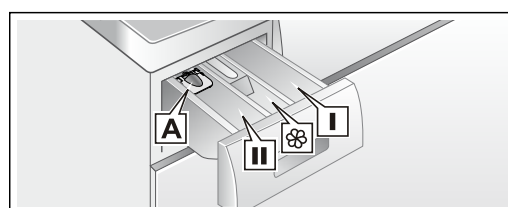
Warning **Eye/skin irritation!**


Detergent and care products may spray out if the detergent drawer is opened while the machine is in operation. Open the drawer carefully.

Rinse eyes or skin thoroughly if they come into contact with detergent/care products. If swallowed accidentally, seek medical advice.

Note: Dilute viscous fabric softener and fabric conditioner with water; this prevents blockages.

Pour the detergent and care products into the appropriate compartments:



Measuring aid* A	For liquid detergent
Compartment II	Detergent for the main wash, water softener, bleach, stain remover
Compartment 	Softener, starch, do not exceed the maximum
Compartment I	Detergent for prewash

1. Pull out the detergent drawer as far as possible.
2. Add detergent and/or care products.
3. Close the detergent drawer.

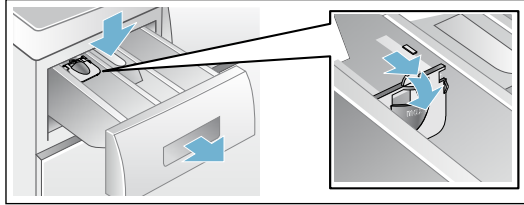
Measuring aid* for liquid detergent

*Depending on the model

Position the measuring aid for measuring liquid detergent:

1. Pull out the detergent drawer. Press down the insert and fully remove the drawer.
2. Slide the measuring aid forwards, fold it down and click it into place.

3. Reinsert the drawer.



Note: Do not use the measuring aid for gel detergents and washing powder, or for programmes with prewash or when the Ready in time is selected.

For models without a measuring aid, pour the liquid detergent into the appropriate dispenser and place it in the drum.

Start the programme


Press the Start button to start the programme.


During the programme, the display panel shows the Ready in time or, after starting the wash programme, the programme duration and the symbols for the programme progress. Display panel → Page 8.


Note: To secure the programme against being inadvertently adjusted, select the childproof lock.

Childproof lock

Prevent the set functions of the washing machine from being accidentally changed by activating the childproof lock when the programme has started.

To **activate/deactivate** the childproof lock, press and hold the "Start" button for approx. five seconds. The  symbol appears in the display panel.




-  lights up: The childproof lock is active.

-  flashes: The childproof lock is active and the programme selector has been adjusted. To prevent the programme from stopping, turn the programme selector back to the original programme. The symbol lights up again.

Note: The childproof lock remains active after the programme has ended and the appliance is switched off. You must always deactivate the childproof lock if you want to start a new programme.

Adding laundry

After starting the programme, you can add or remove laundry:

1. Press the Start button to pause the programme.
The Start button indicator lamp flashes and the machine checks whether it is possible to add laundry.
Note: Do not leave the washing machine door open for too long when adding laundry as water from the laundry may leak out.
If, in the display panel:
 - **Both** the **YES** and  symbols light up, it is possible to add laundry.
 - **NO** flashes, wait until the **YES** and  light up.
Do not open the washing machine door until **both** the **YES** and  symbols are lit.
 - **NO** lights up, it is not possible to add laundry.
For safety reasons, the washing machine door remains locked when the water level or temperature is high, or while the drum is rotating, and it is not possible to add laundry during this time.
2. To continue the programme, press the Start button.

Changing the programme

1. Press the Start button to pause the programme.
2. Select a different programme.
3. Press the Start button again. The new programme starts from the beginning.


Cancel the programme

1. Press the Start button to cancel the programme.
2. To cool the laundry: Set the programme to Rinse.
3. Press the Start button again. The rinse programme starts.

After the programme has ended, you can remove the laundry.

Programme end

 appears in the display panel and the start button indicator lamp is off.

If the  symbol also appears in the display panel, the washing machine has detected too much foam during the wash programme and automatically switched on a rinse cycle to remove the foam.

Note: Add less detergent for the next washing cycle with the same load.

Removing laundry/switching off the appliance

1. Open the washing machine door and remove the laundry.

Notes

- If you cannot open the washing machine door, the appliance is still locked. Wait until the programme ends.
 - If the display panel does not light up, energy-saving mode is active. To activate, select any button.
2. Set the programme selector to the Off position. The appliance is switched off.

3. Turn off the tap.

Note: Not required for Aqua-Stop models.

Notes

- Do not leave any items of laundry in the drum. They may shrink in the next wash or discolour another item.
- Remove any foreign objects from the drum and the rubber seal – risk of rusting.



- Leave the washing machine door and detergent drawer open so that any residual water can dry away.

Sensors

Automatic load sensing

The automatic load sensing function adapts the water consumption ideally to each programme depending on the type of fabric and the load.

Unbalanced load detection system

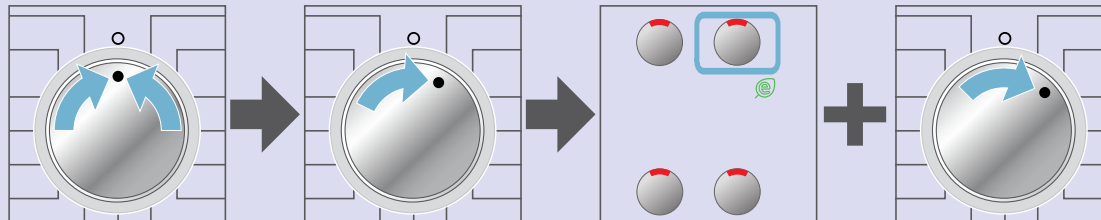
The automatic unbalanced load detection system detects imbalances and ensures even distribution of the laundry by repeatedly starting and stopping drum spinning.

If the laundry is extremely unevenly distributed, the speed is reduced or the spin cycle is not performed for safety reasons.


Note: Place large and small items of laundry evenly in the drum. → Page 22

Setting the signal

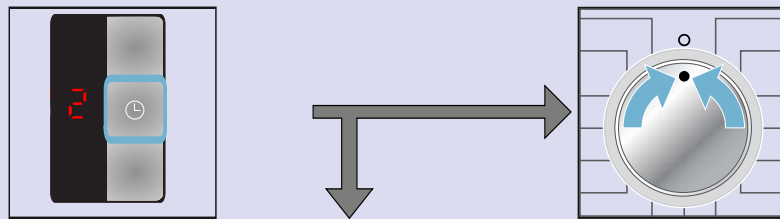
1. Set the button and information signals



Set the programme selector to the "Off" position and then turn the dial one position to the right.

Press the button for Eco Perfect , hold it down and, at the same time, turn the programme selector one further position to the right.

2. Set the volume for button signals



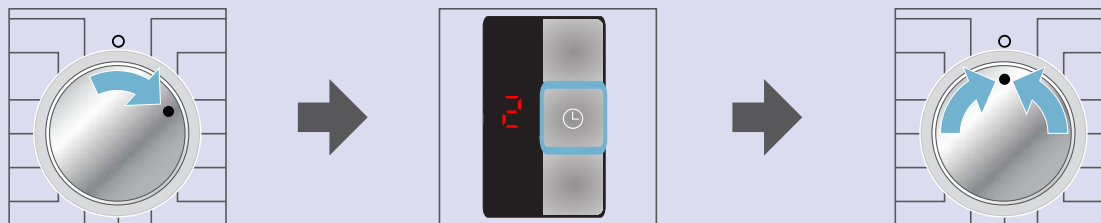
The current signal volume now appears as a figure. Press the button for the "Ready in" time repeatedly until the required signal volume is set.

Go to point **3** to set the volume for the information signals, **or**

Set the programme selector to the "Off" position to exit the menu.



3. Set the volume for the information signals



Turn the programme selector one further position.

Press the button for the "Ready in" time repeatedly until the required information signal volume is reached.

Set the programme selector to the "Off" position to exit the menu.



Cleaning and maintenance



Warning

Danger of death!

There is a risk of electric shock if you touch live components. Switch off the appliance and unplug the mains plug.



Warning

Risk of poisoning!

Toxic vapours can be produced by cleaning agents that contain solvents, e.g. cleaning solvent. Do not use cleaning agents that contain solvents.

Caution!

Damage to the appliance

Cleaning agents that contain solvents, e.g. cleaning solvent, can damage surfaces and components in the machine. Do not use cleaning agents that contain solvents.

Machine housing/control panel

- Wipe the housing and the control panel with a soft, damp cloth.
- Remove the detergent residue immediately.
- Do not clean with a water jet.

Drum

Use chlorine-free cleaning agents and not steel wool.

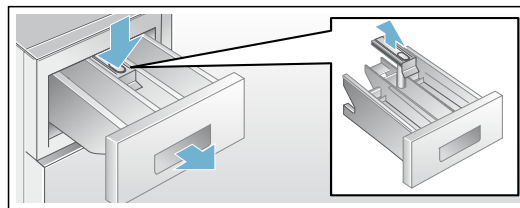
Descaling

Descaling should not be necessary if the detergent is measured out correctly. However, if it is required, follow the manufacturer's instructions for the descaling agent. Suitable descalers can be obtained via our website or from our after-sales service.

Detergent drawer and housing

If the washing machine contains detergent or fabric softener residues:

1. Pull out the detergent drawer. Press down the insert and fully remove the drawer.
2. To remove the insert: Push the insert upwards from below with your finger.



3. Clean the detergent dispenser tray and insert with water and a brush, and dry it. Clean the inside of the housing as well.
4. Fit the insert and lock it in place (push the cylinder onto the guide pin).
5. Push in the detergent drawer.

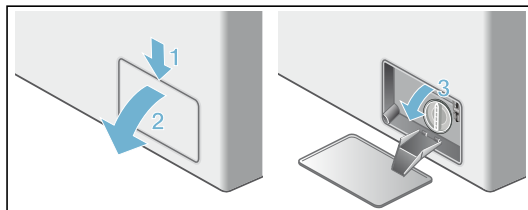
Note: Leave the detergent drawer open so that any residual water can evaporate.

Detergent solution pump blocked

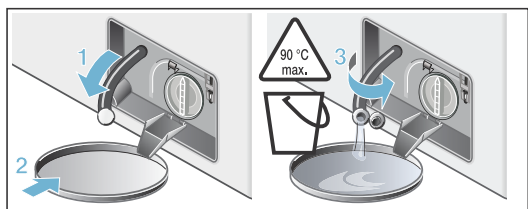
Warning **Risk of scalding!**

Washing water is hot when washing at high temperatures. If you come into contact with the hot detergent solution, you may be scalded. Allow the detergent solution to cool down.

1. Turn off the water tap so that no more water can flow in and has to be drained via the detergent solution pump.
2. Switch off the appliance and pull out the mains plug.
3. Open and remove the service flap.
4. Fold out the water gutter in front of the pump cover.



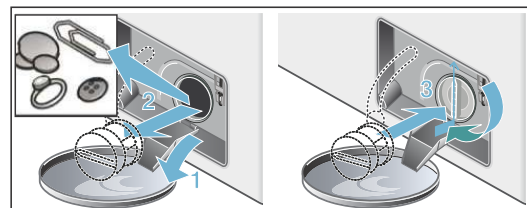
5.
 - Remove the **drainage hose** from its holder and remove the sealing cap. Allow the detergent solution to flow out into a suitable container. Replace the sealing cap on the drainage hose and place the drainage hose back in the retainer.



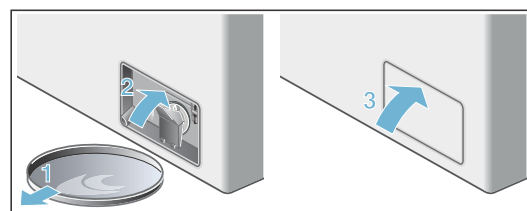
- **Without the drainage hose**
Carefully turn the pump cover once through 180°, but do not remove it. The water now runs out of the detergent solution pump. Repeat the process until no more detergent solution flows out.



6. Now carefully unscrew the pump cover. Residual water may run out. Clean the interior, pump cover thread and pump housing. The impeller in the detergent solution pump must be able to rotate. Refit the pump cover and screw it on tightly. The handle should be vertical.



7. Fold in the water gutter.
8. Place the service flap back on, lock it into place, and close it.

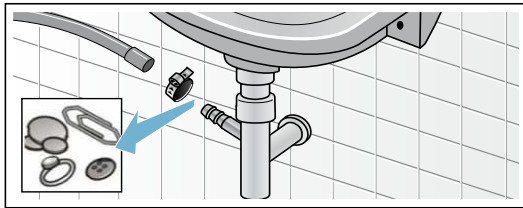


Note: To prevent unused detergent from flowing straight into the drain during the next wash: Pour 2 litre of water into compartment **II** and start the Empty programme.

en Faults and what to do about them.

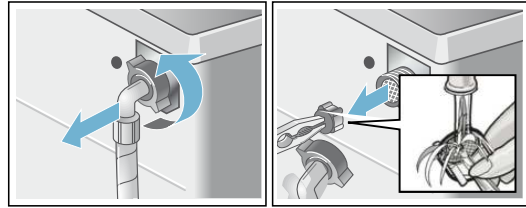
The drain hose at the siphon is blocked

1. Switch off the appliance. Disconnect the mains plug.
2. Loosen the hose clamp. Carefully remove the drain hose, residual water may leak out.
3. Clean the drainage hose and siphon connecting piece.



4. Reattach the drainage hose and secure the connection using the hose clamp.

6. For standard and Aqua-Secure models, clean the filter on the rear of the appliance:
Remove the hose from the rear of the appliance,
Remove the filter using pliers and clean the filter.

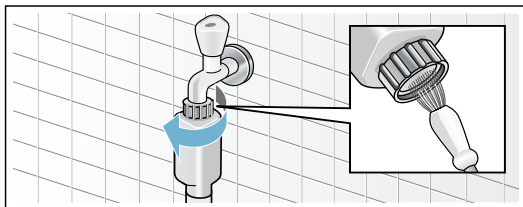


7. Connect the hose and check for leaks.

Filter in the water supply is blocked

For this, first reduce the water pressure in the supply hose:

1. Turn off the tap.
2. Select any programme (except Rinse, Spin, Empty).
3. Press the Start button. Allow the programme to run for approximately 40 seconds.
4. Set the programme selector to the Off position. Remove the mains plug.
5. Clean the filter on the water tap:
Remove the hose from the water tap.
Clean the filter with a small brush.



? Faults and what to do about them.

Emergency release

E.g. in the event of a power cut

The programme continues running when the power supply is restored. However, if the laundry has to be removed, the washing machine door can be opened as follows:

⚠ Warning **Risk of scalding!**

When you are washing at high temperatures, there is a risk of scalding if you come into contact with hot detergent solution and laundry. If possible, leave it to cool down.

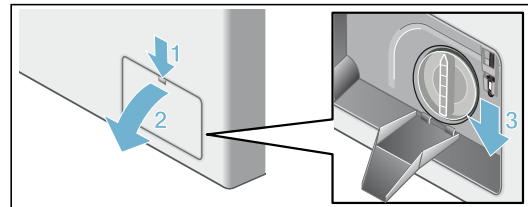
⚠ Warning
Risk of injury!

You may injure your hands if you reach into the drum while it is rotating. Do not reach into the drum while it is rotating. Wait until the drum has stopped rotating.

Caution!
Water damage

Any escaping water may cause water damage. Do not open the washing machine door if water can be seen through the glass.

1. Set the programme selector to the Off position. Remove the mains plug.
2. Drain the water. Pull the emergency release downwards with a tool and release.




The washing machine door can then be opened.


Information on the display panel

Display	Cause/remedial action
Ⓢ flashes	Close the washing machine door properly; laundry may be caught.
YES + Ⓢ	The washing machine door is unlocked. It is possible to add laundry.
NO	<ul style="list-style-type: none"> ■ Due to the high temperature in the drum, the washing machine door cannot be opened. Wait until the temperature drops. ■ Due to the high level of water in the drum, the washing machine door cannot be opened. Drain the water (e.g. select the Spin or Empty programme (if only a drain cycle is required, set rpm (spin speed) to Ⓢ (without final spin) = ☐ (Rinse hold)).
E:17 E:29	<ul style="list-style-type: none"> ■ Turn on the cold water tap fully ■ Supply hose kinked or trapped ■ Water pressure too low. Clean the filter.
A:10	<ul style="list-style-type: none"> ■ Turn on the hot water tap fully, supply hose kinked or trapped. ■ Supply hose kinked/jammed; water pressure too low. Clean the filter. ■ Hot water hose not connected; washing machine will operate using cold water only. Ignore information, this message is only displayed for the first wash cycle.
E:18	<ul style="list-style-type: none"> ■ Detergent solution pump blocked. Clean the detergent solution pump. ■ Drain hose/waste pipe blocked. Clean the drain hose on the siphon.
E:23	Water in the base trough due to appliance leaking. Call the after-sales service.
🔑	If childproof lock is active, deactivate it.
🧼	→ flashes; too much foam detected?
Other displays	Switch off the appliance, wait for five seconds and switch it back on again. If the display is indicated again, call the after-sales service.

en Faults and what to do about them.

Faults and what to do about them.

Faults	Cause/remedy
Water is leaking from the appliance.	<ul style="list-style-type: none"> ■ Attach the drain hose correctly or replace it. ■ Tighten the threaded joint on the inlet hose.
The appliance is not filling with water.	<ul style="list-style-type: none"> ■ Start button not selected? ■ Is the tap turned on?
Detergent is not being dispensed.	<ul style="list-style-type: none"> ■ Could the filter be clogged? Clean the filter → <i>Page 20</i>. ■ Is the inlet hose kinked or trapped?
The door cannot be opened.	<ul style="list-style-type: none"> ■ The safety function is activated. Stop the programme? ■ (▽ Rinse stop = ∅ without final rinse) selected? → <i>Page 11</i>. ■ Can the door only be opened by the emergency release? → <i>Page 20</i>.
The programme does not start.	<ul style="list-style-type: none"> ■ Start button for a pause or "Ready in" time pressed? ■ Is the door closed? ■ Childproof lock active? Deactivate. → <i>Page 15</i>.
The water is not draining.	<ul style="list-style-type: none"> ■ (▽ Rinse stop = ∅ without final rinse) selected? → <i>Page 11</i> ■ Clean the drain pump. → <i>Page 19</i> ■ Clean the drain pipe and/or the drain hose.
Water is not visible in the drum.	Not a fault - the water is below the visible area.
The spin result is not satisfactory. Laundry is wet/too damp.	<ul style="list-style-type: none"> ■ Not a fault – the unbalanced load detection system has interrupted the spin because the laundry is unevenly distributed. Distribute small and large items of laundry evenly in the drum. ■ Is the selected speed too low?
The spin cycle runs several times.	Not a fault – the unbalanced load detection system is adjusting an imbalance.
The programme takes longer than usual.	<ul style="list-style-type: none"> ■ Not a fault – unbalanced load detection system adjusts imbalance by repeatedly distributing the washing. ■ Not a fault – foam detection system active – a rinse cycle is activated.
The programme length changes during the wash cycle.	Not a fault - the programme sequence is optimised for the particular wash process. This may result in changes to the programme length in the display field.
Residual water in the care product dispenser.	<ul style="list-style-type: none"> ■ Not a fault - the effectiveness of the care product is not affected. ■ Clean the insert if necessary. → <i>Page 18</i>
Odours in the washing machine.	Run the Cottons 90 °C programme without laundry. Use standard detergent for this.
 symbol flashes. Foam may be leaking from the detergent drawer.	<p>Have you used too much detergent?</p> <p>Mix one tablespoonful of fabric softener with ½ litre water and pour into dispenser II (Not for outdoor fabrics, sportswear fabrics or those made with down.)</p> <p>Use less detergent in the next washing cycle.</p>

Faults	Cause/remedy
Loud noises, vibrations and machine "movement" during the spin cycle.	<ul style="list-style-type: none"> ■ Is the appliance aligned? Align the appliance. → <i>Page 25</i> ■ Are the appliance's feet secured? Secure the appliance's feet. ■ Have the transport braces been removed? Remove the transport braces. → <i>Page 26</i>
The display panel/indicator lights do not work while the appliance is running.	<ul style="list-style-type: none"> ■ Has there been a power failure? ■ Have the fuses blown? Reset/replace the fuses. ■ If the fault occurs repeatedly, call the after-sales service. → <i>Page 23</i>
There is detergent residue on the laundry.	<ul style="list-style-type: none"> ■ Some phosphate-free detergents contain water-insoluble residue. ■ Select the rinse programme or brush the laundry after washing.
NO appears in the display panel in Pause mode.	The water level is too high. It is not possible to add laundry. Close the washing machine door immediately, if necessary. Press the "Start" button to continue the programme.
YES +  appears in the display panel in Pause mode.	The door is unlocked. It is possible to add laundry.
If you cannot correct a fault yourself (after switching on/off) or a repair is required:	
<ul style="list-style-type: none"> ■ Set the programme selector to the "Off" position. The appliance is switched off. ■ Unplug the mains plug from the socket. ■ Turn off the tap and call the after-sales service. → <i>Page 23</i> 	

After-sales service

If you cannot correct the fault yourself, (see section, Faults and what to do about them) → *Page 20*, please contact our after-sales service. → Cover page

We will always find an appropriate solution in order to avoid unnecessary visits by engineers.

Please give the after-sales service the product number (E no.) and the production number (FD) of the appliance.

You can find this information, *depending on the model:

On the inside of the washing machine door*/in the opened service flap* and on the rear of the appliance.

Trust the expertise of the manufacturer.

Contact us for assistance. By doing so, you will ensure that the repairs are carried out by trained service personnel using genuine spare parts.

E-Nr. _____ FD _____

Product number

Production number

Technical data

Dimensions:

60 x 55 x 85 cm
(width x depth x height)

Weight:

66 - 73 kg*

Mains connection:

Nominal voltage: 220-240 V, 50 Hz
Nominal current: 10 A / 13 A*
Nominal power: 2300 W

Water pressure:

100 - 1000 kPa (1-10 bar)

* Depending on the model

Power consumption when switched off:

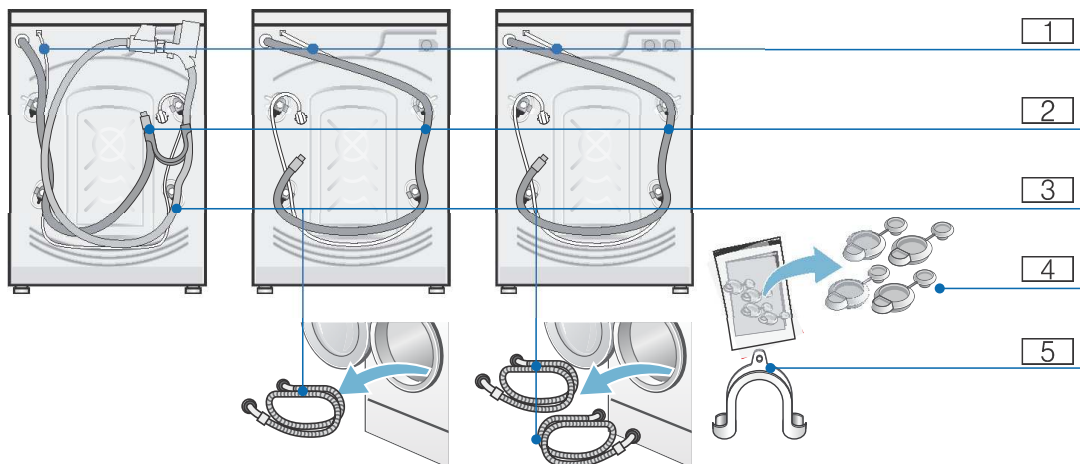
0.17 W






Power consumption when ready for use (left-on mode):

2.00 W

Positioning and connecting Included with the appliance

Note: Check the machine for transport damage. Never use a damaged machine. If you have any complaints, contact the dealer from whom you purchased the appliance or our after-sales service.



-  Mains cable
-  Water drainage
-  Water supply hose*
-  Covers for the transport locks
-  Elbow for securing the water drain hose*

*depending on model

In addition, a hose clamp (24-40 mm diameter, available from specialist dealers) is required to connect the water drain hose to a siphon.

Useful tools

- Spirit level for levelling
- Spanner with:
 - WAF 13 for loosening the transport locks, and
 - WAF 17 for aligning the appliance feet

Safety instructions

Warning

Risk of injury!

- The washing machine is very heavy. Be careful when lifting/transporting the washing machine.
- When the washing machine is lifted by its protruding parts (e.g. the washing machine door), the components may break off and cause injuries.
Do not lift the washing machine by protruding parts.
- If the hose and mains cables are not routed properly, there is a risk of tripping and injury.
Lay hoses and cables in such a way that there is no risk of tripping.

Caution!

Damage to the appliance

Frozen hoses may rip/burst.
Do not install the washing machine in areas exposed to frost or outdoors.

Caution!

Water damage

The connection points for the water supply hose and water drain hose are under high water pressure. To prevent leaks and water damage, you must follow the instructions in this section.

Notes

- In addition to the safety information listed here, the local water and electricity supplier may have special requirements.
- If in doubt, have the appliance connected by a specialist.

Installation surface

Note: The washing machine be stable so that it does not move around.

- The installation surface must be firm and level.
- Soft floors/floor coverings are not suitable.

Installation on a base or a wooden joist floor

Caution!

Damage to the appliance

The washing machine may wander and tip/topple from the base when spinning. Use holding brackets to secure the feet of the appliance.

Order no. WMZ 2200, WX 975600.

Note: On wooden joist floors, install the washing machine:

- In a corner, if possible,
- On a water-resistant wooden board (min. 30 mm thick) which is screwed tightly to the floor.

Installation on a platform with drawer

Platform order no.: WMZ 20490, WZ 20490.

Installing the appliance in a kitchenette

Warning

Risk of death!

There is a risk of electric shock if you touch live components.

Disconnect the appliance from the power supply.

Notes

- Recess width of 60 cm required.
- Only install the washing machine underneath a continuous worktop that is securely connected to adjacent cabinets.

If you remove the appliance covering plate for installation underneath the worktop or fitted in a cabinet, you must replace it with a metal cover.

Order no.: WMZ20331; WZ20331.

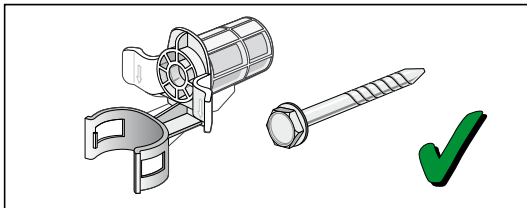
Removing the transport locks

Caution!

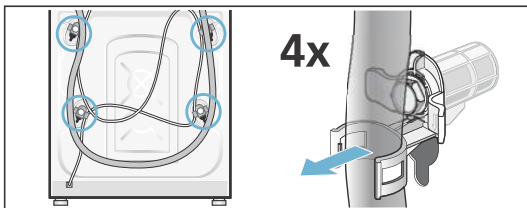
Damage to the appliance

- The machine is secured for transportation using transport locks. If the transport locks are not removed, the drum, for example, may become damaged when the machine is operated. Before using the appliance for the first time, make sure that you completely remove all four transport locks. Keep the locks in a safe place.
- To prevent transport damage from occurring if the appliance is moved at a later date, you must refit the transport locks before transporting the appliance.

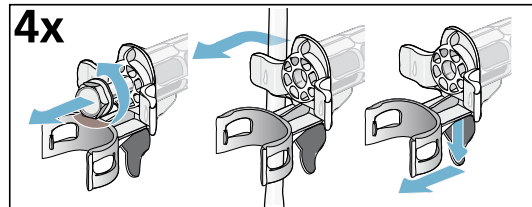
Note: Keep the screws and sleeves in a safe place.



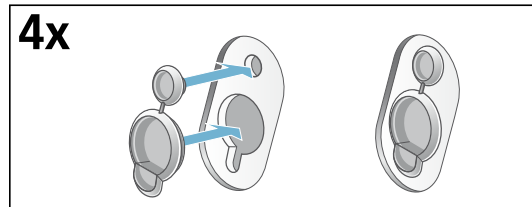
1. Take the hoses out of the holders.



2. Unscrew and remove the bolts from all four transport safety devices. Remove the sleeves. To do this, remove the mains cable from the holders.

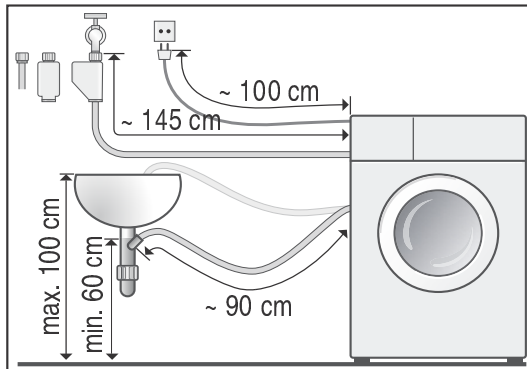


3. Insert the covers.

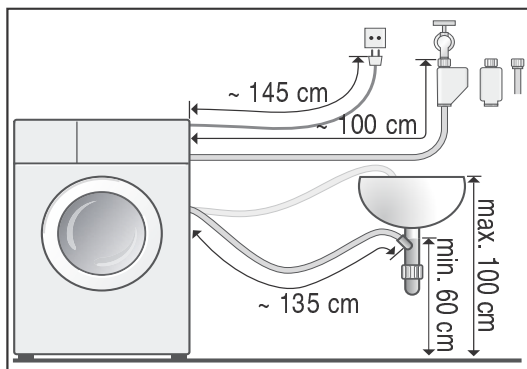


Hose and cable lengths

■ Left-hand connection



■ Right-hand connection



Tip: The following are available from specialist dealers/after-sales service:

- Extension for Aqua-Stop and cold water supply hose (approx. 2.50 m). Order no. WMZ2380, WZ10130.
- A longer supply hose (approx. 2.20 m) for standard model.

Water inlet

⚠ Warning **Risk of death!**

There is a risk of electric shock if you touch live components. Do not immerse the Aqua-Stop safety valve in water (it contains an electric valve).

Observe the following when connecting the machine:

Notes

- With a cold water connection, only operate the washing machine using cold mains water.
- With a hot water connection, operate the washing machine with hot and cold mains water, with a maximum temperature of 60 °C.
- Do not connect the machine to the mixer tap of an unpressurised hot-water boiler.
- Do not use a used supply hose. Only use the supply hose supplied or one that was purchased from an authorised specialist retailer.
- Do not bend, squash, modify or cut through the water supply hose (otherwise its strength is no longer guaranteed).
- Only tighten the screw connections by hand. If the screw connections are tightened too much with a tool (pliers), the thread may become damaged.

Optimum water pressure in the supply network

At least 100 kPa (1 bar)

Maximum 1000 kPa (10 bar)

When the tap is open, the water flow is at least 8 l/min.

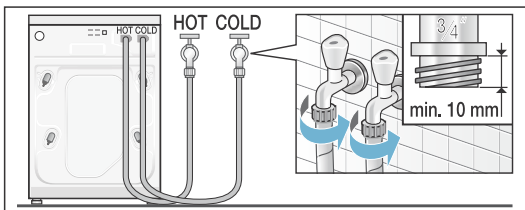
If the water pressure is higher than this, a pressure-reducing valve must be installed.

Hot and cold water connection

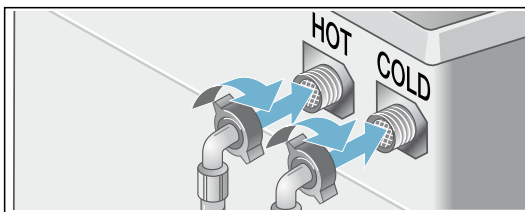
Note:

- Red hot water supply hose on the hot water tap and red valve on the appliance
- Cold water supply hose on the cold water tap and white valve on the appliance

Connection to the water pipes ($\frac{3}{4}$ " = 26.4 mm)



Connection to the appliance



Cold water connection only

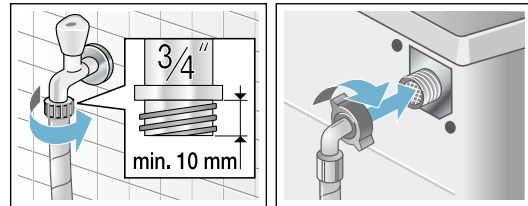
If no hot water connection is present, only connect the cold water inlet hose and cover the hot water connection on the appliance so that it is kept free of dirt

Note: Carefully turn on the tap and check that the connection points are not leaking. The screw connection is under water pipe pressure.

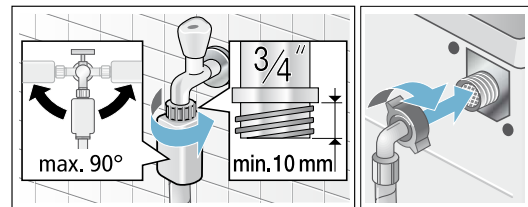
Cold water connection

Connect the water supply hose to the water tap ($\frac{3}{4}$ " = 26.4 mm) and to the appliance (not necessary for Aqua-Stop models as this is permanently installed):

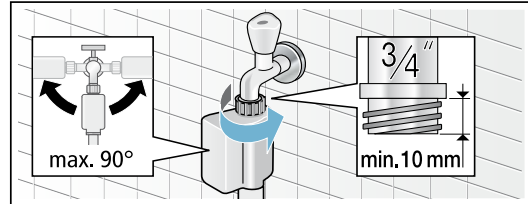
- Model: **Standard**



- Model: **Aqua-Secure**



- Model: **Aqua-Stop**



Note: Carefully turn on the tap and check that the connection points are not leaking. The screw connection is under water pipe pressure.

Water outlet

Caution! Water damage

If the drain hose slips out of the wash basin or the connection point during draining due to high water pressure, any escaping water may cause water damage.

Secure the drain hose so that it cannot slip out.

Note: Do not kink the water drain hose or put strain on it lengthways.

You can lay the water drain hose as follows:

■ Outlet in a sink

Warning **Risk of scalding!**

When you are washing at high temperatures, there is a risk of scalding if you come into contact with hot detergent solution e.g. if hot detergent solution is being drained into a wash basin.

Do not reach into the hot detergent solution.

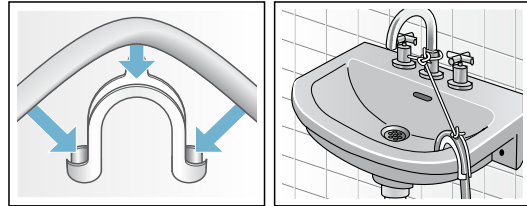
Caution!

Damage to the appliance/fabrics

If the end of the drain hose is immersed in the drained water, water may be sucked back into the appliance and may damage the appliance/fabrics.

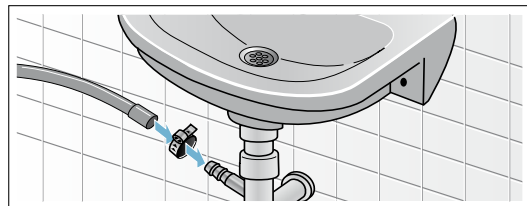
Make sure that:

- The plug does not block drainage from the sink.
- The end of the drain hose is not immersed in the drained water.
- The water drains away quickly enough.

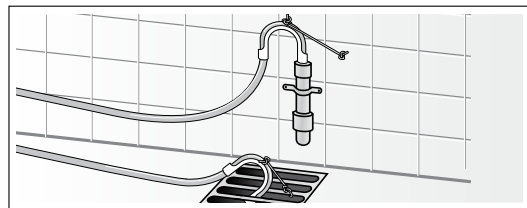


■ **Drainage into a siphon**

The connection point must be secured using a hose clamp with a diameter of 24-40 mm (available from specialist dealers).



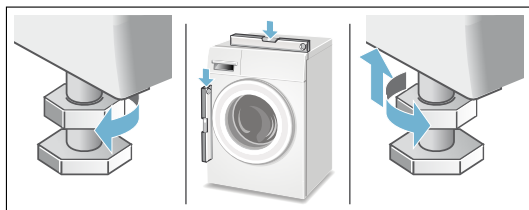
■ **Outlet into a plastic pipe with rubber bushing or into a drainage pit**



Levelling

Level the appliance using a spirit level. Incorrect levelling may result in intense noise, vibrations and "wandering".

1. Loosen the lock nuts using a wrench, by turning it in a clockwise direction.
2. Check the alignment of the washing machine with a spirit level, and adjust it if necessary. Change the height by turning the appliance feet. All four appliance feet must stand firmly on the ground.
3. Tighten the lock nut against the housing.
In doing so, hold the foot tight and do not adjust its height.
The lock nuts on all four appliance feet must be screwed tightly against the housing.



Electrical connection



Warning


Danger of death!

There is a risk of electric shock if you touch live components.

- Never touch or hold the mains plug with wet hands.
- Only pull out the mains cable by the plug and never by the cable, as this could damage it.
- Never unplug the mains plug during operation.

Observe the following information and ensure that:

Notes

- The mains voltage and voltage indicated on the washing machine (rating plate) are the same. The connected load and fuse required are specified on the rating plate.
- The washing machine is only connected to an alternating current via a properly installed earthed socket.
- The mains plug fits the socket.
- The cable cross-section is adequate.
- The earthing system is properly installed.
- The mains cable is only replaced by a qualified electrician (if this is necessary). Replacement mains cables are available from the after-sales service.
- No multiple plugs/couplings or extension cables are used.
- If an earth-leakage circuit breaker is used, only a type which displays this symbol is used: . Only this symbol guarantees compliance with the currently applicable regulations.
- The mains plug can be accessed at all times.
- The mains cable is not bent, squashed, modified, cut through, or in contact with heat sources.

Before washing for the first time

The washing machine was thoroughly tested before leaving the factory. In order to remove any water which may be left over from the test, run the first washing cycle **without** any laundry.

Notes

- The washing machine **must be correctly installed and connected.** (from → *Page 24*).
- Never use a damaged machine. Inform your after-sales service.

1. Check the machine.
2. Plug in the mains plug.
3. Turn the tap on.
4. Close the washing machine door (do not load any laundry).
5. Select the Cottons programme and 90 °C as the temperature.
6. Open the detergent drawer.
7. Pour approx. 2 litre of water into compartment **II**.
8. Pour standard detergent into compartment **II**.

Note: Prevent foaming by only using half of the amount of detergent recommended by the detergent manufacturer. Do not use detergent for wool or delicates.

9. Close the detergent drawer.
10. Press the Start button.
11. When the programme ends, switch off the appliance.

Your washing machine is now ready to use.

Transportation

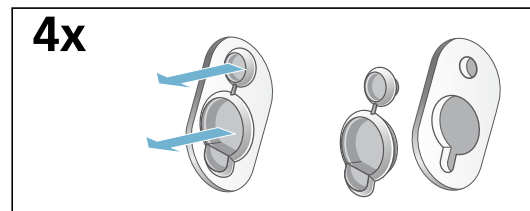
e.g. when moving home

Preparatory work:

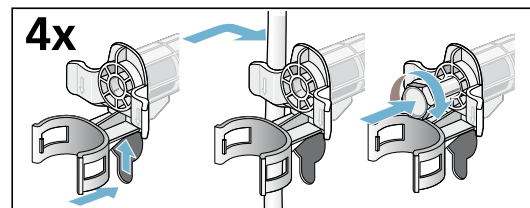
1. Turn off the water tap.
2. Reduce the water pressure in the supply hose.
Maintenance – filter in the water supply → *Page 20*
3. Drain the remaining detergent solution.
Maintenance – detergent solution pump blocked → *Page 19*
4. Disconnect the washing machine from the mains.
5. Remove the hoses.

Installing the transport locks:

1. Remove the covers and keep in a safe place.
If required, use a screwdriver.



2. Insert all four sleeves.
Clamp the mains cable on the holders. Insert and tighten the bolts.



Before commissioning:

Notes

- The transport locks **must** be removed.
- To prevent unused detergent from flowing straight into the drain during the next wash: Pour approx. 2 litre of water into compartment **II** and start the Empty programme.

Aqua-Stop warranty

Only for appliances with Aqua-Stop

In addition to warranty claims against the vendor based on the purchase agreement and to our appliance warranty, we will provide compensation under the following conditions:

1. If water damage is caused due to a fault in our Aqua-Stop system, we will compensate domestic customers for the damage caused.
2. The liability guarantee is valid for the service life of the appliance.
3. It is a prerequisite of all warranty claims that the appliance with Aqua-Stop must have been installed and connected correctly in accordance with our instructions; this also includes a correctly fitted Aqua-Stop extension (genuine accessories).

Our warranty does not cover defective feed lines or fittings leading to the Aqua-Stop connection at the tap.

4. Appliances with Aqua-Stop do not need to be supervised during operation, nor secured afterwards by turning off the tap.
The tap only needs to be turned off if you are away from home for a long period, e.g. for several weeks' holiday.

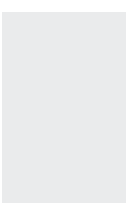


Advice and repair order in the event of faults

GB 0344 892 8979 (Calls charged at local or mobile rate.)

IE 01450 2655 (0.03 € per minute at peak. Off peak 0.0088 € per minute.)

You can find the contact information for all countries in the attached after-sales service directory.



Robert Bosch Hausgeräte GmbH
Carl-Wery-Straße 34
81739 München, GERMANY



9000934151 (9504)



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A+++



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ENERGIJA · ENERGY · ENERGIE
ENERGI

135
kWh/annum

9460
l/annum

8,0
kg

ABCDEF

51 dB

77 dB

2010/1061

A.2 Dishwasher

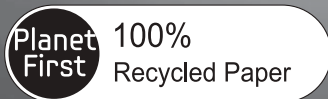
The dishwasher is a Samsung DW60H9950FW, information is at <https://www.samsung.com/uk/dishwashers/dish-washer-dw60h9950fw/>.



DW60H9970 Series
DW60H9950 Series

Dishwasher

user manual



This manual is made with 100% recycled paper.

imagine the possibilities

Thank you for purchasing this Samsung product.



Contents

SAFETY INSTRUCTIONS

3

SETTING UP YOUR DISHWASHER

10

- 10 Checking the parts and control panel
- 15 Cycle selector
- 15 Progress displays
- 16 Meeting the installation requirements
- 18 Installing your dishwasher
(only for installing under the sink)

BEFORE USING THE PRODUCT FOR THE FIRST TIME

21

- 21 Setting mode
- 23 Using dishwasher salt
- 24 Using detergent

LOADING YOUR DISHWASHER

25

- 25 Dishwashing guidelines
- 26 Adjusting the height of the upper rack
- 26 Removing the upper rack
- 27 Loading the lower rack
- 27 Loading the upper rack
- 28 Using the 3rd (cutlery) rack (for some models)
- 29 Using rinse aid

CLEANING AND MAINTAINING YOUR DISHWASHER

30

- 30 Cleaning the exterior
- 30 Cleaning the wash cabinet
- 30 Cleaning the filters
- 31 Cleaning the nozzles
- 32 Storing your dishwasher

TROUBLESHOOTING AND INFORMATION CODES

33

- 33 Check these points if your dishwasher...
- 35 Information codes

PROGRAMME CHART

36

- 36 Programme chart

APPENDIX

37

- 37 Disposing the dishwasher and helping the environment
- 37 Declaration of conformity
- 37 Specifications

FOR STANDARD TEST

38

PRODUCT FICHE

39

Safety instructions

Congratulations on your new Samsung dishwasher. This manual contains important information on the installation, use and care of your appliance. Please take time to read this manual to take full advantage of your dishwasher's many benefits and features.

WHAT YOU NEED TO KNOW ABOUT SAFETY INSTRUCTIONS












Please read this manual thoroughly to ensure that you know how to safely and efficiently operate the extensive features and functions of your new appliance and retain it at a safe place near the appliance for your future reference. Use this appliance only for its intended purpose as described in this user manual.

Warning and important safety instructions in this manual do not cover all possible conditions and situations that may occur. It is your responsibility to use common sense, caution, and care when installing, maintaining, and operating your dishwasher.

Because the following operating instructions cover various models, the characteristics of your dishwasher may differ slightly from those described in this manual and not all warning signs may be applicable. If you have any questions or concerns, contact your nearest service center or find help and information online at www.samsung.com.

IMPORTANT SAFETY SYMBOLS AND PRECAUTIONS

Important safety symbols







 WARNING	Hazards or unsafe practices that may result in severe personal injury and/or property damage.
 CAUTION	Hazards or unsafe practices that may result in personal injury and/or property damage.
 CAUTION	To reduce the risk of fire, explosion, electric shock, or personal injury when using your dishwasher, follow these basic safety precautions:
	Do NOT attempt.
	Do NOT disassemble.
	Do NOT touch.
	Follow directions explicitly.
	Unplug the power plug from the wall socket.
	Make sure the appliance is grounded to prevent electric shock.
	Call the service centre for help.
	Note

These warning symbols are here to prevent injury to you and others. Please follow them explicitly.

Keep these instructions in a safe place and ensure that new users are familiar with the content. Pass them on to any future owner.

Safety instructions

Important safety precautions

-  This appliance conforms to current safety requirements. Inappropriate use can, however, lead to personal injury and damage to property.
To avoid the risk of accidents and damage to the appliance, please read these instructions carefully before using it for the first time. They contain important information on its safety, use and maintenance.
-  As with any equipment using electricity and moving parts, potential hazards exist. To safely operate this appliance, become familiar with its operation and exercise care when using it.
-  Do not let children (or pets) play on or in your dishwasher. The dishwasher door does not open easily from the inside, and children may be seriously injured if trapped inside.
-  Children should be supervised to ensure that they do not play with the appliance.
-  If the plug (power supply cord) is damaged, it must be replaced by the manufacturer or its service agent or a similarly qualified person in order to avoid a hazard.
-  This appliance must be positioned to be accessible to the power plug after installation, the water supply tabs and the drain pipes.

INSTRUCTION ABOUT THE WEEE MARK

Correct Disposal of This Product (Waste Electrical & Electronic Equipment) (Applicable in countries with separate collection systems)



This marking on the product, accessories or literature indicates that the product and its electronic accessories (e.g. charger, headset, USB cable) should not be disposed of with other household waste at the end of their working life. To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate these items from other types of waste and recycle them responsibly to promote the sustainable reuse of material resources.

Household users should contact either the retailer where they purchased this product, or their local government office, for details of where and how they can take these items for environmentally safe recycling.

Business users should contact their supplier and check the terms and conditions of the purchase contract. This product and its electronic accessories should not be mixed with other commercial wastes for disposal.

 To reduce the risk of fire, electric shock, or injury to persons when using your appliance, follow basic precautions, including the following:

This appliance is not to be used by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.

Children should be supervised to ensure that they do not play with the appliance.

For use in Europe: This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved. Children shall not play with the appliance. Cleaning and user maintenance shall not be made by children without supervision.

If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.

For appliances with ventilation openings in the base, that a carpet must not obstruct the openings.

The new hose-sets supplied with the appliance are to be used and that old hose-sets should not be reused.

CAUTION: In order to avoid a hazard due to inadvertent resetting of the thermal cut-out, this appliance must not be supplied through an external switching device, such as a timer, or connected to a circuit that is regularly switched on and off by the utility.

Safety instructions


The door should not be left in the open position since this could present a tripping hazard.

WARNING: Knives and other utensils with sharp points must be loaded in the basket with their points down or placed in a horizontal position.


This appliance is intended to be used in household and similar applications such as:

- staff kitchen areas in shops, offices and other working environments;
- farm houses;
- by clients in hotels, motels and other residential type environments;
- bed and breakfast type environments.


INSTRUCTIONS WHEN USING YOUR DISHWASHER


 This dishwasher is not designed for commercial use. It is intended for use in domestic households and in similar working and residential environments such as:


- Shops
 - Offices and showrooms
- and by residents in establishments such as:
- Hostels and guest houses.


 It must only be used as a domestic appliance as specified in these user manual, for cleaning domestic crockery and cutlery.


Any other usage is not supported by the manufacturer and could be dangerous.

 The manufacturer cannot be held liable for damage resulting from incorrect or improper use or operation.

 **WARNING** Do not use solvents in the dishwasher. Danger of explosion.


 **WARNING** Do not inhale or ingest dishwasher detergent. Dishwasher detergents contain irritant or corrosive ingredients which can cause burning in the nose, mouth and throat if swallowed, or inhibit breathing. Consult a doctor immediately if detergent has been swallowed or inhaled.







 **CAUTION** Avoid leaving the door open unnecessarily, as you could trip over it.

 **CAUTION** Do not sit or lean on the opened door. This could cause the dishwasher to tip and be damaged, and you could get injured.





 Only use detergent and rinse aid formulated for domestic dishwashers. Do not use washing-up liquid.

 **CAUTION** Do not use the strong acid cleaning agent.

 Do not fill the rinse aid reservoir with powder or liquid detergent. This will cause serious damage to the reservoir.
















-  Inadvertently filling the salt reservoir with powder or liquid dishwasher detergent will damage the water softener. Make sure you have picked up the correct packet of dishwasher salt before filling the salt reservoir.
-  Please only use special coarse grained dishwasher salt for reactivation, as other salts may contain insoluble additives which can impair the functioning of the softener.
-  In an appliance with a cutlery basket (depending on model), cutlery is cleaned and dried more if placed in efficiently the basket with the handles downwards. However, to avoid the risk of injury, place knives and forks etc. with the handles upwards.
-  Plastic items which cannot withstand being washed in hot water, such as disposable plastic containers, or plastic cutlery and crockery should not be cleaned in the dishwasher. The high temperatures in the dishwasher may cause them to melt or lose shape.
-  On models with **Delay Start** function, make sure that the dispenser is dry before adding detergent. Wipe dry if necessary. Detergent will clog if poured into a damp dispenser and may not be thoroughly dispersed.
-  Knives and other utensils with sharp points must be loaded in the basket with their points down or placed in a horizontal position.











INSTRUCTIONS FOR PROTECTING YOUR CHILDREN

-  This appliance is not a toy! To avoid the risk of injury, keep children well away and do not allow them to play in or around the dishwasher or to use the controls. They will not understand the potential dangers posed by it. They should be supervised whenever you are working in the kitchen. There is also a danger that children playing might shut themselves in the dishwasher.
-  This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved. Children shall not play with the appliance. Cleaning and user maintenance shall not be made by children without supervision.
-  Older children may only use the dishwasher when its operation has been clearly explained to them and they are able to use it safely, recognising the dangers of misuse.
-  **KEEP CHILDREN AWAY FROM DETERGENTS!** Dishwasher detergents contain irritant and corrosive ingredients which can cause burning in the mouth, nose and throat if swallowed, or inhibit breathing. Keep children away from the dishwasher when the door is open. There could still be detergent residues in the cabinet. Consult a doctor immediately if your child has swallowed or inhaled detergent.

Safety instructions

INSTRUCTIONS FOR INSTALLING YOUR DISHWASHER

-  **WARNING** Before setting up the appliance, check it for any externally visible damage. Under no circumstances should you use a damaged appliance. A damaged appliance could be dangerous.
-  **CAUTION** The dishwasher must only be plugged into the electricity supply via a suitable switched socket. The electrical socket must be easily accessible after the dishwasher is installed so that it can be disconnected from the electricity supply at any time. (Refer to the **“Checking the parts and control panel”** section on page 10.)
-  **WARNING** There must be no electrical sockets behind the dishwasher. Danger of overheating and fire risk if the dishwasher were to be pushed up against a plug.
-  **WARNING** The dishwasher must not be installed under a hob. The high radiant temperatures which are sometimes generated by a hob could damage the dishwasher. For the same reason it should not be installed next to open fires or other appliances which give off heat, such as heaters etc.
-  Do not connect the dishwasher to the mains supply until it has been fully installed and any adjustment has been made to the door springs.
-  **CAUTION** Before connecting the appliance, check that the connection data on the data plate (voltage and connected load) match the mains electricity supply. If in any doubt, consult a qualified electrician.
-  The electrical safety of this appliance can only be guaranteed when continuity is complete between it and an effective grounding system. It is most important that this basic safety requirement is present and regularly tested and where there is any doubt the electrical system in the house should be checked by a qualified electrician.
The manufacturer cannot be held liable for the consequences of an inadequate grounding system (e.g. electric shock).
-  **CAUTION** Do not connect the appliance to the mains electricity supply by a multi-socket unit or an extension lead. These do not guarantee the required safety of the appliance (e.g. danger of overheating).
-  **★** This appliance may only be installed in mobile installations such as ships if a risk assessment of the installation has been carried out by a suitably qualified engineer.
-  **CAUTION** The plastic housing of the water connection contains an electrical component. The housing must not be submerged in water.
-  There are electrical wires in the hose of Aqua-Stop. Never cut the water inlet hose, even if it is too long.
-  Installation, maintenance and repairs may only be carried out by a suitably qualified and competent person in strict accordance with current national and local safety regulations. Repairs and other work by unqualified persons can be dangerous. The manufacturer cannot be held liable for unauthorised work.
-  **CAUTION** The integrated waterproof system offers protection from water damage, provided the following conditions are met:
- The dishwasher is correctly installed and plumbed in.
 - The dishwasher is properly maintained and parts are replaced where it can be seen that this is necessary.
 - The stopcock has been turned off when the appliance is not used for a longer period of time (e.g. during holidays).
 - The waterproof system will work even if the appliance is switched off. However, the appliance must remain connected to the electricity supply.
-  **WARNING** A damaged appliance can be dangerous. If the dishwasher gets damaged, switch it off at the mains and call your dealer or the service department.
-  **✘** Unauthorised repairs could result in unforeseen dangers for the user, for which the manufacturer cannot accept liability. Repairs should only be undertaken by an approved service technician.

-  Faulty components must only be replaced by original spare parts. Only when these parts are fitted can the safety of the appliance can be guaranteed.
-  Always disconnect the dishwasher from the electrical supply for maintenance work (switch off at the wall socket and remove the plug).
-  If the connection cable is damaged it must be replaced with a special cable, available from the manufacturer. For safety reasons, this must only be fitted by the service department or an authorised service technician.
-  In countries where there are areas which may be subject to infestation by cockroaches or other vermin, pay particular attention to keeping the appliance and its surroundings in a clean condition at all times. Any damage which may be caused by cockroaches or other vermin will not be covered by the guarantee.
-  In the event of a fault or for cleaning purposes, the appliance is only completely isolated from the electricity supply when:
 - it is switched off at the wall socket and the plug is withdrawn, or
 - it is switched off at the mains, or
 - the mains fuse is disconnected, or
 - the screw-out fuse is removed (in countries where this is applicable).
-  Do not make any alterations to the appliance, unless authorised to do so by the manufacturer.
-  Never open the casing/housing of the appliance. Tempering with electrical connections or components and mechanical parts is highly dangerous and can cause operational faults or electric shock.
-  While the appliance is under guarantee, repairs should only be undertaken by a service technician authorised by the manufacturer. Otherwise the guarantee will be invalidated.
-  When installing the product, make sure there is space at the top, left, right and back of the product to ensure proper ventilation. If there is insufficient space between the product and the sink, it may damage the sink or allow mold to grow.
-  Make sure that your dishwasher's hardness level setting is correct as your area. (Refer to the **"Water softener mode (Water hardness level setting)"** section on page 21.)

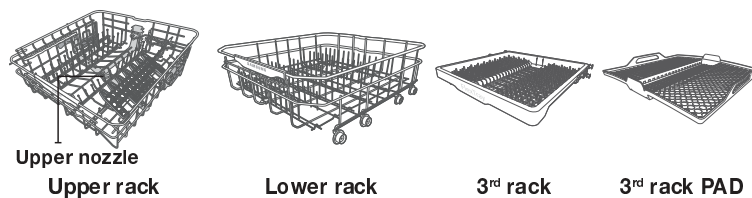
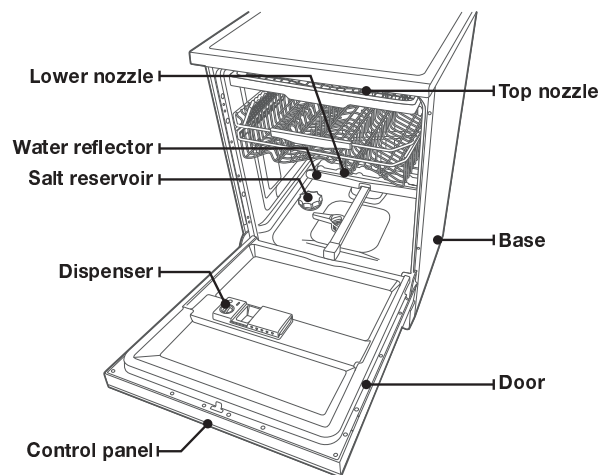
Setting up your dishwasher


Be sure to have your technician follow these instructions closely to ensure the safe and normal operation of your new dishwasher.

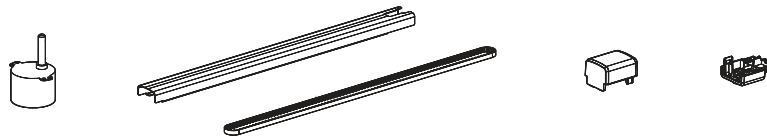
CHECKING THE PARTS AND CONTROL PANEL


When your dishwasher has been unpacked, make sure that you've received all the parts shown below. If your dishwasher was damaged during shipping, or if you do not have all the parts, contact Samsung Customer Service or your Samsung dealer.

 **WARNING** Keep the packaging out of the reach of children to ensure their safety, after unpacking your dishwasher.

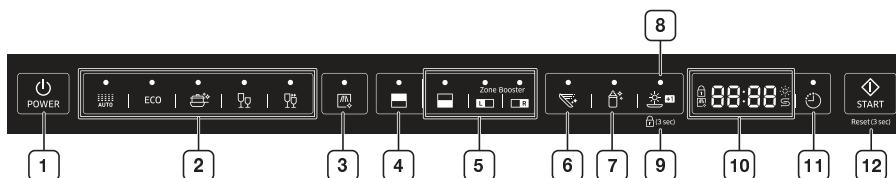


 **Accessory parts** - User/Installation manual, Installation Kit, Holder Drain Hose, Kick Plate, 3rd Rack PAD, Energy Label, Warranty Card, Funnel (Refer to the **"Filling the salt reservoir"** section on page 23).



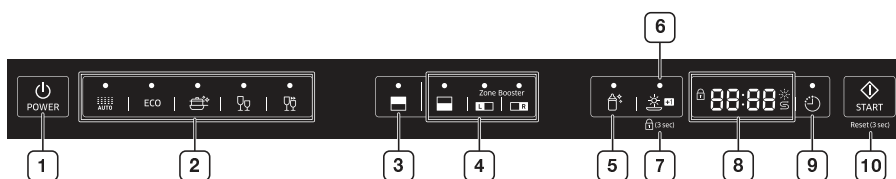
 **Linear Motion Part** - Belt operating AC motor (Motor Geared), Rail, Belt V-Timing, Holder rail (Front up, Front Low)

DW60H9970** Series









1	Power Button	7	Sanitize Button
2	Cycle Selection Buttons (Auto, ECO, Intensive, Delicate, Quick)	8	Dry+ Button
3	Self Clean Button	9	Child Lock
4	Upper Button	10	Display
5	Lower (Zone Booster) Selection Buttons	11	Delay Start Button
6	Speed Booster Button	12	Start (Reset) Button






DW60H9950** Series



1	Power Button	6	Dry+ Button
2	Cycle Selection Buttons (Auto, ECO, Intensive, Delicate, Quick)	7	Child Lock
3	Upper Button	8	Display
4	Lower (Zone Booster) Selection Buttons	9	Delay Start Button
5	Sanitize Button	10	Start (Reset) Button


Setting up your dishwasher


<p>1 Power</p>	<p>When you press the Power button, the light of the most recently finished cycle turns on. When the cycle you selected has finished, all other indicator lights are turned off and the "End" light is illuminated for some minutes. Then, the Power turns off automatically.</p>
<p>2 Cycle Selector</p>	<p>Select the appropriate wash cycle depending on the soil level of your dishes. After you select a cycle, the Cycle On light for that cycle lights. Also, the Upper and Lower zone lights turn on by default.</p> <p> If you want to change the cycle once it has started, press the Reset button and turn off the dishwasher. Then, turn on the dishwasher again and select a new cycle.</p> <p> Default cycle is ECO.</p>
<p>3 Self Clean (for some models)</p>	<p>Select this option to clean the dishwasher TUB. Run with the dishwasher empty. The Upper and Lower options are turned off by default.</p>
<p>4 Upper (for some models)</p>	<p>When you select Upper, only the upper rack nozzle is activated. The lower nozzle will not operate.</p> <p>Use this feature to wash a small load of dishes or glasses placed in the upper rack.</p> <p> When you select Upper, place dishes, glasses, etc. in the upper rack only. The dishwasher will not wash items placed in the lower rack.</p> <p>Selecting Upper reduces both the cycle time and the amount of electricity consumed.</p>
<p>5 Lower (for some models) / Lower Rack - Only (for some models)</p>	<p>When you select Lower (Lower Rack - Only), only the lower rack nozzle is activated. The upper nozzle will not operate.</p> <p>Use this feature to wash a small load of dishes or glasses placed in the lower rack.</p> <p> When you select Lower (Lower Rack - Only), place items, glasses, etc. in the lower rack only. The dishwasher will not wash items placed in the upper rack.</p> <p>Selecting Lower (Lower Rack - Only) reduces both the cycle time and the amount of electricity consumed.</p> <p> If you want to wash heavily soiled items such as pots and pans, select the Zone Booster option. (This option consumes slightly more water and energy.)</p> <p>Select Zone Booster L option: Applies intensive washing power to the left part of the lower rack.</p> <p>Select Zone Booster R option: Applies intensive washing power to the right part of the lower rack.</p> <p>Select both Zone Booster L & R options: Applies intensive washing power to the whole lower rack.</p> <p> Selecting a Zone Booster option does not turn off the Upper Nozzle.</p>
<p>6 Speed Booster (for some models)</p>	<p>Select this option to wash with short cycle time. (Auto, ECO, Intensive.)</p>

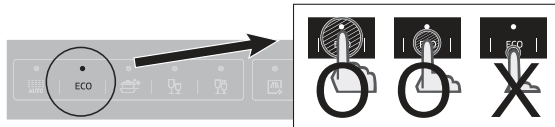
<p>7 Sanitize</p>	<p>With the Sanitize option selected, the water temperature is increased to 70 °C for high temperature sanitization.</p> <p> You cannot select the Sanitize option if you select the Delicate cycle.</p>
<p>8 Dry+ (Child Lock)</p>	<p>Use this option when you want to dry your dishes more completely. The temperature rises to 65 °C in the final rinse cycle and dry time is increased. If you select the this option, electricity consumption is increased.</p> <p>*Child Lock : This option allows you to lock the buttons on the control panel - except the Power button - so children cannot accidentally start the dishwasher by pressing the buttons on the panel. Only the Power button remains active.</p> <p>To lock or unlock the buttons on the control panel, press and hold the Dry+ (Child Lock) button for three (3) seconds.</p> <ul style="list-style-type: none"> • When the Power is On : Press and hold the "Dry+ (Child Lock)" button for three (3) seconds. • When the Power is Off : Push the Power button first, and then press and hold the "Dry+ (Child Lock)" button for three (3) seconds. • Child Lock remains active until you turn it off. You cannot select cycles or options or start the dishwasher when Child Lock is on.
<p>9 Display</p>	<p>Displays cycle time and remaining hours and minutes, Delay Start hours, and Error messages.</p> <p>If an error occurs during an operation, an error message is displayed with a warning sound.</p> <p>Refer to the "Troubleshooting and information codes" section on page 34.</p> <p> Child Lock indicator</p> <ul style="list-style-type: none"> - Turns on if the Child Lock is set (or the dishwasher is in the standby or pause modes). - Turns off while the dishwasher is operating. - When Child Lock is on, the Child Lock indicator blinks for several seconds if any button except the Power button is pressed. <p> Self Clean indicator (for some models)</p> <ul style="list-style-type: none"> - Turns on when the Self Clean option is enabled (or the dishwasher is in the standby or pause modes), but turns off while the dishwasher is operating. - Blinks for 5 seconds every 20 to 22 cycles. - The cycle counter disappears when the Self Clean operation is complete or when the dishwasher reaches the 23rd cycle without the Self Clean cycle being used. (The Reset or Self Clean operation is not counted by the cycle counter.) <p> Rinse Refill indicator</p> <ul style="list-style-type: none"> - Turns on if the dishwasher runs out of rinse aid (or the dishwasher is in the standby or pause modes). - Turns off while the dishwasher is operating. <p> Lack of salt indicator (*applicable models only)</p> <ul style="list-style-type: none"> - Turns on when the water softener runs out of salt. (or the dishwasher is in the standby or pause modes.) - Turns off while the dishwasher is operating.

Setting up your dishwasher

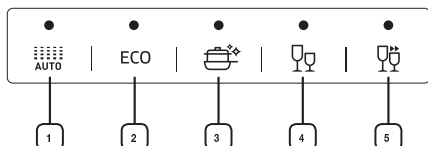
10 Delay Start	Delay a cycle for up to 24 hours in one-hour increments. To increase the delay start time, press or hold the Delay Start button. The hour displayed indicates the time at which the wash will be started. <ul style="list-style-type: none">- After setting the delay time, press the Start button, and then close the door to start the cycle.- If you want to change the delay time once the dishwasher has started, press the Reset button and turn off the dishwasher. Then, turn on the dishwasher again and select a new cycle with a new delay setting.
11 Start	To start a cycle, press the Start button before closing the door. *Reset : To cancel a currently running cycle and drain the dishwasher, press and hold the Start button for three (3) seconds. Once the dishwasher is reset, select a cycle and option, and then press Start to restart the dishwasher.

 You can select options (Self Clean, Upper, Lower, Speed Booster, Sanitize, Dry+, Delay Start) before starting a cycle. If you change the cycle after selecting an option, the original cycle is reset.

-  To prevent the touchpad from losing response sensitivity, follow these instructions:
- Touch the center of each keypad using one finger. Do not push.
 - Clean the touch control's surface regularly with a soft, damp cloth.
 - Be careful not to touch more than one touch key pad at a time, except as directed.



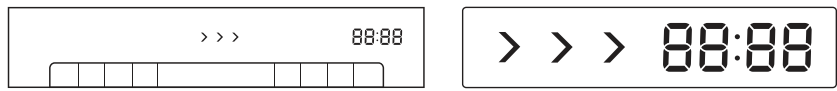
CYCLE SELECTOR



1	Auto	Light to heavily soiled daily used items, automatic detection of the amount of soils.
2	ECO	Normally soiled daily used items, with reduced energy and water consumption. * The Speed Booster option will reduce the cycle time.
3	Intensive	Heavily soiled items include pots and pans.
4	Delicate	Lightly soiled delicate items. You cannot select the Speed Booster , Zone Booster or Sanitize option if you select this cycle.
5	Quick	Lightly soiled with very short cycle time. You cannot select the Speed Booster , Zone Booster or Sanitize option if you select this cycle.

PROGRESS DISPLAYS

DW60H9970 series only



1	Wash		When the dishwasher is in a wash portion of a cycle, the first arrow light is illuminated and the remaining time is displayed.
2	Rinse		When the dishwasher is in a rinse portion of a cycle, the second arrow light is illuminated and the remaining time is displayed.
3	Dry		When the dishwasher is in a drying portion of a cycle, the third arrow light is illuminated and the remaining time is displayed.
4	Clean		After the dishwasher has completed all portions of a cycle, all other indicator lights are turned off. The dishwasher chimes and "End" is displayed for several minutes.

When the dishwasher starts a cycle, the light that corresponds to the current operation turns on to show the progress of the cycle.

Setting up your dishwasher

MEETING THE INSTALLATION REQUIREMENTS

Power supply and grounding



Do not use an extension cord.

WARNING Only use the power cord that came with the dishwasher.

When preparing for the installation, ensure that your power supply offers:

- An AC 220-240 V / 50 Hz fuse or a circuit breaker.
- An individual branch circuit serving your dishwasher.

Your dishwasher must be grounded. If your dishwasher malfunctions or breaks down, grounding will reduce the risk of electric shock by providing a path of least resistance for the electric current.

Your dishwasher comes with a power cord and a grounded, three-prong plug that can be inserted into a properly installed and grounded outlet.



Do not connect the ground wire to a plastic plumbing line, gas line, or hot water pipe.

WARNING

Improperly connecting the grounding conductor can result in electric shock.

Check with a qualified electrician or technician if you are unsure whether your dishwasher has been properly grounded.



Do not modify the plug provided with the dishwasher. If it does not fit the outlet, have a proper outlet installed by a qualified electrician.

CAUTION

Water supply



Do not drink the water from inside the dishwasher.

WARNING

- The dishwasher may be connected to a cold or hot water supply, max 60 °C.
- A stopcock with a 3/4" male thread must be provided on tap.
- The water pressure must be between 0.05 MPa and 0.8 MPa. If the water pressure is too less, the water supply valve may not operate properly causing the dishwasher to turn off. If the water pressure is too high, a pressure reducer valve must be fitted.



You can reduce the risk of leaks and water damage by:

CAUTION

- Making water taps easily accessible.
- Turning off the taps when the dishwasher is not in use.
- Periodically checking the fittings for leaks.

Using Aqua-Stop

The Aqua-Stop was invented as the perfect leakage protection system. It is attached to the water supply hose and automatically cuts off the water flow in the event of damage to the hose.



Aqua-Stop is an electrical component.

- Take care that you do not damage the Aqua-Stop.
- Do not twist or bend the water supply hose connected to the Aqua-Stop.



If the Aqua-Stop has been damaged, shut off the water taps and pull out the power plug right away. Once these steps have been taken, contact Samsung Customer Service or a qualified technician.

Drain

If you are using a drain exclusively for the dishwasher, connect the drain hose to a drain that is between 30 cm to 70 cm off the ground.

Connecting the drain hose to a drain more than 80 cm off the ground can result the water in the dishwasher flowing back or draining incompletely.

Flooring

For best performance, your dishwasher must be installed on a solid, even floor.

Wooden floors may need to be reinforced to minimize vibrations. Carpeting and soft tiles are contributing factors to vibrations and may cause your dishwasher to move slightly while operating.



Never install your dishwasher on a platform or poorly supported structure.

Ambient temperature

Do not install your dishwasher in an area exposed to freezing temperatures. Your dishwasher always retains some water in the water valve, pump and hose and if the water freezes in the machine or hoses, it may damage the appliance and its components.

Test run

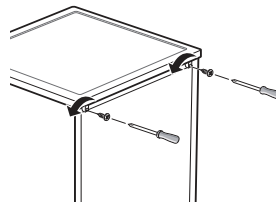
Make sure that you install your dishwasher correctly by running the **Quick** or cycle after the installation is complete.

Setting up your dishwasher

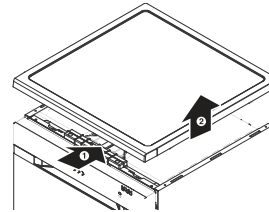
INSTALLING YOUR DISHWASHER (ONLY FOR INSTALLING UNDER THE SINK)


STEP1. Removing the work top

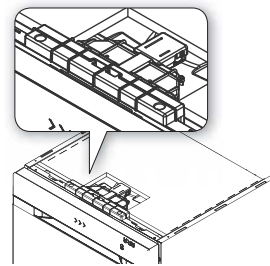
1. Remove the 2 screws from the upper part on the back of the dishwasher.



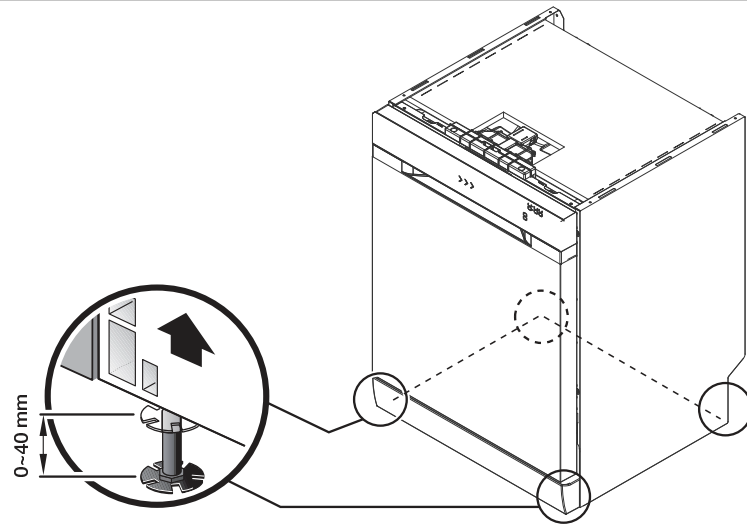
2. Slide the work top backward and then lift it up to separate it.



-  You may dispose the plastic part that is supporting the work top.



STEP2. Leveling the dishwasher

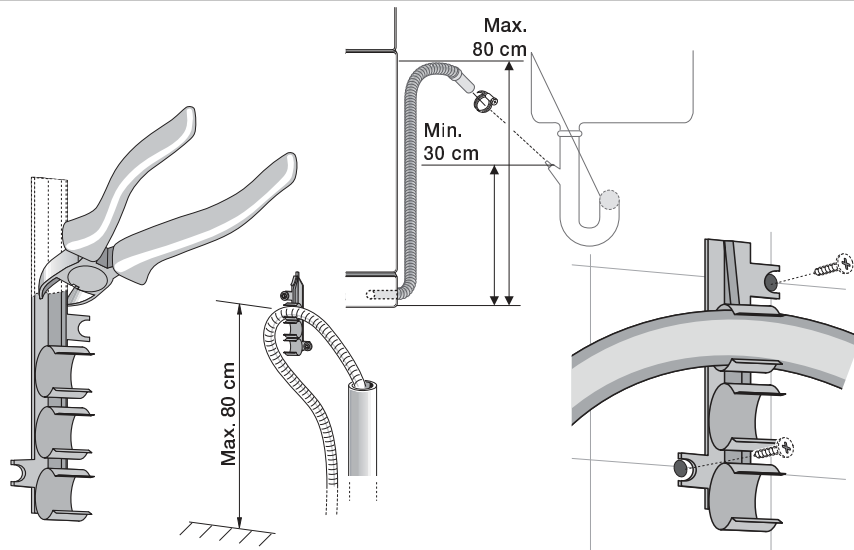


1. You can adjust the height of the product by turning the legs.
 - Slightly lift up the front and back of the product and turn the legs to adjust the height.
 - You can adjust the height up to 40 mm.
2. Push the product into the space under the sink and make sure that the product is level using the leveler.
 - Take care that the hoses or power cord is not twisted. when you push the product into the space under the sink.
3. Install the product so that there is a space of at least 4 mm between the top of the product and the bottom of the top plate of the sink.

 After the installation, do not bind the power cord with a cable tie that has a metal wire in it.

Setting up your dishwasher

STEP3. Connecting the hoses and powering



1. Remove the hose holder which is attached to the product and cut off part of the holder as shown in the figure.
2. Discard the part you have just cut off and use only the part that is shown by the figure.
3. Fix it to the wall by fastening the 2 screws.
4. Insert the drain hose into the fixed hose holder.
Install the drain hose so that it is placed within a range of 30 cm to 80 cm from the bottom.
5. Connect the drain hose to the drain outlet.



- Take care when you connect the drain hose that it does not move during a draining cycle.
- Confirm that no parts of the drain hose, supply hose or power cord are bent or folded.

6. Open the door and remove all foam, paper packaging, and unnecessary parts.
7. Turn on the circuit breaker you turned off before you began the installation.
8. Open the water supply valve to supply water to the dishwasher.
9. Turn on the dishwasher, and then select and run a cycle.



Check if the power turns on correctly and if there is any water leakage while the dishwasher is operating. If no errors occur while it is operating, turn off the dishwasher, and then go to No.5 of above.

If an error has occurred, turn off the dishwasher, close the water supply valve, and then refer to the user manual or contact a service centre as referring to the contact list on the back cover.



Make sure to check for water leakage on both ends of the water supply line and drain hose connector.



Test run

Make sure that you install your dishwasher correctly by running the **Quick** cycle after the installation is complete.

Before using the product for the first time

SETTING MODE

Turn on the dishwasher, and hold down both the **Sanitize** and **Delay Start** buttons for 3 seconds to enter Settings mode.

Pressing the **Sanitize** button changes the mode in this sequence:

Water reflector mode → Sound settings mode → Water softener mode → Brightness mode (for some models) → Auto Door mode.

Sound settings mode

Press the **Sanitize** button until "S on" or "SoFF" is displayed. To change the setting, press the **Delay Start** button. "SoFF" means that the sound is off for all cycles.

This setting is continue before changing again.

Water softener mode (Water hardness level setting)

1. Press the **Sanitize** button to enter Water softener mode ("L3" on the display indicates Water softener mode).
2. Once you enter the setting for the water hardness, the current hardness level setting is displayed.
3. Use the **Delay Start** button to select the water hardness level from Level 0 to Level 5. (Refer to the table below for the water hardness level setting in your area.)



If the water hardness level in your area is very low, you do not need to use dishwasher salt. However, you need to set the water hardness setting for the dishwasher to 0.

4. To exit the water hardness setting, press the **Power** button.

Water hardness level chart

The water hardness is measured using German degrees (°dH), French degrees (°TH), or mmol/ℓ (International unit for the water hardness).

Level	Water hardness				Regeneration softening/ washing cycle (ECO program)	Salt injection
	°dH	°TH	mmol/ℓ	Range		
0	<6	<10	<1.0	No recycle	No	No
1	6~14	10~25	1~2.5	1/8	Yes	Yes
2	14~23	25~40	2.5~4.0	1/5	Yes	Yes
3	23~31	40~55	4.0~5.5	1/3	Yes	Yes
4	31~40	55~70	5.5~7.0	1/2	Yes	Yes
5	>40	>70	>7.0	1/1	Yes	Yes

Before using the product for the first time


Better washing results require the use of soft water.


Hard water contains impurities that can hinder the washing performance.

You will need to soften the water if the water supply is harder than 1.0 mmol/ℓ (6 °d – German scale).

To do this, you need:

- Dishwasher salt.
- Configuration of the water hardness level according to your area.

 For more information about the water hardness level in your area, contact your local water department.

 If the hardness level of your water supply is unsteady, set the dishwasher to the highest measurement. For example, if the water hardness reading ranges from 6.7 mmol/ℓ to 9.0 mmol/ℓ, set the dishwasher to 9.0 mmol/ℓ.

The dishwasher's default water hardness level setting is 3 (4.0-5.5 mmol/ℓ). If this setting matches the water hardness level in your area, there is no need to change it.

Brightness mode (Pocket LED brightness setting)

Press the **Sanitize** button until "B0 ~ B5" is displayed. (The higher numbers is more bright).

To change setting press **Delay Start** button. (for some models)

Auto Door mode

The door opens automatically when the cycle is complete to improve drying performance.

The door opens immediately before a cycle finishes, and "END" will appear on the display 30 seconds after that.

Press the **Sanitize** button to enter Auto Door mode. ("AOn" on the display indicates Auto Door mode.)

Press the **Delay Start** button to enable or disable the Auto Door.


- **AOn** : Auto Door enabled.
- **AOff** : Auto Door disabled.

* Note that Auto Door will stay active throughout the **ECO** cycle with no option enabled.

* Once the door opens in Auto Door mode, the door cannot be closed manually for the next 2 minutes.

* Auto Door will be disabled for the **Quick** cycle.





 Changing "Auto Door mode" setting can influence drying result. Select "**AOn**" mode for better drying result.

USING DISHWASHER SALT

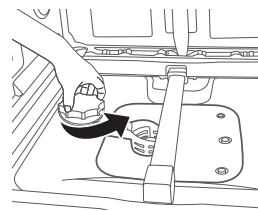
Filling the salt reservoir

In order to use soft water, you need to fill the salt reservoir with dishwasher salt.


 Use dishwasher salt only. Do not use any other type of salt or solvent. This may damage the salt reservoir and the water softening system.

 Always fill the salt reservoir just before running one of complete washing programmes to prevent corrosion due to the excess salt or salty water.


1. Open the door.
2. Open the salt reservoir cap by rotating it counterclockwise.

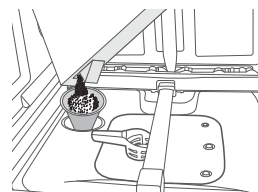


3. Fill the salt reservoir with water (only required when switching on the appliance for the first time)
4. Add the dishwasher salt.


 The salt reservoir's capacity is about 1 kg. Do not overfill the salt reservoir.


5. Remove excess salt from around the salt reservoir opening and cap seal.

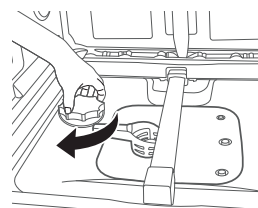
 If the excess salt is not removed, the salt reservoir cap may not close properly and allow salt water flow out with negative impact to the performance.



6. Rotate the salt reservoir cap clockwise until it is completely shut.


 Recommended that if spilled a lot of salt or salty water to inside Tub, run the **Quick Dry** to clean inside Tub. Any remaining salt grain or salty water can occur corrosion.

 Depending on the size of the salt grains, it may take a while for the salt to dissolve and the "Lack of salt" indicator to turn off.



Checking the Lack of salt indicator

If the "Lack of salt" indicator is lit, add dishwasher salt as described above.

 A lit "Lack of salt" indicator means that there remains salt for three more cycles from the first switched on.


Before using the product for the first time

USING DETERGENT

All dishwasher cycles require detergent in the detergent compartment.

Add the correct amount of detergent for the selected cycle to ensure the best performance.


 Use dishwasher detergent only. Regular detergent produces too much foam, which may decrease the dishwasher's performance or cause it to malfunction.

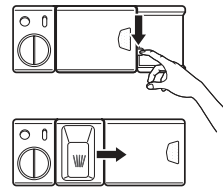
 Do not swallow dishwasher detergent. Avoid breathing in the fumes. Dishwasher detergent contains irritants and caustic chemicals that can induce respiratory conditions. If you have swallowed dishwasher detergent or inhaled the fumes, seek medical attention immediately.

 Keep dishwasher detergent out of the reach of children.

Filling the detergent dispenser


1. Open the detergent dispenser flap by pushing the detergent dispenser release catch.

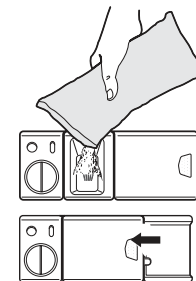
 The flap is always open at the end of a dishwashing cycle.



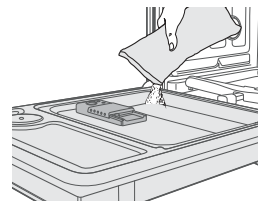
2. Add the recommended amount of detergent to the main wash detergent compartment.

3. Close the flap by sliding it to the left and then pressing it down.

 There is no separate button that is specific to using tablet detergents.



4. For better cleaning result, especially if you have very dirt items, add small amount (about 8 g) of detergent on the door. That will act in prewash phase.



Loading your dishwasher

DISHWASHING GUIDELINES

Follow these simple guidelines to get the best results and save energy.

Before loading dishes



Remove food remains such as bones, fruit seeds, etc. and waste such as toothpicks, paper napkins, etc. from your dishes. Food remains and waste can damage your dishes, make noise and even result in a product malfunction.



Do not wash items that are covered with ash, sand, wax, lubricating grease or paint. These materials will damage the dishwasher and ash does not dissolve and will distribute in hole interior.

Items not suitable for the dishwasher

- **Copper, brass, tin, ivory and aluminium items or with an adhesive**
- **Non-heat resistant plastics**
- **Craft items, antiques, valuable vases and decorative glassware**
- **Colours painted over a glaze**
- **Wooden cutlery and crockery or items with wooden parts**
- **Delicate glassware, or glassware containing lead crystal**



Silverware that has been in contact with foods containing sulphur can become discoloured. These include egg yolks, onions, mayonnaise, mustard, fish, fish brine and marinades.

- Clouding may occur on glasses after frequent washing. Do not wash delicate glassware, or glassware containing lead crystal in the dishwasher.



Aluminium components (e.g. grease filters) must not be cleaned with caustic, alkaline cleaning agents. These may damage the material, or in extreme cases, cause a severe chemical reaction. Use only items e. g. glasses, porcelain and cutlery which the manufacturer declare as dishwasher-proof.

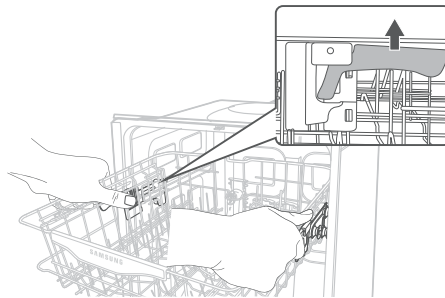
Loading your dishwasher

ADJUSTING THE HEIGHT OF THE UPPER RACK

You can adjust the height of the upper rack in your Samsung dishwasher so that the lower rack can accommodate larger sized dishes. Depending on where you set the upper rack height, the lower rack can accommodate plates up to 12 in. (30 cm) in diameter and the upper rack can accommodate plates up to 8 in. (20 cm) in diameter.

1. To lower the upper rack by 2 in. (5 cm), pull the adjust handles located at the left and right sides of the upper rack, and then push the upper rack downwards slightly at the same time.
2. To raise the upper rack, just pull the upper rack upwards. The adjuster handle will latch and the upper rack will move to the high position.

CAUTION We recommend adjusting the height of the upper rack before loading dishes into the rack. If you adjust the rack after loading the dishes, you may damage the dishes. If you do not adjust with left and right handle together, the dishwasher door may not close properly. Pull out the upper rack from the tub until it is fully revealed before adjusting the upper rack.



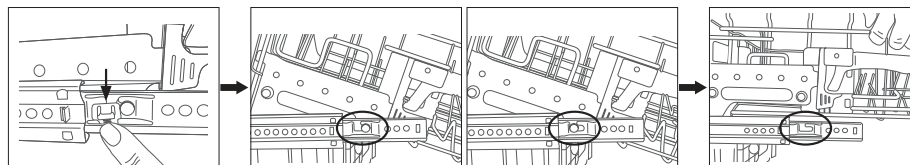
REMOVING THE UPPER RACK

NOTE You can remove the upper rack to accommodate extra large items in the bottom rack. Take care that you do not lose the holder rails during this process.

To remove the upper rack from the slide rail, pull the upper rack out from the tub until it is fully extended.

Hold down the holder rails on both sides to release the upper rack. Slide the upper rack out to the end of one holder rail, and then lift it up.

Repeat the steps above with the other holder rail.



Step 1.

Step 2.

Step 3.

LOADING THE LOWER RACK

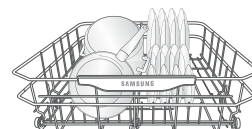
Load cookware (pots, pans, etc.), up to 12 in. (30 cm) in diameter into the lower rack. The lower rack has been especially designed for dinner dishes, soup bowls, plates, pots, lids, and casserole dishes.

We recommend loading cups, stemware, and small plates into the upper rack. See the recommended loading patterns below.



Loading large items into the zone booster areas

You can load large items such as pots and pans into the left and/or right sides of the lower rack - the Zone Booster areas - for more effective cleaning. When you select the Zone Booster option, an additional, powerful jet is activated and directed at items in the Zone Booster areas. Make sure pot handles and other items do not interfere with the rotation of the nozzles and the water reflector.



LOADING THE UPPER RACK

The upper rack has been designed for small plates, mugs, glasses, and plastic items marked "dishwasher safe". Load your plates into the dishwasher so that their top sides face each other.

Make sure the loaded dishes do not interfere with the rotation of the nozzle which is located at the bottom of the upper rack. (Check this by rotating the nozzle by hand.)

When loading dishes, pull the upper rack out sufficiently so you can load it without striking the counter above.

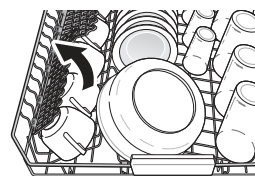


Using the glass support

You can place cups, small items and long cooking utensils on the cup selves. This is also a very convenient way to wash wine glasses.

Place wine glasses on the pegs of the cup selves. The cup selves can also be folded back when not in use.

CAUTION Do not adjust the level of the upper basket with the glass supports propped up. This will make it impossible to push in the upper basket.



Loading your dishwasher

USING THE 3RD (CUTLERY) RACK (FOR SOME MODELS)

Loading the cutlery rack

In addition to the standard cutlery basket in the lower rack, some models come with a cutlery rack. The cutlery rack is best suited for flatware and cooking or serving utensils. You can place cutlery and utensils on the cutlery rack.





Removing the Cutlery Rack

The entire cutlery rack can be removed if more space is needed on the upper rack for larger items.

Loading the cutlery pad

Some models come with a removable, foldable cutlery pad along with a cutlery rack. To use, place the pad on the cutlery rack, and then place cutlery and serving and cooking utensils on the pad in a random or regular fashion. After a wash cycle is complete, and the cutlery and utensils are dry, you can fold the pad and carry the cutlery and utensils in the pad to their storage locations.



-  **WARNING** Use caution when folding and moving the rack with a long thin item inside the pad. The item may fall out in this process, causing physical injury.
-  It is advisable not to move the pad while it is wet. Wait until the pad is dry. The pad dries quickly after a wash cycle when exposed to air for a few minutes.

* When loading the cutlery and utensils onto the cutlery rack, make sure they do not interfere with the top nozzle of the rack. If they interfere, remove the cutlery pad and try again.



USING RINSE AID

Filling the rinse aid reservoir

When the Rinse Refill indicator lights up on the control panel, refill with rinse aid.

Your dishwasher has been designed to use liquid rinse aid only.

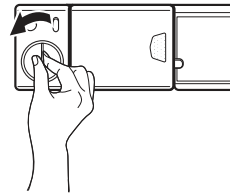
Using a powdered rinse aid will clog the reservoir opening and cause the dishwasher to malfunction.

Rinse aid improves the drying performance of the dishwasher.


CAUTION Do not add regular detergent to the rinse aid reservoir.

1. Remove the rinse aid reservoir cap by rotating it counterclockwise.

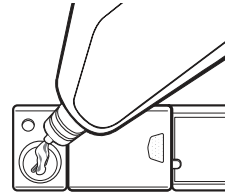
 Adding rinse aid to tablet detergents will improve drying performance.



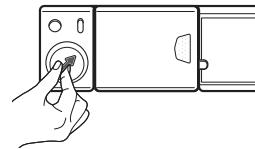
2. Fill the rinse aid reservoir with rinse aid.

 Use the viewing port when filling the rinse aid reservoir.

CAUTION Do not fill the reservoir above the full level indicator.
Excess rinse aid can overflow during the wash cycle.



3. Turn the rinse aid indicator dial to a number between 1 and 6. The higher the number, the more rinse aid the dishwasher uses. If you are unable to rotate the rinse aid dial easily, try using a coin.



4. Close the rinse aid reservoir cap by rotating it clockwise.

Cleaning and maintaining your dishwasher

Keeping your dishwasher clean improves its performance, reduces unnecessary repairs, and prolongs its life.

CLEANING THE EXTERIOR

It's best to clean spills on the exterior of your dishwasher as they occur. Use a soft, damp piece of cloth to gently wipe away spills and dust from the control panel.



Do not use benzene, wax, thinner, chlorine bleach, or alcohol. These chemicals may discolour the inner walls of the dishwasher and cause stains.



Do not clean the dishwasher by sprinkling water over it. In particular, protect the electrical components from coming into contact with water.



If your dishwasher has a stainless steel door panel, it can be cleaned with a stainless steel cleaner for Home Appliances or similar product using a clean, soft cloth.

CLEANING THE WASH CABINET

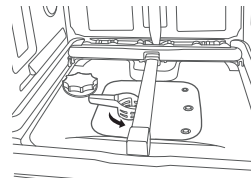
If there are limescale or grease deposits in the cabinet, remove these by damp cloth or run a programme which has highest rinsing temperature without any loading items after filling detergent dispenser with dishwasher detergent.



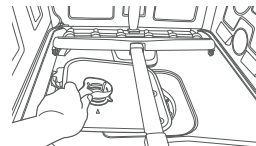
Do not remove the front seal on the container. Removing the seal can cause the dishwasher to leak or malfunction.

CLEANING THE FILTERS

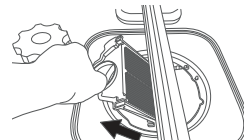
1. Turn off the dishwasher.
2. Rotate the filter insert counterclockwise to unfasten and then detach the filter insert.



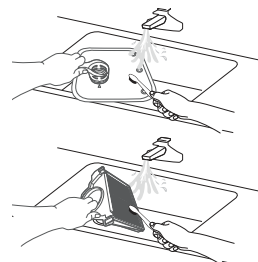
3. Remove the fine filter (flat rectangular).



4. Disassemble the coarse filter and micro filter.



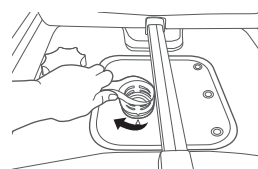
- Remove any dirt or other remains from the filters and rinse them under running water.



- Reassemble the filters in the reverse order of the disassembly, replace the filter insert, and rotate clockwise to the close arrow.



If the filter insert is not closed properly, the performance will be decreased.

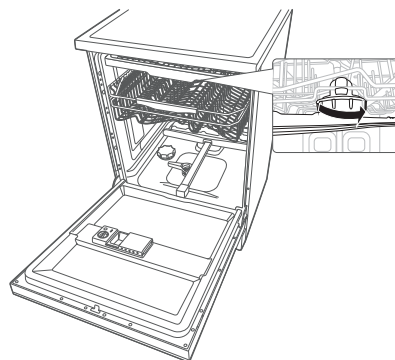


CLEANING THE NOZZLES

If your dishwasher does not seem to be cleaning adequately or the nozzles seem clogged, you can clean each of the nozzles. When removing the nozzles, take care as they may break.

Upper nozzle

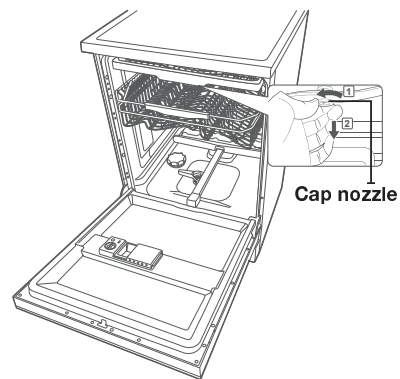
- Pull the upper rack towards the front.
- Check whether the nozzle holes are clogged by food particles.
- If cleaning is needed, remove the nozzle.
- To remove the nozzle, unfasten and remove the nut, and then remove the nozzle.
- Clean the nozzle, re-insert it, and fasten the nut.
- When fastening the nut, turn it firmly by hand.
- Check whether the nozzle is engaged correctly by rotating it by hand.



Cleaning and maintaining your dishwasher

Top nozzle

1. Check whether the nozzle holes are clogged by food particles.
2. If cleaning is needed, remove the nozzle.
3. To remove the nozzle, pull out the upper rack first, unfasten the nozzle cap by turning it counterclockwise, and then remove the upper nozzle.
4. Clean the nozzle, re-insert it, and then fasten the nozzle cap to the nozzle by turning the cap clockwise.
5. Check whether the nozzle is engaged correctly by rotating it by hand.



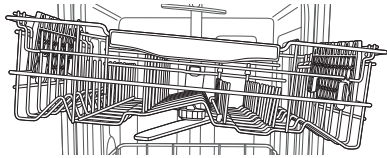



STORING YOUR DISHWASHER

If you need to store your dishwasher for an extended period of time, first drain the unit fully and then disconnect the water hose.

Your dishwasher can become damaged if water is left in the hoses and internal components before storing it. After draining and disconnecting the dishwasher, be sure to turn off the water supply valve and circuit breaker.

Troubleshooting and information codes

CHECK THESE POINTS IF YOUR DISHWASHER...

PROBLEM	POSSIBLE CAUSE	SOLUTION
Will not start.	The door is not closed completely.	<p>Check if the door is latched and closed completely. Check whether the Upper Rack is properly joined with Duct Nozzle.</p> <p>Also, Check imbalance assembly of the Upper Rack.</p> 
	The Start (Reset)  button is not selected.	Check that the door is latched and closed completely. Press the Start (Reset)  button before closing the door.
	No programme is selected.	Select a programme.
	The power cord is not connected.	Connect the power cord.
	There is no water supplied.	Check that the water supply valve is open.
	The control panel is locked.	Deactivate the Child Lock function to unlock the control panel.
Has a bad odour.	There is water left over from the last cycle.	Add detergent without loading dishes and run the Self Clean  programme to clean the dishwasher.
Has water remaining after the programme has finished.	The drain hose is folded or clogged.	Straighten and unclog the hose.

Troubleshooting and information codes

PROBLEM	POSSIBLE CAUSE	SOLUTION
Has food particles remaining on the dishes.	An inappropriate programme was selected.	Select a programme according to the soil level of the dishes as directed in this manual.
	The filter is contaminated or not correctly fasten.	Clean the filter and make sure the filters are fitted properly.
	No dishwasher detergent or not enough detergent is being used.	Use an automatic dishwasher detergent or use more detergent.
	The pressure of the supplied water is low.	The water supply pressure must be between 0.05 MPa and 0.8 MPa.
	Spray arm jets are clogged.	Clean the spray arms.
	The dishes are improperly loaded.	Rearrange the dishes so they have good water access and do not interfere with spray arm and dispenser operation.
	The water is too hard.	Check salt refill indicator and refill dishwasher salt.
Does not dry dishes well.	There is no rinse aid in the dispenser or not enough rinse aid was used.	Check the dispenser and add rinse aid. Check rinse aid setting.
	Multi taps were used without selecting the Dry+ function.	Select the Dry+ function or use rinse aid.
	Glasses and cups with concave bottoms hold water. This water may spill onto other items when you are unloading.	After finishing the cycle, empty the lower rack first and then the upper, this will avoid water dripping from the upper rack onto the dishes in the lower rack.
Is too noisy.	The dishwasher beeps when the dispenser cover is opened and during the initial stage of draining the pump operation.	This is a normal operation.
	The dishwasher is not level.	Ensure that the dishwasher is level.
	There is a 'chopping' sound because an arm is bumping against the dishes.	Rearrange the dishes.
Leaves a yellow or brown film on cups or dishes	This can occurs from coffee and tea soils.	Use programme with higher temperature.
Does not have any indicators lit.	The power cord is not connected.	Connect the power cord.
Does not have smoothly rotating arms.	The arms are clogged with food particles.	Clean the arms.
Leaves a white coating on cutlery or crockery after cleaning.	Hard water was used.	Check the salt fill indicator and softener setting is correct according to the water hardness of your area. Check salt reservoir cap is correctly fitted.

INFORMATION CODES

The Control Panel displays information codes to help you understand what is occurring with your dishwasher. If you see any of the codes listed below, you should select the **Reset** option, and then follow the instructions in the Solution column.




CODE SYMBOL	MEANING	SOLUTION
tE	Temperature sensor error	Functional error. With the dishwasher empty, add detergent, and then run a cycle. If the problem continues, go to your house circuit breaker panel, set the dishwasher's circuit breaker switch to off, and then contact an authorized Samsung service center.
HE1	Heater error	
HE	High temperature heating error	
1E	Low water level error	
PE	Half load function error	
7E	Reflector function error	Check if flatware or dishware interferes with the water reflector and the water reflector does not operate as a result. If this happens without any interference, close the water supply valve and contact an authorized Samsung service center.
4E	Water supply error	Check whether the water supply valve is closed, the water supply is suspended, or the water inlet valve or line is frozen or clogged by foreign particles. If the problem continues, close the water supply valve, and then contact an authorized Samsung service center.
4E5		
5E	Drain error	Check whether the drain hose is clogged or folded. If the problem continues, close the water supply valve, and then contact an authorized Samsung service center.
OE	Over-level water error	Functional error. Close the water supply valve and go to your house circuit breaker panel, set the dishwasher's circuit breaker switch to off, and then contact an authorized Samsung service center.
LE	Leakage	
bE2	Button error	
3E	Communication error	Functional error. Turn off the dishwasher and try to start it again. If the problem continues, contact an authorized Samsung service center.
AE		
bE3		
AE6		
dE3	Auto door open error	This error occurs if the door doesn't open automatically during the dry cycle. If the problem continues, close the water supply valve, and then contact an authorized Samsung service center.

For any codes not listed above, call 1-800-SAMSUNG (726-7864)

Programme chart

PROGRAMME CHART

Soil level	Auto	ECO	Intensive	Delicate	Quick
Amount of food remains	Very light to Heavy	Normal	Heavy	Light	Light
Program sequence	Prewash ▶ Mainwash ▶ Rinse ▶ Hot rinse ▶ Dry ▶ End	Prewash ▶ Mainwash ▶ Rinse ▶ Hot rinse ▶ Dry ▶ End	Prewash ▶ Mainwash ▶ Rinse ▶ Hot rinse ▶ Dry ▶ End	Prewash ▶ Mainwash ▶ Rinse ▶ Hot rinse ▶ Dry ▶ End	Mainwash ▶ Rinse ▶ Hot rinse ▶ End
Water consumption (L)	11.0 ~ 21.0	10.7	25.9	10.9	11.2
Energy consumption (kWh)	1.0 ~ 1.5	0.94	1.65	0.84	0.9
Program Time (min)	128 ~ 184	190	199	113	38

-  The wash time varies depending on the options you add, and on the pressure and temperature of the supplied water.
-  Quick Cycle : This cycle doesn't work AUTO DOOR. (without DRY course)
-  The power consumption depends on the water temperature and/or load.
When the Rinse Aid is empty, time and temperature can increase a little.
The water consumption and wash time depending on the steps or options you add, and on the pressure and temperature of the supplied water.

Appendix

DISPOSING THE DISHWASHER AND HELPING THE ENVIRONMENT

Your dishwasher is manufactured from recyclable materials. If you decide to dispose of it, please observe your local waste disposal regulations. Cut off the power cord so that the appliance cannot be connected to a power source.

Remove the door so that animals and children cannot get trapped inside the appliance.

Do not exceed the detergent quantities recommended in the detergent manufacturers' instructions.

DECLARATION OF CONFORMITY

This product complies with the requirements of these directives:

EMC-Directive 2004/108/EC


Low Voltage Directive 2006/95/EC

SPECIFICATIONS

MODEL	FS (Free Standing)	
	DW60H9970FS	DW60H9950FS DW60H9950FW
Power	AC 220 ~ 240 V / 50 Hz	
Water pressure	0.05 ~ 0.8 Mpa	
Wash capacity (place settings)	14	
Rated power	2000 ~ 2300 W	
Dimension (mm)	598 (W) x 845 (H) x 600 (D)	
Weight	Unpacked	48.0 kg
	Packed	51.0 kg

- Dimensions of the space to be provided for the appliance;
- Dimensions and position of the means for supporting and fixing the appliance within this space;
- Minimum distances between the various parts of the appliance and the surrounding structure;
- Minimum dimensions of ventilating openings and their correct arrangement;
- Connection of the appliance to the supply mains and the interconnection of any separate components;
- Necessity to allow disconnection of the appliance from the supply after installation, unless the appliance incorporates a switch complying with 24.3. The disconnection may be achieved by having the plug accessible or by incorporating a switch in the fixed wiring in accordance with the wiring rules.
- The instructions for fixed appliances shall state how the appliance is to be fixed to its support. The method of fixing stated is not to depend on the use of adhesives since they are not considered to be a reliable fixing means.

For standard test

 The diagrams below show the proper way to load the baskets based on the European Standards (EN50242).

- Washing capacity: 14 place settings
- Test standard: EN50242/IEC60436
- Position of upper basket: Low
- Programme: **ECO**
- Additional options: Upper only + Lower only (Default)
- Rinse aid setting: 6
- Dosage of the standard detergent
 - 14 PS : 7 g + 28 g
- For the arrangement of the items, refer Figure A, B, C.

14 place settings

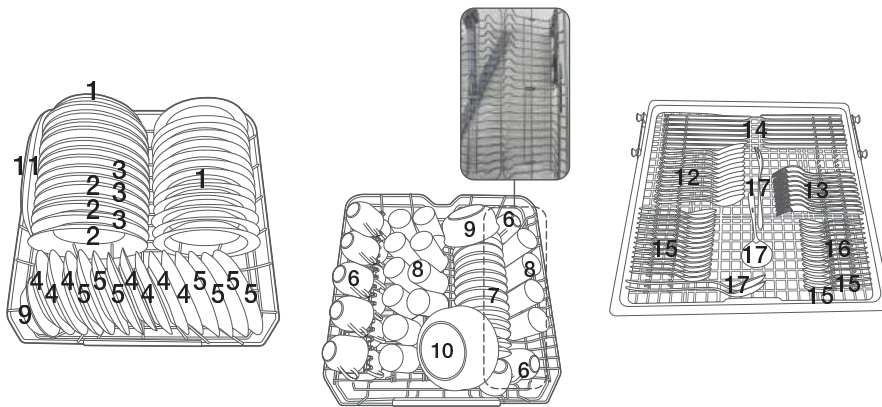


Figure A-1: Lower basket

Place the Wire Folding left side.

Figure B-1: Upper basket


Without 3rd rack pad

Figure C-1: Cutlery tray

1	Soup plate : Oat flake	6	Cup : Tea	12	Soup spoon : Oat flake
2	Dinner plate : Egg	7	Saucer : Tea	13	Fork : Egg
3	Dinner plate : Meat	8	Glass : Milk	14	Knife
4	Dessert dish : Spinach	9	Small bowl, Middle bowl : Spinach	15	Dessert spoon
5	Dessert dish : Egg	10	Big bowl : Meat	16	Tea spoon
		11	Oval plate : Margarine	17	Serving cutlery

Product fiche

REGULATION (EU) No 1059/2010

 " * " Asterisk(s) means variant model and can be varied (0-9) or (A-Z).

Supplier	SAMSUNG				
Model name	DW60H9970U*	DW60H9950U*	DW60H9970F*	DW60H9950F*	
Rated Capacity (place setting)	14	14	14	14	
Energy efficiency class	A++	A++	A++	A++	
Eco label	No	No	No	No	
Annual energy consumption, (AE _d) (kWh/year) ¹⁾	266	266	266	266	
Standard cycle energy consumption, (E _c) (Kwh)	0.936	0.936	0.936	0.936	
Power consumption off mode, P _o (W)	0.45	0.45	0.45	0.45	
Power consumption left-on mode, P _l (W)	5	5	5	5	
Annual water consumption (AW _d), (L) ²⁾	2996	2996	2996	2996	
Drying efficiency class	A	A	A	A	
Standard programme ³⁾	Eco	Eco	Eco	Eco	
Programme time for the standard cycle	190	190	190	190	
Duration of the left-on mode, (T _l) (min)	10	10	10	10	
Airborne acoustical noise emissions (dBA re 1pW)	41	44	41	44	
Installation	Built-under	Yes	Yes	-	-
	Free standing	-	-	Yes	Yes

- 1) Based on 280 standard cleaning cycles using cold water fill and the consumption of the low power modes. Actual energy consumption will depend on how the appliance is used.
- 2) Based on 280 standard cleaning cycles. Actual water consumption will depend on how the appliance is used.
- 3) 'Standard programme' is the standard cleaning cycle to which the information in the label and the fiche relates, that this programme is suitable to clean normally soiled tableware, and that it is the most efficient programme in terms of combined energy and water consumption.

Note

Note

Note

Note



QUESTIONS OR COMMENTS?

COUNTRY	CALL	OR VISIT US ONLINE AT
UK	0330 SAMSUNG (7267864)	www.samsung.com/uk/support
EIRE	0818 717100	www.samsung.com/ie/support

DD68-00158A-03

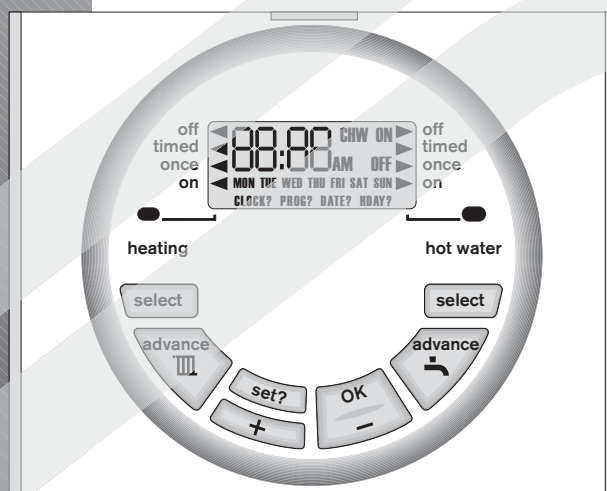
A.3 Boiler

A.3 Boiler

The boiler is a Worcester-Bosch with a DT20 programmer.

DT20 PROGRAMMER

DIGITAL TWIN CHANNEL PROGRAMMER
FOR GREENSTAR i and GREENSTAR Si MODELS



 **WORCESTER**
Bosch Group

INSTRUCTION MANUAL
FITTING & OPERATING INSTRUCTIONS



CONTACT INFORMATION

WORCESTER BOSCH:

TECHNICAL: 08705 266241
SERVICE: 08547 256206
SPARES: 01905 752571
LITERATURE: 01905 752556
TRAINING: 01905 752526
SALES: 01905 752640
WEBSITE: www.worcester-bosch.co.uk

MANUAL INFORMATION

PLEASE READ THESE INSTRUCTIONS CAREFULLY BEFORE STARTING

THESE INSTRUCTIONS ARE APPLICABLE TO THE WORCESTER BOSCH MODEL(S) STATED ON THE FRONT COVER OF THIS MANUAL ONLY AND MUST NOT BE USED WITH ANY OTHER MAKE OR MODEL

THE INSTRUCTIONS APPLY IN THE UK ONLY AND SHOULD BE FOLLOWED EXCEPT FOR ANY STATUTORY OBLIGATION

IF YOU ARE IN ANY DOUBT CONTACT WORCESTER BOSCH TECHNICAL HELPLINE

THIS ACCESSORY MUST BE FITTED BY A COMPETENT PERSON. FAILURE TO COMPLY COULD LEAD TO PROSECUTION.

LEAVE THESE INSTRUCTIONS WITH THE USER OR AT THE APPLIANCE.

ABBREVIATIONS:

CH Central Heating

HW Domestic Hot Water

RF Radio Frequency

DLS Day Light Saving

BST British Summer Time

GMT Greenwich Mean Time

C Celcius

m Metre

IP Ingress Protection

V Volts

mA MilliAmps

DEFINITIONS (DLS/BST):

Summer period begin: Last Sunday in March at 1:00 AM GMT (Clock put forward by 60 minutes)

Summer period end: Last Sunday in October at 2:00 AM GMT (Clock put back by 60 minutes)

SYMBOLS:

 Central Heating

 Domestic Hot Water

CONTENTS

ACCESSORY INFORMATION

GENERAL INFORMATION	2
---------------------	---

TECHNICAL DATA	3
----------------	---

INSTALLATION & COMMISSIONING

FITTING THE DT20	4
------------------	---

USER INSTRUCTIONS

OPERATING CONTROLS	5
--------------------	---

PRESET PROGRAMS	6
-----------------	---

SETTING PROGRAMS	
------------------	--

Setting CH Mon-Fri • Setting HW Mon-Fri	7
---	---

Setting individual weekdays	8
-----------------------------	---

Setting CH Sat-Sun • Setting HW Sat-Sun	9
---	---

Setting individual weekend days	10
---------------------------------	----

SETTING HOLIDAYS	11
------------------	----

SETTING THE CLOCK	12
-------------------	----

SETTING THE DATE	13
------------------	----

SERVICING & SPARES

MAINTENANCE & SPARES	14
----------------------	----

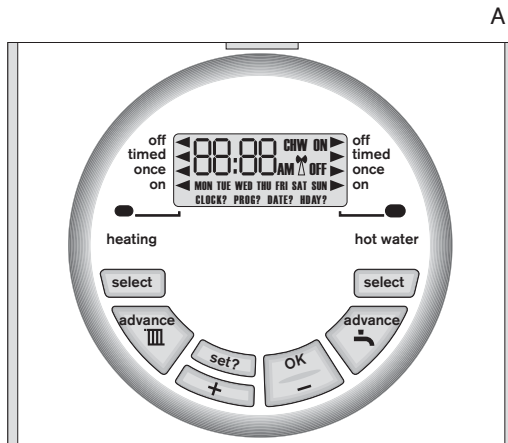
CONTENTS

ACCESSORY
INFORMATION

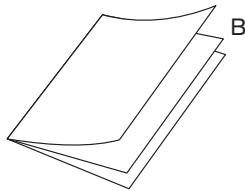
INSTALLATION &
COMMISSIONING

USER
INSTRUCTIONS

SERVICING
& SPARES



A



B

GENERAL INFORMATION

STANDARD PACKAGE:

- A - Programmer
- B - Instructions

SPECIFICATIONS:

- Twin channel programmer for CH & DHW mounted into the boiler fascia
- 7 day programmer
- 3 on/off periods per day
- Automatic BST settings
- Pre-programmed on/off periods
- Dedicated advance buttons
- 12 or 24 hour back-lit digital display
- Holiday function
- Pre-wired with PCB connector

TECHNICAL DATA

DESCRIPTION	UNITS	DT20
Dimensions	mm	-
Electrical supply	-	24v DC <65mA
Ambient operating temperature	°C	0 to +50
Humidity operating range	% non-condensing up to 45°	30 - 95
Class of protection	-	II
Degree of protection	IP	20
Accuracy @ 25°C	sec/day	<±1
Battery life	years	10
Battery backup time & date	years min.	10
Shortest switching period	minutes	1
DHW & CH On/Off periods	number	3
DHW & CH Programs	days	7

ACCESSORY
INFORMATION

Related Standards:

BS EN60730-1:2001

BS EN60730-2-7:1992

Electro Magnetic Compatibility and Radio Spectrum Matters (ERM); Short Range Devices (SRD) ETSI EN 300 220-1

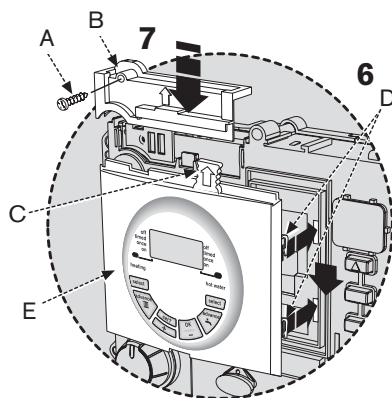
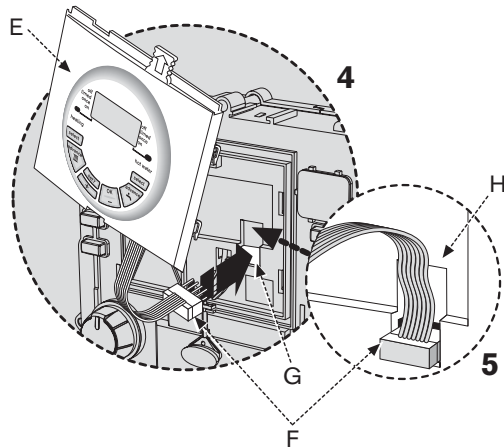
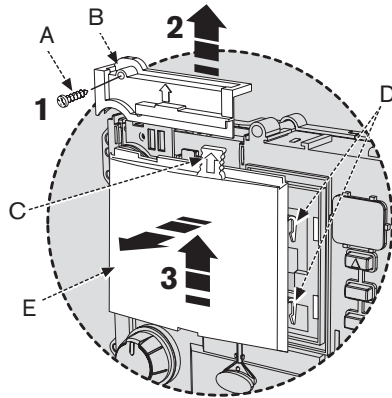
EC Directives:

European Union Law Directive 2000/84/EC

Low Voltage Directive (73/23/EEC)

Electro Magnetic Compatibility Directive (89/336/EEC)

CE Marking Directive (93/68/EEC)



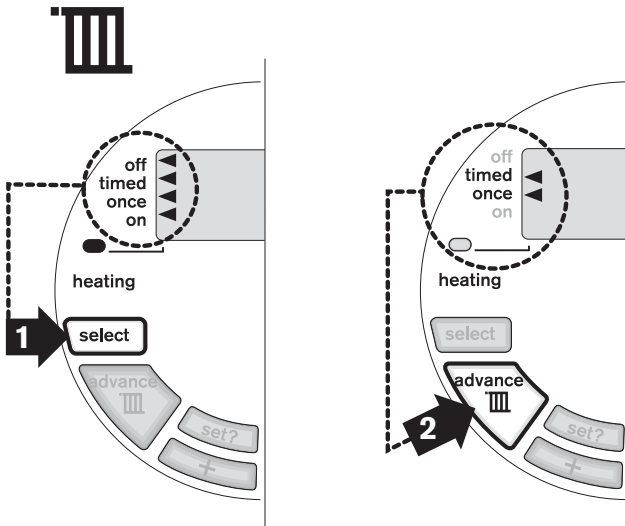
FITTING THE DT20

DANGER - 24V & 230V: DO NOT TOUCH THE ELECTRICAL COMPONENTS OR CIRCUITS.

CAUTION: ISOLATE THE MAINS ELECTRICITY SUPPLY BEFORE STARTING ANY WORK AND OBSERVE ALL RELEVANT SAFETY PRECAUTIONS.

OBSERVE ELECTRONIC STATIC DISCHARGE PRECAUTIONS. DO NOT TOUCH THE PCB CIRCUITS

- ▶ **Important: Switch off boiler**
- ▶ Remove boiler outer casing and control panel fascia to gain access to the heatronic control panel
- 1 Release securing screw (A)
- 2 Pull cover panel (B) upwards to remove
- 3 Grip tab (C), pull upwards to disengage clips (D) and pull forwards to remove blanking plate (E) or existing programmer
- 4 Align connector pins (F) into receptors (G) in the pcb and push fully home
- 5 Feed the ribbon cable (G) into recess (H)
- 6 Align programmer (E) and locate clips (D), push into slots then downwards to secure using grip tab (C)
- 7 Locate cover panel (B) and secure with screw (A)
- ▶ Replace fascia cover and outer casing before switching on the electricity supply and boiler
- ▶ Switch boiler on when completed.
- ▶ Refer to 'USERS INSTRUCTIONS' section for details of pre-set and setting programs.



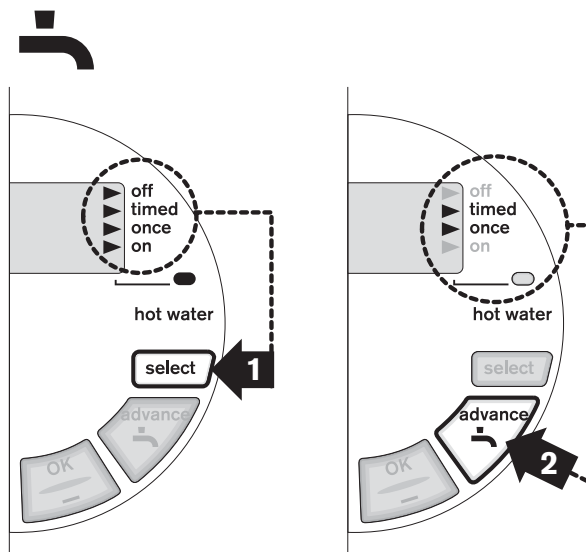
OPERATING CONTROLS

Central heating:

- Press '**select**' button to choose:
 - off** ◀ = constantly OFF
 - timed** ◀ = up to 3 ON and 3 OFF time periods as program
 - once** ◀ = ON from 1st ON until 3rd OFF time period as program
 - on** ◀ = constantly ON

- Press '**advance**' button:
 - ON = heating light on (heating stays on until the next OFF time period)
 - OFF = heating light off (heating stays off until the next ON time period)

Note: 'advance' will not function with constant on or off selected.



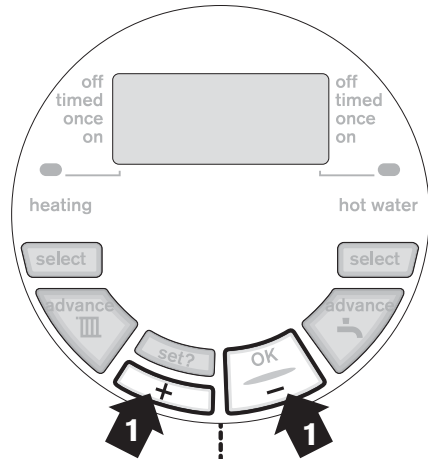
Hot Water:

- Press '**select**' button to choose:
 - ▶ **off** = constantly OFF
 - ▶ **timed** = up to 3 ON and 3 OFF time periods as program
 - ▶ **once** = ON from 1st ON until 3rd OFF time period as program
 - ▶ **on** = constantly ON

- Press '**advance**' button:
 - ON = hot water light on (hot water stays on until the next OFF time period)
 - OFF = hot water light off (hot water stays off until the next ON time period)

Note: 'advance' will not function with constant on or off selected.

USER
INSTRUCTIONS



	1st ON	1st OFF	2nd ON	2nd OFF	3rd ON	3rd OFF
Central Heating:						
<i>MON to FRI</i>						
Time	6:30	8:30	12:00	12:00	16:30	22:30
<i>SAT & SUN</i>						
Time	7:00	9:00	12:00	12:00	16:00	23:00
Hot Water:						
<i>MON to FRI</i>						
Time	6:30	8:30	12:00	12:00	16:30	22:30
<i>SAT & SUN</i>						
Time	7:00	9:00	12:00	12:00	16:00	23:00

PRE-SET PROGRAMS

If you need to restore the factory pre-set program times then:

- 1 Press the '-' and '+' buttons together to restore the default program times to those shown in the table opposite.

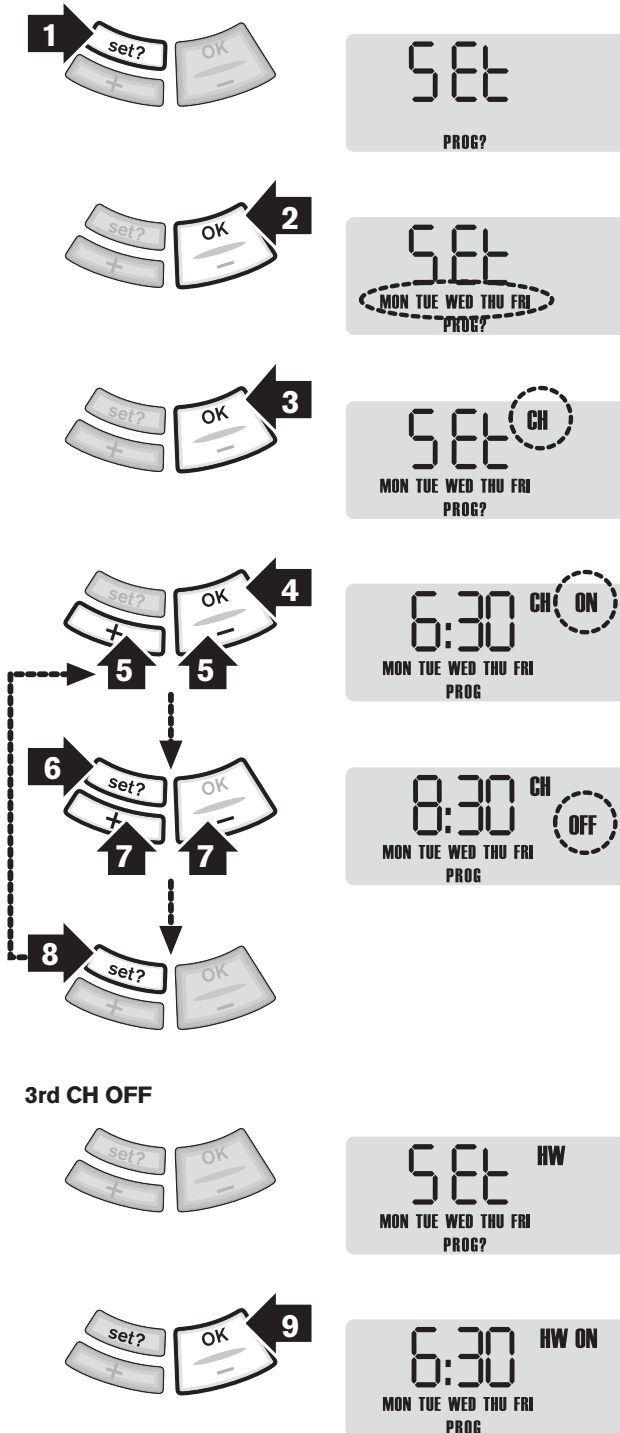
The default ON/OFF periods pre-programmed for CH and DHW are shown in the table opposite.

Note: two ON/OFF periods can be used instead of 3 by setting the 2nd ON & OFF periods to 12.00 as shown in the default program table.

One ON/OFF period can be achieved by setting the 2nd and 3rd ON & OFF periods to the same time.

Note: The clock time is pre-programmed and should not require adjustment.

See 'SETTING PROGRAMS' in the USER INSTRUCTIONS section if changes are required to the clock time or pre-programmed settings.



SETTING PROGRAMS

Note: if you require different ON/OFF times during the week, see 'Setting individual days'

Setting CH MON - FRI:

- 1 Press 'set?' until 'SET' & 'PROG?' are shown in the display
- 2 Press 'OK' to enter program
- 3 Press 'OK' to select MON-FRI
- 4 Press 'OK' to select CH

Note: speed up the display by holding down the '+' or '-' buttons.

- 5 Press '+' or '-' to change the ON time
- 6 Press 'set?' to set the ON time and select the OFF time
- 7 Press '+' or '-' to change the OFF time
- 8 Press 'set?' to set the OFF time and select the next ON time

Repeat operations 5 to 8 to set the 2nd and 3rd CH ON/OFF times.

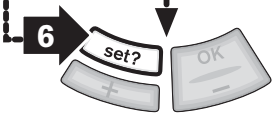
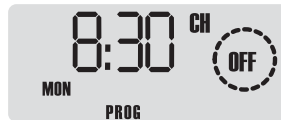
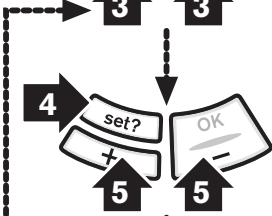
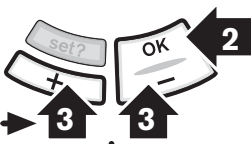
Note: after pressing 'set?' for the 3rd CH OFF time the display shows 'SET' HW MON-FRI

Setting HW MON - FRI

- 9 Press 'OK' to select the first ON time
- Repeat operations 5 to 8 to set the 1st, 2nd and 3rd HW ON/OFF times.

Note: after pressing 'set?' for the 3rd HW OFF time the display shows 'SET' MON . . . see next page

USER INSTRUCTIONS



3rd CH OFF



SETTING PROGRAMS

Setting individual weekdays:

Note: if you do not require individual weekday times, then press 'set?' until 'SET' SAT-SUN are displayed and continue on the next page.

- ▶ If you do not wish to change the settings for the day displayed, then press 'set?' until the first day you want to change is displayed

Setting CH individual weekdays:

- 1 Press 'OK' to select weekday
- 2 Press 'OK' to select CH

Note: speed up the display by holding down the '+' or '-' buttons.

- 3 Press '+' or '-' to change the ON time
- 4 Press 'set?' to set the ON time and select the OFF time
- 5 Press '+' or '-' to change the OFF time
- 6 Press 'set?' to set the OFF time and select the next ON time

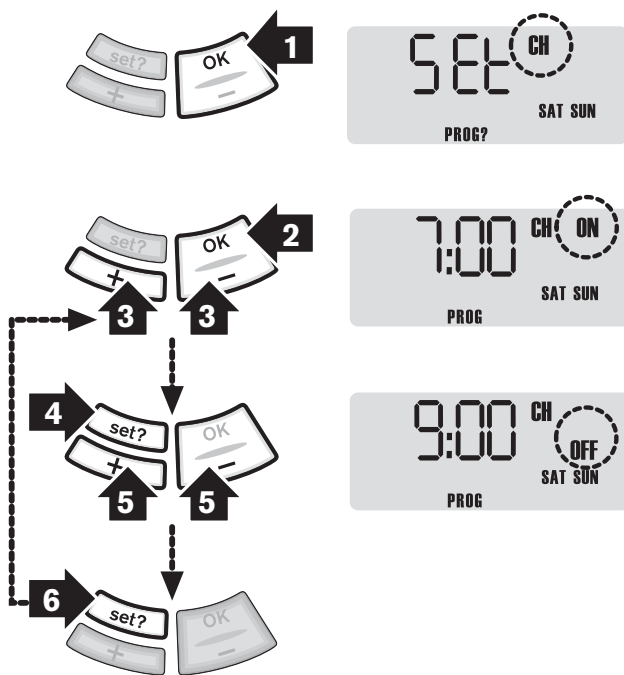
Repeat operations 3 to 6 to set the 2nd and 3rd CH ON/OFF times.

Note: after pressing 'set?' for the 3rd CH OFF time the display shows 'SET' HW for that weekday

Setting HW individual weekdays:

- 7 Press 'OK' to select the first ON time
- Repeat operations 3 to 6 to set the 1st, 2nd and 3rd HW ON/OFF times.

Note: after pressing 'set?' for the 3rd HW OFF time 'SET' and the next weekday are displayed shown . . . after completing the steps above for FRI the display shows 'SET' SAT SUN (see next page)



SETTING PROGRAMS

Setting CH SAT - SUN:

- 1 Press 'OK' to select weekend
- 2 Press 'OK' to select CH

Note: speed up the display by holding down the '+' or '-' buttons.

- 3 Press '+' or '-' to change the ON time
- 4 Press 'set?' to set the ON time and select the OFF time
- 5 Press '+' or '-' to change the OFF time
- 6 Press 'set?' to set the OFF time and select the next ON time

Repeat operations 3 to 6 to set the 2nd and 3rd CH ON/OFF times.

Note: after pressing 'set?' for the 3rd CH OFF time the display shows 'SET' HW for that weekday

Setting HW SAT - SUN:

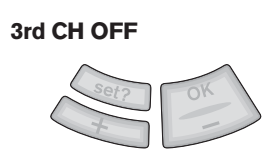
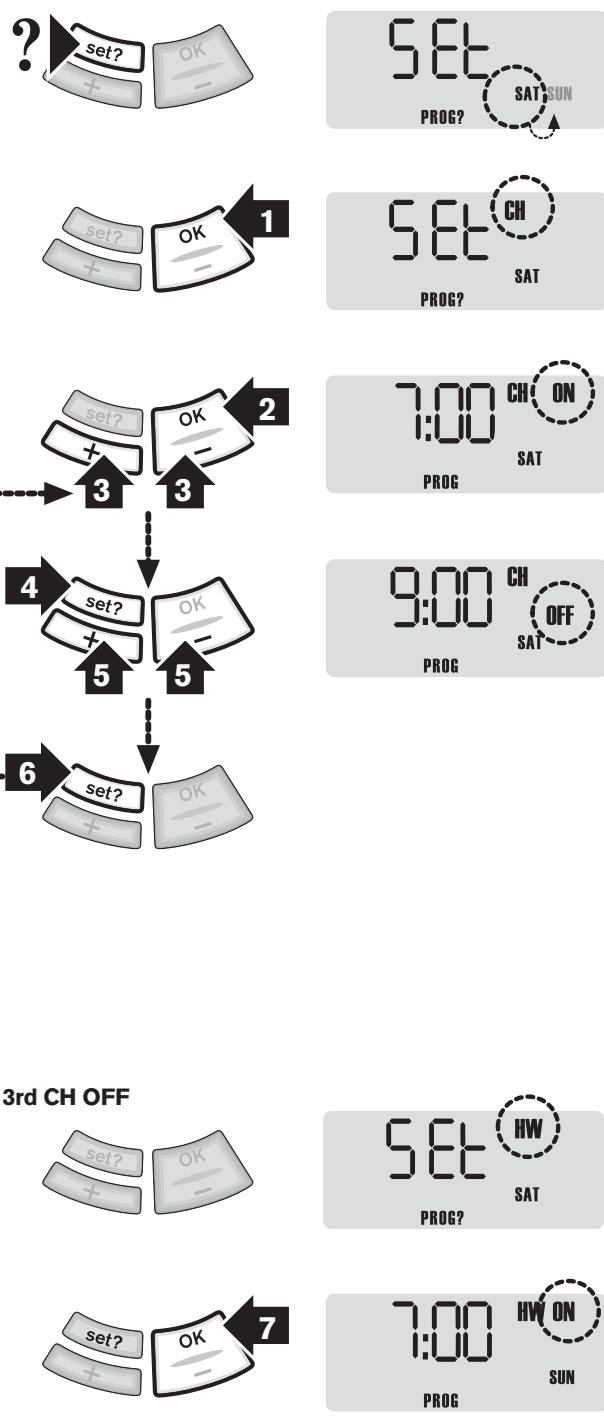
- 7 Press 'OK' to select the first ON time
- Repeat operations 3 to 6 to set the 1st, 2nd and 3rd HW ON/OFF times.

Note: after pressing 'set?' for the 3rd HW OFF time the display shows 'SET' SAT, see next page.

If you do not require individual weekend times, then press 'SET?' until the normal display is resumed.

3rd CH OFF





SETTING PROGRAMS

Setting individual weekend days:

Note: if you do not require individual weekend times, then press 'set?' until normal display is shown.

- ▶ If you do not wish to change the settings for 'SAT', then press 'set?' to move to 'SUN'

Setting CH individual weekend days:

- 1 Press 'OK' to select day displayed
 - 2 Press 'OK' to select CH
- Note: speed up the display by holding down the '+' or '-' buttons.

- 3 Press '+' or '-' to change the ON time
- 4 Press 'set?' to set the ON time and select the OFF time
- 5 Press '+' or '-' to change the OFF time
- 6 Press 'set?' to set the OFF time and select the next ON time

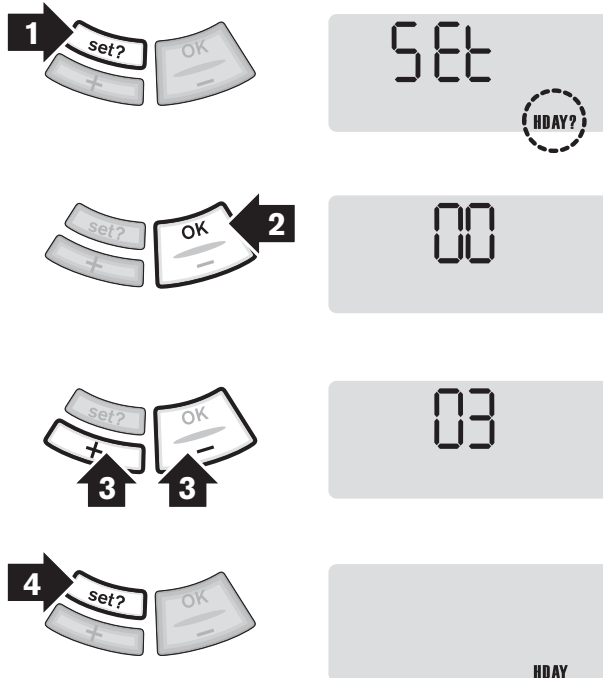
Repeat operations 3 to 6 to set the 2nd and 3rd CH ON/OFF times.

Note: after pressing 'set?' for the 3rd CH OFF time the display shows 'SET' HW for that day

Setting HW individual weekend days:

- 7 Press 'OK' to select the first ON time
- Repeat operations 3 to 6 to set the 1st, 2nd and 3rd HW ON/OFF times.

- ▶ Press 'set?' until the display returns to normal mode.



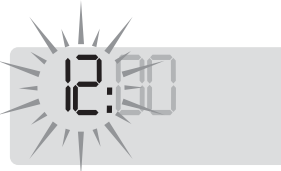
SETTING HOLIDAYS

- 1 Press the 'set?' button until 'SET' & 'HDAY?' is displayed
- 2 Press 'OK' the display shows 00
- 3 Press '+' & '-' to set the number of days you require the system to be off
- 4 Press 'set?' then 'HDAY' is shown in the display and no demand for heating will be made from the programmer.

The program will return to normal after the set number of days.

- ▶ To cancel the holiday setting and return to normal operation, press any button.

*Note: the programmer counts each pass through midnight as a day.
For example, if you don't want the heating on from Saturday morning until Tuesday morning, set for 3 days.*



SETTING THE CLOCK

1 Press the 'set?' button until 'SET' & 'CLOCK?' are shown in the display

2 Press 'OK' displays '24hr' & 'ON'

3 Press '+' to toggle between 24hr and 12hr display

4 Press 'set?' to set the clock and the hours flash on the display

5 Press '+' or '-' to correct hour

Note: speed up the display by holding down the '+' or '-' buttons.

6 Press the 'set?' button to set the correct hour

7 Press '+' or '-' to correct minutes

8 Press the 'set?' button to set the correct minutes. 'SET' & 'DATE?' appears in the display.








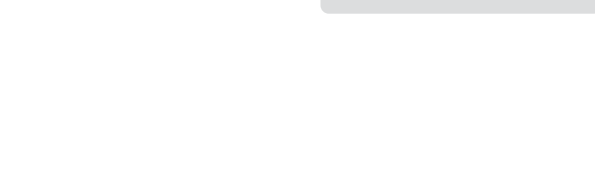
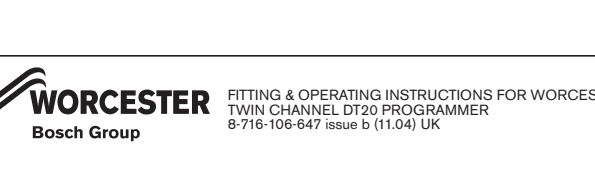

Note: if the day displayed is incorrect the date needs resetting. To change the date see 'SETTING THE DATE'.

If you do not wish to change the date, press 'set?' to return to normal display.

SETTING THE DATE

Note: if the day displayed is incorrect the date needs resetting as follows:

- 1 Press the 'set?' button until 'SET' & 'DATE?' are shown in the display
- 2 Press the 'OK' button once, the year flashes on the display
- 3 Press '+' or '-' to correct year
- 4 Press the 'set?' button and the month flashes on the display
- 5 Press '+' or '-' to correct month
- 6 Press the 'set?' button and the day flashes on the display
- 7 Press '+' or '-' to correct day
- 8 Press the 'set?' button to set the DLS and 'ON' flashes
- 9 Press '+' or '-' for 'ON' or 'OFF'
- 10 Press 'set?' to return to normal display.

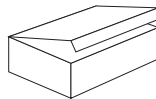
MAINTENANCE & SPARES

Maintenance:

- ▶ The programmer requires no maintenance
- ▶ The outer casing can be wiped clean using a dry cloth, do not use polish or detergents

Servicing:

- ▶ This unit cannot be serviced.
- ▶ Should the existing unit fail to function correctly, check that the times and program settings are correct.



Replacement Parts:

- ▶ DT20 programmer replacement part number: 8-716-106-665-0

B Certificates

B.1 Energy performance (EPC)

Energy Performance Certificate



41, Thorpe Way, CAMBRIDGE, CB5 8UJ

Dwelling type: Semi-detached house
Date of assessment: 19 February 2018
Date of certificate: 20 February 2018

Reference number: 0571-2861-6921-9598-3525
Type of assessment: RdSAP, existing dwelling
Total floor area: 82 m²

Use this document to:

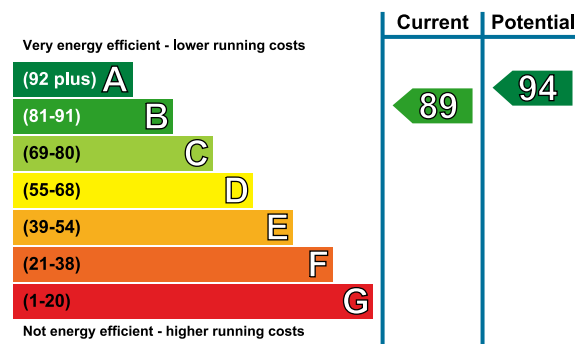
- Compare current ratings of properties to see which properties are more energy efficient
- Find out how you can save energy and money by installing improvement measures

Estimated energy costs of dwelling for 3 years:	£ 1,926
Over 3 years you could save	£ 327

Estimated energy costs of this home			
	Current costs	Potential costs	Potential future savings
Lighting	£ 174 over 3 years	£ 174 over 3 years	
Heating	£ 1,449 over 3 years	£ 1,209 over 3 years	
Hot Water	£ 303 over 3 years	£ 216 over 3 years	
Totals	£ 1,926	£ 1,599	

These figures show how much the average household would spend in this property for heating, lighting and hot water and is not based on energy used by individual households. This excludes energy use for running appliances like TVs, computers and cookers, and electricity generated by microgeneration.

Energy Efficiency Rating



The graph shows the current energy efficiency of your home.

The higher the rating the lower your fuel bills are likely to be.

The potential rating shows the effect of undertaking the recommendations on page 3.

The average energy efficiency rating for a dwelling in England and Wales is band D (rating 60).

The EPC rating shown here is based on standard assumptions about occupancy and energy use and may not reflect how energy is consumed by individual occupants.

Top actions you can take to save money and make your home more efficient

Recommended measures	Indicative cost	Typical savings over 3 years
1 Floor insulation (solid floor)	£4,000 - £6,000	£ 111
2 Draught proofing	£80 - £120	£ 42
3 Solar water heating	£4,000 - £6,000	£ 87

See page 3 for a full list of recommendations for this property.

To find out more about the recommended measures and other actions you could take today to save money, visit www.gov.uk/energy-grants-calculator or call 0300 123 1234 (standard national rate). The Green Deal may enable you to make your home warmer and cheaper to run.

Summary of this home's energy performance related features

Element	Description	Energy Efficiency
Walls	Cavity wall, as built, insulated (assumed)	★★★★☆
Roof	Pitched, 250 mm loft insulation	★★★★☆
Floor	Solid, no insulation (assumed)	—
Windows	Fully double glazed	★★★☆☆
Main heating	Boiler and radiators, mains gas	★★★★☆
Main heating controls	Programmer, room thermostat and TRVs	★★★★☆
Secondary heating	None	—
Hot water	From main system	★★★★☆
Lighting	Low energy lighting in all fixed outlets	★★★★★

Current primary energy use per square metre of floor area: 76 kWh/m² per year

The assessment does not take into consideration the physical condition of any element. 'Assumed' means that the insulation could not be inspected and an assumption has been made in the methodology based on age and type of construction.

Low and zero carbon energy sources

Low and zero carbon energy sources are sources of energy that release either very little or no carbon dioxide into the atmosphere when they are used. Installing these sources may help reduce energy bills as well as cutting carbon. The following low or zero carbon energy sources are provided for this home:

- Solar photovoltaics

Your home's heat demand





For most homes, the vast majority of energy costs derive from heating the home. Where applicable, this table shows the energy that could be saved in this property by insulating the loft and walls, based on typical energy use (shown within brackets as it is a reduction in energy use).

Heat demand	Existing dwelling	Impact of loft insulation	Impact of cavity wall insulation	Impact of solid wall insulation
Space heating (kWh per year)	8,290	N/A	N/A	N/A
Water heating (kWh per year)	2,271			

You could receive Renewable Heat Incentive (RHI) payments and help reduce carbon emissions by replacing your existing heating system with one that generates renewable heat, subject to meeting minimum energy efficiency requirements. The estimated energy required for space and water heating will form the basis of the payments. For more information, search for the domestic RHI on the www.gov.uk website.

Recommendations

The measures below will improve the energy performance of your dwelling. The performance ratings after improvements listed below are cumulative; that is, they assume the improvements have been installed in the order that they appear in the table. Further information about the recommended measures and other simple actions you could take today to save money is available at www.gov.uk/energy-grants-calculator. Before installing measures, you should make sure you have secured the appropriate permissions, where necessary. Such permissions might include permission from your landlord (if you are a tenant) or approval under Building Regulations for certain types of work.

Recommended measures	Indicative cost	Typical savings per year	Rating after improvement
Floor insulation (solid floor)	£4,000 - £6,000	£ 37	 B90
Draught proofing	£80 - £120	£ 14	 B91
Solar water heating	£4,000 - £6,000	£ 29	 A92
Replacement glazing units	£1,000 - £1,400	£ 28	 A94

Opportunity to benefit from a Green Deal on this property

Green Deal Finance allows you to pay for some of the cost of your improvements in instalments under a Green Deal Plan (note that this is a credit agreement, but with instalments being added to the electricity bill for the property). The availability of a Green Deal Plan will depend upon your financial circumstances. There is a limit to how much Green Deal Finance can be used, which is determined by how much energy the improvements are estimated to **save** for a 'typical household'.

You may be able to obtain support towards repairs or replacements of heating systems and/or basic insulation measures, if you are in receipt of qualifying benefits or tax credits. To learn more about this scheme and the rules about eligibility, call the Energy Saving Advice Service on **0300 123 1234** for England and Wales.

About this document and the data in it

This document has been produced following an energy assessment undertaken by a qualified Energy Assessor, accredited by Elmhurst Energy Systems Ltd. You can obtain contact details of the Accreditation Scheme at www.elmhurstenergy.co.uk.

A copy of this certificate has been lodged on a national register as a requirement under the Energy Performance of Buildings Regulations 2012 as amended. It will be made available via the online search function at www.epcregister.com. The certificate (including the building address) and other data about the building collected during the energy assessment but not shown on the certificate, for instance heating system data, will be made publicly available at www.opendatacommunities.org.

This certificate and other data about the building may be shared with other bodies (including government departments and enforcement agencies) for research, statistical and enforcement purposes. For further information about how data about the property are used, please visit www.epcregister.com. To opt out of having information about your building made publicly available, please visit www.epcregister.com/optout.

Assessor's accreditation number: EES/008525
Assessor's name: Mr. Steven Norfield
Phone number: 07821314995
E-mail address: steven@selsol.co.uk
Related party disclosure: No related party

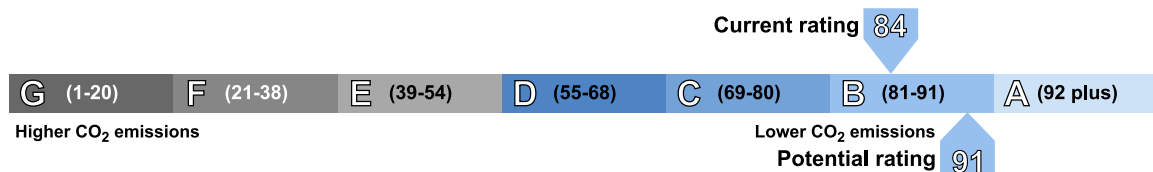
There is more information in the guidance document *Energy Performance Certificates for the marketing, sale and let of dwellings* available on the Government website at www.gov.uk/government/collections/energy-performance-certificates. It explains the content and use of this document, advises on how to identify the authenticity of a certificate and how to make a complaint.

About the impact of buildings on the environment

One of the biggest contributors to global warming is carbon dioxide. The energy we use for heating, lighting and power in homes produces over a quarter of the UK's carbon dioxide emissions.

The average household causes about 6 tonnes of carbon dioxide every year. Based on this assessment, your home currently produces approximately 1.2 tonnes of carbon dioxide every year. Adopting the recommendations in this report can reduce emissions and protect the environment. If you were to install these recommendations you could reduce this amount by 0.6 tonnes per year. You could reduce emissions even more by switching to renewable energy sources.

The environmental impact rating is a measure of a home's impact on the environment in terms of carbon dioxide (CO₂) emissions based on standardised assumptions about occupancy and energy use. The higher the rating the less impact it has on the environment.



B.2 Gas

B.2 Gas

Please ask the agent for a copy of the latest gas safety certificate.

B.3 Electrics

NAPIT *Electrical Installation* Condition Report

Guidance for recipients

This report is an important and valuable document which should be retained for future reference.

1. The purpose of this condition report is to confirm, so far as reasonably practicable, whether or not the electrical installation is in a satisfactory condition for continued service (see Section E). The report should identify any damage, deterioration, defects and/or conditions which may give rise to danger (see Section K).
2. The person ordering the Report should have received the original Report and the inspector should have retained a duplicate.
3. The original Report should be retained in a safe place and be made available to any person inspecting or undertaking work on the electrical installation in the future. If the property is vacated, this Report will provide the new owner /occupier with details of the condition of the electrical installation at the time the Report was issued.
4. Where the installation incorporates residual current devices (RCDs) there should be a notice at or near the devices stating that they should be tested quarterly. **For safety reasons it is important that these instructions are followed.**
5. Section D (Extent and Limitations) should identify fully the extent of the installation covered by this Report and any limitations on the inspection and testing. The inspector should have agreed these aspects with the person ordering the Report and with other interested parties (licensing authority, insurance company, mortgage provider and the like) before the inspection was carried out.
6. Some operational limitations such as such as inability to gain access to parts of the installation or an item of equipment may have been encountered during the inspection. The inspector should have noted these in Section D.
7. For items classified in Section K as C1 ("Danger Present"), **the safety of those using the installation is at risk**, and it is recommended that a competent person undertakes the necessary remedial work immediately.
8. For items classified in Section K as C2 ("Potentially Dangerous"), **the safety of those using the installation may be at risk** and it is recommended that a competent person undertakes the necessary remedial work as a matter of urgency.
9. Where it has been stated in Section K that an observation requires further investigation the inspection has revealed an apparent deficiency which could not, due to the extent or limitations of this inspection, be fully identified. Such observations should be investigated as soon as possible. A further examination of the installation will be necessary, to determine the nature and extent of the apparent deficiency (see Section F).
10. For safety reasons, the electrical installation should be re-inspected at appropriate intervals by a competent person. The recommended date by which the next inspection is due is stated in Section F of the Report under 'Recommendations' and on a label at or near to the consumer unit / distribution board.

NAPIT Electrical Installation Condition Report

Requirements for Electrical Installations –
BS 7671:2008 incorporating Amendment No.2, 2013
[IET Wiring Regulations 17th Edition]

NA/ 2 0 0 2 6 0 0 0 0 2

Page 1 of 7

A Details of the installation

Client	Mr Robert Izzard	Installation (if different from client)	
Address	41 Thorpe Road Cambridge Cambridgeshire	Address	
Postcode	CB5 8UJ	Postcode	

B Reason for producing this report

This form to be used only for reporting on the condition of an existing installation.

Asked by owner of property

Date(s) on which the inspection and testing were carried out 31/01/2015 to 31/01/2015

C Details of the installation which is the subject of this report

Description of premises Domestic Commercial Industrial Other (please state) n/a

Estimated age of the wiring system 40 years

Evidence of alterations or addition Yes No Not apparent If 'Yes', estimated n/a years

Records of installation available Yes No Records held by n/a

Date of last inspection n/a Electrical Installation Certificate No. or previous Inspection Report No. n/a

D Extent and limitations of inspection and testing

Extent of electrical installation covered by this report:
All

Agreed limitations (See Regulations 634.2) Agreed with: n/a

Operational limitations including the reasons (see page no n/ of a) n/a

The inspection and testing detailed within this report and accompanying schedule has been carried out in accordance with BS 7671: 2008 (IET Wiring Regulations), amended to 2013 (date)

It should be noted that cables concealed within the trunkings and conduits, under floors, in roof spaces and generally within the fabric of the building or underground have not been inspected unless specifically agreed between the client and inspector prior to the inspection.

E Summary of the condition of the installation

General conditions of the Installation (in terms of safety)
In good condition

Overall assessment of the installation in terms of its suitability for continued use SATISFACTORY UNSATISFACTORY*

* An UNSATISFACTORY assessment indicates that dangerous (code C1) and/or potentially dangerous (code C2) conditions have been identified

F Recommendations

Where the overall assessment of the suitability of the installation for continued use above is stated as UNSATISFACTORY, I / we recommend that any observations classified as 'Danger present' (code C1) or 'Potentially dangerous' (code C2) are acted upon as a matter of urgency. Investigation without delay is recommended for observations identified as 'further investigation required'. Observations classified as 'Improvement recommended' (Code C3) should be given due consideration. Subject to the necessary remedial action being taken, I / we recommend that the installation is further inspected and tested by 31/01/2025 (date)

G Declaration

I/We, being the person(s) responsible for the inspection and testing of the electrical installation (as indicated by my/our signatures below), particulars of which are described above, having exercised reasonable skill and care when carrying out the inspection and testing, hereby declare that the information in this report, including the observations and the attached schedules, provides an accurate assessment of the condition of the electrical installation taking into account the stated extent and limitations in section D of this report.

Company	Elliston Electrical Services	Inspected and tested by	Authorised for issue by
Membership No.	20026	Name:	Jason Elliston
Address	123 Alan Road	Signature:	
Ipswich		Position:	Electrician
Postcode	IP3 8EZ	Date:	20/02/2015

H Schedule(s)

2 schedule(s) of inspection and 1 schedule(s) of test results are attached.
The attached schedule(s) are part of this document and this report is valid only when they are attached to it.

NAPIT Electrical Installation Condition Report

Requirements for Electrical Installations –
BS 7671:2008 incorporating Amendment No.2, 2013
[IET Wiring Regulations 17th Edition]

NA/ 2 0 0 2 6 0 0 0 0 2
Page 2 of 7

Supply characteristics and earthing arrangements

Earthing Arrangements TN-S TN-C-S TT Other Please specify: n/a
 Number & type of live conductors a.c. d.c. No. of phases 1 No. of wires 2
 Nature of Supply Parameters (Note: (?) by enquiry, (?) by enquiry or by measurement)
 Nominal voltage, U₀(V) 230 v Nominal frequency, f(°) 50 Hz Confirmation of supply polarity
 Prospective fault current, I_{pf}(°) 4.9 kA External loop impedance, Z_e(°) 0.05 Ω
 Supply Protective Device BS 1361 Type 2 Nominal Current Rating 60 A Main Supply Tails
 Other Sources of Supply (as detailed in attached schedule)

Particulars of installation referred to in this report

Means of Earthing Distributor's facility Installation earth electrode
 Details of Installation earth electrode (where applicable) Type (e.g. rod(s), tape etc) n/a
 Location n/a Electrode resistance to earth n/a Ω

Main Protective Conductors	Material	Csa (mm ²)	Verified	Csa (mm ²)	Verified
Earthing Conductor	Copper	16	<input checked="" type="checkbox"/>	Water 10	<input checked="" type="checkbox"/>
Protective Bonding Conductor	Copper	10	<input checked="" type="checkbox"/>	Gas 10	<input checked="" type="checkbox"/>
Other			<input type="checkbox"/>	Oil	<input type="checkbox"/>

Main Switch / Switch-Fuse/ Circuit Breaker / RCD
 Location DB1 BS (EN) 60947-3 No. of Poles 2
 Current rating 100 A Fuse/device rating or setting Switch A Voltage rating 230 V
 If RCD main switch: Rated residual operating current I_{Δn} = n/a mA Rated time delay n/a ms (at I_{Δn})
 Measured operating time at I_{Δn} = n/a ms

Observations

Referring to the attached schedule of inspection and test results, and subject to the limitations at Section D.

No remedial work required OR The following observations are made

Explanation of codes

- C1. Danger present. Risk of injury. Immediate remedial action required.
- C2. Potentially dangerous. Urgent remedial action required.
- C3. Improvement recommended.

Item No.	Observations	Code	Further investigation required yes/no
n/a			No
n/a			No
n/a			No
n/a			No
n/a			No
n/a			No
n/a			No
n/a			No

One of the above codes, as appropriate, has been allocated to each of the observations made above and/or any attached observation sheets to indicate to the person(s) responsible for the installation the degree of urgency for remedial action.
 Note: For additional report pages use the continuation report form with the relevant serial number and page numbers detailed on each page.

Immediate remedial work recommended for items n/a
 Urgent remedial work recommended for items n/a
 Improvement(s) recommended for items n/a

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Condition Report Inspection Schedule for Domestic and Similar Premises with up to 100A Supply

IT Requirements for Electrical Installations – BS 7671:2008 incorporating Amendment No.2, 2013 [Wiring Regulations 17th Edition]
 Only for the reporting on the condition of an existing installation.
 Note: This form is suitable for many types of smaller installation not exclusively domestic.

A Schedule of Inspections Outcomes

Acceptable condition:	✓	Unacceptable condition:	State C1 or C2	Improvement recommended:	C3	Not verified:	NV	Limitation:	Lim	Not applicable:	NA
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(In the Outcome column use the codes above. Provide additional comment where appropriate. C1/C2 and C3 coded items to be recorded in section K of the condition report)

Item No.	Description	Outcome	Further investigation required yes/no
1.0	DISTRIBUTOR'S / SUPPLY INTAKE EQUIPMENT		
1.1	Service cable condition	✓	No
1.2	Condition of service head	✓	No
1.3	Condition of tails Distributor	✓	No
1.4	Condition of tails Consumer	✓	No
1.5	Condition of metering equipment	✓	No
1.6	Condition of isolator (where present)	NA	No
2.0	Presence of adequate arrangements for – other sources such as microgenerators (551.6; 551.7)	NA	No
3.0	EARTHING / BONDING ARRANGEMENTS (411.3; Chap 54)		
3.1	Presence and condition of distributor's earthing arrangement (542.1.2.1; 542.1.2.2)	✓	No
3.2	Presence and condition of earth electrode connection where applicable (542.1.2.3)	NA	No
3.3	Provision of earthing / bonding labels at all appropriate locations (514.13.1)	✓	No
3.4	Confirmation of earthing conductor size (542.3; 543.1.1)	✓	No
3.5	Accessibility and condition of earthing conductor at MET (543.3.2)	✓	No
3.6	Confirmation of main protective bonding conductor sizes (544.1)	✓	No
3.7	Condition and accessibility of main protective bonding conductor connections (543.3.2; 544.1.2)	✓	No
3.8	Accessibility and condition of all protective bonding connections (543.3.2)	✓	No
4.0	CONSUMER UNIT(S) / DISTRIBUTION BOARD(S)		
4.1	Adequacy of working space / accessibility to consumer unit / distribution board (132.1.2; 513.1)	✓	No
4.2	Security of fixing (134.1.1)	✓	No
4.3	Condition of enclosure(s) in terms of IP rating etc (416.2)	✓	No
4.4	Condition of enclosure(s) in terms of fire rating etc (526.5)	✓	No
4.5	Enclosure not damaged/deteriorated so as to impair safety (621.2 [iii])	✓	No
4.6	Presence of linked main switch (as required by 537.1.2 ; 537.1.4)	✓	No
4.7	Operation of main switch (functional check) (612.13.2)	✓	No
4.8	Manual operation of circuit-breakers and RCDs to prove disconnection (612.13.2)	✓	No
4.9	Correct identification of circuit details and protective devices (514.8.1; 514.9.1)	✓	No
4.10	Presence of RCD retest notice present at or near consumer unit / distribution board (514.12.2)	✓	No
4.11	Presence of non-standard (mixed) cable colour warning notice at or near consumer unit/distribution board (514.14.1)	✓	No
4.12	Presence of alternative supply warning notice at or near consumer unit / distribution board (514.15.1)	NA	No
4.13	Presence of other required labelling (Please specify) (514)	✓	No
4.14	Examination of protective device(s) and base(s); correct type and rating (no signs of unacceptable thermal damage, arcing and overheating) (421.1.3)	✓	No
4.15	Single-pole protective devices in line conductor only (132.14.1, 530.3.2)	✓	No
4.16	Protection against mechanical damage where cables enter consumer unit / distribution board (522.8.1; 522.8.11)	✓	No

Inspector's Name Jason Elliston
 Date 31/01/2015

Signature



Condition Report Inspection Schedule for Domestic and Similar Premises with up to 100A Supply

IT Requirements for Electrical Installations – BS 7671:2008 incorporating Amendment No.2, 2013 Wiring Regulations 17th Edition]

Only for the reporting on the condition of an existing installation.

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Page 5 of 7

Schedule of Inspections

Outcomes

Acceptable condition:	✓	Unacceptable condition:	State C1 or C2	Improvement recommended:	C3	Not verified:	NV	Limitation:	Lim	Not applicable:	NA
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(In the Outcome column use the codes above. Provide additional comment where appropriate. C1/C2 and C3 coded items to be recorded in section K of the condition report)

Item No.	Description	Outcome	Further investigation required yes/no
4.17	Protection against electromagnetic effects where cables enter consumer unit / distribution board / enclosures (521.5.1)	✓	No
4.18	RCD(s) provided for fault protection – includes RCBOs(411.4.9; 411.5.2 -;Section 531)	✓	No
4.19	Selection and operation (612.10) 612.13.2) of RCD(s) provided for additional protection – includes RCBOs (411.3.3; 415.1)	✓	No
5.0	FINAL CIRCUITS		
5.1	Identification of conductors (514.3.1)	✓	No
5.2	Cables correctly supported throughout their run (522.8.5)	NV	No
5.3	Condition of insulation of live parts (416.1)	✓	No
5.4	Non-sheathed cables protected by enclosure in conduit, ducting or trunking (521.10.1) To include the integrity of conduit and trunking systems (metallic and plastic)	NA	No
5.5	Adequacy of cables for current-carrying capacity with regard for the type and nature of the installation (Section 523)	✓	No
5.6	Co-ordination between conductors and overload protective devices (433.1; 533.2.1)	✓	No
5.7	Adequacy of protective devices; type and rated current for fault protection (411.3)	✓	No
5.8	Presence and adequacy of circuit protective conductors (411.3.1.1; 543.1)	✓	No
5.9	Wiring system(s) appropriate for the type and nature of the installation and external influences (Section 522)	✓	No
5.10	Concealed cables installed in prescribed zones (see extent and limitations) (522.6.101)	NV	No
5.11	Concealed cables incorporating earthed armour or sheath, or run within earthed wiring system, or otherwise protected against mechanical damage from nails, screws and the like (see extent and limitations) (522.6.101; 522.6.103)	NV	No
5.12	Provision of additional protection by RCD not exceeding 30mA		
	for all socket-outlets of rating 20 A or less provided for use by ordinary persons unless exempt (Regulation 411.3.3)	✓	No
	used to supply mobile equipment not exceeding 32 A rating for use outdoors (411.3.3)	✓	No
	for cables concealed in walls or partitions (522.6.102; 522.6.103)	✓	No
5.13	Provision of fire barriers, sealing arrangements and protection against thermal effects (527)	✓	No
5.14	Band II cables segregated / separated from Band I cables (528.1)	NA	No
5.15	Cables segregated / separated from communications cabling (528.2)	✓	No
5.16	5.16 Cables segregated/separated from non-electrical services (528.3)	✓	No
5.17	Termination of cables at enclosures – indicate extent of sampling in Section D of the report		
	Connections soundly made and under no undue strain (526.6)	✓	No
	No basic insulation of a conductor visible outside enclosure (526.8)	✓	No
	Connections of live conductors adequately enclosed (526.5)	✓	No
	Adequately connected at point of entry to enclosure (glands, bushes etc...) (522.8.5)	NA	No
5.18	Condition of accessories including socket-outlets, switches and joint boxes (134.1.1; 621.2 [iii])	✓	No
5.19	Suitability of accessories for external influences (512.2)	✓	No

Inspector's Name **Jason Elliston**
Date **31/01/2015**

Signature



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Condition Report Inspection Schedule for Domestic and Similar Premises with up to 100A Supply

IT Requirements for Electrical Installations – BS 7671:2008 incorporating Amendment No.2, 2013 Wiring Regulations 17th Edition]

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Schedule of Inspections

Outcomes

Acceptable condition:	✓	Unacceptable condition:	State C1 or C2	Improvement recommended:	C3	Not verified:	NV	Limitation:	Lim	Not applicable:	NA
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(In the Outcome column use the codes above. Provide additional comment where appropriate. C1/C2 and C3 coded items to be recorded in section K of the condition report)

Item No.	Description	Outcome	Further investigation required yes/no
6.0	LOCATION(S) CONTAINING A BATH OR SHOWER		
6.1	Additional protection for all low voltage (LV) circuits by RCD(s) not exceeding 30 mA (701.411.3.3)	✓	No
6.2	Where used as a protective measure, requirements for SELV or PELV met (701.414.4.5)	NA	No
6.3	Shaver sockets comply with BS EN 61558-2-5 or BS 3535 (701.512.3)	NA	No
6.4	Presence of supplementary bonding conductors, unless not required by BS 7671:2008 (701.415.2)	NA	No
6.5	Low voltage (e.g. 230 volt) socket-outlets sited at least 3 m from zone 1 (701.512.3)	NA	No
6.6	Suitability of equipment for external influences for installed location in terms of IP rating (701.512.2)	✓	No
6.7	Suitability of equipment for installation in a particular zone (701.512.3)	✓	No
6.8	Suitability of current-using equipment for particular position within the location (701.55)	✓	No
7.0	OTHER SPECIAL INSTALLATIONS OR LOCATIONS		
7.1	List all other special installations or locations present, if any. (Record the results of particular inspections applied separately)	NA	No

Schedule of Tests

Results to be recorded on Schedule of Test Results

- | | |
|---|--|
| ✓ External earth loop impedance, Ze | ✓ Insulation Resistance between Live conductors |
| NA Installation earth electrode | ✓ Insulation Resistance between Live conductors & Earth |
| ✓ Prospective fault current I _{pf} | ✓ Polarity (prior to energisation) |
| ✓ Continuity of Earth Conductors | ✓ Polarity (after energisation) including phase sequence |
| ✓ Continuity of Circuit Protective Conductors | ✓ Earth fault loop impedance |
| ✓ Continuity of Protective Bonding Conductors | ✓ RCDs / RCBOs including discrimination |
| ✓ Volt drop verified | ✓ Functional testing of devices |

(insert ✓, Lim or NA)

Inspector's Name Jason Elliston

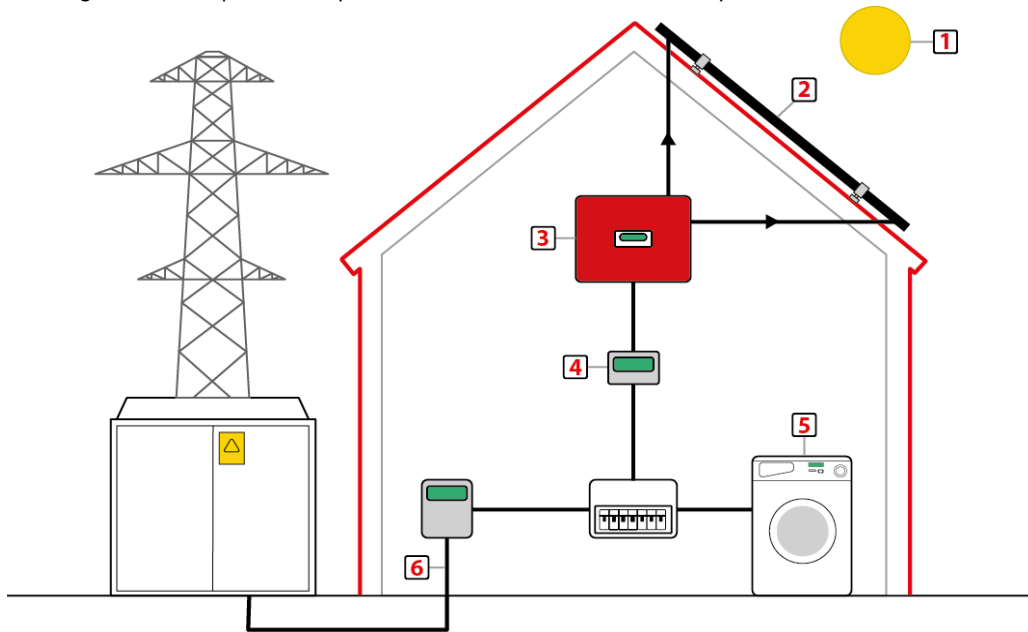
Date 31/01/2015

Signature



How a Solar PV system Works

The diagram below explains what you need to know about how Solar PV systems work.



1 Light

The sun gives off light, even on cloudy days

2 The Panels

PV cells on the panels turn the light into DC electricity

3 The Inverter

The current flows into an inverter, which converts it to AC electricity ready to use.

4 The Electricity

The current is fed through a meter and then into your home's consumer unit.

5 Powering the home

Plug in and switch on. Your system will automatically use the free electricity you've generated, then switch back to the grid as needed.

6 The National Grid

Any electricity you don't use is exported to the grid for others to use.

Predicted System Performance

The Micro generation Certification Scheme sets out how an estimate of system performance must be arrived at. This is known as the standard MCS procedure. Whenever a quotation is issued, it is a requirement that we also issue the following “disclaimer”:

The performance of Solar PV systems is impossible to predict with certainty due to the variability in the amount of solar radiation (sunlight) from location to location and from year to year. This estimate is based upon the standard MCS procedure and is given as guidance only. It should not be considered as a guarantee of performance.

In addition, if the data has been estimated or taken remotely, the following must also be included on the Quotation:

This system performance calculation has been undertaken using estimated values for array orientation, inclination or shading. Actual performance may be significantly lower or higher if the characteristics of the installed system vary from the estimated values.

And/or if any shading whatsoever is present the following disclaimer must be added

We have established that the system will be subject to some shading; therefore we are required to issue you with the following disclaimer:

This shade assessment has been undertaken using the standard MCS procedure – it is estimated that this method will yield results within 10% of the actual energy yield for most systems

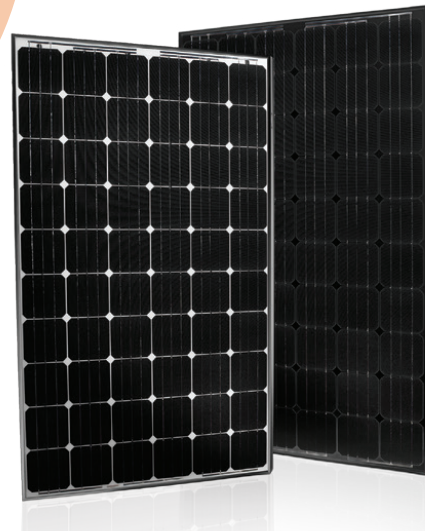
A. Installation Data	
Aspect 1	
Installed capacity of PV system – kWp (stc)	14
Orientation of the PV System – degrees from South	30°
Inclination of system – degrees from horizontal	35°
Postcode region	12
B. Calculations	
Kwh/kwp (kk) from table	936
Shade Factor (SF)	1
Estimated annual output (Kwp x Kk x SF)	3734.64
Total Estimated annual output (kWh)	3734.64

SILVANTIS® R-SERIES: 275W TO 290W

60-Cell High Wattage Modules

SunEdison introduces the next generation of high performance solar modules based on innovative Continuous Cz (CCz) monocrystalline cells with PERC technology. The Silvantis R-Series delivers the highest levels of efficiency and durability; providing homeowners with the same quality and performance SunEdison's utility customers enjoy, while optimising roof fit, overall system size and installer productivity.

SunEdison is a leader in utility-scale solar systems with over two and a half-million Silvantis modules deployed in some of the world's harshest climates and most remote locations. This experience, coupled with over 50 years of expertise in silicon technology and innovation, enables SunEdison to design and produce highly advanced residential solar solutions.



SILVANTIS ADVANTAGE

- 17.7% module efficiency with positive power tolerance
- PID-free: compatible with transformerless and multi-MPPT inverters
- Higher return on investment with more watts-per-module
- Reliability tested beyond international standards
- Utility-grade manufacturing: ISO 1400, ISO 9001 and 100% EL inspection

QUALITY & SAFETY

- Industry leading PID test conditions:
 - » 96 hours, 85° C, 85% relative humidity, -1kV
- IEC certified by TÜV SÜD:
 - » 61730 to ensure electrical safety
 - » 61215 long-term operation in a variety of climates including snow loading up to 5400 Pa and hail testing
 - » 61701 Level 1 salt mist corrosion resistant for marine regions
 - » 62716 ammonia testing for agricultural environments
- CSA listed to UL 1703 for 1,000 V systems in the US and Canada
- TS16949 & AQL Level II-0.4 manufacturing quality
- MCS certified for the UK

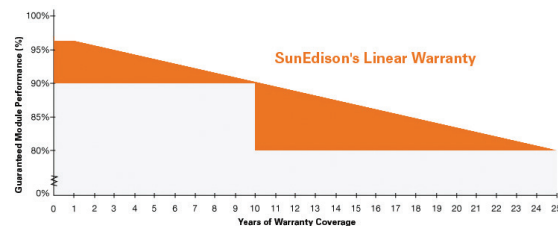
ROBUST & AESTHETIC DESIGN

- Black anodised corrosion resistant aluminum frame
 - » White back sheet: SE-R2xxCzC-3y
 - » Black back sheet: SE-R2xxKzC-3y
- Low glare anti-reflection coated (ARC) tempered glass

SUNEDISON WARRANTY

- 25-year limited warranty for materials and workmanship*
- 25-year linear power warranty at STC:
 - » Year 1: ≤ 3.5% of rated power
 - » After year 1: ≤ 0.7% rated power degradation per year

* Subject to SunEdison's Warranty terms & conditions found at www.sunedison.co.uk





SILVANTIS R-SERIES: 275W TO 290W

PHYSICAL PARAMETERS

Module Dimensions	1,658 mm x 990 mm x 50 mm
Module Weight	19.3 kg
Wafer / Cell-Type	PERC on CCz monocrystalline
Number of Cells	60
Frame Material	Black Anodised Aluminum
Tempered ARC Glass Thickness	3.2 mm

TEMPERATURE COEFFICIENTS AND PARAMETERS¹

Nominal Operating Cell Temperature (NOCT)	45° C ± 2° C
Temperature Coefficient of Pmax	-0.44 %/°C
Temperature Coefficient of Voc	-0.32 %/°C
Temperature Coefficient of Isc	+0.05 %/°C
Operating Temperature	-40° C to +85° C
Maximum System Voltage	1000 V (UL & IEC)
Limiting Reverse Current	9.20 A
Maximum Series Fuse Rating	15 A
Power Selection	-0 W to +5 W
Junction Box Rating	IP67
IEC 61730 Application	Class A
Wind and Snow Front Load	Up to 5,400 Pa
Wind Back Load	2,400 Pa
Reduction of STC efficiency from 1000 W/m ² to 200 W/m ² (Relative)	< 4%

STC ELECTRICAL CHARACTERISTICS²

Model # (e.g. R2xxCzC-3y) ³	R280 CzC	R285 CzC	R290 CzC	R275 KzC	R280 KzC	R285 KzC
Rated Maximum Power Pmax (W)	280	285	290	275	280	285
Open-Circuit Voltage Voc (V)	39.2	39.3	39.3	38.6	38.6	38.7
Short-Circuit Current Isc (A)	9.45	9.50	9.55	9.20	9.30	9.40
Module Efficiency (%)	17.1	17.4	17.7	16.8	17.1	17.4
Maximum Power Point Voltage Vmpp (V)	31.7	31.9	31.9	31.6	31.6	31.7
Maximum Power Point Current Impp (A)	8.84	8.95	9.14	8.72	8.86	9.00

NOCT ELECTRICAL CHARACTERISTICS⁴

Model # (e.g. R2xxCzC-3y) ³	R280 CzC	R285 CzC	R290 CzC	R275 KzC	R280 KzC	R285 KzC
Rated Maximum Power Pmax (W)	204.6	208.2	211.8	196.7	200.3	203.9
Open-Circuit Voltage Voc (V)	35.7	35.8	35.9	35.5	35.6	35.7
Short-Circuit Current Isc (A)	7.47	7.49	7.51	7.32	7.35	7.38
Maximum Power Point Voltage Vmpp (V)	29.1	29.4	29.6	28.6	28.9	29.2
Maximum Power Point Current Impp (A)	7.03	7.09	7.15	6.88	6.93	6.99

Listed specifications are subject to change without prior notice.

¹Temperature coefficients may vary by ±10%

²All electrical data at standard test conditions (STC): 1000 W/m², AM 1.5, 25° C. Electrical characteristics may vary by ±5% and power by -0 W to +5 W

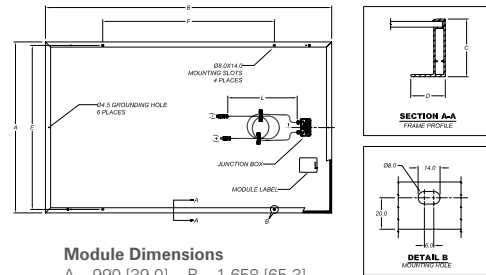
³y indicates connector type: -34 = Bizlink S418; -38 = Amphenol Helios H4

z indicates manufacturing location: M = Malaysia

⁴NOCT electrical characteristics measured under normal operating conditions of cells: 800 W/m², 20° C, AM 1.5, wind 1 m/s

For more information about SunEdison's Silvantis modules, please visit www.sunedison.co.uk

R-SERIES SOLAR MODULE DIMENSIONS mm [inch]



Module Dimensions

A – 990 [39.0] B – 1,658 [65.3]
C – 50 [2.0] D – 30 [1.18]

Mounting Hole Spacing

E – 950 [37.4] F – 994 [39.1]

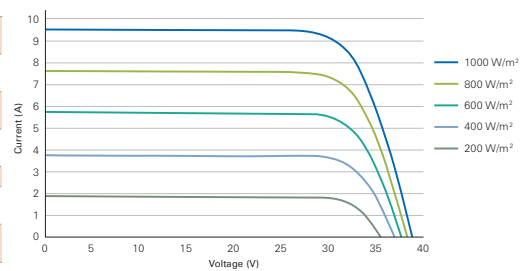
Cable Length

L – 1,000 [39.4]

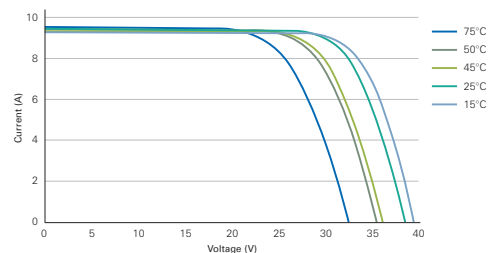
Junction Box Dimensions

101.5 x 60.0 x 25.5 [3.99 x 2.36 x 1.0]

IV CURVES AT MULTIPLE IRRADIANCES [25° C]⁵



IV CURVES AT MULTIPLE TEMPERATURES [1000 W/m²]



SunEdison UK RSC Ltd
Fairbourne Drive, Atterbury
Milton Keynes, MK10 9 RG
inforsc@sunedison.com

Freephone: 0 8000 211 859





SolarEdge Single Phase Inverters-16A

SE3000(*) (**) / SE3500(*) (**) / SE4000-16A

INVERTERS



Specifically designed to work with power optimizers

- Superior efficiency (97.6%)
- Small, lightweight and easy to install
- Built-in module-level monitoring
- Internet connection through Ethernet or Wireless
- IP65 – Outdoor and indoor installation
- Fixed voltage inverter, DC/AC conversion only



Single Phase Inverters - 16A

SE3000(*) (**) / SE3500(*) (**) / SE4000-16A

	SE3000(*) (**)	SE3500(*) (**)	SE4000-16A	
OUTPUT				
Rated AC Power Output	3000	3500	4000	VA
Maximum AC Power Output	3000	3500	4000	VA
AC Output Voltage (Nominal)		220 / 230		Vac
AC Output Voltage Range		184 - 264.5		Vac
AC Frequency (Nominal)		50 / 60 ± 5		Hz
Maximum Continuous Output Current		16		A
Residual Current Detector / Residual Current Step Detector		300 / 30		mA
Utility Monitoring, Islanding Protection, Country Configurable Thresholds		Yes		
Input				
Recommended Maximum DC Power*** (Module STC)	3750	4350	5000	W
Transformer-less, Ungrounded		Yes		
Maximum Input Voltage		500		Vdc
Nominal DC Input Voltage		350		Vdc
Maximum Input Current	11.5	13.5	15.5	Adc
Reverse-Polarity Protection		Yes		
Ground-Fault Isolation Detection		600ka Sensitivity		
Maximum Inverter Efficiency		97.6		%
European Weighted Efficiency		97.5		%
Nighttime Power Consumption		< 2.5		W
ADDITIONAL FEATURES				
Supported Communication Interfaces		RS485, RS232, Ethernet, Zigbee (optional)		
Standard Compliance				
Safety		IEC-62103 (EN50178), IEC-62109		
Grid Connection Standards		VDE 0126-1-1, VDE-AR-N-4105, AS-4777, RD-1663, DK 5940		
Emissions		IEC61000-6-2, IEC61000-6-3, IEC61000-3-11, IEC61000-3-12, FCC part15 class B		
RoHS		Yes		
Installation Specifications				
AC Output		Cable Gland - diameter 9-16		mm
DC Input		1 MC4 pair	2 MC4 pairs	
Dimensions (HxWxD)		540 x 315 x 172	540 x 315 x 191	mm
Weight		20.2	21.7	kg
Cooling		Natural Convection		
Noise		<25		dBA
Operating Temperature Range		-20 - +50 (M40 version -40 - +50)		°C
Protection Rating		IP65 - Outdoor and Indoor		
Bracket Mounted (Bracket Provided)				

* SE3000-GBR & SE3500-GBR for United Kingdom.

** SE3000 & SE3500 for Denmark, Ireland, Latvia, Portugal and Poland should be set to country code DEN, IRL, LAT, PRT or POL respectively to limit to 16A. For other countries contact SolarEdge.

*** Limited to 135% of AC power.



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SolarEdge Power Optimizer

Module Add-On

P300 / P350 / P405 / P500



POWER OPTIMIZER

PV power optimization at the module-level

- Up to 25% more energy
- Superior efficiency (99.5%)
- Mitigates all types of modules mismatch-loss, from manufacturing tolerance to partial shading
- Flexible system design for maximum space utilization
- Fast installation with a single bolt
- Next generation maintenance with module level monitoring
- Module-level voltage shutdown for installer and firefighter safety



SolarEdge Power Optimizer Module Add-On

P300 / P350 / P405 / P500

	P300 (for 60-cell modules)	P350 (for high-power 60-cell and for 72-cell modules)	P500 (for 96-cell modules)	P405 (for thin film modules)	
INPUT					
Rated Input DC Power ⁽¹⁾	300	350	500	405	W
Absolute Maximum Input Voltage (Voc at lowest temperature)	48	60	80	125	Vdc
MPPT Operating Range	8 - 48	8 - 60	8 - 80	12.5 - 105	Vdc
Maximum Continuous Input Current (Isc)	Pxxx-2 series 10	11	10	10	Adc
Maximum Efficiency			99.5		%
Weighted Efficiency			98.8		%
Overvoltage Category			II		
OUTPUT DURING OPERATION (POWER OPTIMIZER CONNECTED TO OPERATING SOLAREEDGE INVERTER)					
Maximum Output Current			15		Adc
Maximum Output Voltage		60		85	Vdc
OUTPUT DURING STANDBY (POWER OPTIMIZER DISCONNECTED FROM SOLAREEDGE INVERTER OR SOLAREEDGE INVERTER OFF)					
Safety Output Voltage per Power Optimizer			1		Vdc
STANDARD COMPLIANCE					
EMC		FCC Part15 Class B, IEC61000-6-2, IEC61000-6-3			
Safety		IEC62109-1 (class II safety), UL1741			
RoHS		Yes			
Fire Safety		VDE-AR-E 2100-712:2013-05			
INSTALLATION SPECIFICATIONS					
Maximum Allowed System Voltage		1000			Vdc
Dimensions (W x L x H)	Pxxx-2 series	141 x 212 x 40.5 / 5.55 x 8.34 x 1.59			mm / in
	Pxxx-5 series	128 x 152 x 27.5 / 5 x 5.97 x 1.08	128 x 152 x 35 / 5 x 5.97 x 1.37	128 x 152 x 48 / 5 x 5.97 x 1.89	mm / in
Weight (including cables)	Pxxx-2 series	950 / 2.1			gr / lb
	Pxxx-5 series	770 / 1.7			gr / lb
Input Connector		MC4 ⁽²⁾			
Output Connector		MC4			
Output Wire Length	0.95 / 3.0		1.2 / 3.9		m / ft
Operating Temperature Range		-40 - +85 / -40 - +185			°C / °F
Protection Rating	Pxxx-2 series	IP65 / NEMA4			
	Pxxx-5 series	IP68 / NEMA6P			
Relative Humidity		0 - 100			%

⁽¹⁾ Rated STC power of the module. Module of up to +5% power tolerance allowed.

⁽²⁾ For other connector types please contact SolarEdge.

PV SYSTEM DESIGN USING A SOLAREEDGE INVERTER ⁽³⁾		SINGLE PHASE	THREE PHASE	
Minimum String Length (Power Optimizers)	P300,P350,P500	8	16	
	P405	6	13	
Maximum String Length (Power Optimizers)		25	50	
Maximum Power per String		5250	11250	W
Parallel Strings of Different Lengths or Orientations		Yes		

⁽³⁾ It is not allowed to mix P405 with P300/P350/P500/P600/P700 in one string.



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C House description

- Three bedrooms
- Two reception rooms
- Solar panels
- Private rear garden
- Garage and driveway
- Unfurnished
- Twelve month tenancy
- Available now

**41 Thorpe Way
Cambridge CB5 8UJ
£1,200 PCM**

Radcliffe & Rust
ESTATE AGENTS



We are delighted to offer for let this spacious, three bedroom, semi-detached property on Thorpe Way. The property is situated close to local amenities and is just a stones throw from both Newmarket Road for access into the city centre and the A14 which leads to the science park, just one junction away. Internally the property comprises of entrance hall, lounge, second reception/study and kitchen on the ground floor. On the first floor you will find a landing, three bedrooms and bathroom. Outside, the front benefits from an enclosed lawn and driveway that leads to the garage. Through the gated side access you will come to a fully enclosed rear garden that is not overlooked from the rear. Available immediately on an unfurnished basis with an initial 12 month agreement. Call us now to arrange your viewing.

Entrance hall

With door to front aspect, built in storage cupboard, radiator and doors to both the garage and lounge.

Lounge

12'00 x 17'06 (3.66m x 5.33m)
 With double glazed window and patio doors to rear aspect, stairs rising to the first floor, two radiators, TV and telephone points.

Reception two/study

8'09 x 8'00 (2.67m x 2.44m)
 With double glazed window to rear aspect and radiator.

Kitchen

10'09 x 8'08 (3.29m x 2.54m)
 With double glazed window to front aspect, fitted with matching wall and base units with worktop over, inset sink and drainer unit, breakfast bar, tiled splashback, freestanding electric oven with gas hob and cooker hood over, freestanding washing machine, freestanding dishwasher, freestanding fridge/freezer and radiator.

First floor

Landing
 With stairs rising from the ground floor, loft access hatch, airing cupboard housing gas fired combination boiler, radiator and doors to all first floor rooms.

Bedroom one

8'01 x 13'01 (2.66m x 6.12m)
 (MAXIMUM MEASUREMENTS - RESTRICTED HEAD HEIGHT) With two double glazed, velux windows to rear aspect, under eaves storage cupboard, radiator and telephone point.

Bedroom two

8'10 x 14'00 (2.69m x 4.27m)
 With two double glazed, velux windows to rear aspect, built in over stairs wardrobe, under eaves storage cupboard, radiator and telephone point.

Bedroom three

7'00 x 10'11 (2.13m x 3.33m)
 With double glazed window to front aspect, radiator and telephone point.

Bathroom

4'09 x 8'00 (1.46m x 2.44m)
 With obscured, double glazed window to front aspect, part tiled suite comprising of low level W.C, built in sideboard with inset wash hand basin, bath with mixer taps and shower over, extractor fan, electric shaver point and heated towel rail.

Garage

8'01 x 17'01 (2.46m x 5.21m)
 With double doors to front aspect, workbench, power and lighting.

Outside

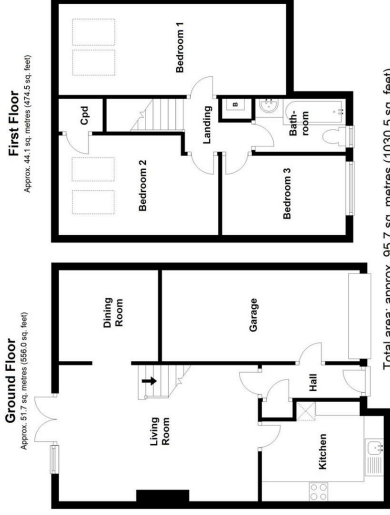
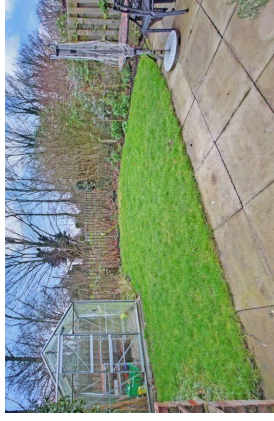
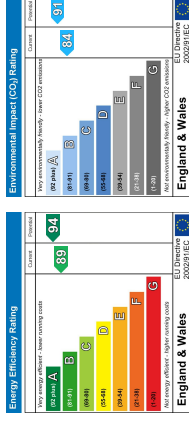
To the front of the property there is a driveway leading to the garage and a lawn with fenced surrounding. There is also the added benefit of gated side access to the rear garden. At the rear of the property you will find a fully enclosed garden that is mainly laid to lawn with planted borders, a patio area, brick built barbecue and greenhouse. The rear garden is not overlooked from the back.

Agent notes

Deposit: £1,800
 Council tax band C: Approx. £1,450 per annum
 Sorry no pets, non-smokers only please

Fees

1 Adult Applicant: £140.00 + VAT (£168.00)
 Guarantor: £140.00 + VAT (£168.00)
 Check out: £140.00 + VAT (£168.00)
 Check in: £140.00 + VAT (£168.00)



Total area: approx. 95.7 sq. metres (1030.5 sq. feet)
 Drawings are for guidance only
 Plan produced using PlanUp.