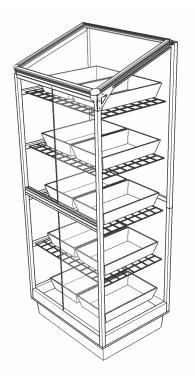


Setup guide

Model S10

Greenhouse only, Solar, 3-season and 4-season versions



4-season shown above

Thank you for buying a Harvst greenhouse.

If you have any questions while setting up, send us an email (help@harvst.co.uk) or have a look at our forums at

https://grow.harvst.co.uk

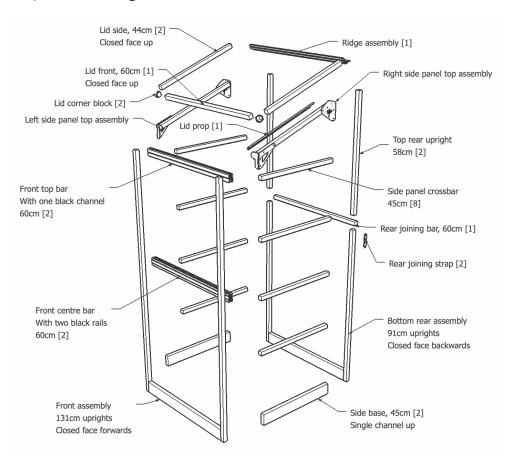
There are also videos at https://www.harvst.co.uk/setup

Important information

Sprout mini greenhouses are intended for outdoor garden use, fixed securely to a fence, wall or the ground. Use outdoors unsecured, or indoors, is at your own risk.

Mains powered greenhouses are provided with a waterproof power supply and 5m of mains cable. They should be plugged into a waterproof outdoor socket, or an indoor socket in a shed, garage or other safe place. Non waterproof extension leads should never be used.

Exploded diagram





Visit www.harvst.co.uk/setup for more information, videos and photos

Parts list (aluminium pieces)



440mm **x2** Lid sides with plastic corners



580mm **x2** Rear top upright



450mm Side panel crossbar **x8**



1308mm **x2** Front upright



910mm **x2** Rear lower upright



600mm **x2** Lid front & rear crossbar



600mm **x1**Front upper crossbar (box profile as alternative)



610mm Shelf support **x4** GH / 3-season / Solar **x8** 4-season model



600mm **x1** Front centre crossbar



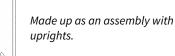
405mm **x1** With one hole Lid prop



450mm **x2** Side base parts



600mm **x2** Front and rear base parts





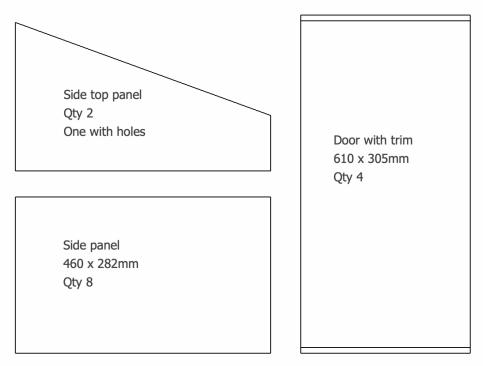
Side panel top assembly x2
One left and one right

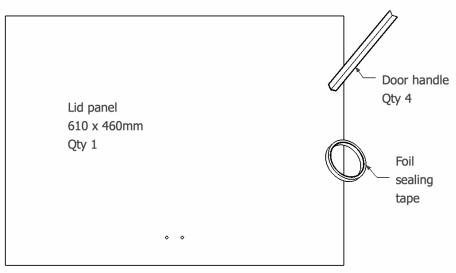




Two-part ridge x1

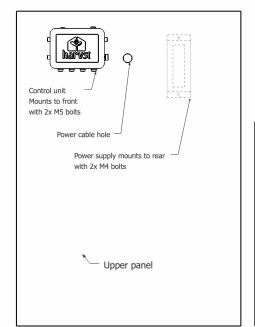
Parts - clear panels

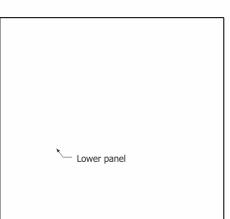




Parts - rear panels

Showing position of control unit and power supply (if provided, with the smart greenhouse). Control unit and power supply are fitted after the greenhouse is built.





Parts - other

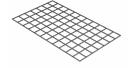
Tools provided

3mm allen key 8mm spanner Pozidrive screwdriver

Tools required

Tape measure Secateurs for cutting pipe

Mesh shelves



You will also have mesh shelves and shelf supports;

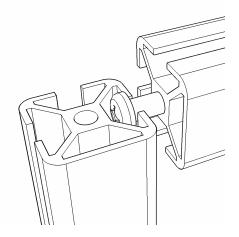
<u>2 shelves</u> for greenhouse-only, solar & 3-season models. <u>4 shelves</u> for 4-season models.

Fixings and small parts



Introduction - Slotting parts together

The greenhouse is based on parts that slot together using stainless steel screws, as shown in the diagram below.



Ensure that your screwdriver is fully engaged with the screw head when you tighten, so that you don't round off the head of the screw.

Note the orientation of each piece in the description; specifically the closed face.

WARNING Every care has been taken during manufacture to avoid sharp edges or burrs, however you should still take care when handling metal parts.

WARNING <u>DO NOT USE POWER TOOLS</u> TO SCREW IN THE SCREWS. YOU MIGHT SNAP OFF THE HEAD, WHICH IS NOT COVERED BY WARRANTY.

Step 1 - Seal the polycarbonate panels (optional)

Twin wall polycarbonate panels act like double glazing for your mini greenhouse, and to improve the insulation characteristics, it is good to seal the ends of the channels using the provided foil tape. It also helps prevent bugs from crawling into the plastic.

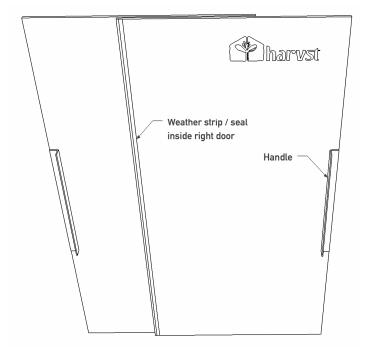
This step is optional - it can take some time but is recommended.

- Peel back a couple of inches of the protective foil which covers both sides of the panels, but don't take it all the way off yet.
- 2. Apply the tape to the end of the panel, covering the flutes.
- 3. Fold down the sides to seal the tape to the panels.

The white film is on the UV protected side which should face out when you place the panels into the greenhouse.

Step 2 - Attach the door handles

Do this step first to allow the adhesive tape to cure while you assemble the rest of the greenhouse. You'll fit the doors at the end.



Parts 4 x door handle 4 x polycarbonate door Fix the door handles to the doors as shown in the drawing above, using the tape fixed to the handles.

Make sure you have peeled the protective film off the doors first, the surfaces are clean, dry and free from grease, and that the UV treated side of the door panels (white film) faces out.

There is a sticker on the **upper** pair of doors.

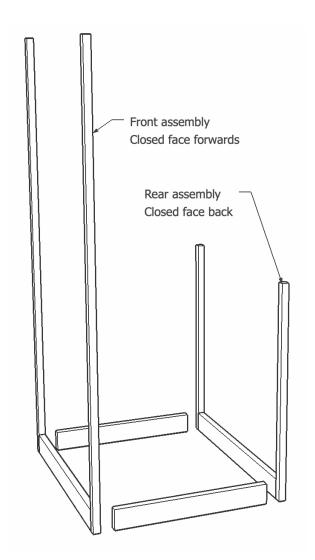
The longer (taller) doors are the lower pair.

Step 3 - Assemble the base

Parts:

1 x front assembly
1 x rear assembly
2 x side base 45cm

This step is best done on a flat surface where you can easily access the screws at the bottom, such as a table or workbench.

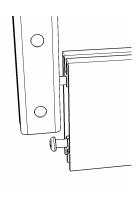


Link the front and rear assemblies using the 45 cm side base parts.

The closed faces on the assembly uprights face **outside** the greenhouse.

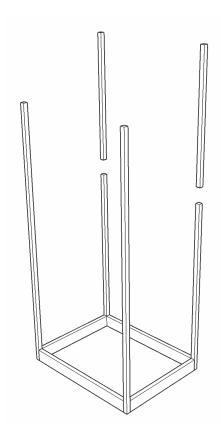
The side base parts have the single channel facing **up**, and the double channel facing **down**.

Slot the assemblies over the screws on the side base parts and tighten.

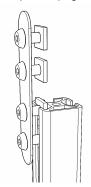


Step 4 - extend the rear uprights

Move the frame down onto the floor at this point.



Parts
2 x joining strap
8 x M5 x 8 button head
8 x M5 square nut
2 x top rear upright 58cm



Insert the bolts into the joining straps, and put a square nut on the back of each, loosely.

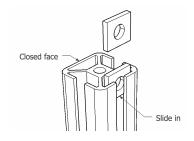
Slide the square nuts into the **outside** channel of the rear uprights, and tighten the lower pair of bolts.

It can be a little fiddly to get the square nuts to slide into the channels. A small pair of pliers can help keep them aligned.

Slide the top rear uprights down over the square nuts, and tighten the bolts. The closed face of the bars faces the rear (outside) of the greenhouse.

Step 5 - Insert square nuts into cross bars

These are for you to attach pipe clips for irrigation (which you may add in the future even if you don't have them now).



Parts 4 x side cross bar 45cm 4 x square nut

Insert a square nut into the inside channel of each crossbar that will go on the **left** side of the greenhouse. The inside channel is the one opposite the closed face.

Step 6 - Side panels and side crossbars

The **top side panel on the left** has a hole with grommets in it for an external hose or tank connection, if you have a solar, 3 season or 4-season model.



Parts:

8 x clear side panel 2 x clear top side panel 4 x side cross bar 45cm 4 x side cross bar with nuts 45cm

Peel the protective plastic off the side panels. Slot the panels into the frame, one on each side.

The side with the white film should face outside; it is the UV treated side.

Slide the crossbars, **closed face outwards**, down over the clear side panels.

The bars with the nuts go on the **left** side.

Tighten the screws.

Finish inserting all the side panels and cross bars in the same way.

Step 7 - Front crossbar



Parts:

1 x Front cross bar (60cm with a black channel top and bottom)

Slide the crossbar into the front of the greenhouse and tighten when the screws line up with the holes in the uprights.

Closed face forwards.

Step 8 - Lower rear panel and rear crossbar



Parts:

1 x Lower rear panel (the smaller one)

1 x Rear cross bar (60cm with screws in)

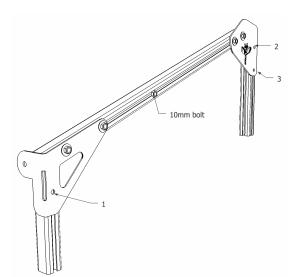
Slide the rear panel into the slots on the rear of the greenhouse, all the way into the channel in the bottom base part.

It's a snug fit into the base (anti-slug!); knock it down gently with a soft hammer or block of wood.

Slide the bar into the rear of the greenhouse. Closed face backwards.

Tighten the screws from the sides.

Step 9 - Fit the right side panel top assembly



Parts:

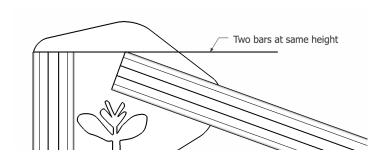
1 x Right side panel top assembly 3 x M5 * 8mm button head bolt 3 x M5 square nut 1 x M5 * 10mm button head bolt

Insert the <u>8mm bolts</u> into the assembly in positions marked 1,2,3, and add the <u>square nuts</u> on the inside, loosely.

Slide the assembly down over the side panel, inserting the square nuts into the outer channels on the uprights.

Screw the <u>10mm bolt</u> into the square nut which is already in the outside channel of the assembly and tighten by hand. This will form part of the storm lock (see end of guide)

The front end goes down as far as it will go, and the rear end is flush with the top of the rear upright (see drawing below). Tighten the bolts.



Step 10 - Fit the **left** side panel top assembly

Parts:

1 x Right side panel top assembly 3 x M5 *8mm button head bolt

3 x M5 square nut

Repeat for the left hand side

(apart from the storm lock bolt which is only on the right side)

Step 11 - Fix lid lifter bracket to adapter plate

OPTIONAL - if you have an automatic lid opener

The *lid lifter bracket* is in the lid opener box. (see drawing below for named parts)

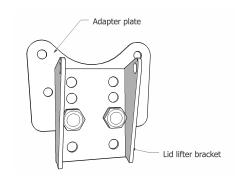
Parts:

2 x M5 nut

bracket.

1 x lid lifter bracket 1 x adapter plate 2 x M5 x 8mm button head

Bolt the lifter bracket to the adapter plate as shown, with the nuts on the inside of the



Step 12a - Fix bracket to front bar: slot method

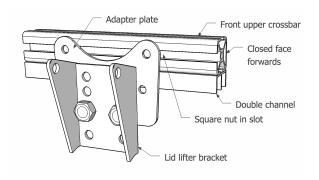
Parts:

1 x front upper cross bar 60cm 1 x bracket assembly from above

2 x M5 x 8mm button head

2 x M5 square nut

Slide two square nuts into the **rear** channel of the bar (the side opposite the closed face). Bolt the bracket assembly to the front bar, in the exact centre of the bar.



Step 12b - Through-hole method

If your greenhouse has a front crossbar with no slot, it will have holes drilled in the relevant place.

Parts:

1 x front upper cross bar 60cm 1 x bracket assembly from step 9 2 x M5 x 30mm button head

2 x M5 nut

Bolt the bracket to the front bar, through the two holes.

Step 13 - Front upper cross bar

Parts

2 x M5 x 30 bolt

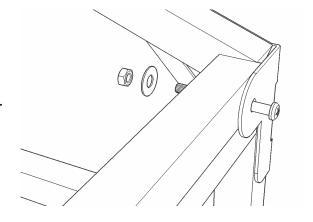
2 x M5 nut

2 x M5 washer

1 x front bar you have assembled

Bolt the front upper bar to the **rear** of the brackets on the front of the greenhouse.

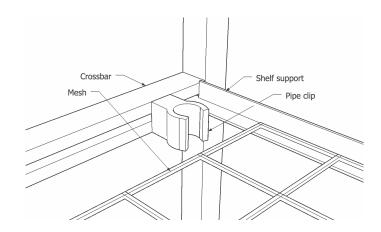
Tighten securely.



Optional step - fit pipe clips

If you have a greenhouse with self watering, it will be easiest to fit the pipe clips before adding the mesh shelves.

Parts (from control system parts): 4 x pipe clip 4 x M5 x 16mm bolt

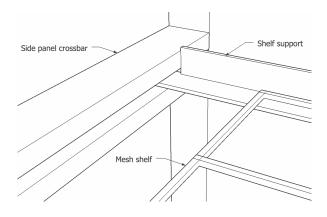


Fit the pipe clips to the crossbars as shown in the drawing above. The irrigation down-pipe will clip into these.

Step 14 - Fit the shelves

Parts: Mesh shelves 2 x shelf support per shelf 4 x cable tie per shelf Slide the square nuts for the 13mm water pipe to the middle of the crossbars on the left hand side of the frame, before you insert the shelf supports.

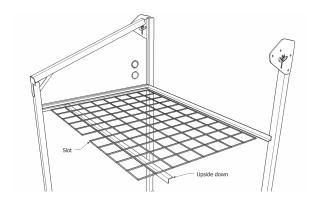




Slot the shelf supports into the slots on the inside of the side panel cross bars, inserting them at a diagonal and then straightening up.

Place the mesh shelves onto the shelf supports and secure with cable ties, one in each corner.

NOTE: The mesh shelf with a slot cut out goes in the top level to allow the lid lifter piston to swing clearly. The front shelf support goes in upside down.



Step 15 - Add the lid prop bolts

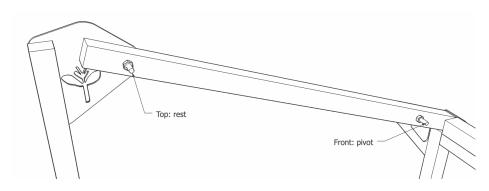
Parts 2 x M5 x 16mm bolt 2 x M5 nut Screw the two standard nuts onto the bolts until they are 2mm away from being fully tightened.

Slide the heads of the bolts down the inner slot on the top right end panel bar, as shown in the drawing below..

Slide one all the way to 40mm off the bottom and leave the other one near the top.

Holding the bolt thread, tighten the nut to create a stud. The lower / front stud goes through the lid prop with a nyloc nut on it.

The top / rear stud is used to rest the lid prop when not in use.



Step 16 - Fit the lid prop

Parts 1 x lid prop, 405 mm 1 x M5 nyloc nut

Note: The nyloc nut has a little plastic ring inside to prevent it loosening over time.

Put the hole in the lid prop over the lower stud that you inserted above.

Put on the nyloc nut, tightening it just so that the plastic "bites" the thread. The prop should be loose enough to move around.

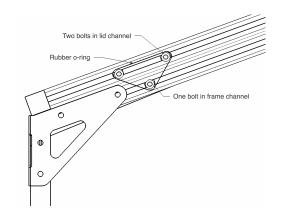
Step 17 - Fit storm lock bolts to right lid side

Position the lid left and right sides on the table. L and R will be marked with the corner cubes facing towards you. The closed face is upwards.

Parts
1 x right lid sidebar
(45cm with corner cubes)
2 x square nut
2 x M5 x 10mm
1 x o-ring

Slide two <u>square nuts</u> into the outside channel of the right <u>lid</u> <u>sidebar</u>. These will form the top bolts for the storm lock as per drawing on the right.

Screw the 10mm bolts into the nuts and tighten them by hand to lock them in place.



Fit the o-ring over the two bolts on the side of the lid. The drawing above shows what the lock will look like when in operation, holding the lid down.

Step 18 -Fit lid side bars to lid rear

This is easiest done on a flat table or worktop.

Parts

- 1 x lid rear
- 2 x lid side bars



- 1. Slide the lid sides into the ends of the ridge assembly, with the closed side upwards.
- 2. Tighten the screws.

Step 19 - Insert the lid polycarbonate

Parts
1 x clear lid panel

Slot in the lid polycarbonate sheet, with the holes at the front.

Make sure the white UV protected side is upwards.

You'll need to flex the lid side bars apart slightly.

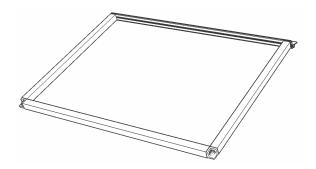
Step 20 - Complete the lid

Parts

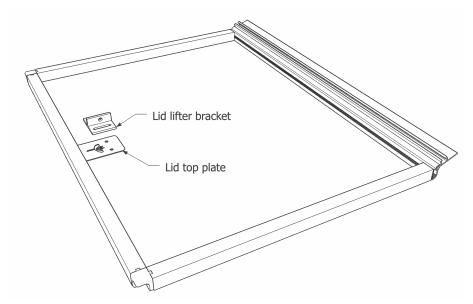
1 x lid front bar

2 x 30mm screw

Screw the front of the lid onto the rest of the lid assembly, with the closed face up.



Step 21 - Fit the lid lifter to the lid



Place the lid upside down on a table (with the black channel facing up), with the holes over the edge.

Parts:

2 x M4 x 16mm bolt

2 x M4 nut

1 x lid top plate

1 x lid lifter

Place the lid lifter so that the bracket with slots in is above the two holes in the front of the lid. The slotted bracket is shown in the diagram above without the lid lifter, for clarity.

Bolt the lid lifter to the bottom of the lid, using the top plate on the other side (underneath the upturned lid).

Step 22 - Fit the lid lifter piston

WARNING - the lid lifter has powerful springs and should be treated with care.

Parts 1 x lid lifter piston

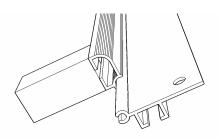
Prop the greenhouse lid open. Insert the black piston into the lid lifter, using the instructions as supplied with the lid lifter.

Taking care not to trap your fingers, squeeze the sides of the lid lifter together and insert the studs into the bracket on the inside of the front upper bar.

Step 23 - Fit the ridge to the lid

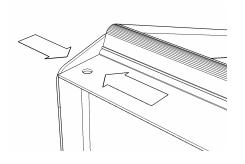
Parts 1 x assembled lid 1 x ridge 2 x blanking plugs

Fit the blanking plugs when the screws are fully tightened.



Step 24 - Fit the lid to the greenhouse

Parts 2 x 30mm screw 1 x Lid Place the lid on top of the greenhouse, making sure that the rear panel slots into the black channel on the underside of the lid.



Secure it with two 30mm screws into the rear uprights.

Before you tighten the screws, ensure the sides of the greenhouse are firmly pushed together to secure the rear panels in place.

Tighten the screws well.

Step 25 - Fit the top doors

Parts
2 x polycarbonate door
With handles fitted
Shorter pair
With sticker

Pop the doors into the sliding channels by flexing them slightly. The left hand door goes in the rear (inside) channel and the right hand door goes in the front (outside) channel.

Step 26 - Fit the bottom doors

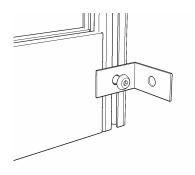
Parts
2 x polycarbonate door
With handles fitted
Longer pair

Pop the doors into the sliding channels by flexing them slightly. The left hand door goes in the rear (inside) channel and the right hand door goes in the front (outside) channel.

Step 27 - Fit the hole caps

We've supplied some small black plastic caps to cover the screw holes in the front of the greenhouse to make it look smarter. Fit the caps.

Secure the greenhouse down



We recommend that you secure the greenhouse to the ground, a wall or a fence.

Parts
2 x square nut
2 x M5 x 8mm bolt
2 x securing bracket

Use square nuts in the rear upright side slots, with an M5 bolt and a bracket of your choice to suit what you're mounting to.

Regular maintenance

The materials and design of your greenhouse means that it does not need much maintenance.

- The automatic lid lifter will need oiling from time to time to prevent corrosion.
- Clean the inside of the panels from time to time, especially if you have hard water.

To extend the life of your automatic lid lifter, avoid opening the lid against the pressure of the piston too frequently. Open the front doors, unclip the lifter mechanism, and then open the lid. The lid opener piston is not covered under our manufacturer's guarantee.

Further reading

We have more information on our website at www.harvst.co.uk about:

- The smart control system and web app
- Using the self watering
- Using grow lights and heating
- What to grow in your greenhouse



Visit www.harvst.co.uk/setup for more information, videos and photos