

Autotherm Roller Garage Door Installation Instructions

Thank you purchasing your new Autotherm garage door by Autoroll. Please take time to read the following instructions carefully.

Safety advice

- This installation requires 2 people
- This product should be installed by a competent person with the necessary experience and knowledge
- A certified electrician should carry out all electrical installations to comply with current electrical directives
- Before operating, you must make sure that there are no persons or objects in the way of the shutter
- You must always make sure that the shutter is in view before operating
- Children should not be allowed to operate the shutter at any time

Unpacking the door

When the door arrives it will come well packed, please do not attempt to cut away any packaging with a sharp blade, as this could damage the powder coated finish to the door

Pre-installation checks

- The area that you are working in should be safe, clean and dry and that you have a clear area to work in
- Any loose brick work is to be removed and where the shutter is to be fitted is firm and can support the framework of the door
- Ensure that the area to be fixed to is vertical and true, including the upper lintel, if not packers will be required to ensure a flat and level surface
- Before you remove the existing door if applicable, check your dimensions to ensure that the product supplied is the correct size before commencing installation
- Ensure that you have a suitable 13amp power socket situated on the corresponding side of the garage within 1.5 metres of the shutter

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Tools & fixings required

- Suitable drill
- 7mm masonry drill bit
- 2.5mm, 7mm & 13mm HSS drill bits
- Screwdriver
- Spirit level
- 4mm allen key
- Marker pen
- 10 no. 75mm no. 12 screws with rawlplugs
- Additional fixings will be required for fixing head plates and back box (if ordered), depending on the material being fixed to. Screw sizes may need to be changed.

General part's list

- Barrel assembly
- Back box and front fascia (if ordered as an extra)
- Pair of guide tracks
- Pair of endplates
- Assembled shutter curtain including rubber bottom seal
- Crank handle
- Remote control unit
- Segmental lock down straps
- 13mm screw caps
- Motor limit setting tool

Familiarization

- Familiarize yourself with all of the parts, look how the end plates fit into the top of the guides and how they will fit flush to the wall
- Look how the motor end of the barrel assembly fits to the end plate using the 4 screws provided (if ordered with back box and front fascia, this will already be installed)

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- Look how the adjustable shaft end of the barrel assembly fits into the other end plate using the bolt and lock nut supplied

Preparations of guide tracks

You will notice that the guide track has a void box section to the back of the guide channel; this is to accommodate the fixings. Please note that the two “L” shaped flanges must be fitted to the front of the guide on the projecting side of the shutter box. To drill for fixings, measure in from each end of the guide rail 150mm, and divide the length between these two points into suitable divisions. Next, drill a pilot hole through both sides of the box section and open out the front side to suit the 13mm white plugs supplied and then drill the back to suit the fixings you wish to use. Slide the guide rails onto the peg at the bottom of the shutter end plate. Do not force it as you may damage or snap the peg.

Fixing the guide tracks if ordered with shutter box (or go to next section if fitting without back box and front fascia)

Measure the width across the shutter box and this will be your total width. (This is more important for reveal fixing). Two people should carefully lift into position by holding the guide track with one hand and supporting the shutter box with the other. It is important that the shutter box is supported, as if not the peg could become damaged or broken. Check with a spirit level that the guides are plumb and that the canopy is level. Drill the brick work and securely fix. Next remove the box front, as extra fixings are required through the return flange on the back of each end plate and every 800mm along the length of the back fascia to secure it and stop it from rubbing against the curtain, which could mark over time. Now plug the 13mm holes in the guide tracks with the screw caps provided.

Fixing the guide tracks without shutter box

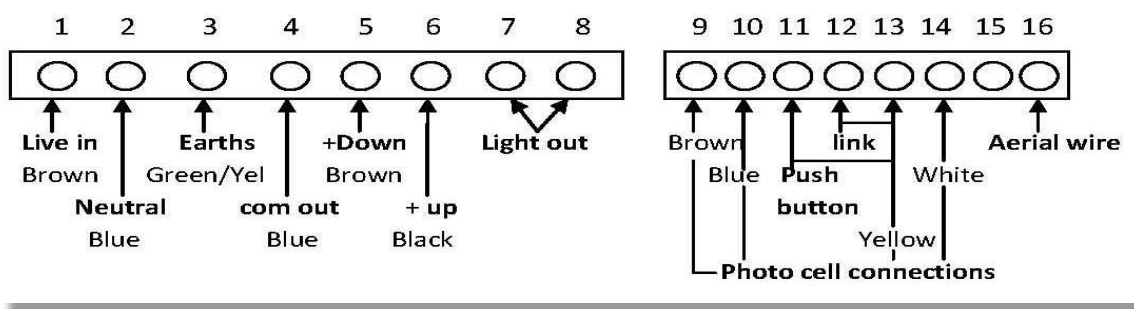
- First measure the door curtain including the black endlocks. Add 86mm to this measurement, which will give you the total overall back of guide track measurement required to give the door sufficient air gap for smooth operation.
- Example: -if the door curtain including black endlocks is 2400mm, then the measurement to the back of the two parallel guide tracks needs to be 2486mm

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- Stand the guide up, making sure they are vertical and level. Mark the brickwork through the holes drilled in the guide. Remove the guide and drill to the depth of the rawlplug and repeat for the other side.
- Drill and fasten back the end plates through the return flange at the back.
- Fasten the guides and end plates into position loosely
- When installing the barrel assembly, two people are required.
- The shaft on the end of the barrel assembly is telescopic and you will need to loosen the 4mm allen screw to extend it.
- Insert the adjustable end of the barrel assembly into the bearing in the 'U' cup in the centre of the end plate. Do not tighten at this stage.
- Offer the square plate at the motor end, to the opposite end plate and secure using the four 5mm screws supplied.
- Check all of the dimensions are correct and then tighten the fixings to the guides, end plates and adjustable shaft.
- Check to make sure everything is firm and secure before moving onto the next stage.
- Now plug the 13mm holes in the guide tracks with screw caps provided

Installing the remote control unit



The remote control unit has a comprehensive set of installation and set up instructions. Please follow these carefully.

Fitting of optional photo-cell safety beam

Wiring

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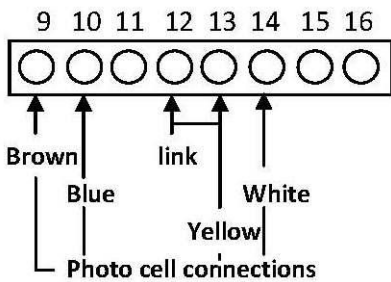
Drill a suitable hole through the side of the remote control box to pass the photo-cell cable through. It is advisable to remove the circuit board first to prevent accidental damage caused by the drill. Make sure that you have put a loop wire to connect terminals 12 to 13 then connect as follows:

Brown to terminal 9 (24v supply)

Blue to terminal 10 (24v supply)

Yellow to terminal 13 (common)

White to terminal 14 (N/C)



The black wire is not used and can be either cut out or just left un-connected.

Mounting and adjusting

Bolt the photo-cell to one of the brackets provided and fix loosely to the internal wall at car bumper height (500 – 700mm above floor) and between 40mm – 70mm away from the door. Next, switch on the power and both the green and red led's on the photo-cell will illuminate. Place the reflector on the other wall directly adjacent to the photo-cell unit and ensure that the visible red beam is centred on the reflector. Secure to both walls. You will notice that when the beam is aligned correctly, the red led on the photo-cell will go out and then should only illuminate if the beam is blocked by an object. Please note that your door will not close if the photo-cell is not aligned correctly or blocked, and the red led is on. If the photo-cell becomes damaged or the wiring is broken and you need to close your door, first disconnect the 5 wires to the unit and put a loop wire between terminal 13 & 14 and change the dip switch setting 4 to ON. This will put the door into dead man function, so you will need to keep your finger on the remote transmitter button for the duration of the door closing

Testing

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Start the motor in the closing direction, block the photo-cell beam and the motor should stop. If not, check to see if it stops when the beam is blocked while the motor is turning in the opening direction. If it does stop, you need to change the motor direction wires in the remote control box – reverse the motor connection wires between terminal 5 & 6. Now the door should stop while closing

Identifying the open and close stop limits on the motor

Once the remote control installation is completed, test the running direction of the motor by pressing the button on the handset once. The motor will run until it has reached its preset limit. Press the button on the handset again twice and the motor will turn the other way. On the end of the motor there are two coloured plastic limit stop setting screws; these determine where the motor will stop. Push the button on the handset to start the motor to go in the downward (closing) direction until it stops turning itself. Within two minutes of the motor stopping, turn either of the plastic coloured screws a full turn in the + direction. If the motor starts to continue in the downward direction you have identified the down (closed) limit screw. If not, turn the other screw a full turn in the + direction and this should start the motor in the downward direction. Now you have identified which is the down limit and which is the up limit screw, make a note of this and leave the motor in the fully down position before attaching the curtain, If whilst identifying the limit screws, the motor stops and will not travel in either direction, this will be it's built in thermal trip, this is normal and it is to protect the motor. Please leave for 15 minutes to cool down before continuing

Attaching the shutter curtain

Before attaching the shutter curtain, please make sure that you have driven the barrel in the downward direction until it stops. Carefully slide the shutter curtain over the plastic rings on the barrel and slide it into the guide tracks and lower it until it is half way, then slide the segmental lock down straps onto the top of the curtain and then fully lower it. The top of the curtain should be at approximately the same level as the barrel and no higher. If it is too high, remove 1 no. Slat otherwise the door will not lock correctly. Space the plastic rings in pairs, evenly across the barrel; you may now have to rotate the barrel a fraction to bring the screw hole in the ring to the front where it is visible (it is advised to do this rotating the

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barrel in the downward direction). You will now notice a series of holes in the side of the rings. Bring the lock down straps forward and lock the metal rod into 1 pair of these holes and repeat with the other straps. Now secure the rings by inserting the 2.9mm x 13mm screws provided through the holes and into the elongated holes on the barrel. Next use a 2.5mm pilot drill through the locking strap fixing holes into the barrel and secure with the 3.5mm x 9.5mm fixing screws provided. Please make sure that the correct screws are used, as longer ones may cause damage to the motor.

Setting the open and close limits on the motor

Before commencing further, be ready to isolate the power in case you have not identified the down limit correctly, as this will cause damage to the door curtain.

As you should have already attached the door curtain to the barrel assembly when the motor had stopped in its fully closed position, now if you press the button on the handset, the door will automatically start to open a short way and then stop. Making sure that hands are out of the way of moving parts and using the plastic limit tool provided, start to turn the up limit screw in the + direction until you reach the height you desire. This must be done within two minutes of the door stopping or the remote system will automatically cut the power to the motor and you will have to send the door down again before returning to the open position. Do not set limits too high, as it is necessary to leave approximately 75mm of the bottom of the door in the top of the guide tracks to assist closing. You will now need to check that the door closes firmly to the ground, if not, turn the bottom limit screw in the + direction or – direction if it tries to close too far. Please note that damage to the locking straps can occur if the down limit is set too far down, which will put excessive strain on them due to the power of the motor. The general rule for limit screws, is the more that you turn the screw in the + direction, the further the door will travel or the more that you turn it to the negative direction, the less it will travel. One full turn of either screw will move the doors travel by approximately 50mm.

Refitting the back box (if ordered) and manual override eye.

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Insert the manual override hoop into the motor and mark the position on the end plate with a marker. Note the distance away from the end plate. Lift the back box into position and secure with the fixing supplied. Now mark the back box and drill a pilot hole and open out to 13mm. Put the override through this hole and drill and secure with the self tapping screws provided.

Commissioning and testing the door

- Ensure that the safety system is working correctly
- Run the door up and down 3 times to ensure that the limit settings are to your satisfaction

Your new garage door is now ready to use