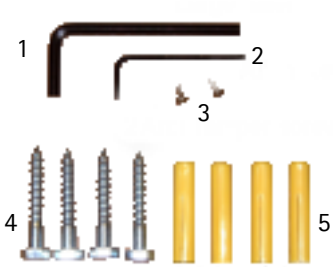
Unpacking

In the box with the 290A housing you will find a small plastic bag containing:

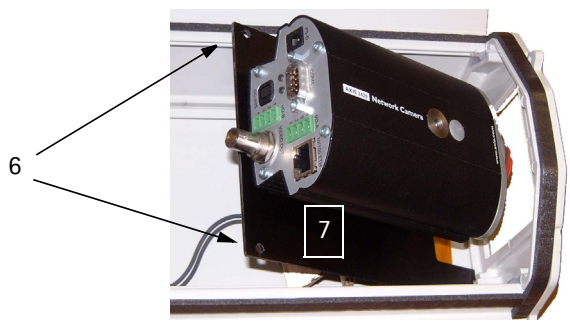


No.	
1.	One large allen key
2.	One small allen key
3.	Two locking screws
4.	Four M8 wall fixings
5.	Four plugs (11x50 mm) for use in solid walls

Fitting the camera inside the housing

Recommendation: Fit the camera in indoor conditions to prevent the build-up of dust and moisture inside the housing.

1. Open the housing by releasing the two clips on the side.
2. Undo the two screws (6) on the camera mounting board (7). Slide the board backwards and lift it out.
3. Refer to the Axis Installation Guide provided with the Axis camera for instructions on camera hardware installation.



4. Attach the camera to the camera mounting board (7) using the screw attached to the board. You will find a screw hole at the bottom of the camera. Before tightening the screw, position the camera with the board inside the housing (with the lens to the front) and determine the camera's correct position.

   Caution: The lens should be as close to the window as possible allowing sufficient space between the lens and window to accommodate the zoom function (if supported by the lens).

5. Once the correct position has been established, lift out the camera with the board while keeping it in the correct position. Tighten the screw at the bottom to securely affix the camera to the board.

   Caution: The heater at the front of the housing unit becomes hot when in operation. If applicable, position the cable connected from the DC IRIS socket to the lens so that it does not touch the heater.

   Caution: Do not over-tighten the screw as you may damage the camera.

6. Position the camera with the board inside the housing as before. Make sure the board is inserted under the lugs beneath the window in its most forward position. Use the two screws (6) to secure the board with the camera and lens in the housing.

Routing the cables

1. Route the cables (network and mains power) to the location where the bracket arm is to be installed.

   Note:
   The cables can either be routed through the bracket arm (recommended) or through a hole in the base of the bracket. This hole needs to be drilled in the recess area where the casing metal is thinner to accommodate easy drilling.
   Determine the size of the hole to accommodate the fitment of the cable gland (not supplied). However, the hole should not exceed 15mm in diameter.

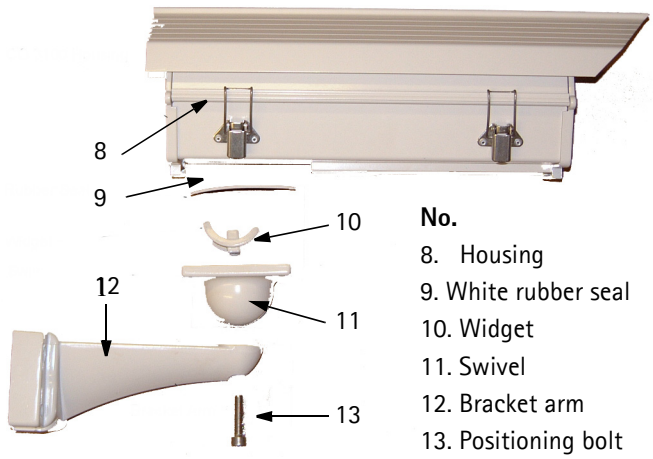
   Warning: Install cable glands and/or cables that are suitable for external use that and are in compliance with local laws and regulations.

Installing the housing

Recommendation: Keep the housing closed when possible during the installation to prevent the build-up of dust and moisture inside the housing.

Important: This product should be installed by certified electrical technicians in compliance with local laws and regulations.

Warning: High voltage - the apparatus works on 100-240VAC. Always ensure that the power is disconnected before starting any work or opening the housing..



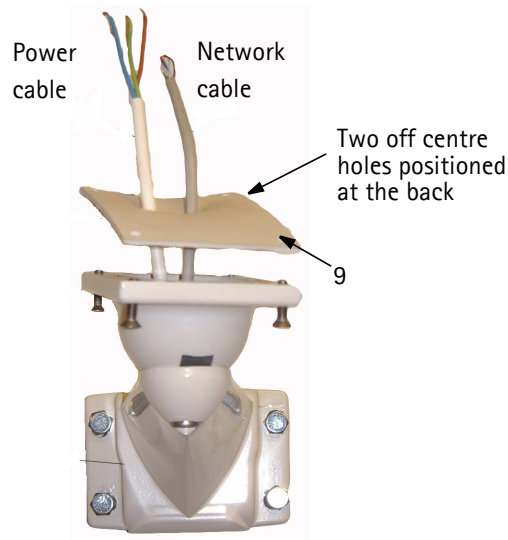
No.
8. Housing
9. White rubber seal
10. Widget
11. Swivel
12. Bracket arm
13. Positioning bolt

1. Detach the bracket from the housing by unscrewing the positioning bolt (13). Use the large allen key (1) to do this. Continue until the swivel (11) (still attached to the housing) comes completely loose from the bracket arm (12). The positioning bolt (13) is held in the bracket arm (12) by a plastic washer inside.
2. Detach the swivel (11) from the housing by loosening its four screws. Use the small allen key (2) to do this. The four screws are held in the swivel (11) by plastic washers.
3. Position the bracket arm (12) on the wall in the position required and drill four fixing indicators. Remove the bracket arm and drill the four holes (using an 11 mm drill bit) to the depth and size (50 mm) of the plugs provided.
4. Route the cables through the rear of the bracket arm and pull them out at the front. Pull out at least 60 cm of cable to complete the installation.

   Warning: Be careful when routing the cables through the bracket arm. A damaged cable may damage the camera, the housing and/or other system equipment.

5. Position the swivel (11) on the end of the bracket arm (12) with the two cables coming through the open slot. Ensure that the swivel is positioned with F (front) at the front and R (rear) at the back.

6. Now position the widget (10) inside the swivel (11) with the cables coming through the opening. Match the F and R on the widget with the F and R on the swivel, assuring that F remains at the front and R at the back.
7. Line up the positioning bolt (13) with the screw hole in the widget (10) and tighten it using the large allen key (1).
8. Position the white rubber seal (9) on the flat face of the swivel (11) by pushing the power cable through the off centre hole on the left and the network cable through the off centre hole on the right. The two off centre holes should be positioned towards the back.
9. Position the housing (8) on the swivel (11) with the white rubber seal (9) in between, the network cable going through the larger hole in the black board and the power cable going through the smaller hole. Attach the housing to the swivel by tightening up the four screws held in the swivel. Use the small allen key (2) to do this.



Connecting the camera

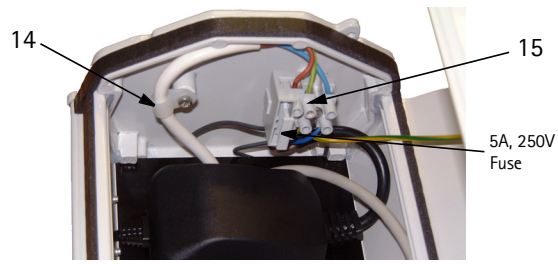
Warning: Be sure to work inside the housing in dry conditions. Rain water, moisture and prolonged condensation inside the housing may cause serious damage to the camera and disturb the picture quality when in operation.

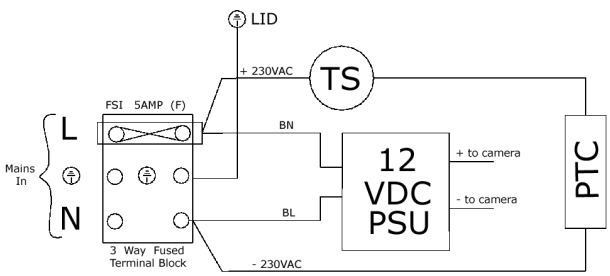
Warning: High voltage - the apparatus works on 100-240VAC. Always ensure that the power is disconnected before starting any work or opening the housing.

1. Open the housing by releasing the two clips on the side.
2. Strip back the mains power cable by 5mm. The minimum mains cable conductor area for installation of the housing is 0.5 mm^2.

   Warning: Regulations relating to other parts of the system may require a bigger conductor area. You are responsible that the requirements of these regulations are met.

3. Route the power cable through the cable tie (14). Wire into the fused terminal block (15) as follows:
   Blue = neutral (N),
   Brown = live (L),
   Green/yellow = earth.
   Refer to the wiring diagram below.





Wiring diagram 290A

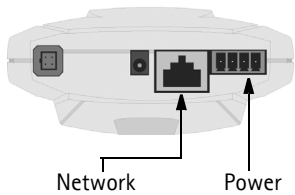
Caution: Ensure that all wires are correctly and securely wired into the terminal block (15). No bare wires should be showing. Tighten the cable tie (14) so that the power cable is held firmly.

4. All models - attach an RJ45 connector (not supplied) to the network cable allowing sufficient cable to reach the back of the camera. Once you have fitted the connector, plug it into the network connector at the back of the camera.

   Important: Only a 90° BNC angle plug will fit inside the housing. Do not use any other plugs!

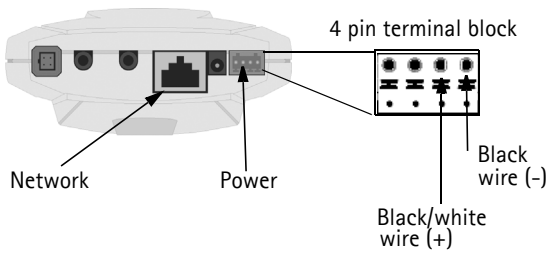
5. **AXIS 211** - plug the green power connector coming from the 12V DC power supply into the green socket on the camera.

AXIS 211



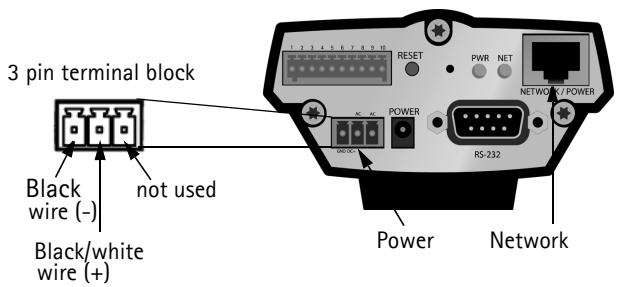
AXIS 211A - replace the 4 pin green power connector coming from the 12V DC power supply with the 4 pin green terminal block supplied with the camera:

AXIS 211A



AXIS 221/223M - replace the 4 pin green power connector coming from the 12VDC power supply with the 3 pin green terminal block supplied with the camera and connect the wires.

AXIS 221/223M



Completing the installation

Caution: The heater at the front of the housing unit becomes hot when in operation. If applicable, position the cable connected from the DC IRIS socket to the lens so that it does not touch the heater.

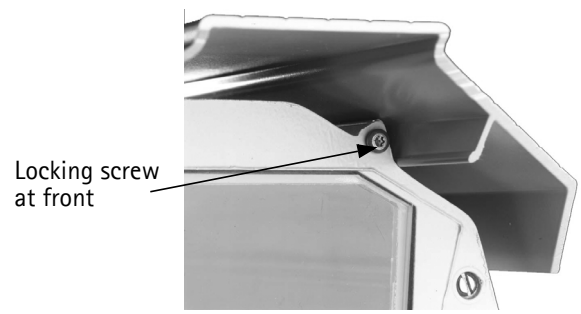
- Ensure that all cables and connections are correctly and safely installed.
- Ensure that the lens setting is correct and make final adjustments if required (refer to Axis Installation Guide).
- Ensure that the window is clean. Wipe it with a dry cloth if it is not. Do not use a damp or wet cloth! Ensure that no tools/loose parts are left in housing.
- Finally ensure that all the visible seals are undamaged and in position.

Warning: If any of the seals are damaged or missing , the housing will not be weatherproof and water ingress may occur. This can seriously damage to the camera and other system equipment. Installations that have been completed with damaged or missing seals are not covered by any warranty.

Once you have checked all the above items, close the housing with the two clips on the side:

1. Loosen the positioning bolt (13) sufficiently to move the housing in the desired position. Use the large allen key (1) to do this. Once the housing is in its final position firmly lock up the positioning bolt (13).

   Caution: Do not over-tighten or use excessive force. You may damage the bracket-swivel assembly if you do so.



2. Finally, securely lock the housing at the front and rear using the locking screws.

The installation is now complete.

Maintenance

Annual maintenance is required to inspect all visible seals for wear and damage. Worn or damaged seals should be replaced.

Recommendation: Treat all visible seals with silicone at least once a year to prevent them from drying out and to aid opening and closing of the housing. Use an all-purpose silicone spray for use on electrical equipment and components, and also compatible with rubber, metal and plastic materials.

Clean the housing with a damp cloth only (not on the window). Do not use chemicals to clean the housing as this may affect the powder coat finish. The window should only be cleaned with a dry cloth.

Burnt fuses in the fused terminal block can be replaced to reinstate the power supply of the camera. Use a 5A, 250 VAC fuse and ensure that the mains is disconnected before beginning.

Specifications

- Weatherproof to IP66
- CE
- Power requirement: 100-240V AC 60/50Hz
- Operating temperature: -20°C to +42°C (-4F to 108F).
- Approximate weight: 3.2 kg (7.1 lbs)
- Color: RAL 9002 grey white
- Specifications may change without prior notice.

Warning: The housing should not be installed in areas that are subject to many hours of direct sunlight as this may overheat and damage the camera beyond repair. The maximum temperature inside the housing should never exceed 50°C (122F).

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