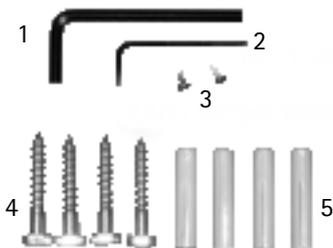# 290A Outdoor Housing

290A

1. Unpacking

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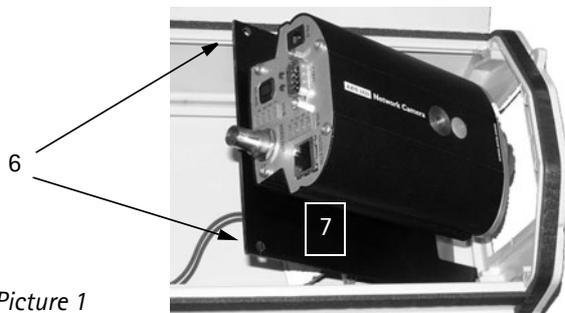

No.

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

2. Fitting your camera inside the housing

Recommendation: Fit the camera in indoor conditions.

2.1. Open the housing by releasing the two clips on the side.

2.2. Undo the two screws (6) on the camera mounting board (7) and keep them safe (see *Picture 1*). Slide the board backwards and lift it out.

Picture 1

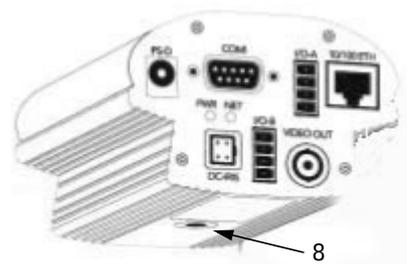2.3. Attach the lens to the camera (refer to the Axis Installation Guide provided with the Axis camera).

2.4. Attach the camera to the camera mounting board (7) using the screw attached to the board. You will find a screw hole (8) at the bottom of the camera (see *Picture 2*). Before tightening the screw, position the camera with the board inside the housing (with the lens to the front) (see *Picture 1*) and determine the camera's correct position.

Recommendation: The lens should be as close to the window as possible.

Caution: Allow sufficient space between the lens and window to accommodate the lens' zoom function. 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. 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.

Picture 2

2.5. Position the camera with the board inside the housing as before (see *Picture 1*). Make sure the board is inserted under the lugs beneath the window in its most forward position. Use the two screws (6) undone under 2.2 to mount the board with the camera and lens back into the housing.

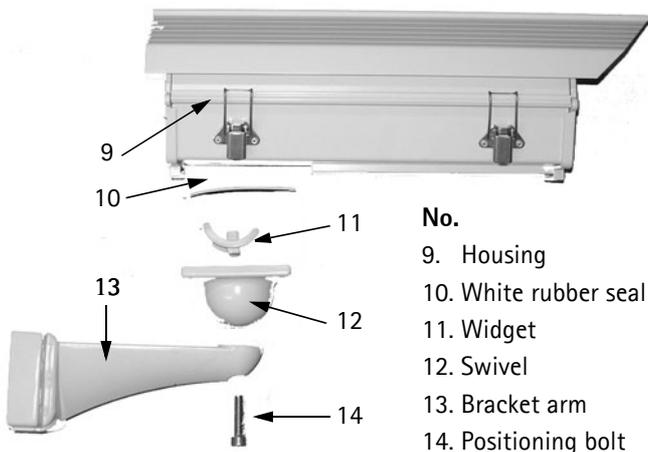2.6.Close the housing with the two clips on the side. Your housing is now ready for installation outdoors.

3. Installing your housing with camera outside

Recommendation: Keep the housing closed at all possible times. This prevents the build-up of dirt, dust, moisture or water inside the housing and any subsequent problems that could arise from it once in operation.

Important: Only certified electrical technicians should install this product, else the warranty will not be valid. You are responsible for correct and safe installation of this product and compliance of the installation with local laws and regulations.

Warning: Apparatus works on 100-240VAC. Danger of electrical shock. Always ensure that mains is disconnected before starting any work or opening the housing.

3.1. Route the cables (CAT.5 and mains power) to the point of fix (this is your own responsibility and no instructions on how to do this are given here, nor is it available). Refer to chapter 6 of this manual if the cables are not coming out of the wall at the point of fix. Else continue with 3.2.

3.2. Detach the bracket from the housing by unscrewing the positioning bolt (14). Use the large allen key (1) to do this. Continue until the swivel (12) (still attached to the housing) comes completely loose from the bracket arm (13). The positioning bolt (14) is held in the bracket arm (13) by a plastic washer inside. Ensure this is the case.

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

Picture 3

3.3. Detach the swivel (12) from the housing by loosening its four screws. Use the small allen key (2) to do this. The four screws will be held in the swivel (12) by plastic washers inside it.

3.4. When the whole assembly has come apart you should have the parts as shown in *Picture 3*. Keep loose parts safe.

3.5. Position the bracket arm (13) 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
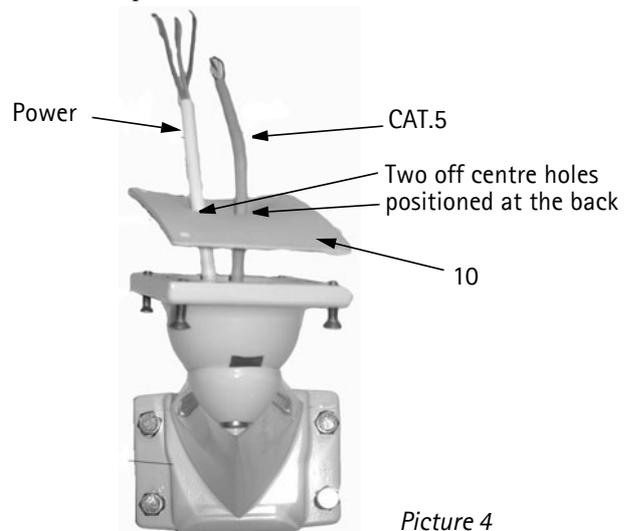
drill bit) to the depth and size (50 mm) of the plugs provided.

3.6. 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.

Caution: Make sure you do not damage the cable while doing this. Check the cable for damages once you have finished routing the cable through the bracket arm.

Warning: The cables may be damaged after routing them. A damaged cable can cause serious damage to the camera, the housing and/or other system equipment, it also could seriously endanger the health and safety of humans or animals.

3.7. Position the swivel (12) on the end of the bracket arm (13) with the two cables coming through the open slot. The front of the swivel is indicated by F on the swivel's flat face. The rear is indicated by R, also on the swivels flat face. Ensure that the swivel is positioned with F at the front and R at the back. This is essential for further correct assembly.

3.8. Now position the widget (11) inside the swivel (12) with the cables coming through the opening. The front of the widget is indicated by F and the rear by R. 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.

3.9. Line up the positioning bolt (14) with the screw hole in the widget (11) and tighten it up using the large allen key (1).

3.10. Position the white rubber seal (10) on the flat face of the swivel (12) by pushing the power cable through the off centre hole on the left and the CAT.5 cable through the off centre hole on the right. The two off centre holes should be positioned towards the back (see *Picture 4*).

Picture 4

3.11. Position the housing (9) on the swivel (12) with the white rubber seal (10) in-between, the CAT.5 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.

4. Connecting your camera

Warning: Only work inside the housing in dry weather conditions. Rain water or excessive moisture kept inside the housing may cause serious damage to the camera, other system equipment or even fire. It also could seriously endanger the health and safety of humans or animals. Water or moisture kept inside the housing may also cause prolonged condensation on the window disturbing the picture quality when in operation.

Warning: Apparatus works on 100-240VAC. Danger of electrical shock. Ensure that mains is disconnected before continuing the installation.
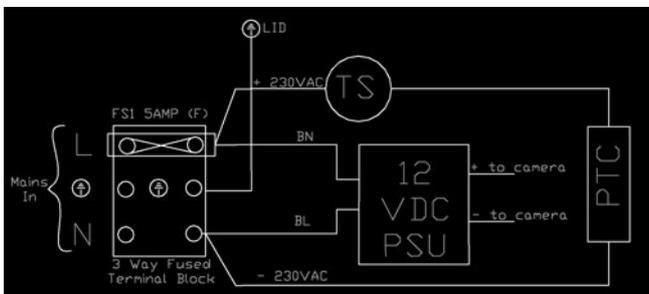
4.1. Open the housing by releasing the two clips on the side.

4.2. Strip back the mains power cable by 50mm. The minimum conductor area for installation of the housing is 0.5mm^2.

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

4.3. Route the power cable through the cable tie (15). Wire into the fused terminal block (16) as follows: Blue = neutral (N), Brown = live (L), Green/yellow = earth. Refer to *Picture 6* for a full wiring diagram for the apparatus.
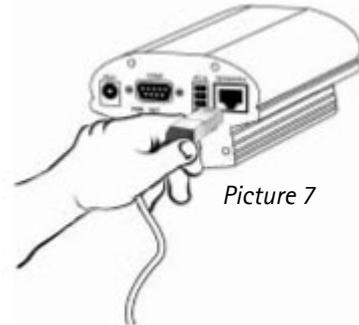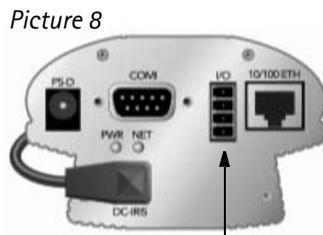

Picture 5

Picture 6 - Wiring diagram 290A

4.4 **Caution:** Ensure that wires are correctly and securely wired into the terminal block (16). No bare wire should be showing.

After this cautionary check, tighten the cable tie (15) so that the power cable is held firmly.

4.5. Attach your RJ45 connector (not supplied) to the CAT.5 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 your camera (see *Picture 7*). If you are installing an AXIS 2420 camera and are using Coaxial cable instead of CAT.5 refer to chapter 7 of this manual.
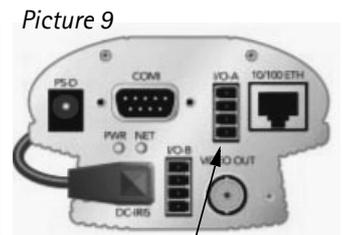

Picture 7

Power socket on 2110/2120   Power socket on 2420

4.6. When installing an AXIS 2110/2120 camera plug the green power connector coming from the 12VDC power supply into the socket labelled I/O (see *Picture 8*). When installing an AXIS 2420 camera plug the green power connector into the socket labelled I/0-A.

   Warning: Do not plug the green connector into the socket labelled I/0-B. This will damage the camera. For further details on how to connect your camera refer to the Axis Installation Guide provided with the camera.

5. Completing your installation

5.1. Before closing the housing, check the following:

   • Ensure that all cables and connections are correctly and safely installed.

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

   • Ensure that the lens setting is correct and make final adjustments if required (refer to Axis Install 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 there is no water or condensation inside the housing or on any of the parts. Dry it thoroughly and ensure that no electrical parts are affected.

- Ensure that no tools/loose parts are left in housing.

- Finally ensure that all the visible seals are undamaged and check that the white rubber seal in-between the housing and the bracket swivel is in position.

5.1. **Warning:** If any of the seals are damaged or missing your housing will not be weatherproof and water ingress may occur. This can seriously damage to the camera and other system equipment. It can seriously endanger the health and safety of humans or animals. Installations that have been completed with damaged or missing seals are not covered by any warranty.
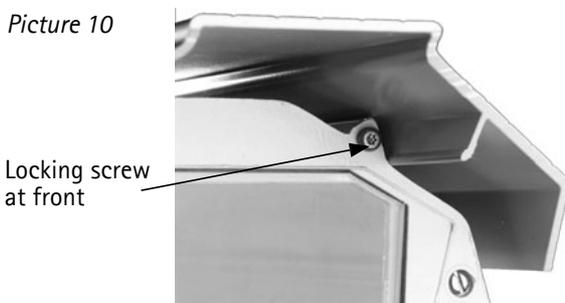
Once you have checked all the above items, close the housing with the two clips on the side.

5.2. Loosen the positioning bolt (14) 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 (14).

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

5.3. Finally, securely lock the housing at the front and rear using the two locking screws (3) provided. See *Picture 10.*

Picture 10

Locking screw at front

Your installation is now complete.

6. Your cables are not coming out of the wall at the point of fix

6.1. If your cables are not coming out of the wall at the point of fix you should drill a hole in the bottom of the base of the bracket. The hole needs to be drilled in the recess area where the wall is thinner to accommodate easy drilling.

6.2. You should determine the size of the hole to accommodate the fitment of the cable gland (not supplied) you are using. However, the hole should not exceed 15mm in diameter.

Warning: It is your own responsibility to install cable glands and/or cables that are suitable for external use and are in compliance with local laws and regulations. No advice is given in this manual, nor is it available.

Continue with 3.2.

7. You are installing an AXIS 2420 camera and are using Coaxial cable instead of CAT.5

7.1. Attach a RG59 BNC plug to the coaxial cable.

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

7.2. Once you have fitted the BNC plug to the cable connect it to the video output at the back of your camera. Continue with 4.6.

8. 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.

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

9. Basic specifications

- Weatherproof to IP66

- CE

- Power requirement: 100-240VAC 60/50Hz

- Operating temperature: -20°C to +42°C (-4F to 107.6F). **Warning:** Housing should not be installed in areas that are subject to many hours of direct sunlight as the camera may overheat and become damaged beyond repair.

- Approximate weight: 3.7kg (8.2 lbs)

- Colour: RAL 9002 grey white

Specifications may change without prior notice.