# 13A Connection Units & 20A Switches

Comply with BS 1363 Part 4 & BS 3676 respectively

***Please keep this leaflet for future reference***

## SAFETY INSTRUCTIONS

- This product must be installed by a competent person in accordance with the current editions of the IEE Wiring Regulations (BS7671) and Buildings Regulations. If in any doubt, consult a qualified electrician.
- To prevent electrocution, do not work on any appliance live. Switch off the mains supply before commencing work.
- This product must always be earthed and be used within its rated current.
- To prevent fire hazard do not exceed the rated current.
- When mounted using a metal back box the following minimum box depths should be used :-
- With a front plate of 9mm depth or greater - 35mm.
- With a front plate of less than 9mm depth - 46mm.
- Product and packaging should be disposed of via standard refuse facilities at the end of their life.

43364 PL Ed. 3



## INSTALLATION GUIDE

1. All terminal screws are backed out ready to receive the cables.
2. When intended to connect the flexible cable from an appliance through the cable clamp, always connect the LOAD cables before connecting the SUPPLY cables.
3. SUPPLY cables are those from the distribution board.
4. LOAD cables are those from an appliance.
5. Some products have the fixing screws clipped to the rear of the product. These should be unclipped.
6. Ensure the back box is firmly fixed to the wall.
7. Front plates less than 9mm deep, require the top and bottom lugs of the metal back box to be bent back to clear the base of the product.
8. Products having a clip-on front plate can have the plate removed by carefully sliding a screwdriver into the notch in the lower edge of the plate and gently levering it away from the wall.

## INSTALLING LOAD CABLES USING THE FRONT CABLE CLAMP

1. Strip back the outer sheath on the appliance flexible **LOAD** cable and trim wires to 55mm in length. Do not trim the insulation on the three individual cables for the moment.



*Pre-stressing the front cable clamp for cables greater than 10mm in diameter*

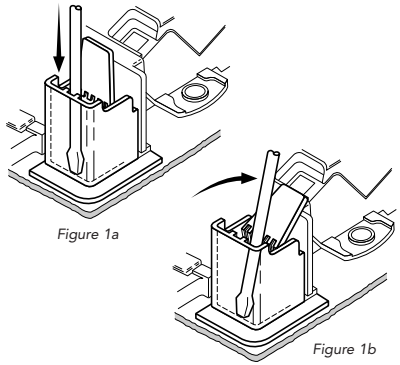

*Figure 1a*

*Figure 1b*

2. When using cables of 10mm or more in diameter on 20 amp switches, it is necessary to pre-stress the cable clamp before attempting to load the cable.
3. To pre-stress the clamp, insert a flat bladed screwdriver into the cord grip as shown in **figure 1a** and flex the clamping jaw open until it touches the grey base moulding, **figure 1b**. Then remove the screwdriver.
4. Make the front plate cable outlet bigger, by removing the crescent shape (with a round file).

**IMPORTANT:** The clamp must not be re-used for cables below 6mm dia. after pre-stressing.

5. Cables below 10mm do not need the cable clamp pre-stressed and the installation from this point is the same for all products.
6. To assist pushing the load cable through the front of the product, ease the clamping jaw pressure by holding the product securely in one hand and pushing the tab firmly with your thumb in the direction shown in **figure 2a**.
7. Continue pushing the cable through the clamp until the outer sheath reaches the cable stops. See **figure 2b**. The jaws **must** clamp on the outer sheath.
8. Carefully strip back the insulation on all three cables to expose 13mm of the conductor.



*Installation of flexible load cables*

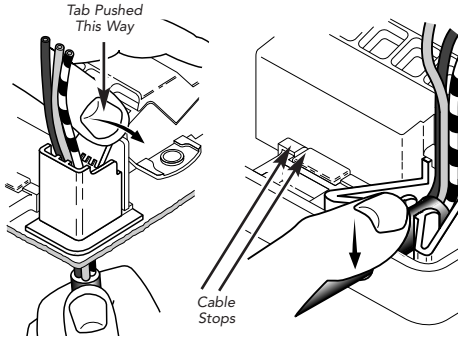


*Figure 2a* *Figure 2b*



9. The conductors should now be connected to the respective load terminals as described below and shown in figure 4.
10. Take care to select the cable with the appropriate sleeve colour code for each terminal.

| | | |
|---|---|---|
| BROWN | = | LOAD terminal marked 'L' |
| BLUE | = | LOAD terminal marked 'N' |
| GREEN/ YELLOW | = | LOAD terminal marked '⏚ ' |

## INSTALLING LOAD CABLES USING BOTTOM CABLE CLAMP

1. Remove the plug from the cable entry point.
2. Strip back the outer sheath on the appliance flexible **LOAD** cable and trim wires to 60mm in length.
3. Carefully strip back the insulation on all three cables to expose 13mm of the conductor.
4. Press the outer sheath of the cable into the jaws of the clamp with a forward and downward movement, as illustrated in **figures 3a & 3b**. The jaws **must** clamp on the outer sheath.
5. The conductors should now be connected to the respective load terminals as described below and shown in **figure 4**.
6. Take care to select the cable with the appropriate sleeve colour code for each terminal.

| | | |
|---|---|---|
| BROWN | = | LOAD terminal marked 'L' |
| BLUE = | = | LOAD terminal marked 'N' |
| GREEN/ YELLOW | = | LOAD terminal marked '⏚' |

**INSTALLING SUPPLY AND NON FLEXIBLE LOAD CABLES FOR HARD WIRED INSTALLATIONS**

1. Strip back the outer sheath and trim wires to approximate length to allow cable ends to reach terminals.
2. Carefully strip back the inner insulation to expose 13mm of the conductor.
3. Slide a length of green/yellow sleeving onto the bare earth conductor.
4. Connect the cables to the correct **SUPPLY** or **LOAD** terminals, as shown in **figure 5**.
5. A length of green/yellow sleeved conductor must be connected between the product and the earth terminal in the back box.
6. Please note; the colour codes used in the UK prior to April 2004 are as follows: -

| | |
|---|---|
| RED | = terminal marked 'L' |
| BLACK | = terminal marked 'N' |
| GREEN/ YELLOW | = terminal marked '⏚' |

In all other areas of the EU, as well as new build installations in the UK after April 2004, the colour codes used are: -

| | |
|---|---|
| BROWN | = terminal marked 'L' |
| BLUE | = terminal marked 'N' |
| GREEN/YELLOW | = terminal marked '⏚' |

The first colour indicated in the following illustrations will be that used prior to April 2004. The second colour, shown in brackets, is the colour used after April 2004.

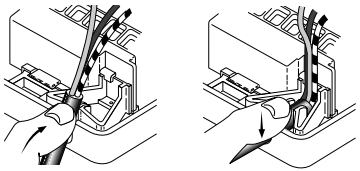

*Fig 3a* *Installation of bottom cable outlets* *Fig 3b*

7. Using the fixing screws provided, mount the product onto the back box. Do not over tighten, so as to prevent damage or distortion to the front plate. Adjust so the front plate is square on the wall.
8. If the product has a decorative clip-on front plate, hook the plate on the clips down the left hand side of the product and apply figure pressure down the right hand side until the plate is heard to click into place.



**Note:** Certain products in the range have no cable entry and are designed for 'hard' wired installations only.
However, when a bottom entry product is used in a 'hard' wired position, the blanking plug must be left in place in the bottom edge of the front plate.
The cable clamp is not used when there are no external flexible cables.

**CHANGING FUSES ON CONNECTION UNITS**

1. Unscrew the fuse carrier screw to partially eject the carrier.
2. Carefully lever the carrier out further to remove the fuse. **Note: The carrier does not come fully out.**
3. Always replace with a BS 1362 type fuse (as used in 13A plugs) of the correct rating.
4. Consistent fuse blowing could mean a faulty appliance. If in doubt, consult a qualified electrician.
5. Push carrier back until engaging with jacking screw. Screw the carrier down until flush with surface of the plate. Do not over tighten the screw.

**CLEANING FRONT PLATES**

In order to protect the quality surface finish of the front plate, periodically clean with a dry lint free soft cloth. On no account should abrasive or domestic cleaners be used.



*Supply and non flexible load cables*

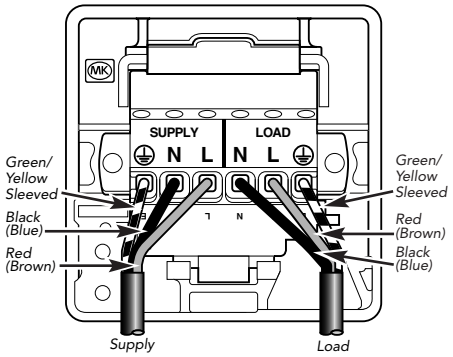


*Figure 5*



*Flexible cable connections*
*(bottom entry clamp shown, connection same for front entry)*

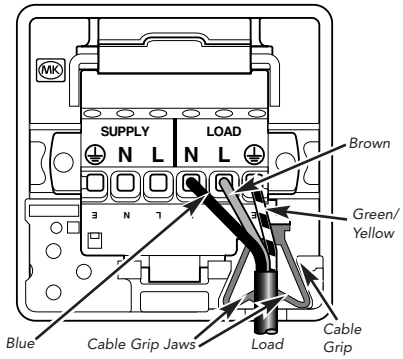


*Figure 4*



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