Installation Note

4910/4911 Power Supply Unit

IN022

To meet international PTT and EMC regulations and to meet the FCC regulations for a class B digital device, this equipment must be fitted with the ferrite sleeve provided as described in the section entitled “Connecting the mains cable”.

Mounting

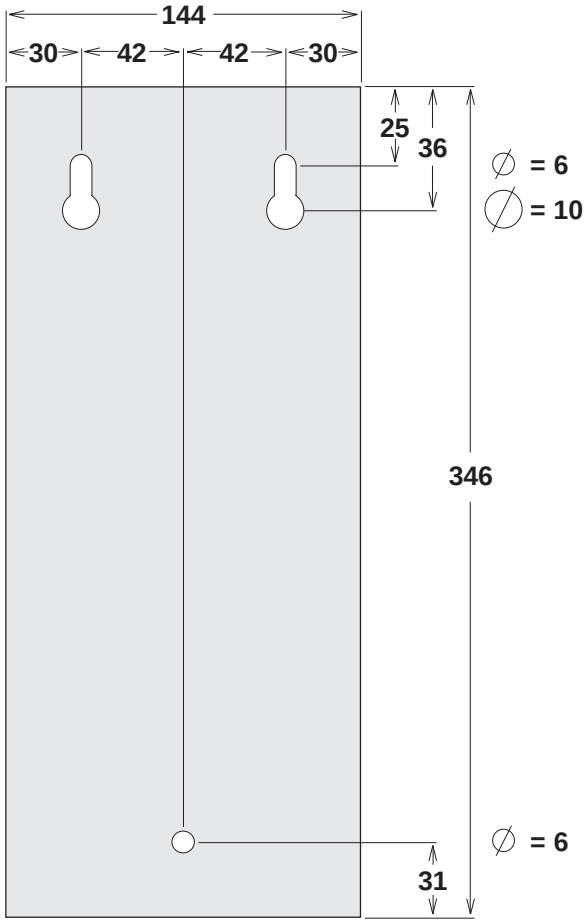
The PSU has three mounting holes in the rear of the case. It should be mounted in a secure area as close as possible to the Controller(s) it is powering. The PSU must not be mounted in direct sunlight.

1. Remove the cover by loosening the two fixing screws at the bottom of the case, pulling it out at the bottom and sliding it up to disengage the lug at the top of the case. Unplug the earth cable from its spade connector so you can remove the cover completely.

2. To mount the base you must first remove the chassis on which all the components are mounted. Unplug the earth cable from the spade connector on the base and undo the six fixing screws fastening the chassis to the base. Lift the chassis up and clear of the base.

3. Mark out and drill three mounting holes for the cable tray and screw it in position on the wall, checking that the cable entry points are accessible.

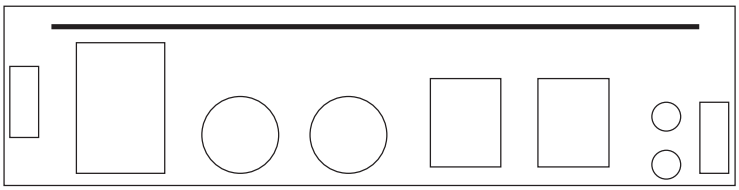
4. Check the mains input voltage as described below, then replace the chassis and reconnect the earth cable.



dimensions in mm

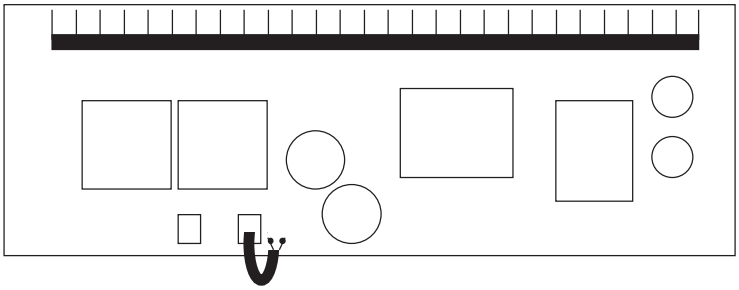
Setting the mains input voltage

If the PCB on the underside of the chassis (visible after step 2 of Mounting) looks like this:



then the power supply will accept any mains input voltage between 80V and 250V AC RMS 50/60 Hz and no setting up is required.

If the PCB on the underside of the chassis (visible after step 2 of Mounting) looks like this:

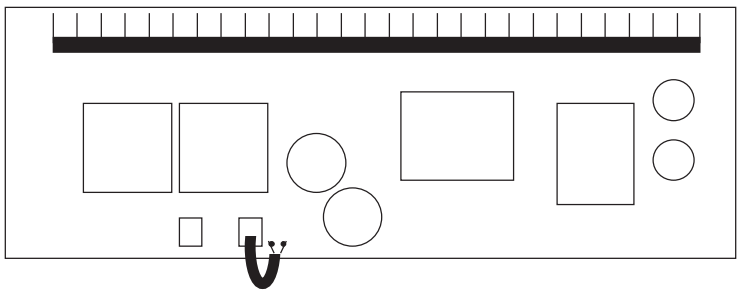


then you need to check that the mains input voltage is set to the correct value.

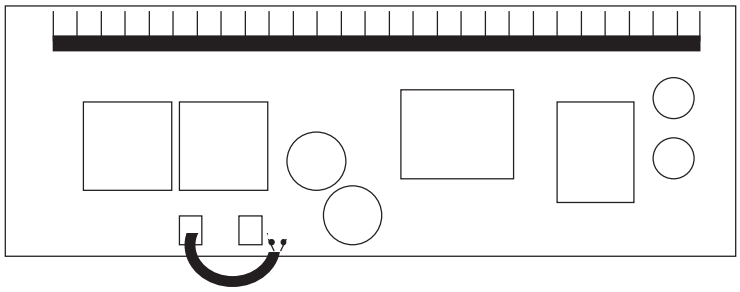
Use the jumper on the circuit board on the underside of the chassis to set the mains input voltage to either 240V or 120V nominal. The chassis must first be removed as described in step 2 in the section on "Mounting". The PSU is set to 240V when it leaves the factory. **Make sure the mains is disconnected**.

1. On the underside of the chassis is a PCB. Jumper J1 is a short length of cable with a plug on the end. This plug can be connected to one of two connectors, CN4 and CN5 which are labelled 115V and 230V respectively.

240V (default)



120V



2. Plug J1 into the required connector.
3. Replace the chassis and reconnect the earth cable.

Fitting the battery

The 4910 PSU is shipped in a different package from its battery. Warning: at all times take care not to short circuit the battery contacts. To fit the battery, take the following steps:

1. Undo the two screws holding the battery housing. The screws are held captive in the battery housing and so do not fall out.
2. Raise the battery housing at the end where the screws are and slide the locating flange out of the slot at the other end until the housing is removed.
3. Slide the battery into the housing (the piece you have just removed) so that the positive (red) terminal is nearest the flange containing the captive screws.
4. Replace the battery housing in its slot making sure the cables are not trapped underneath it and tighten the two screws.
5. Connect the two battery cables to the terminals using the spade connectors, the red wire to the red (+ve) terminal, the black wire to the black (-ve) terminal.

Connections

External connections are made to the PSU via cables which can enter through holes in any part of the case using the knockouts provided. There are two clamps at the top of the unit for securing the cables for CONN1 and CONN2, and another at the bottom for the mains cable.

CONN1 Tamper and PSU MON connections to Controller. Each function uses two terminals on the connector.

Pin	Connection
TAMPER	Connect to TAMPER pins on CONN3 of the Controller.
PSU MON	Connect to PSU MON pins on CONN3 of the Controller.

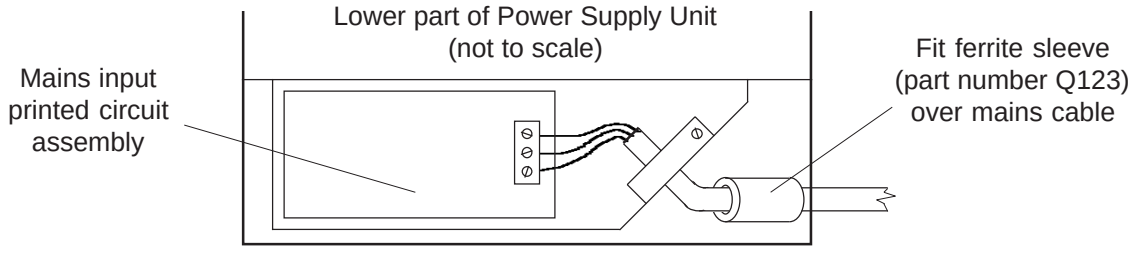
CONN2 DC power outputs

Pin	Function	Connection
+12V	+12V (DC +ve output)	Controller CONN4 +12
0V	Ground (DC -ve output)	Controller CONN4 0V
⏚	Safety Earth	Controller CONN4 ⏚
AUX +	+ve auxiliary output	Controller CONN4 AUX IN +
AUX -	-ve auxiliary output	Controller CONN4 AUX IN -

Connecting the mains cable

To pass emission regulations, the mains cable must pass through the ferrite sleeve provided.

1. Insert the mains cable through the knockout at the bottom right of the case.
2. Thread the ferrite sleeve over the mains cable as shown in the diagram.



3. Connect the mains cable to the mains connector as follows:

Pin	Function
L	Live - brown cable
N	Neutral - blue cable
E	Earth - green/yellow cable

Note: this unit must be earthed

4. Clamp the mains cable using the clamp provided. The ferrite core should be to the right of the cable clamp.

To complete the installation

- Replace the PSU cover and reconnect the earth cable.

FCC Statement

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:
1) This device may not cause harmful interference, and 2) This device must accept any interference received, including interference that may cause undesired operation.