

# Installing the DTP/Booster Kit

The Dual Transmission Path (DTP)/Booster kit (PN: 020-543) is very simple to fit to the main chassis providing the instructions described below are followed. The DTP/Booster module is located in an open, rear compartment of the main chassis. The module must be fitted BEFORE installing the main chassis in the back box. The module is secured to the main chassis using four M4 x 8 SEM screws.





Your kit PN: 020-543 should contain:

DTP/Booster module with two cables (1 off) PN: 124-297

M4 x 8 SEM screws (4 off) PN: 776-042

4-wire (black/red) power cable (1 off) PN: 082-207

4-way plugs with screw terminals (2 off) PN: 610-171

Anti-Static Warning instructions PN: 997-180

Warning Leaflet - Fit Correct PSU PN: 997-409

Installation instructions (this leaflet) PN: 997-267-000-6

# Check Your Equipment....

Taking suitable precautions, before proceeding with the installation, remove all packaging and inspect for any damage that may have occurred during transit. If no damage is evident, proceed using the instructions below. In the unlikely event that damage has occurred, or any items are missing, DO NOT PROCEED, contact your supplier and refer to the panel Installation & Commissioning Manual.

Observing all necessary precautions, proceed with the installation of the DTP/Booster kit to the main chassis.

## A Cautionary Note....

During this procedure, various wiring connections are to be made and it is important that the manufacturer's recommendations are followed to avoid the possibility of damage occurring to wiring when fitting the DTP/Booster kit.

If you have an 'original' Base Board, PN: 124-180/124-180-001, do the following BEFORE fitting the DTP/Booster kit:

- 1 Disconnect the four-wire (black/red) power cable at DTP.
- **2** Cut grommet, remove power cable and insert supplied alternative power cable, with square connector toward DTP.
- 3 Connect square connector to DTP; other end connects to the Base Board (see 'Main Chassis Wiring Connections' step 'b' for details).

# Procedure for Fitting the DTP/Booster Kit

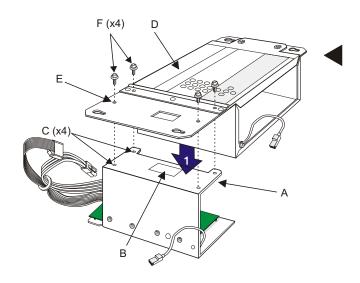
Place the DTP/Booster module (A) on a clean work surface so that the side with the 'rating' label (B) is uppermost (see drawing at left) - this side is provided with four holes (C) for fitting the module. With the module temporarily supported in this position, fit the main chassis assembly (D) as follows:

**Note:** If the Power Supply Unit is located in the Back Box, perform 'Other Wiring Connections' step 'a' (see sheet 2) at the DTP/Booster module end of the connection NOW. Access to the ribbon cable connector becomes more difficult after the module is fitted to the main chassis.

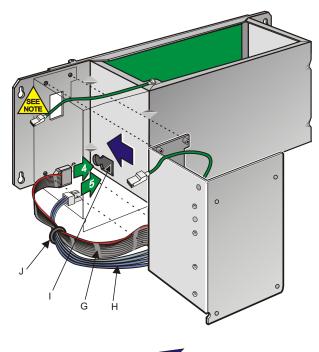
- 1 With the main chassis orientated with the front door uppermost, carefully lower it until the part to the right of the front door hinge rests on the DTP/Booster module.
- **2** Line the four holes (E) on the front face of the main chassis with corresponding holes (C) on the module.
- 3 Taking care not to trap the module's cables and the earth wiring, insert the four M4 x 8 SEM screws (F) and, using a No.2 Posidriv screwdriver, tighten them until the module is secured firmly to the main chassis.

Continued overleaf....

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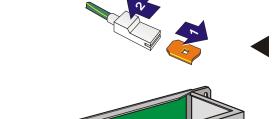


# Installing the DTP/Booster Kit (Continued)



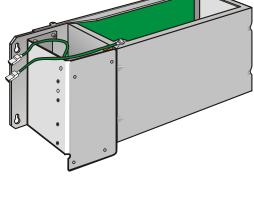
With the module now secured, take the module's two cables (that are held by the grommet) into the main chassis' PCB enclosure as follows:

- 4 First, ease the connector of the 10-way ribbon cable (G) and the connector of the power cable (H) through the aperture (I) in the main chassis. PULL the cables through, taking up any slack.
- 5 Secondly, with a sufficient length of each cable pulled through, to connect to the Base PCB, ease the grommet (J) in to the aperture (I) and then slide it and cables sideways into the circular part until secure.



**Note:** All blade connections to earth incorporate a locking barb. To make a connection push the shrouded receptacle on to the earth blade (1). To remove this connection, pull the shroud (2), NOT the earth wire.

The illustration at left shows the DTP/Booster module fitted correctly in the chassis.



# **Main Chassis Wiring Connections**



### **CAUTION!**

To prevent damage, <u>always</u> isolate power from the DTP/Booster before making or breaking any connections.

Once the DTP/Booster module is fitted to the main chassis, the two wiring assemblies that are held by the grommet must now be terminated on the Base PCB connection points.

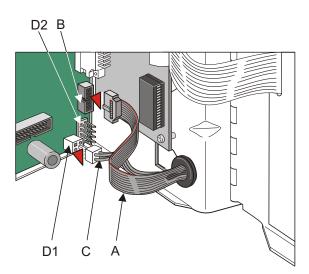
With reference to the drawing at left, connect these wiring assemblies as follows:

- a. The 10-way ribbon cable (A) is to be terminated at the Base PCB socket SK8 (B); this is SK18 if you have Base PCB (PNs: 124-180/124-180-001 or 124-301), and
- b. The four-wire power cable (C) at the Base PCB socket SK12 (D1) on Base PCB PN: 124-361 this is socket SK21 (Base PCB PN: 124-301) or, if you have Base PCB (PN:124-180/124-180-001), at socket SK20 (D2). The alternative four-wire cable (not shown) is supplied for use with Base PCBs (PN: 124-180/124-180-001) for connection to socket SK20.

It is now possible to fit the main chassis/DTP/Booster assembly to the back box.

For information on fitting the main chassis refer to the Main Chassis installation instruction sheet or the panel Installation & Commissioning Manual.

Continued overleaf....



# Main Chassis Wiring Pre-wired (See above) This plug is supplied loose in the kit F G

# **Other Wiring Connections**



### **CAUTION!**

To prevent damage, <u>always</u> isolate power from the DTP/Booster before making or breaking any connections.



### **CAUTION!**

It is essential that ONLY PSU7A units are used with the DTP/Booster module. Damage may result if any other PSU is connected.

The following additional wiring must be connected:

- a. IF THE POWER SUPPLY UNIT TO WHICH THE DTP/BOOSTER IS CONNECTED IS MOUNTED INTERNALLY, fit the ribbon cable (supplied with the PSU) between the DTP/Booster connector (E) and the PSU's LED status indication output connector. This connection is not used if the PSU is mounted externally.
- b. Connect a cable (supplied with the PSU, refer to the PSU7A kit instructions) between the Charger Inhibit connector (F) and the the equivalent connector on the PSU (on the PSU assemblies PN: 124-190 and PN: 124-190-001, this connector is labelled ALARM). On PSU assemblies 124-295 and 010-114 this connector is labelled 'CI+' and 'CI-'. Connect + to + and to -.
- c. IF THE POWER SUPPLY UNIT TO WHICH THE DTP/BOOSTER IS CONNECTED IS MOUNTED EXTERNALLY, connect a suitable cable between the COMMON FAULT connector (G) and the Normally Open and Common connections of the equivalent connector on the PSU7A. This connection is not used if the PSU7A is mounted internally.
- d. Connect suitable¹ cables (if PSU is internal, use cables supplied with the PSU; refer to the PSU7A instructions) between the Power connector (H) and the power supply unit. Connect + to + and - to - (may be labelled 0V).
  - 1 Refer to table of recommended cable sizes provided with PSU instructions.