Mounting Instructions
HPDPD-550 Series

SW3-611 - Document Version 1.0

Introduction

The HPDPD-550 series is a range of power dividers designed to connect a single radio to two separate, electrically isolated antennas, in the frequency range 50MHz to 550MHz. The HPDPD is available in 3 versions, to handle different maximum input power.

Note: The power rating for each version of the HPDPD is based on a maximum VSWR value of 3.0:1 for each antenna.

Ensure that you have the correct version to suit your application.

Part Number	Max. Power	GPS/GNSS (1562-1610MHz 26dB LNA)
HPDPD15-550	15 Watt	DL-2-2500-SP Direct SMA plug
HPDPD60-550	60 Watt	DL-10-2500-SP Direct SMA plug
HPDPD150-550	150 Watt	DL-30-3000-NP Remote 30cm cable to N type

Note on Antennas to be Used

The HPDPD is a splitter unit and does not incorporate any phasing function, so it is important that antennas connected to the unit have a high degree of isolation, i.e. cannot "see each other" – typical application is connection of front and rear bumper mount antennas.

1. Mounting Requirements and Selecting Location

The unit should be fitted in a dry, protected location and secured using the fixing holes provided. Ensure that all connectors will be accessible when the unit is fitted and that there is clearance for the projection of the dummy load on 15W and 60W versions. For the 150W version, a remote dummy load is supplied, with a 30cm (12") coaxial cable. A suitable location should be found for the load, ensuring that there will be adequate ventilation area around it.

2. Fitting the Unit

The HPDPD15-550 and HPDPD150-550 versions can be fitted direct to a flat surface. The HPDPD60-550 must be fitted using the spacers supplied to ensure that there is clearance for the dummy load. For the 15W and 60W versions, fit the dummy load to port marked LOAD. For the 150W version, connect the remote load cable to the LOAD port, run the cable to selected location. Secure the dummy load using the supplied clip.

3. Connecting the Antennas and Radio

Run each antenna cable to the HPDPD location and fit fme jack connector. Connect each antenna to port labelled Output. A suitable length of CS23 (RG58) coax should be routed from the radio to the HPDPD – fit FME jack for connection to HPDPD and the correct connector to suit the radio.

4. Commission and Test

- Ensure that the dummy load is securely connected to correct port (LOAD)
- Carry out a DC check on the antennas and radio to HPDPD cable. On the radio cable and most antenna types, the connector centre pin to body should measure open circuit.
- A VSWR check should be made on each individual antenna (must be <3.0:1) and then a final VSWR test should be carried out at the HPDPD input cable with both of the antennas connected to HPDPD ports.
- The VSWR should measure as detailed on the datasheet for the relevant antenna.

European Waste Electronic Equipment Directive 2002/96/EC
Please ensure that your old Waste Electricals and Electronics are recycled do not throw them away into standard waste.

RF Safety Note
This antenna should be mounted in such a way that no person is within 20cm (8") of the antenna during use.

Panorama Antennas Ltd | 61 Frogmore, Wandsworth, London, SW18 1HF, UK | **Phone:** +44(0)20 8877 4444