

OVERHEATING

This power unit is intended for use in moderate climates only. It should not be used in tropical regions. The recommended ventilation clearances and other precautions given in the relevant section of this instruction leaflet should be observed to prevent overheating. No unit should be fixed where it is likely to become smothered by soft furnishing fabrics such as curtains, or by thermal insulation material in a roof space or building void. Mains powered equipment should not be left resting on a carpet.

WATER AND FIRE RISKS

This power unit is not waterproof. It is intended for indoor use only and must not be fixed where it could be exposed to dripping or splashing water. Objects containing liquids should not be placed on or near the power unit. To prevent risk of fire, no object with a naked flame should be placed on or near the power unit, or its associated wiring.

MAINS PLUG AND DISCONNECTION FROM THE SUPPLY

The power unit is supplied with a standard fused plug fitted. If this is unsuitable, refer to the instructions below. If you need to change the fuse in the fitted plug, a 3 Amp fuse to BS 1362 carrying the ASTA or BSI approval mark must be used. Always replace the plastic fuse carrier when renewing the fuse. The plug (or other means of disconnection from the supply, if used) should remain readily accessible for operation when necessary. The LED power indicator on this equipment should not be regarded as providing reliable indication of supply disconnection.

CHANGING THE PLUG

If the fitted mains plug is not suitable for the socket-outlets in use, it should be cut off and a new plug fitted.

WIRING THE NEW PLUG:

Instructions supplied with the new plug should be followed. The brown wire must be connected to the live (L) terminal of the plug and the blue wire to the neutral (N) terminal. Neither wire should be connected to the earth (E) terminal of a 3-pin plug (the unit does not require an earth connection). Ensure that the cord grip in the plug is correctly used and clamps the sheath of the cord firmly.

Fuse rating: If the new plug is a fused type, the fuse fitted should be rated at not more than 3 Amp.

Caution: The old plug should be destroyed immediately since it would be dangerous if plugged into a live socket.

2-Year Guarantee

This guarantee covers failure of your PROception product resulting from manufacturing defect within a period of 2 years from the date of supply to the end-user. This guarantee does not cover damage to the product caused by abuse, tampering, defective installation or natural causes such as lightning discharge. Repair or attempted repair, other than by the manufacturer, will render this guarantee void. This guarantee does not affect a consumer's statutory rights.

Performance data given are typical unless otherwise stated. We reserve the right to change product design and specifications without prior notice.

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PD2011-9033-01 4

12 V 200 mA DC Power Supply Unit



Instruction Manual

PROPSU12X

INSTALLATION INSTRUCTIONS

This unregulated DC power unit is intended for powering specific PROception dual-mode distribution amplifiers such as the proAMP310X.

Features

- Signal frequency range 5-862MHz
- Passes return-path remote control extension signals.
- DC output: 12V (nominal, unregulated) at 200mA maximum.
- Type-F signal connectors for reliable connection with high screening integrity.

Application Guide

Important

This is an unregulated power unit designed for use with specific PROception amplifier products only. It should be used only where indicated in the amplifier installation instructions as being suitable. This power unit is not suitable for powering general-purpose masthead preamplifiers and similar products which require a 12V regulated supply. Use of this power unit may cause damage to such products.

Use this power unit only where specified by the installation instructions for a PROception amplifier product. Take care to ensure that the unit is connected in-line the right way round. In all cases the connector marked IN/OUT must face the user's TV equipment and the connector marked AMP (+12 V DC) must face the PROception amplifier. Typical arrangements are shown in Figs.1 and 2.

Fig.1 typical installation with amplifier powered via output (Mode 1)

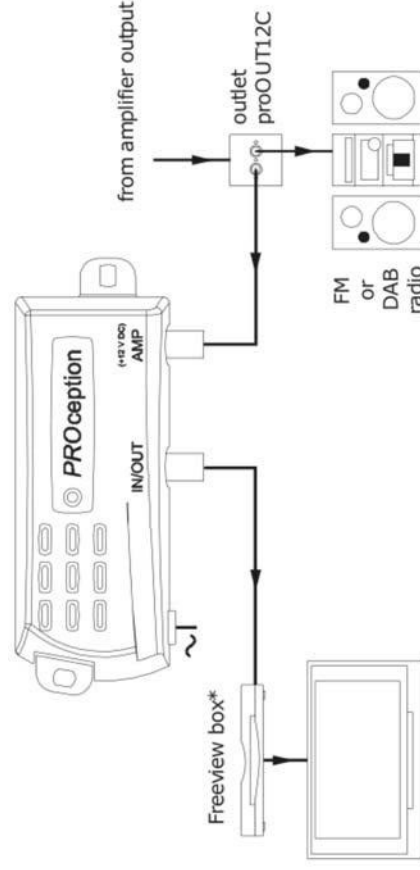
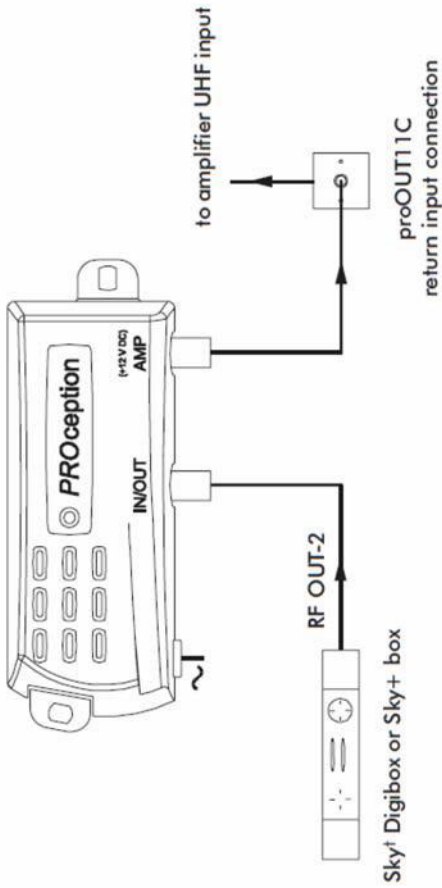


Fig. 2— typical installation with amplifier powered via UHF input (Mode 2)



Fixing

Fix the power unit to a sound vertical surface such as a wall, skirting board or equipment mounting board. Ventilation gaps of at least 50 mm should be left around the front and sides of the unit. More clearance will be required below the unit to allow access for the signal cables.

Do not leave the power unit resting on a carpet or install it where it may become smothered with curtains or other soft furnishing fabrics. When installing the power unit in a roof space ensure that it will not come into contact with thermal insulation material.

Signal connections

To preserve RF screening integrity the signal connections to the power unit should be made using good quality coaxial cable and connectors. This is particularly important with digital terrestrial TV (DTT) to minimise the ingress of impulsive electrical interference. The use of cable benchmarked under the CAI scheme is recommended. Crimp F connectors, used in accordance with the manufacturer's instructions will give the best results. The importance of achieving sound braid connections cannot be over-stressed. Connectors should be tightened with a spanner, not left finger tight

Mains supply connection and safety notes

The power supply unit is supplied with a fitted mains plug and may be plugged directly into a 13 A (BS 1363) socket outlet. If socket outlets of a different type are in use, please refer to the safety instructions on page 4. The mains plug should remain readily accessible to permit disconnection of the unit from the supply.

Alternatively the plug may be cut off and the power unit wired into a readily accessible fused connection unit, fitted with an approved 3 A fuse to BS 1362. This method of connection is recommended for permanent distribution system applications, since it reduces the risk of tampering and accidental disconnection. If the power unit is not connected to the mains using the fused plug supplied, or a fused connection unit, it must be protected by means of a fuse or MCB at the final distribution board of rating not exceeding 6A. A readily accessible isolating switch should be provided to allow the unit to be disconnected from the supply when necessary.

Any fixed wiring installed to supply power to this power unit should comply with BS 7671 (IEE wiring regulations) and, where relevant, Part P of the building regulations. The power unit is of Class 2 construction and does not require a protective earth connection. This does not obviate the need to provide a circuit protective (earth) conductor in the supply wiring, as required by BS 7671.

System equipotential bonding

Distribution systems supplying signals to more than one household should comply with the safety requirements of BS EN 60728-11. This effectively requires earthed equipotential bonding of the system. (The use of isolated outlet plates is no longer recommended since they compromise screening integrity and allow ingress of interference.) Bonding may be effected using a probAR5 equipotential bonding bar.

Output short-circuit

Take care to ensure that stray strands of braid wire, etc., do not short-circuit the coaxial cables. This power unit will stand accidental short-circuiting of its output, but only for a period of up to one minute. A longer-term short may cause the mains transformer to overheat and its thermal fuse to operate. This is not repairable. The power indicator LED extinguishes if the output is short-circuited. If the output has been shorted for more than a few seconds it is recommended to disconnect the unit from the mains and allow at least five minutes for cooling before re-applying power.

Technical data

Signal frequency range	5 .. 862MHz
Signal insertion loss	≤ 0.6dB
Output voltage	Nominal value +12 V unregulated DC Range +10.5V (full load, mains -10%) to +21 V (no load, mains +10%) Ripple amplitude 0.6 V p-p at full load
Output current rating	200 mA maximum
Output protection	Maximum short-circuit duration 60s (from cold start)
Mains power requirement	230 V 50 Hz 5 W (6 VA)
Power indicator	Green LED
Signal connector type	Type-F (IEC 60169-24)
Operating temperature range	-10 .. +40°C
Standards compliance	Safety: BS EN 60065: EMC: BS EN 50083-2