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Setback Amplifiers: 1 & 2-Way FM/DAB/UHF Amplifiers without IR	www.blake-uk.com/amp
PROAMP12R: 2-Way Setback Amplifier with IR	www.blake-uk.com/ampr
PROSAT1EYE: IR Control Eye 'Magic Eye	www.blake-uk.com/eye
PROLINK22: Flexible 'I/O Link' RF Modulator for Sky	www.blake-uk.com/prolink22
PROCON01: F Male Twist-On +O-Ring - RG6/100	www.blake-uk.com/procon01
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PROCON12: F Male Crimp-On Black - RG6/100	www.blake-uk.com/procon12
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EU Declaration of Conformity

Blake UK hereby declares that the radio equipment type PROAMP24, PROAMP24R, PROAMP26, PROAMP26R, PROAMP28 and PROAMP28R are in compliance with Directive 2014/53/EU.

The full text of the EU declaration of conformity is available at the following internet address: www.blake-uk.com/DoC

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 designs and specifications without prior notice.

Website: www.proception.co.uk

Email: support@proception.co.uk

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PD2011-9043-03

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VHF/UHF Distribution Amplifiers Instruction Manual

PROception

PROAMP24-26-28 www.blake-uk.com/distamp
PROAMP24R-26R-28R www.blake-uk.com/ampr

These amplifiers are ideal for use in small digital and analogue reception and distribution systems. All MK3 products feature a filtered dual-band VHF input which accepts signals in both Bands II and III, allowing use for Band III DAB or TV, as well as for FM radio.

All these amplifiers are compliant with the Radio Equipment Directive 2014/53/EU and meet the harmonised standard EN 303 354 for Class 0. As such they work on ALL current UK DTT channels including channel 60, are resilient to interference and overloading, and cope with multiple carriers. In cases of strong LTE interference a separate 4G filter should be fitted. These are supplied free by at800, or **higher performance models** can be purchased from www.blake-uk.com. (To **pass** channels **up to and including channel 59** use proLTE1/59, or **if** channels **58 and 59 are not required, use** proLTE1/57).

Features: (Whole Range)

- Separate VHF and UHF inputs.
- New dual-band VHF input for Band II FM radio and Band III DAB or TV.
- 4-, 6- and 8-way versions available.
- Low noise figure and high output capability.
- New equipotential bonding terminal added on Mk 3 versions.
- Channels 61-68 can be used for locally modulated signals.

Features: (PROAMP24, 26 & 28)

- Traditional multi-way aerial signal amplifiers.
- Line power available at UHF input 12V at up to 100 mA.
- Higher-gain FULL output on 6- and 8-way versions allows expansion beyond eight points.
- IEC connectors.

Features: (PROAMP24R, 26R & 28R)

- 7 MHz return path for Sky* infrared remote control systems.
- Built-in power for IR eyes on all outputs.
- F connectors.

Note: R versions do not have input line-power capability or FULL outputs.

Fixing:

Fix the amplifier 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.

Being fully screened, the amplifier will not be affected by proximity to an antenna. However clearance of not less than 300 mm from the nearest part of the antenna should be observed to avoid degrading the antenna's performance. Manufacturer's instructions regarding routing of the cable from the antenna terminal box must be followed if provided.

Do not leave the amplifier resting on a carpet or install it where it may become smothered with curtains or other soft furnishing fabrics. When installing the amplifier 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 amplifier 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 from home appliances.

- The use of cable benchmarked under the CAI scheme is recommended.
- Amplifiers PROAMP24, '26 and '28 require IEC connectors (IEC 60169-2).
- Amplifiers PROAMP24R, '26R and '28R requires Type-F connectors (IEC 60169-24).

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For both connector types the use of crimp 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. F connectors should be tightened with a spanner, not left finger tight.

Important: The FULL output (where fitted) must always be terminated in a well matched 75 Ω load. The terminator plug supplied must be fitted if this output is not used.

Using remote control:

The R versions of the amplifiers are compatible with the PROception PROSAT1EYE and other Sky* remote control extenders. To use the remote control feature it is essential that the amplifier input is fed directly from the RF OUT-2 connector or I/O port[#] of the Sky receiver. The amplifier provides 9 V DC power for up to two remote receiver eyes. Note that some Sky receivers require their RFOUT-2 power option to be enabled in order for remote control extension to work. On the Sky handset press SERVICES, 4, 0, 1, SELECT, then select the SECOND OUTLET POWER SUPPLY option. Set this to be ON, SAVE SETTINGS and BACK UP out of the menu.

As always with wired remote extender systems, it is essential to maintain DC continuity through the coaxial cabling between the amplifier output(s) and the IR receiver equipment in the remote room(s). For this reason isolated outlet plates cannot be used in the remote rooms and all connections must be securely clamped, crimped or soldered. When troubleshooting remote control problems, the first step should be to check for the presence of approximately 9 V DC on the cable in the remote room.

[#] I/O Port Replicator needed for Sky box DXR850/890; See Supplementary Installation Instructions to introduce PROception proLINK22 'RF replicator'.

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. (Isolated outlet plates cannot be used with PROAMP R versions for functional reasons.) Although not mandatory in single households, system equipotential bonding is strongly recommended for all installations. All PROAMP Mk 3s are provided with a bonding terminal. A bonding conductor of 4 mm² should be provided, connected to the main earth terminal of the electrical installation which supplies the unit. Bonding may be effected using PROception PROBAR5 or 8 equipotential bonding bar.

Features	PROAMP24 & 24R	PROAMP26 & 26R	PROAMP28 & 28R
Number of outputs	4	6	8
Signal frequency range (VHF)	87.5-108MHz & 174-230MHz	87.5-108MHz & 174-230MHz	87.5-108MHz & 174-230MHz
Signal frequency range (UHF)	470-862MHz	470-862MHz	470-862MHz
Noise figure	3dB	3dB	3dB
Gain to each output (except FULL)	7dB	5dB	5dB
Gain to each FULL output	-	16dB	16dB
Output capability (see note below)	86dBμV	82dBμV	82dBμV
IR receiver ('eye') line-power	9V@15mA (s/c protected) present at all outputs ('R' versions only)		
Signal connector type	'1EC'(IEC 60169-2)		
Signal connector type ('R' versions)	F'(IEC 60169-24)		
Mains power requirement	230V 50Hz@2W (8 VA)		
Operating temperature range	-10 - +40 °C		

1.Full output is not fitted on R versions. 2.Output capability is given for 5 analogue TV channels plus up to 6 DTT multiplexes at <-14dB relative level (VHF FM and DAB radio signal should not exceed -10dB relative to analogue TV).

Dual-band VHF input:

The VHF input will accept Band II FM radio signals and/or DAB or TV signals in Band III. Separate bandpass circuits in the amplifier provide filtering outside and between these bands. Where more than one aerial is to be connected a separate diplexer such as the PROception proCOM31T should be used (see example in Fig.1).

Making use of the FULL output:

The FULL output (where fitted) allows additional outlets to be fed via an external passive network. This network should present a good 75 Ω load to the amplifier (otherwise the other outputs will be affected).

Fig. 1 shows an example of correct practice, using an 8-way tap unit to provide eight additional outlets. The terminator plug supplied must always be fitted if the FULL output is not used.

Fig.1 - Using the FULL output (proAMP26 and proAMP28 Mk 3 only).

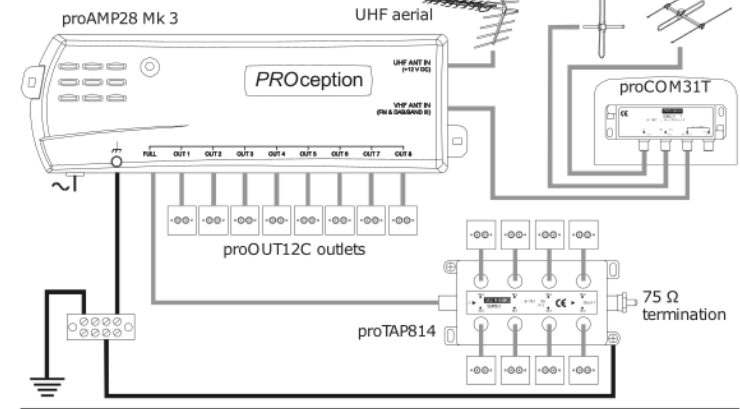
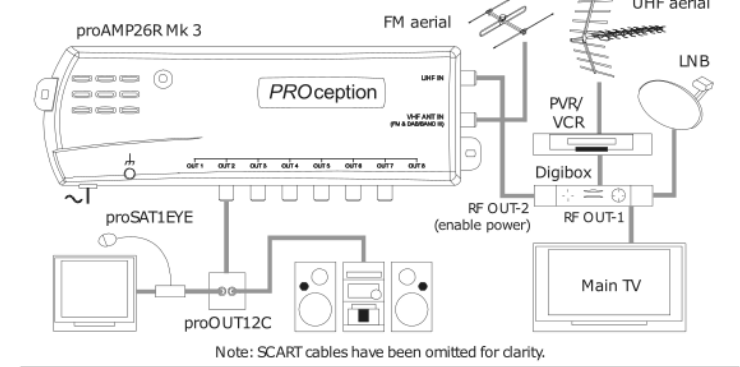


Fig.2 - PVR/VCR and Sky* distribution with control of Sky* box (proAMP24R, proAMP26R and proAMP28R Mk 3 only).



Note: SCART cables have been omitted for clarity.

Safety Instructions

Overheating:

These amplifiers are intended for use in moderate climates only. They 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:

The appliance 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 appliance. To prevent risk of fire, no object with a naked flame should be placed on or near the appliance, or its associated wiring.

Mains plug and disconnection from the supply:

The appliance 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 appliance 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.