# Application diagrams



Figure 2. Recommended to use TERRA power supplies PI008, PI009, PI011.

Figure 3. Application diagram using other power supplies 12 V 400 mA max., connected together with power inserter.

# **Technical characteristics**

Туре			MA080L	MA081L	MA082L	MA083L
Gain, typical	FM (88-1	08 MHz)	20 dB	20 dB	20 dB	20 dB
	VHFIII (1	74-230 MHz)	20 dB			
	UHF*	470 MHz	30 dB	2x 30 dB	30 dB	2x 20 dB
		782 MHz	29.3 dB	2x 28.5 dB	29.3 dB	2x 19.3 dB
		790 MHz	28 dB	2x 27.5 dB	28 dB	2x 18 dB
		821 MHz	-10 dB	2x -10 dB	-10 dB	2x -20 dB
		832 MHz	-10 dB	2x -10 dB	-10 dB	2x -20 dB
		862 MHz	-5 dB	2x -5 dB	-5 dB	2x -15 dB
Number of inputs			3		2	3
Noise figure, UHF at 700 MHz			VHF 5 dB; UHF 3 dB			
Maximal output level			$IMD3=60 \text{ dB}$ (DIN45004B) 108 $dB\mu V$ , $IMD3=60 \text{ dB}$ 105 $dB\mu V$			
Gain control			VHF 0 $\div$ -12 dB; UHF 0 $\div$ -15 dB			VHF 0 ÷ -12 dB
						UHF $0 \div -12 \text{ dB}$
Return loss			> 10 dB			
Supply voltage, current consumption			12 V ====60 mA			
Operating temperature range			-20° ÷ +50 °C			
Dimensions/Weight (packed)			89x107x43 mm/0.18 kg			

\* UHF inputs are filtered

Multiband amplifiers MA080L, MA081L, MA082L, MA083L

## Product description

Multiband masthead amplifiers are intended for summing and amplifying radio and TV signals from up to 3 antennas in FM, VHF (6-12 channels) and UHF (21-60 channels) bands.

The amplifiers are powered via a coaxial cable (4). Supply voltage 12 V DC. External power supply must have a short circuit protection.

There is a possibility to adjust the gain of the amplifier in every sub-band. The gain increases by turning regulators (5) clockwise.

UHF band of the amplifiers has 35 dB LTE signal suppression filter 1 means the amplifiers can be used in outdoor conditions as well.

### Safety instructions

Installation of the amplifier must be done according IEC60728-11 and national safety standards.

Any repairs must be done by a qualified personnel.

External power supply must have a short circuit protection. Do not plug the external power supply untill all cables have been connected correctly.

To disconnect the amplifier, disconnect the power supply from mains or disconnect the cable from output connector.

The amplifier should be mounted with connectors underneath to avoid the water ingress inside.

### External view



### INSTALLATION INSTRUCTIONS

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Read the product description and safety instruction first.

If RF IN connectors on the amplifier are not used, connect to them the 75  $\Omega$  loads or set the minimum gain for not used amplifiers band.

Mount the amplifier as described in chapter "Safety instructions".

Gain of every sub-band can be adjusted with screwdriver (6).

This product complies with the relevant clauses of the European Directive 2002/96/EC. The unit must be recycled or discarded according to applicable local and national regulations.

The device has integrated LTE filter.

CE TERRA confirms, that this product is in accordance to following norms of EU: EMC norm EN50083-2, safety norm EN60065 and RoHS norm EN50581.



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