

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 .

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 skilled personnel.

External power supply must have a short circuit protection.

Do not plug the external power supply until 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

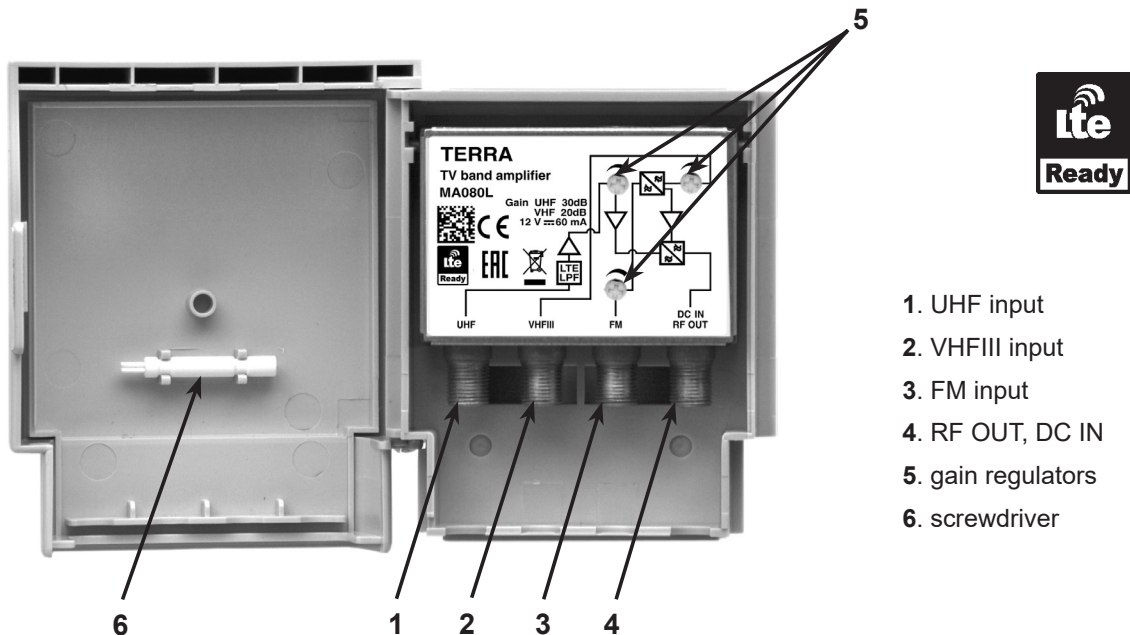


Figure 1. External view of the amplifier

INSTALLATION INSTRUCTIONS


Read the product description and safety instruction first.


If RF IN connectors on the amplifier are not used, connect to them the 75 Ω 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.

 This product is in accordance to following norms of EU: EMC norm EN50083-2, safety norm EN IEC62368-1 and RoHS norm EN50581.

 This product is in accordance with Custom Union Technical Regulations: “Electromagnetic compatibility of technical equipment“ CU TR 020/2011, “On safety of low-voltage equipment“ CU TR 004/2011.

Application diagrams

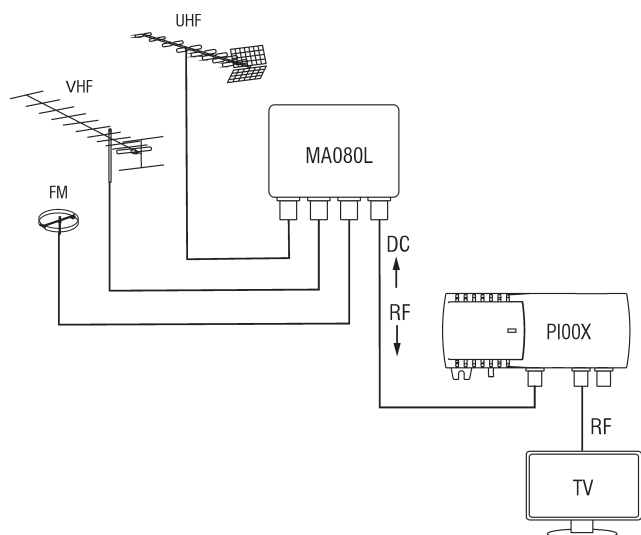


Figure 2. Recommended to use TERRA power supplies PI008, PI011.

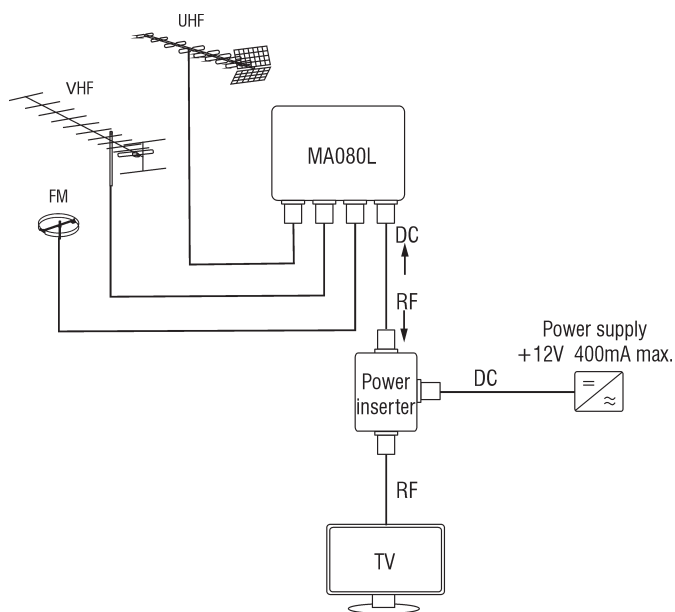




Figure 3. Application diagram using other power supplies 12 V 400 mA max., connected together with power inserter.

Technical characteristics

Type		MA080L	MA081L	MA082L	
Gain, typical	FM (88-108 MHz)	20 dB	20 dB	20 dB	
	VHFIII (174-230 MHz)	20 dB			
	UHF* 	470 MHz	30 dB	2x 30 dB	30 dB
		782 MHz	29.3 dB	2x 28.5 dB	29.3 dB
		790 MHz	28 dB	2x 27.5 dB	28 dB
		821 MHz	-10 dB	2x -10 dB	-10 dB
		832 MHz	-10 dB	2x -10 dB	-10 dB
862 MHz	-5 dB	2x -5 dB	-5 dB		
Number of inputs		3		2	
Noise figure, UHF at 700 MHz		VHF 5 dB; UHF 3 dB			
Maximal output level		IMD3=60 dB (DIN45004B) 108 dB μ V, IMD3=60 dB 105 dB μ V			
Gain control		VHF 0 ÷ -12 dB; UHF 0 ÷ -15 dB			
Return loss		> 10 dB			
Supply voltage, current consumption		12 V  60 mA			
Operating temperature range		-20 ^o ÷ +50 ^o C			
Dimensions/Weight (packed)		89x107x43 mm/0.18 kg			

* UHF inputs are filtered