Product description

Multiband amplifiers are intended to amplify FM radio signals, TV signals in VHF and UHF bands.

There is a possibility to adjust the gain of the amplifier in every sub-band by fine turning 10 dB regulators (7) and an additional 10 dB by switching switches (8) in every sub-band.

EN

The amplifier has possibility to feed external equipment only through input connector (3) via on/off switch (11). Feeding for external equipment is short circuit and overload protected. If current used by external equipment is up to 0.1 A, an indicator (6) glows green. When current increases, the protection circuit starts to operate and the voltage supply has being disconnected from external equipment. In this case the indicator glows red (overloaded).

The housing of amplifiers meets more stringent screening requirements according to EN50083-2, class A.

The amplifier is intended for indoor use only.

Safety instructions

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

The amplifier is powered from mains 230 V~. This voltage is dangerous to life.

Any repairs must be done by a qualified personnel.

The amplifier is double isolated from the mains 230 V~.

Do not remove the cover of the power supply section, without disconnecting the unit from the mains supply.

Do not plug the amplifier into the mains supply if the power cord or plug is damaged.

Do not plug the amplifier into the mains supply until all cables have been connected correctly.

To disconnect the amplifier from the mains completely, disconnect plug from the mains socket.

The mains socket must be easily accessible.

The amplifier shall not be exposed to dripping or splashing water and no objects filled with liquids, such as vases, shall be placed on it.

Avoid placing amplifier next to central heating components and in areas of high humidity.

No naked flame sources, such as lighted candles, should be placed on amplifier.

If the amplifier has been kept in cold conditions for a long time, keep it in a warm room no less than 2 hours before plugging into the mains.

Do not insert any objects into ventilation openings.

The ventilation should not be impeded by covering the ventilation openings with items, such as newspapers, table-cloths, curtains.

Mount the amplifier in vertical position with RF input connectors underneath. The amplifier must be fixed with steel screws \emptyset 4-5 mm. The screws are not included in a package.

From top, front and bottom of installed amplifier must be at least 10 cm free space.

X

Ite

健

Ψ

EHC

Caution.

Risk of electric shock.

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.

Equipment intended for indoor usage only.

Equipment is double insulated from the mains, with functional earthing.

Functional earthing. Connect to the main potential equalization.

This product is in accordance to following norms of EU: EMC norm EN50083-2, safety norm EN60065 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.

External view





- 1. FM input
- 2. VHFIII input
- 3. UHF input, DC output 12 V $\,$
- 4. UHF2 input (MA074L)
- 5. UHF1 input (MA074L)
- 6. Internal DC and external equipment short circuit and overload indicator
- 7. 10 dB fine tuning gain regulators for each sub-band
- 8. 10 dB gain switches (10 dB attenuation for each sub-band)
- 9. Test point -30 dB
- 10. RF OUT RF signal output
- 11. Switch to turn on/off the power feed for external equipment
- 12. Functional grounding clamp
- 13. Screwdriver

Technical characteristics

Туре			MA074L	MA074T	MA075L	MA075T	MA076L	MA076T	MA077LC	MA077TB	
Gain	FM (88-108 MHz)		35 dB								
	VHFIII (174-230 MHz)			35 dB							
	UHF (470-694 MHz)**		-	44 dB 🔪	-	47 dB 🔪	-	2x47 dB* 🔼	-	44 dB 🔪	
	UHF (470-790 MHz)**		44 dB 🔪	-	47 dB 🔪	-	2x47 dB* 乁	-	44 dB 🔪	-	
	UHF1 (470-590 MHz)		44 dB	44 dB	-	-	-	-	-	-	
	UHF1 (470-862 MHz)		-		-	-	-	-	44 dB	44 dB	
	UHF2 (590-694	MHz)**		44 dB 🔼	-	-	-	-	-	-	
	UHF2 (590-790	MHz)**	44 dB 🔼	-	-	-	-	-	-		
	UHF2 (470-678	MHz)**	-	-	-	-	-	-	-	44 dB 🔪	
	UHF2 (470-766	MHz)**	-	-	-	-	-	-	44 dB 🔪	-	
Number of inputs				5	3		4		5		
Noise figure, typical VHF		< 6 dB < 5 dB									
UHF		< 4 dB		< 3 dB		< 3.5 dB		< 4 dB			
Maximal output level			$IMD3=60 \text{ dB}$ (DIN45004B) 121 $dB\mu V$, $IMD3=60 \text{ dB}$ 118 $dB\mu V$								
Gain o	control		0 ÷ - 20 dB								
Return loss			> 10 dB								
Test p	oint		- 30 dB								
DC feeding for external			12 V ====100 mA max.								
Supply voltage limit values, power consumption***			198-250 V~ 50/60 Hz 7 W								
Opera	ting temperature ra	ange	$-20^{\circ} \div +50^{\circ}$ C								
Dimensions/Weight (packed)			135x180x52 mm/0.72 kg								

* both inputs are filtered

** \frown LTE signal suppression filter on the input

*** with external DC loading

Structure diagram





Draugystes str. 22, LT-51256 Kaunas, Lithuania, tel.: +370 37 - 31 34 44, fax: +370 37 - 31 35 55 E-mail: *sales@terraelectronics.com*, *http://www.terraelectronics.com*