

Product description

The amplifiers are designed in splitband technology for amplifying SAT IF and terrestrial TV signals. Amplifiers can work in two modes:

- splitband - one input for both bands
- insertion - separate inputs for SAT IF and Terr. TV bands

It is possible to feed external network equipment through RF signal input and output connectors.

The amplifiers have fixed slope pre-corrections for both SAT IF and Terr. TV bands. There are independent switchable gain and slope regulators for both bands too.

According to the standard ETSI EN 303 354 V.1.1.1, this Terr. TV band amplifier type is Launch, selectivity classification 0. The amplifiers are designed for indoor use only.

Safety instructions

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

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

Any repairs must be done by a skilled personnel.

The amplifiers are 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 amplifiers into the mains supply if the power cord or plug is damaged.

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

The mains socket must be easily accessible.

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

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

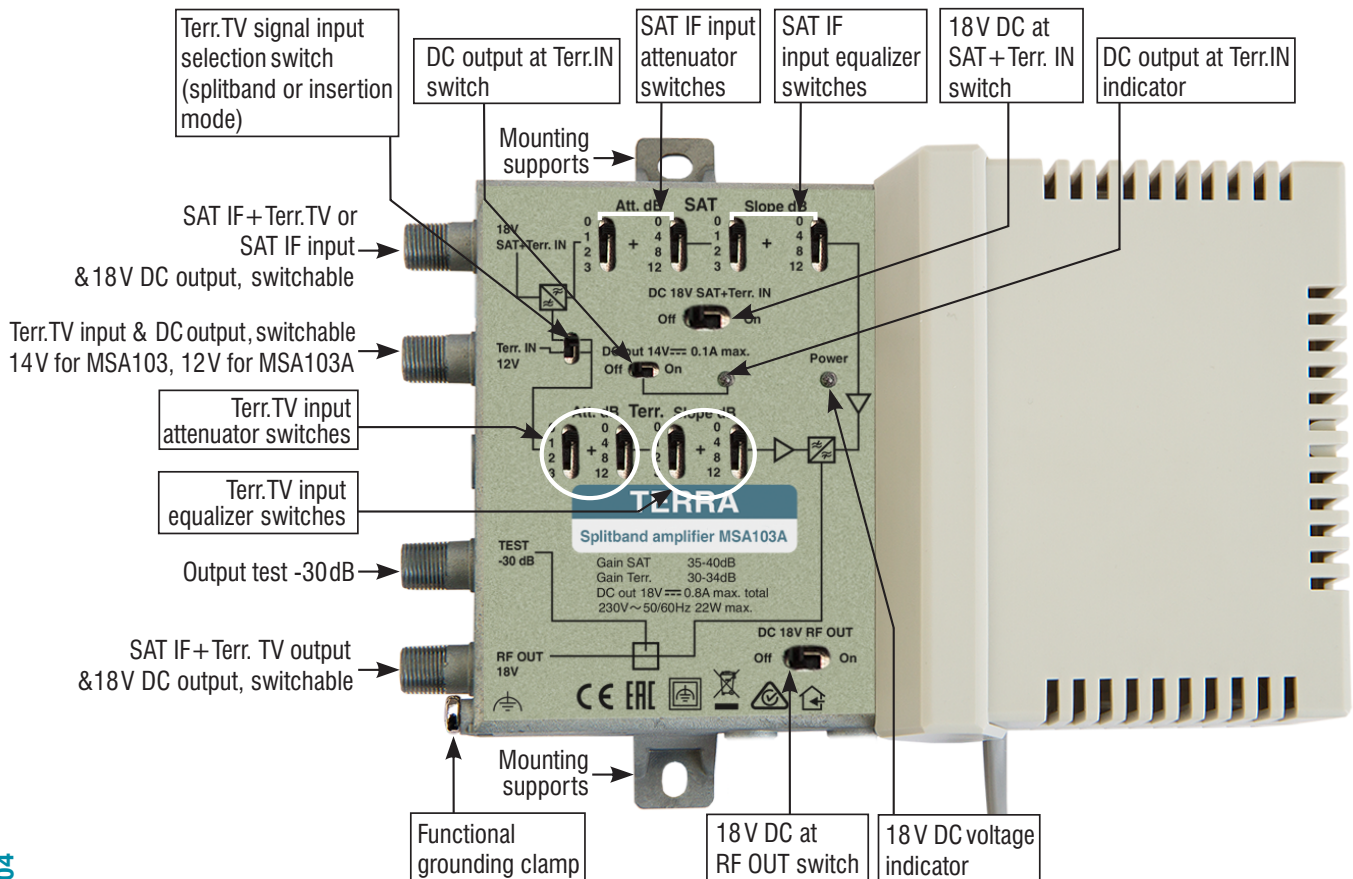
Do not insert any objects into ventilation openings.

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

Mount the amplifiers in vertical position with four RF connectors on the left. The amplifiers must be fixed with steel screws Ø 4-4.5 mm. The screws are not included in a package. Mount in locations where children not likely to be present. Shields of cables must be connected to main potential equalization bus.

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

External view and operating controls



Installation

The amplifiers should be mounted vertically with RF connectors on the left.

Ground the amplifiers housing. Connect the amplifiers into the mains supply lastly.

DC voltage appears on Terr.IN input if DC output at Terr.IN switch is switched on and amplifier works on insertion mode.

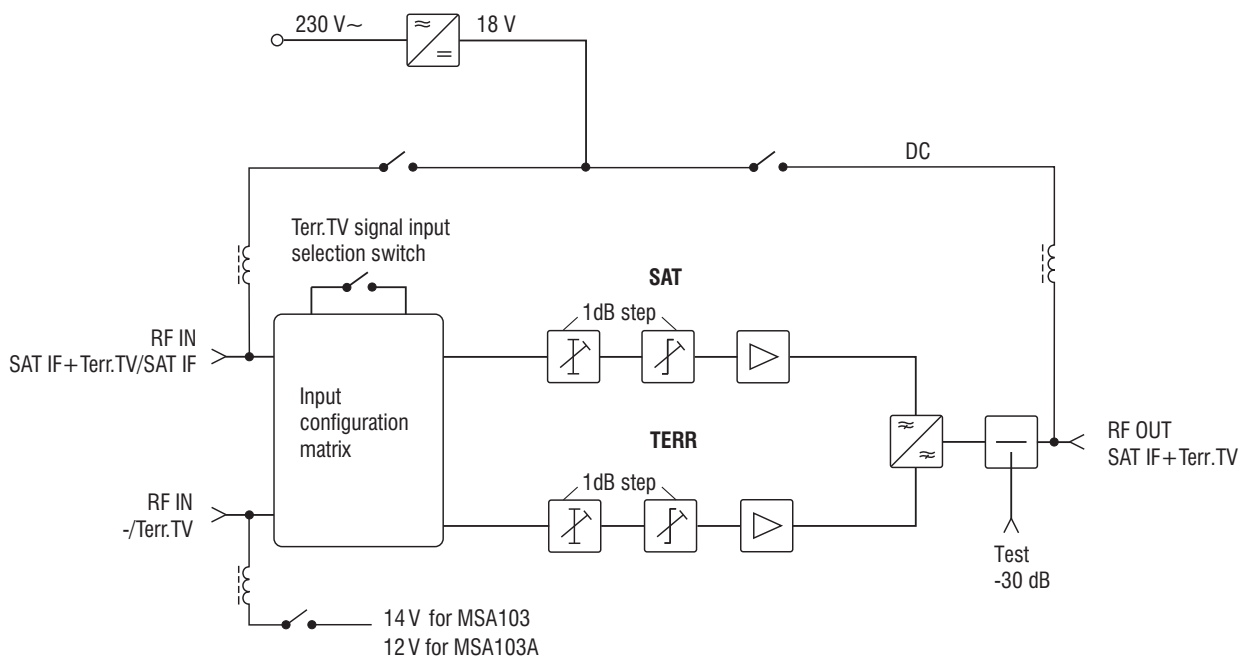
WARNING! In case of short circuit/overload of 18 V DC at RF connectors the amplifiers will switch off and self recover when short circuit/overload will be eliminated.

Technical characteristics

Type		MSA103	MSA103A
Frequency range	Terr. TV	47-790 MHz	
	SAT IF	950-2400 MHz	
Gain (fixed slope pre-correction)	Terr. TV	30 - 34 dB	
	SAT IF	35 - 40 dB	
Gain adjustment	SAT IF	15 dB by 1 dB step	
	Terr. TV	15 dB by 1 dB step	
Slope adjustment	Terr. TV	15 dB by 1 dB step	
	SAT IF	15 dB by 1 dB step	
Input and output return loss		≥ 12 dB	
Output level	Terr. TV	115 dB μ V IMD3=60 dB, 2 equal carriers	
	SAT IF	120 dB μ V IMD3=35 dB, 2 equal carriers	
Noise figure	Terr. TV	7 dB	
	SAT IF	8 dB	
Output test point		-30 dB	
DC feeding for external, switchable & short circuit/overload protected outputs	Terr. IN	14 V 100 mA, max	12 V 100 mA, max
	SAT + Terr. IN	18 V 800 mA max. total for two 18 V outputs	
	RF OUT		
Power consumption*		230 V~ 50/60 Hz 3.5 W	
Operating temperature range		-20° ÷ +50° C	
Dimensions/Weight (packed)		180x135x52 mm/0.62 kg	

* without external DC feeding, with external DC feeding 22 W

Structure diagram





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.



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 EN IEC62368-1, 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.



This product is in accordance with safety standard AS/NZS 60065 and EMC standards of Australia.