

MULTISWITCHES MR908L, MR912L, MR916L

PRODUCT DESCRIPTION

This series of multiswitches has 8 satellite TV IF inputs, two terrestrial TV inputs (active and passive) and up to 16 subscriber's outputs. They ensure an independent access of every subscriber to any SAT IF or terrestrial input.

Multiswitches are designed for use in large and medium SAT and terrestrial TV distribution systems.

Active terrestrial TV input has LTE signal suppression filter .

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

The multiswitches are intended for indoor use only.

SAFETY INSTRUCTIONS

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

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

Any repairs must be done by a qualified personnel.

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

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

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

The mains socket must be easily accessible.

The multiswitch 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 multiswitch next to central heating components, near highly combustible materials and in areas of high humidity.

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

If the multiswitch 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.

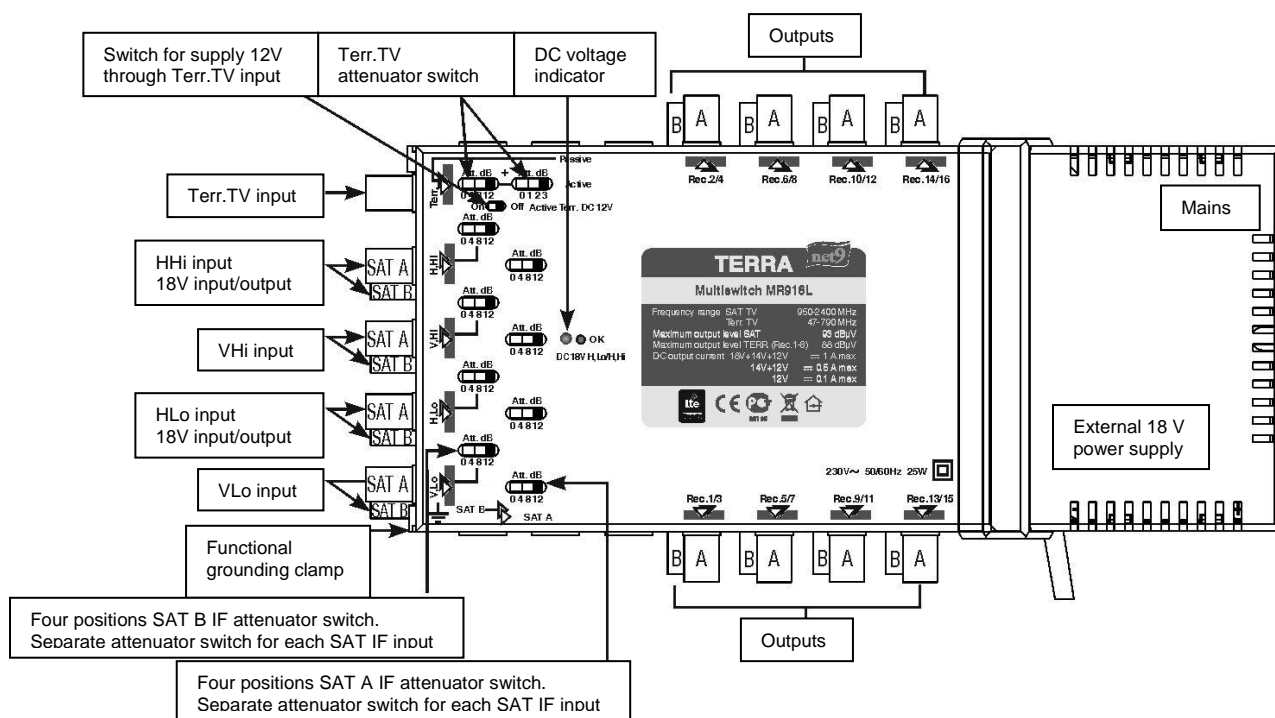
The ventilation should not be impeded by covering the multiswitch with items, such as newspapers, table-cloths, curtains.

Mount the multiswitch on not flammable wall or in not flammable installation box in vertical position with power supply unit on the right side.

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

MONTAGE VIEW

Mount the multiswitch in vertical position with RF input connectors on the left side



OPERATING

SAT IF signals must be connected as shown on the label of multiswitch to ensure correct access to SAT TV signals. It is important to equalize average signal level from satellites. Use gain controls for each satellite line to achieve this goal.

The purpose of the control near the terrestrial TV input is to adjust optimal level of terrestrial TV signal. Maximal level must not exceed the upper limit (see specifications), at the same time it must not be too low to avoid interference from SAT TV lines.

The subscriber's access to terrestrial TV line is permanent. Subscriber access to SAT TV lines is controlled by either analogue control signals or DiSEqC signals, which comes from the receiver through RF cable.

Analogue control signals:

- 14V/18V - polarization selection (vertical/horizontal)
- 0 kHz/22 kHz - band selection (low/high band)
- 22 kHz tone burst - satellite selection (satellite A/B)

DiSEqC control signals according DiSEqC 2.0 protocol for specifications (see www.eutelsat.com).

Without DiSEqC signal and tone burst only satellite A will be accessible.

Multiswitch has own power supply unit, which ensure feeding voltages: 18 V through H lines, 14 V through V lines and 12 V through active terrestrial TV input.

To improve isolation from other SAT TV lines put 75 Ohm terminations with DC blocking on idle connectors if they are.

TECHNICAL CHARACTERISTICS

Type	MR908L	MR912L	MR916L
Number of outputs	8	12	16
Frequency range	SAT IF	950-2400 MHz	
	Terr. TV	47-790 MHz	
Gain (fixed slope	SAT IF	3 ÷ 8 dB	
pre-correction)	Terr. TV outputs 1-8	1 ÷ 4 dB	
	outputs 9-12	-	0 ÷ 2 dB
	outputs 13-16	-	-1 ÷ 0 dB
Loss	Terr.TV outputs 1-8	28 dB	
	passive outputs 9-16	-	30 dB
Gain adjustment	SAT IF	12 dB by 4 dB step	
	Terr. TV	15 dB by 1 dB step	
Output level for SAT IF (IMD3=35 dB)*		93 dB μ V	
Output level for Terr. TV outputs 1-8		85 dB μ V	
(IMD3=60 dB)*	outputs 9-12	-	83 dB μ V
	outputs 13-16	-	83 dB μ V
SAT inputs decoupling		> 30 dB	
Outputs decoupling		> 30 dB	
Supply voltage through RF inputs	H,Lo and H,Hi - 18 V; V,Lo and V,Hi - 14 V; Terr. TV - 12 V		
DC supply current	+18V & +14V & +12V	≤ 1 A	
through RF inputs	+14V & +12V	≤ 0.5 A	
	+12V	≤ 0.1 A	
Current consumption from receiver		≤ 60 mA	
Control signals	14/18 V, 0/22 kHz, tone burst or DiSEqC 2.0		
Supply voltage limit values, power consumption**	198-250 V~ 50/60 Hz 4 W		
Operating temperature range	-20° ÷ + 50° C		
Dimensions/Weight (packed)	253x135x52 mm/1.44 kg		

* 2 equal carriers; output level by DIN45004B - add 3 dB to mentioned above value, ** without external DC load; with maximal load 25 W