

## MA SERIES - Active multiswitches

- SAT active
- Terrestrial passive
- 4/6/8/12 Taps
- A/B - B/A Reverse Function\*
- Controls Tone burst/DiSEqC 1.0/2.0
- Return path 5... 100 Mhz
- Isolation SAT/Terrestrial TV  $\geq 45$ dB



\* This function allows the input reverse A/B in B/A

### Technical features

ITEM CODE	MA94	MA94T	MA96	MA96T	MA98	MA98T	MA912	MA912T
TYPE	Cascadable	End	Cascadable	End	Cascadable	End	Cascadable	End
NUMBER OF IN/OUT	9 / 9	9 / 0	9 / 9	9 / 0	9 / 9	9 / 0	9 / 9	9 / 0
NUMBER OF TAPS	4		6		8		12	
FREQUENCY BAND IF-SAT	950... 2150 MHz							
TAP GAIN/LOSS	1 dB	1 dB	1 dB	1 dB	0/-1 dB	0/-1 dB	- 3 dB	- 3 dB
THROUGH LOSS IF-SAT	< 1,5 dB	-	< 1,5 dB	-	< 4 dB	-	< 5 dB	-
CROSS-POLAR ISOLATION	> 32 dB							
ISOLATION INPUTS/OUTPUTS	> 32 dB							
TERRESTRIAL TV BAND	5... 790 MHz							
RET. PATH LOSS (5...100 MHz)	- 15 dB						-20 dB	
THROUGH LOSS TV	< 3 dB	-	< 3 dB	-	< 3,5 dB	-	< 5 dB	-
TV TAP LOSS	- 15 dB	- 15 dB	- 15 dB	- 15 dB	- 18 dB	- 18 dB	- 20 dB	- 20 dB
SAT/TERR. TV SEPARATION	> 45 dB							
RETURN LOSS	$\geq 12$ dB							
OUTPUT LEVEL MAX.	100 dB $\mu$ V*							
USER CONSUMPTION MAX.	65 mA							
DIMENSIONS	161 x 98 x 36		161 x 136 x 36		161 x 171 x 36		161 x 240 x 36	

### General Instructions



Electrical and electronic equipments **are not household waste**. In accordance with the European directive EN50419 (corresponding to the article 11(2) of the guideline 2002/96/EC) of the European Parliament of the Council of January, 27th 2003 on used electrical and electronic equipment, it must be disposed properly. At the end of the product life cycle please take this unit and dispose it on designated public collection points.



Installation is only permitted in dry rooms and upon a non combustibile surface. Ensure that there is an adequate air circulation.



LEM ELETTRONICA confirms the keeping of the EMC requirements in accordance to the EU product norm EN 50083-2 and the keeping of the safety requirements in accordance to the EU product norm EN 60728-11 by the CE sign.

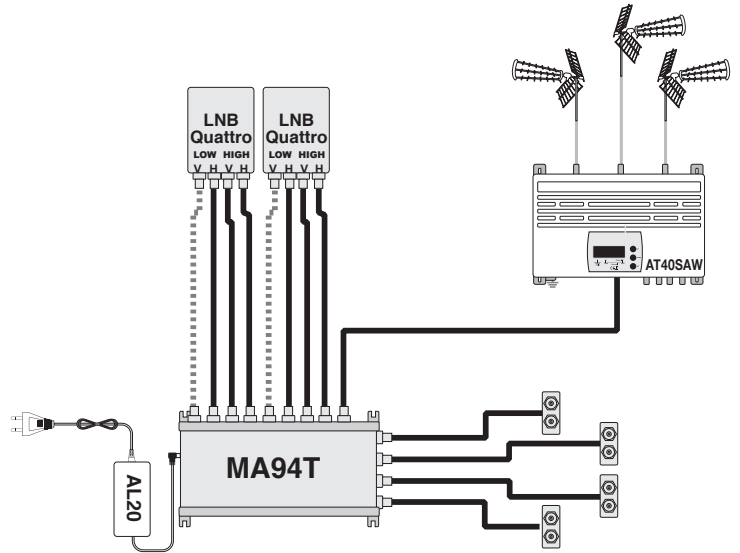
**Class A**

This product meets the more stringent screening requirements according to EN 50083-2, quality grade A.

### Example (1):

Network with **MA94T** multiswitch with **8 SAT** cables + Terr.

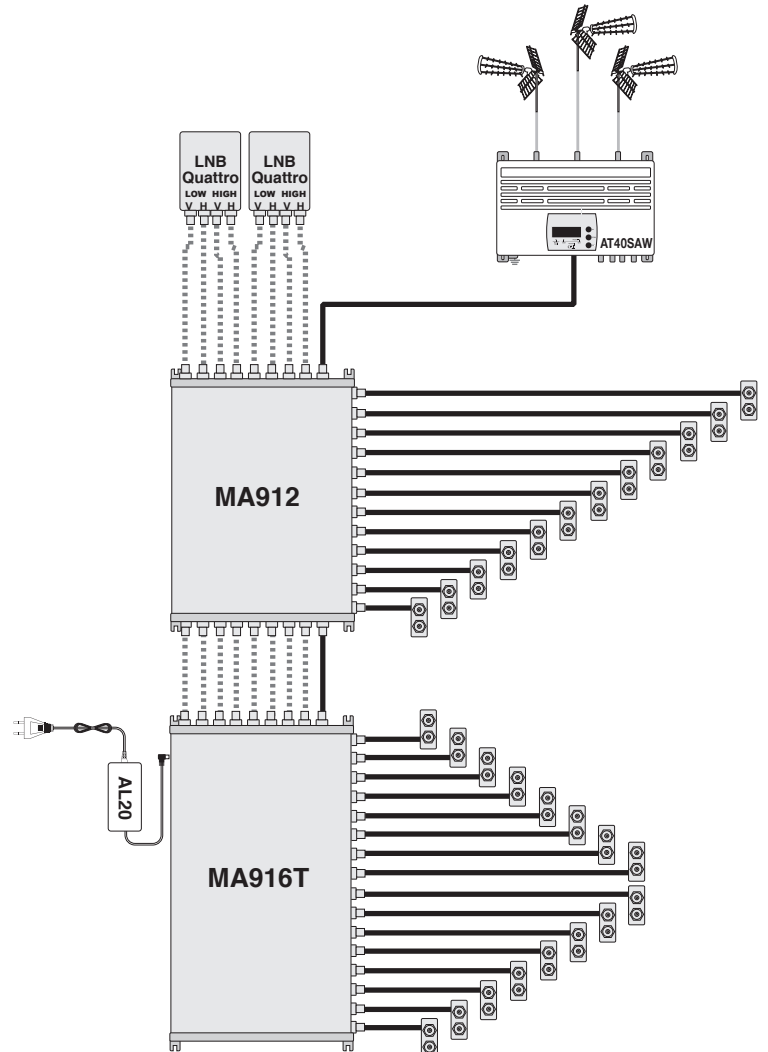
For small networks it is not usually necessary to use the head amplifier.  
The **ALS15** power supplier feeds the LNB on the Vertical Line - Low Band.



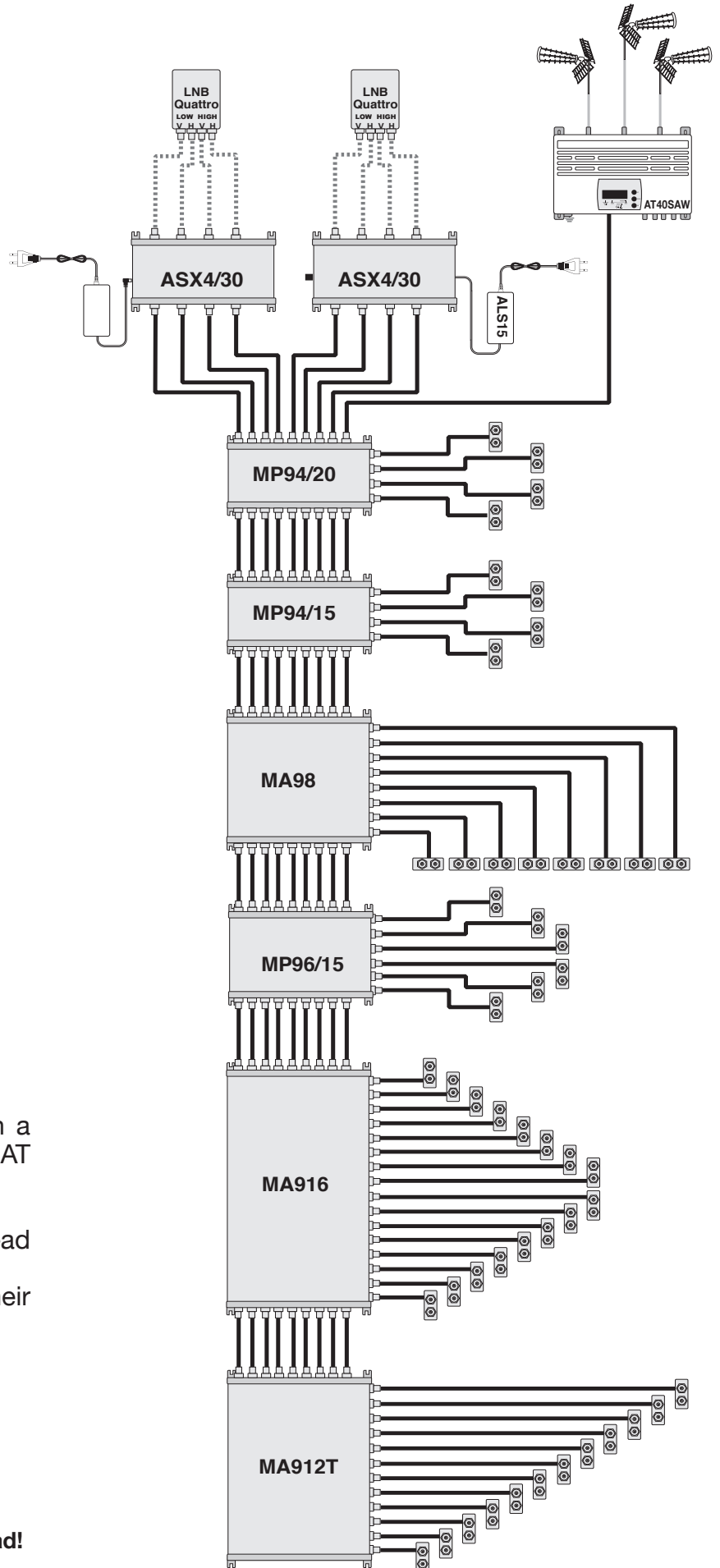
### Example (2):

Network with MA series multiswitches in a cascaded distribution with **28 users** **8 SAT** cables + Terr.

For small networks it is not usually necessary to use the head amplifier.  
The **ALS15** power supplier, which feeds the two LNB, can be connected to any active **MA9** multiswitch.



Use only 75 OHM insulated dummy load!



**Example (3):**

Network with MA series multiswitches in a cascadable distribution with **50 users 8 SAT cables + Terr.**

For big networks it is best to use the head amplifier **ASX4/30**.  
The amplifiers feed the LNB on all their outputs.



**Use only 75 OHM insulated dummy load!**

# Special Functions

## Reverse A/B Function

### DIP-SWITCH SETTING



Every user connected to the MA9 multiswitches output can be managed separately from the dip-switch with the corresponding number.

### ON POSITION

(default setting)

The multiswitch performs the DiSEqC controls of the SAT position SAT A / SAT B. if there are no DiSEqC controls, the multiswitch will remain on the SAT A position.

### OFF POSITION

The multiswitch performs the DiSEqC commands in reverse order.

When an A command is given the SAT B input group will be selected; When a B command is given the SAT A input group will be selected;

If there are no DiSEqC controls, the multiswitch will remain on the SAT B position.

