



AMP 310 - AMP 310 P – AMP 310 P R

USER'S MANUAL



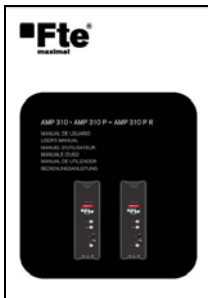
1. Initial Installation

1.1. Safety measures

Please read carefully these safety rules before installing your device.

- 1.- Never place the device next to hot sources.
- 2.- Never undergo the device to temperatures that exceed its level of operation.
- 3.- Never expose the device to leakings nor splatterings.
- 4.- Never place objects that contain liquids over the device.
- 5.- Respect the ventilation slots of the device, do not cover them with any kind of object.
- 6.- The space around the device must be free of objects, in a minimum radius of 40cm.
- 7.- Avoid locations with possibilities of spilling liquids on the inside of the device, and with important changes of temperature.
- 8.- Never open the device by yourself due to electric risk. In case of problems, go always to qualified technicians
- 9.- Never, under no circumstances, open the device when connected to the electrical net.
- 10.- During the handling it is better to disconnect the device from the electrical net.
- 11.- Obey the electricity security rules during the assembling. Use materials that obey the current law.
- 12.- The connecting plug must be accessible in a fast and simple way to have a fast disconnection.
- 13.- Never touch the plug with wet hands. Also, disconnect always the device before handling the connections.
- 14.- Never put any heavy object over the device, since it could get damaged.
- 15.- If the device is going to remain some time without use, it is recommendable to disconnect it from the electrical net.
- 16.- The repairmen and the maintenance of the device must be done by TV and radio specialised technicians

1.2. Box content



User's manual



Adapters for frame FRA 300 *



F male – F male 14 cm cable

Depending of model selected, the box will has one of these equipments:



AMP 310



AMP 310 P – AMP 310 P R

* Not included with AMP 310 P R model.

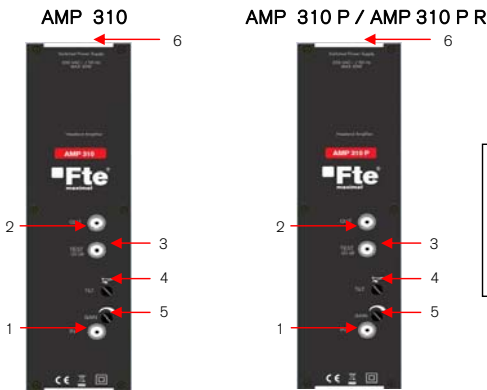
1.3. Description and connections

The wide band amplifier AMP 310 / AMP 310P/ AMP 310 P R amplifies the frequency range of 47-862MHz. The input and output connection are type F female.

It has a $40 \pm 0.5\text{dB}$ gain for AMP 310 model and a 45 dB gain for AMP 310 P / AMP 310 P R model and a 120 dB μV output level for AMP 310 and 125 dB μV output level for AMP 310 P / AMP 310 P R. It also has a 10dB regulation for AMP 310 and 20dB regulation for AMP 310 P / AMP 310 P R for the ideal adjustment of output level and an equalization of 10 dB for avoiding the descompensation between high and low frequencies. There is also a TEST output of -20dB in order to verify the output level.

Due to the equipment of 6 receivers with a Power Supply occupy the entire available space in a FRA 300 frame, the AMP 310 P is supplied with all the needed pieces for extending the frame and allowing placing one space more.

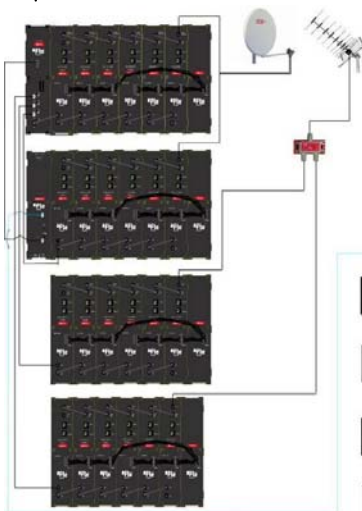
In this manner, we achieve that a frame for 6 modules and Power Supply (total 7 modules) becomes a frame for 8 modules.



- | | |
|---|--|
| 1 | IN: Terrestrial signal input |
| 2 | OUT: Terrestrial signal output |
| 3 | TEST: Test Output (-20dB) |
| 4 | TILT: Slope adjustment |
| 5 | GAIN: Gain regulation |
| 6 | AC IN: Feeding cable (230V AC, 50Hz) |

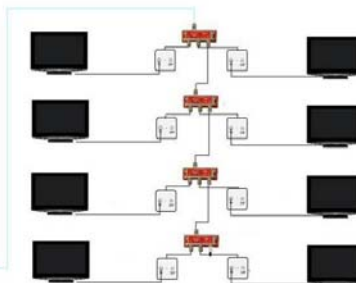
1.4. Accessories and examples of installations

Example of installation



Example of installation in a 4 floors building where 12 satellite channels and 12 terrestrial channels are freely distributed to all the users in the building.

The headend is made of 12 DVB 310 S, 12 DVB 310 T, a MUX 310 combiner and an AMP 310 P amplifier that amplifies and equalizes the signal so all the user receive an optimal signal in their dwellings.



Accessories



Digital headend satellite
Mod. DVB 310 S CI
Cod. 2003522



Digital headend terrestrial
Mod. DVB 310 T
Cod. 2003502



Active combiner
Mod. MUX 310
Cod. 2003518

2. Technical features

Reference	AMP 310	AMP 310 P / AMP 310 P R
Code	2003521	2003520 / 2003520-R
Inputs/Outputs	1/2 (1/1 Test)	1/2 (1/1 Test)
Frequency range	47-862 MHz	47-862 MHz
Gain	40 ±0.5dB	45 dB
Regulation	10 dB	20 dB
Equalization	10 dB	10 dB
Output level max.	120 dBμV	125 dBμV
RF Connectors (In/Out)	F female / F female	F female / F female
Temperature range	0°C a 45°C	0°C a 45°C
Consumption 24V (mA)	525	525
Consumption	95-230V, 50-60Hz, 10,8 W	95-230V, 50-60Hz, 17 W
Dimensions (mm)	265 x 75 x150	265 x 75 x150

3. Declaration of conformity

CONFORMITY DECLARATION



"WE, FTE MAXIMAL, DECLARE THAT THE PRODUCTS
AMP 310, AMP 310 P AND AMP 310 P R
ARE IN CONFORMITY WITH FOLLOWING DIRECTIVES
Low Voltage Directive 2006/95/EC
EMC Directive 2004/108/EC"

If you wish a copy of the conformity declaration, please contact to the company