

Chapter 1. Installation.

1.1. Safety measures

- 1.- Never place the equipment next to hot sources.
- 2.- Never undergo the equipment to temperatures that exceed the level of operation of the device.
- 3.- Do not expose the equipment to dripping or splashing.
- 4.- Do not place objects filled with liquids on the equipment.
- 5.- Respect ventilation slots of this equipment. Avoid covering them with any object.
- 6.- Keep clean and without obstacles a minimum radius of 40 cm around this equipment.
- 7.- Avoid locations with possibilities of spilling liquids on the inside of the device, and with important changes of temperature.
- 8.- Never open the equipment yourself due to electric risk. In case of problems, go always to qualified technicians.
- 9.- Never, under no circumstances, open the equipment connected to the electrical net.
- 10.- During the handling it is better to disconnect the equipment of the electrical net.
- 11.- Respect 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, as it could get damaged.
- 15.- If the equipment 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 equipment must be done by TV and radio specialist technicians.

1.2. Box content



AV 80/40X - AV 90/50X



User's guide

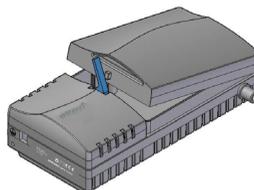
1.3. Description and connections

The main feature of wideband amplifiers AV 80/40X - AV 90/50X is the possibility of configuring the amplified bands through plug-in filters.

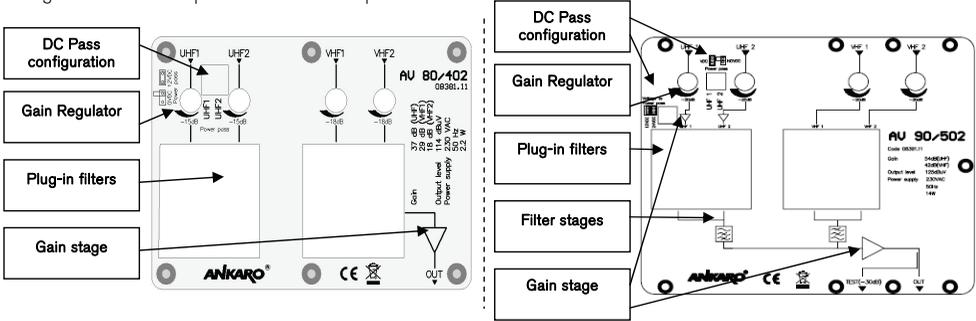
The difference between the different models is the number of inputs and the gain. The maximum output level for models AV 80/40X is 114 dBuV and for models AV 90/50X it is 125 dBuV.

The configuration of each input is made through connectable filters that are situated inside the amplifier; these inputs have a filter by default that allows the complete band to get through. The VHF 2 input of all the models will not have any filter and the installer himself will choose if he wants to use it or not.

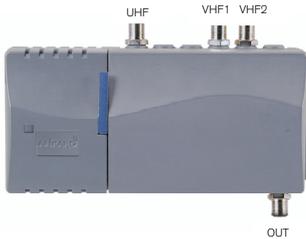
The UHF inputs have jumpers that allow feeding preamplifiers in cases where the installation needs it. These amplifiers are provided with a hermetic frame made of aluminium with a removable cover that allows the installer to configure the amplifier according to the needs of each installation.



Inside the device there is a simplified sketch that shows the different stages of the amplifier and also the access to configure the different options that it offers is provided.



AV 80/40X Main Features



AV 80/401



AV 80/402

The gain in AV 80/40X models in UHF is 41dB and 37dB depending on the model. In VHF the gain is 30dB for VHF1 and 18dB for VHF2.

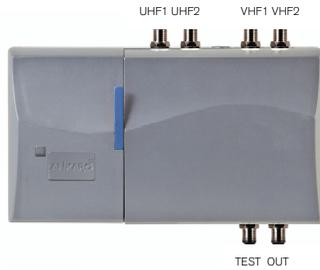
The regulation for UHF is 15dB and for VHF is 18dB.

The maximum output level of these models is 114dBuV.

AV 90/50X Main Features



AV 90/501



AV 90/502

The gain in AV 90/50X models in UHF is 56dB and 54 dB depending on the model. In VHF the gain is 44dB in both models.

The regulation is 20dB for UHF and VHF in all the models.

The maximum output level of these models is 125dBuV.

These models are provided with a Test output of -30dB.

Configuration of pre-amplifiers feeding

The configuration of pre-amplifiers feeding is made through jumpers, depending on the model it will feed one or two UHF inputs.

Models	AV 80/401	AV 80/402	AV 90/501	AV 90/502
UHF inputs with pre-amplifier feeding	1	2	1	2

Power pass	ON	OFF
Jumper configuration		

The AV 90/50X models give the possibility of feeding the pre-amplifier in 12VDC or in 24VDC, while the AV 80/40X models can only feed in 12VDC.

Feeding	12VDC	24VDC
Jumpers configuration AV 90/50X		

Installation

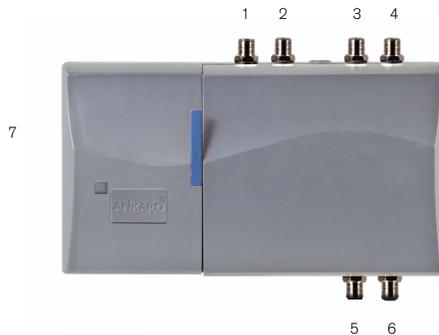
The equipment is provided with a wall support with wedges and screws included.

The steps to make a correct installation are the followings:

- Bring down the fastening device. The equipment will be now loosed and it will be possible to separate the support from the equipment.
- Fix the support to the wall with the wedged and screws provided.
- Introduce the equipment again in the wall support once it is installed.
- Bring up the fastening device to adjust the equipment to the support.



AV 80/40X - AV 90/50X



- 1-2 UHF IN: Terrestrial signal input UHF 470-862 MHz
- 3-4 VHF IN: Terrestrial signal input VHF 47-230 MHz
- 5 TEST OUTPUT: Test output (-30dB) (only AV 90/50X)
- 6 OUT: Terrestrial signal output UHF+VHF 47-862MHz
- 7 AC IN: Feeding cable (230V AC, 50Hz)

1.4. Accesories and example of installation

Accesories

Internal plugable filters

BI Filter

Mod. B1F
Code 08300.BI

FM Filter

Mod. FMF
Code 08300.FM

BIII Filter

Mod. B3F
Code 08300.B3

DAB Filter

Mod. DABF
Code 08300.DAB

BIV Filter

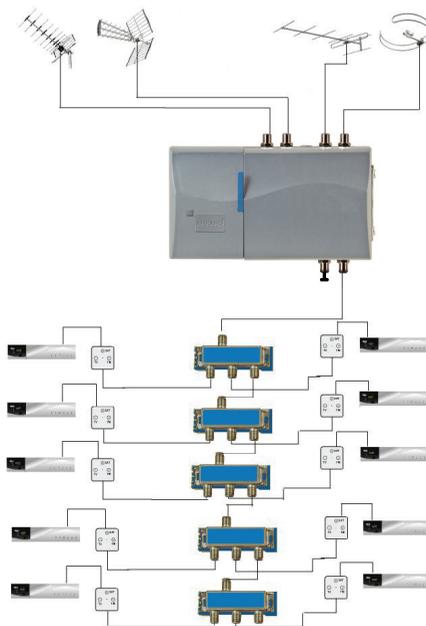
Mod. B4F
Code 08300.B4

BV Filter

Mod. B5F
Code 08300.B5



Example of installation



Example of an installation of a 5-floors-building with two dwellings per floor. The UHF + VHF signals are distributed in each outlet. The amplifier allows regulating the signal and configuring the different bands of each input through plug-in filters, this way we can get to the different outlets with optimum signal level.

Chapter 2. Technical features

Ref.	AV 80/401	AV 80/402	AV 90/501	AV 90/502
Code	08380.11	08381.11	08390.11	08391.11
Number of UHF inputs	1	2	1	2
Number of VHF inputs	2		2	
Number of outputs	1		1	
Test output (-30dB)	-		1	
UHF frequencies margin	470-862 MHz			
VHF frequencies margin	47-230 MHz			
UHF Gain	41 dB	37 dB	56 dB	54 dB
VHF1 / VHF2 Gain	30/18 dB		44 dB	
UHF Regulation	15 dB		20 dB	
VHF Regulation	18 dB		20 dB	
Maximum output level	114 dB μ V		125 dB μ V	
Pre-amplifiers feeding (UHF)	12 V		12/24 V	
Protection grade	IP 40		IP 65	
Consumption	230V, 50Hz, 2.2W		230V, 50Hz, 14W	
Measures	175 x 50 x 98 mm		230 x 140 x 60 mm	

Chapter 3. Conformity declaration



CONFORMITY DECLARATION

"WE , ANKARO, DECLARE THAT THE PRODUCTS
 AV 80/401, AV 80/402,
 AV 90/501 AND AV 90/502
 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 the company