

# Head amplifiers

## Head antenna amplifiers with multiple outputs

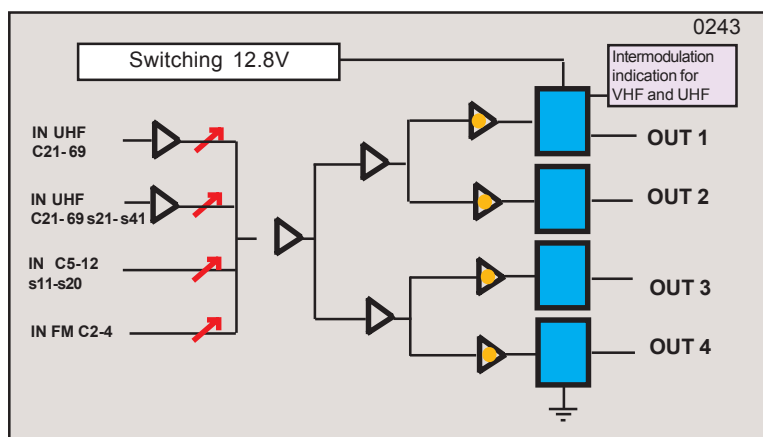
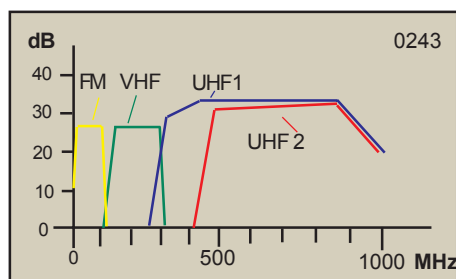
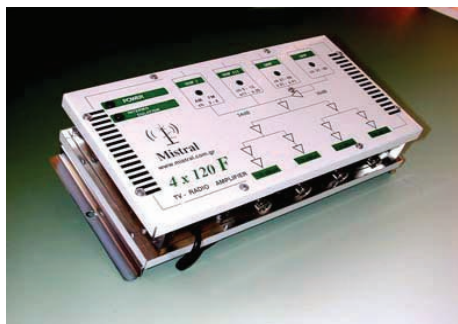
### 4X120 F

Application : Head antenna amplifier with high output level, 4 inputs and 4 outputs

#### 4x120

code 0243

Input 1	:	FM Ch 2 -4,
Input 2	:	VHF Ch 5 - 12 S11-S20,
Input 3 ( wide )	:	S21 - S40 UHF Ch 21-69
Input 4 ( narrow )	:	UHF Ch 21 - 69
Amplification	:	Amplifier VHF 10-28 dB, Amplifier UHF 12 - 32dB
Output level	:	4 outputs of 120 dB/μV
Input voltage	:	Linear power supply 210VAC -250VAC / 12.8VDC
Channel reject filter	:	-10 dB at 935 MHz
Indications	:	Led indication for high intermodulation VHF and UHF



### Application of installing 2 VHF-UHF antennas and 12 downloads with the 4x120 amplifier

#### You should pay attention to these

- Choose multichannel antennas especially for the UHF. Ask to see the gain diagram which should be as straight as possible. There should be less than 3 dB difference in the whole band. Antennas with such characteristics are the logarithmic, they don't have great gain but they are very linear.
- When raining, care should be taken in order to avoid water sliding down through the antenna cables to the amplifier because there is a great risk of electrocution.
- Make sure you connect all the splitters to the outputs and that you attach a cable to every splitter.
- Adjust the amplifier by checking the indication light of the distortion (if such a system exists) and make sure that there is no intermodulation of the amplifier by checking the image quality especially of the weakest channels.
- Ground the whole installation in a trustworthy grounding point, it will help in the lightning protection. Good grounding point is the splitters' mounting points. The good quality splitters have a special grounding screw on them.
- Don't enclose the amplifiers in small boxes because the air has to be circulated in order to cool the amplifiers. The high output amplifiers like the 4x115 and especially the 4x120 require sufficient cooling otherwise there are going to be interruption during summer because of the internal protection systems they have. If they are installed in a box, the temperature should not exceed 50 degrees C.

