

V51-101C

Vision 41dB Launch Amplifier

Single input - single output:

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1. Product description

The Vision 1 in – 1 out amplifier model V51-101C is intended for amplifying and distributing radio frequency (RF) signals in TV networks. The amplifier is powered from the mains 230 VAC. The amplifier has one input, one output and output test point.

The Vision V51-101C amplifier type is "Launch", selectivity classification "0" as defined in standard ETSI EN 303 354 V.1.1.1,

2. IMPORTANT - Safety instructions

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

For safety, this amplifier is double isolated from the mains 230 VAC and the following information must be adhered to to avoid the possibility of an electric shock :-

- Do not remove the cover of the power supply section and amplifier, without disconnecting the unit from the mains supply;
- Ensure you secure the cover fastenings to a torque of between 3 and 4 Nm;
- Do not plug the amplifier into the mains supply if the power cord or plug are damaged;
- Do not plug the amplifier into the mains supply until all cables have been connected correctly;
- To disconnect the amplifier from the mains completely, disconnect plug from the mains socket;
- Ensure the mains socket is easily accessible in case it is necessary to disconnect the unit from the mains;
- Avoid placing the amplifier next to heat sources such as central heating components;
- Keep the amplifier away from naked flame sources, such as lit candles;
- Before installation, if the amplifier has been kept in cold conditions for a long time, ensure it has at least 2 hours to reach room temperature before use;
- In use, the amplifier is protected from moisture and can be mounted in damp conditions, but must not be exposed directly to rain or running water.

3. Mounting

The amplifier should be mounted vertically with RF connectors underneath.

The amplifier must be fixed with steel screws Ø 4-4.5 mm. The screws are not included with the product.

There must be a minimum of a 10cm air gap around the top, front and bottom of the amplifier.

The cover should be fastened with 3...4 Nm (key included in a package).

4. External view

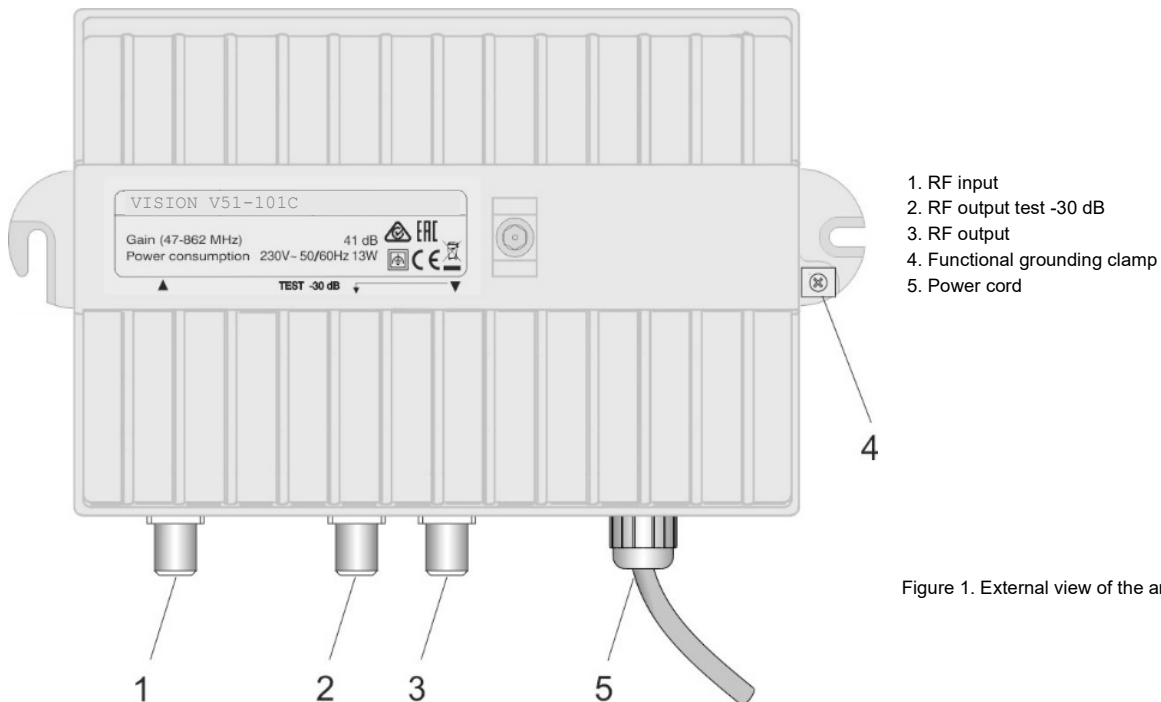


Figure 1. External view of the amplifier

5. AMPLIFIER CONTROLS - under the cover

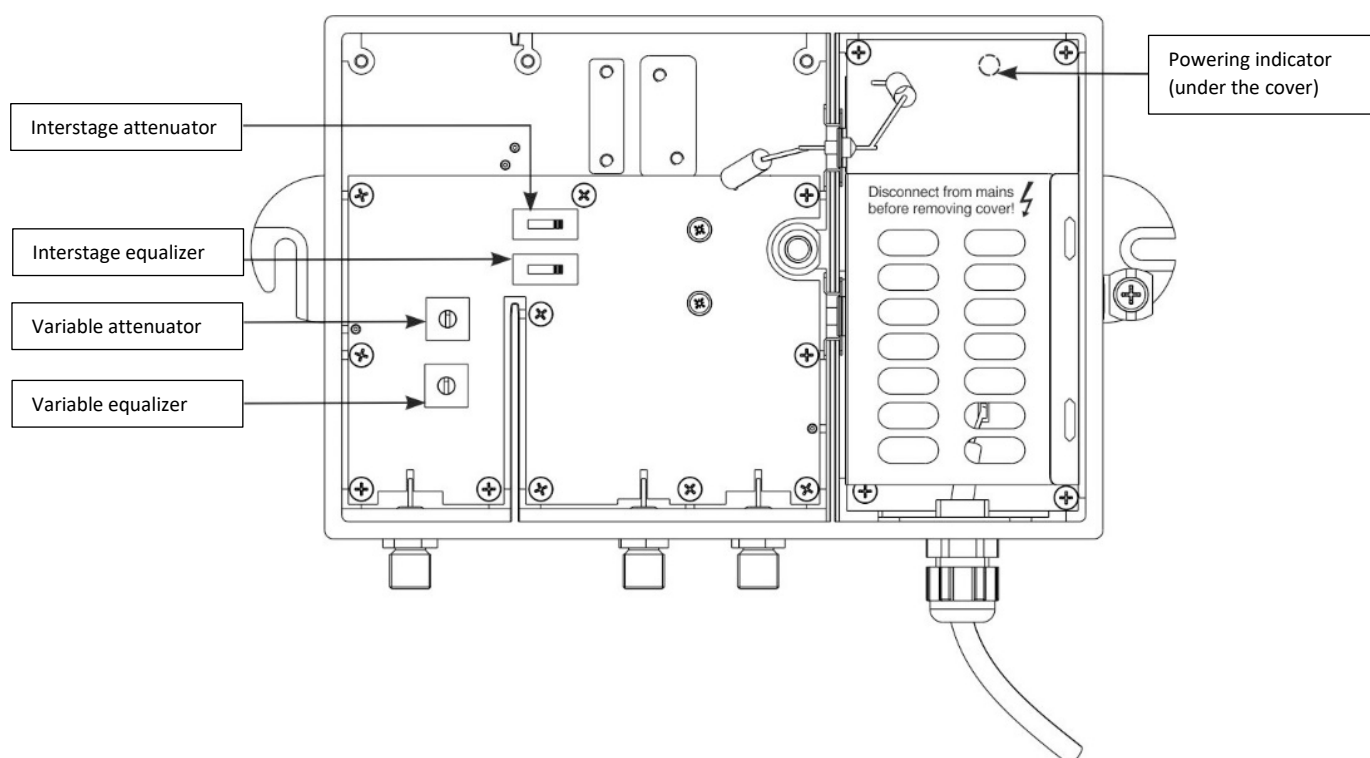


Figure 2. Controls of the amplifier

6. FUNCTIONAL - Block diagram

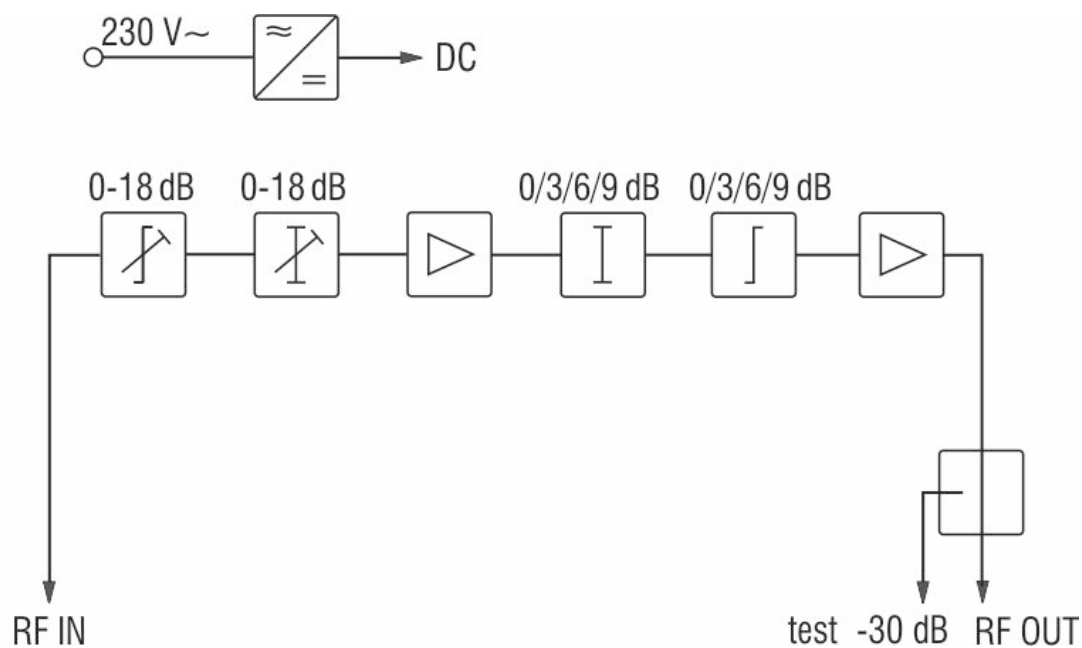


Figure 3. Block diagram of the amplifier

SPECIFICATION:

Power supply

The amplifier powered from mains 230 VAC has a factory fitted mains cable.
There is a power indicator under the cover (see Figure 2).

Test point

The output test point is bi-directional. It is used for output signal measurement during adjustment.

Technical characteristics

Frequency range	47 - 862 MHz
Gain	41 dB
Flatness	± 0.5 dB
Gain adjustment	18 dB
Slope adjustment, typical	18 dB
Interstage attenuator	0/3/6/9 dB
Inverse equalizer	0/3/6/9 dB
Output level CTB, CSO (EN50083-3)*	115 dB μ V
Input and output return loss	≥ 18 dB at 40 MHz - 1.5 dB/octave
Noise figure	< 5 dB
Test point	- 30 dB
Supply voltage limit values, power consumption	198-250VAC 50/60 Hz 13 W
Operating temperature range	-20 °C ÷ +50 °C
Dimensions	180x132x76 mm (main body) 213x132x76 mm (with fixing ears)
Weight (packed)	1.4 kg

* measured with a 6 dB interstage equalizer



This product complies with the relevant clauses of the European Directive 2002/96/EC.

The unit must be recycled or discarded according to applicable local and national regulations.



Equipment is double insulated from the mains, with functional earthing.



Functional earthing. Connect to the main potential equalization.



This product is in accordance to following norms of EU: EMC norm EN50083-2, safety norm EN60065, RoHS norm EN50581.



This product is in accordance with Custom Union Technical Regulations: "Electromagnetic compatibility of technical equipment" CU TR 020/2011,
"On safety of low-voltage equipment" CU TR 004/2011.



This product is in accordance with safety standard AS/NZS 60065 and EMC standards of Australia.