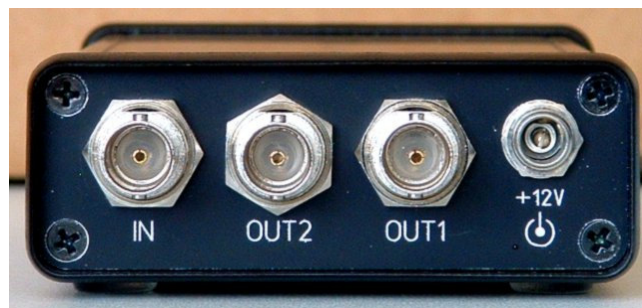


# Specifications

and Operator's Manual

## Active Distributor / Dual Amplifier RVV1



Version: 1.1

Created: 12.05.2016

## Specifications

Dimensions (W x H x D):	80 mm x 30 mm x 127 mm
Frequency range:	1 kHz ... 40 MHz
Maximum level (output):	+22 dBm
Gain IN → OUT1:	0 ... +20 dB
Gain IN → OUT2:	approx. -30 ... +20 dB
IP3 Out (10 MHz + 10.1 MHz):	+34 dBm
Noise OUT1:	-150... -140 dBm/Hz (depending on amplification)
Noise OUT2:	-140 dBm/Hz
Connectors:	BNC 50 ohms
Power supply:	+12 ... +14.5 V / max. 150 mA, hollow pin 2.5 mm pin
Weight:	<= 150 g
Environmental conditions:	0 ... +50 °C ambient temperature, <=90 % rel. humidity non-condensing, indoor application
Compliance:	CE according to DIN EN 55013, EN 55020, EN 60065 RoHS / WEEE Directive, ear-Reg. 27676700

All specifications are subject to design changes!

# Safety precautions

**Please always keep the following safety precautions in mind!**

The device is designed for operation with low-level high-frequency signals and DC power supply. Never connect voltages outside the specified range. Under no circumstances should the the device come into contact with the mains voltage of 230 V ~!

It is essential to observe the lightning protection regulations for the outdoor operation of electrotechnical systems! When operating the device with antennas outside the protected area (e.g. house), it must be properly equipped with lightning protection. The HF bypass must be equipped with overvoltage protection. If there is a risk of lightning, take the device out of operation immediately (remove the HF connection)!

Observe the permitted temperature range for starting up the device! Do not switch the device on or off again if this range is exceeded or fallen below!

Never expose the device to mechanical stress due to impact, pressure, vibration or shock which exceed a normal level.

If you notice any damage to the device, stop the operation immediately! If necessary, send it to the supplier for repairs.

Would you like to dispose the device due to damage or no more usability, send it back to the supplier or return it to your local waste collection center. Never dispose of the appliance elsewhere, such as household waste. It pollutes our environment!

# Operator Manual

The active distributor / dual amplifier RVV1 is intended for splitting a coaxial high-frequency cable over two cables. The signal is fed in at the IN connection (50 Ohm) and can be taken from the OUT connections without any feedback. The two OUT connections are decoupled from one another and have a defined characteristic impedance of 50 ohms.

Each output can be adjusted in level by an associated rotary knob on the front of the RVV1. Different circuits are used for each amplifier:

- OUT1: The amplifier 1 is adjusted in the negative feedback. This enables a minimum gain of 1 (0 dB) and a maximum gain of 10 (+20 dB). The change in gain also changes the intrinsic noise level. With gain 1 it is the smallest, with increasing gain it becomes correspondingly larger.
- OUT2: The amplifier 2 always works with full gain of 10 (+20 dB). The output level is adjusted by a level knob before the input of the amplifier. With the minimum setting, frequency-dependent attenuation is greater than the amplifier gain (ideally 0, i.e. no output level). This allows output levels to be set lower than the input level. The inherent noise at the output always corresponds to the noise at full gain.

The RVV1 is powered by a DC voltage of 12... max. 14.5 V via a hollow pin socket. The positive pole is at the middle pin. The presence of the operating voltage is indicated by an LED on the front.