

A decorative graphic on the left side of the page. It consists of a vertical column of eight red circles. To the right of each circle is an L-shaped bracket. These brackets extend horizontally to the right and then vertically downwards, creating a grid-like structure that frames the text on the right. The number of horizontal segments increases from one in the top row to eight in the bottom row.

U 901 / VZN 8

OPERATING INSTRUCTIONS

Description

U 901 & VZN 8 are combining networks which, after combination, allow the signal to be amplified by up to 7 dB.

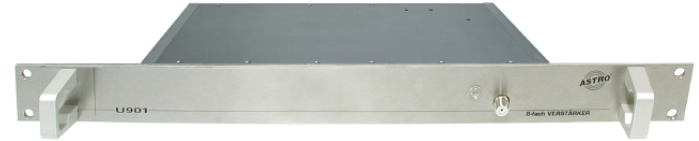
U 901 & VZN 8 are used for loss-free expansion of existing systems, offering connection of up to 16 additional channels each (e.g. V16)..

Type		U 901	VZN 8
Order no.:		380 190	380 191
Impedance	Ω	75	
Frequency range	MHz	47 – 862	
Return loss (In & out)	dB	≥ 16	
Decoupling of the inputs	dB	≥ 20 typically, min. 18	
Gain	dB	0 – 7 pluggable in 0,5 steps (attenuators)	
Attenuation distortion	dB dB	≤ 1 throughout the entire range $\leq 0,2$ in the 8 MHz channel	
Signal-to-intermodulation ratio according to EN 50083-3 at 81 dBpW (100 dB μ V)	dB dB	3.0 \geq 90 2.0 \geq 78	
Spectral noise-power density at a bandwidth of 1 MHz	dBm	≤ -88	
Measuring point (directional coupler)	dB	-20 \pm 1	
Connectors	Ω	75 , IEC jacks (DIN 45325)	
Remote feeding inputs 1 and 8 or external connection	V	+12 ... +19	
Power consumption	W	12	

The devices are equipped with a measuring port at which the output signal (reduced by 20 dB) can be checked.

CAUTION – The mains voltage can be supplied either to the voltage supply port using a flat band connector or via inputs 1 and 8. In the first case, no voltage is present at inputs 1 and 8.

Illustration showing the U 901 / VZN 8 unit



Front view of the U 901 unit



Rear view of the U 901/ VZN 8 unit



Front view of the VZN 8 unit

Gain adjustments

IMPORTANT:

During operation of the U 901 / VZN 8, all unused inputs must be terminated (with a 75Ω terminating resistor).

Here, a 0 dB bridge circuit should be inserted in the associated slots for Pad x (see Fig. 2), or alternatively a 20 dB bridge circuit can be inserted in the associated slots for Pad x. In this case there is no need to use a terminating resistor.

Gain adjustments

You will need to unscrew the cover in order to adjust the gain.

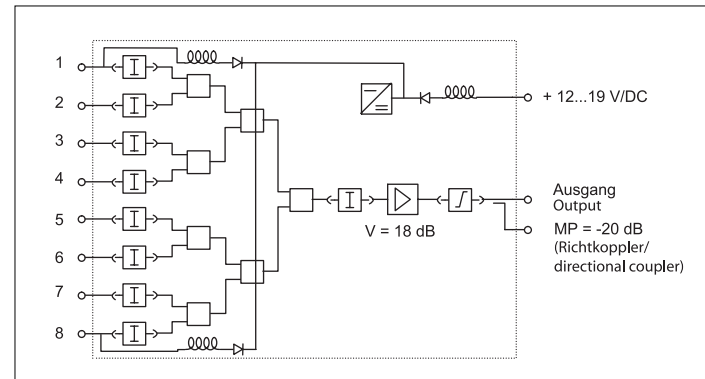
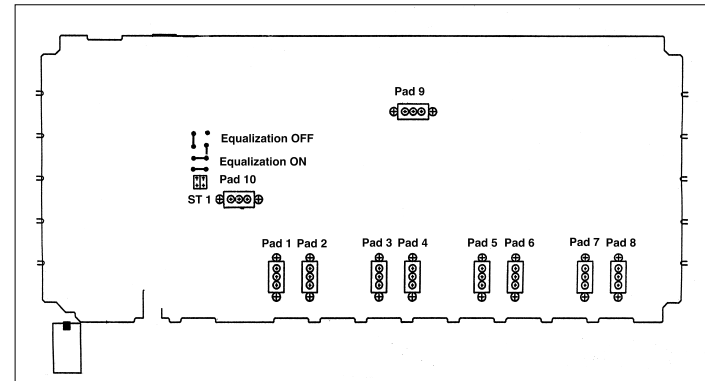
On delivery with 0 dB elements, the gain is set to the maximum level of 7 dB.

Depending on the requirements of the application, the gain or attenuation of the individual input signals can be adjusted in 0.5 dB increments by inserting the different attenuators (0.45" JXP Attenuators) in the slots for Pad 1 to Pad 8 (see Fig. 2).

In addition, the device has a slot for Pad 9, which can attenuate the combined signals jointly through various 0.45" JXP Attenuators ahead of the amplifier.

Furthermore, the device also allows the slope (pre-emphasis) of the combined signals to be adjusted after the amplifier. The release of the pre-emphasis adjustment option is realized via the short-circuit bridges at slot ST 1. The actual slope adjustment is performed by inserting various 0.45" JXP Attenuators in the slot for Pad 10, as a result of which the attenuation value on the JXP Attenuator corresponds to a lowering of the signal by this value at 47 MHz (± 0.5 dB). Through activation of the slope adjustment the overall signal is lowered by around 1 dB.

Fig. 2





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