

# TVX-225/1

## PROFESSIONAL VHF TV TRANSMITTER



- TVX-225/1** is an VHF TV transmitter with high level power output for all VHF TV channels from CH 7-12. It is a single channel unit- please choose desired channel. It has adjustable high power output level from 50 mW- 1 W. The transmitter comes with two 19" rack mount units: exciter and power amplifier 1W. Antenna connector is an BNC type. RF amplifier is temperature and VSWR protected.

### Technical Specifications

#### VISION SPECIFICATIONS

Inputs	1 video - 1 audio
Impedance	75 ohm
Connectors	BNC
Return loss	$\geq 28$ dB
Video	B/W Color
Input level	1 Vpp (manually adjustable)
Clamp	Reinsertion of D.C. component and video alignment to black level
Modulation limiter	White level clipper
Amplitude response	within $\pm 0.5$ dB (from 0 to 5 MHz) (measured at Video processor output)
Intermodulation distortion	$\leq -70$ dB (3 tones Vc-5dB, Sc-10dB, Cc-17dB)
Differential gain	$\leq 2\%$
Differential phase	$\leq 2^\circ$

#### SOUND SPECIFICATIONS

Inputs	N° 1 input in the monophonic version
Impedance	600 ohm balanced
Connectors	BNC, RCA
Input level	0 dBm to + 9 dBm (for deviation $\pm 50$ KHz)
Frequency deviation check LED	Green LED nominal value; Red LED +2.5 dB; Yellow LED -2.5 dB
Preemphasis	50ms
Bandpass	$\pm 0.5$ dB (from 30 Hz to 15 KHz)

Sound intercarrier frequency	obtained with a high stability synthesized oscillator, 2.5 KHz steps from 4.5 MHz to 9MHz
Sound 1	4.5 MHz (monophonic)
Sound 2	5.7425 Mhz (stereo or dual sound)
Total Harmonic Distortion	<=0.5% (dev.±50 KHz)
<b>MODULATION SPECIFICATIONS</b>	
Vision modulation	AM negative (A5C) according to the B and G standard of CCIR
Vision carrier	38.9 MHz ± 1 ppm /year (TCXO) External Oscillator input facility
Group delay precorrector	Complying with B and G Standard
Sound modulation	FM, (F3) deviation ± 50 KHz
<b>IF OUTPUT CHARACTERISTICS</b>	
Intermediate frequency	composite (vision carrier + sound carriers)
Impedance	50 ohm
Connector	BNC
Output Return Loss	>=20 dB
Vision carrier	from - 6 dBm to + 3 dBm adjustable output level
Sound 1	carrier 33.4 MHz (-13 dB under the Vision carrier)
Sound 2	carrier 33.1575 MHz ( -20 dB under the Vision carrier)
The two sound sub carriers levels can be independently adjusted	
<b>GENERAL SPECIFICATIONS</b>	
Power supply	110 to 264 Vac 48 to 62 Hz
Consumption	240 VA
Power supply	D.C. +24 Vdc ± 15% or +15 Vdc ± 0.2V
Consumption	1.8A " 120W
Warm up time	10'
Operating temperature	-5°C to +45°C
Dimensions	19" - 1U rack depth: 400 mm
Weight 0	2 kg
Options MS2	Module for second sound. It permits to generate the second sound intercarrier at 5.7425 MHz 999
<b>RF SPECIFICATIONS</b>	
Power output	2 W (5 W, 35W or 150 W) depends on model
Consumption	3 - 10 A/26 V-28 V
Power supply	from D.C. +26 Vdc ± 15% or +15 Vdc ± 0.2V
Output connector	N type
Input connectors	BNC/ RCA
Operating temperature	-5°C to +45°C