R V R TEX700LCD Exciters Transmitters Owner's Manual

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R V R TEX700LCD Exciters Transmitters

Product Information

- The RVR TEX transmitters are a series of exciters/transmitters that offer uncompromised transmission quality at an attractive price. They are ideal for use as drivers for mid-power stations or as transmitters in stand-alone applications. The transmitters have adjustable power output from 0 watts to maximum output power.
- Key audio features of the RVR TEX transmitters include low distortion and intermodulation values, as well as a high noise/signal ratio. The transmitters are compact and indeformable thanks to the stainless steel chassis, with a depth of only 525mm and occupying 3 rack units.
- The RVR TEX transmitters have user-friendly features such as a universal multi-voltage power supply (80-260 V), pushbuttons for user/device interaction, and configuration software with a simple, intuitive interface. The transmitters also have advanced module engineering for ease of access and maintenance.
- Reliability and continuity are ensured with the SMD technology, Automatic Power Control (APC), and Foldback protection. The transmitters offer total control through a microprocessor that can be easily programmed from a menu or via RS232, with all key parameters displayed on an LCD.
- The transmitters have built-in interfaces including a high-performance stereo coder, L&R analog audio inputs, Mono inputs, MPX composite signal, and auxiliary inputs for SCA/RDS signals. They also feature a built-in Telemetry System with a GSM modem, battery, and battery charger (optional).
- The RVR TEX transmitters are in full compliance with EC, FCC, and CCIR standards.

Product Usage Instructions:

To use the RVR TEX transmitters, follow these steps:

1. Ensure that the transmitter is connected to a power source within the universal voltage range of 80-260 V.
2. Connect the desired audio inputs to the corresponding L&R analogue audio inputs or Mono inputs on the transmitter.
3. If necessary, connect additional signals such as SCA/RDS signals to the auxiliary inputs.
4. Adjust the power output of the transmitter according to your requirements. The power output can be set from 0 Watt to the maximum output power.
5. If remote control is desired, ensure that the Telemetry System with the GSM modem, battery, and battery charger (optional) is properly installed.
6. For advanced control and configuration, use the microprocessor to program the transmitter. This can be done either from the menu on the transmitter or via RS232.
7. Monitor the key parameters displayed on the LCD to ensure optimal transmission performance.
8. For maintenance purposes, access the transmitter’s modules easily through the advanced module engineering design.

Refer to the user manual for more detailed instructions and troubleshooting information.

Overview

Front view

TEX1000-LIGHT front view

Rear view

TEX1000-LIGHT rear view

Features

- **PRIMARY APPLICATION:** RVR TEX transmitters offer uncompromised transmission quality at a very attractive price.
    - Ideal for use as drivers for mid-power stations or as transmitters in stand-alone applications.
    - Adjustable power output from 0 Watts to maximum output power.
- **AUDIO PERFORMANCE:** key audio features are low distortion and intermodulation values and a high noise/signal ratio.
- **HARDWARE FEATURES:** RVR TEX transmitters are compact (525mm depth only) and indeformable thanks to the stainless steel chassis, in 3 rack units only.
- **USER-FRIENDLY FEATURES:** universal 80-260 V multi-voltage power supply enables operation on different main voltages with no need to preselect voltage.
    - Pushbuttons for user/device interaction provide enhanced accessibility, resulting in extreme ease of use.
    - Configuration software offers a simple, intuitive interface.
- **EASE OF MAINTENANCE:** advanced module engineering ensures extreme ease of access and simple maintenance.

- **RELIABILITY/CONTINUITY:** SMD technology ensures enhanced business continuity. APC (Automatic Power Control) and Foldback protection ensure reliable operation under any operating conditions.
- **INTERFACE CONTROL:** total control thanks to the microprocessor easily programmed from the menu or via RS232 with all key parameters displayed on LCD.
- **INPUT/OUTPUT INTERFACE:** built-in high-performance stereo coder, L&R analog audio inputs, Mono inputs, MPX composite signal, and auxiliary inputs for SCA / RDS signals.
- **REMOTE CONTROL:** built-in Telemetry System with GSM modem, battery, and battery charger (option).
- **REGULATORY COMPLIANCE:** state-of-the-art technology in full compliance with EC, FCC, and CCIR standards.

Technical specifications

	TEX700LCD	**TEX1000LIGHT**
Parameters	**Values**	**Values**
GENERALS		
Rated output power	700W	1000W
Frequency range	FCC -CCIR and other on-request	
Operational Mode	Mono, Stereo, Multiplex	
Modulation type	F3E	
Primary Power	80 ÷ 260 Vac	
AC Power Consumption	1215 VA / 1190 W / PF:0,98	1650 VA / 1617 W / PF: 0,98
Overall efficiency	59%	62%
Physical Dimensions (W x H x D)	483 x 132 x 520 mm	
Weight	23 kg	
Environmental Working Conditions	-10 ÷ +50 °C / 95% relative Humidity non-condensing	
Cooling	Forced, with an internal fan	
Frequency programmability	From software, with 10 kHz steps	
Frequency stability	±1 ppm	
Pre-emphasis mode	0/50 (CCIR) µS, 75 (FCC) µS	
Spurious & harmonic suppression	<75 dBc (80 typical)	
Asynchronous AM S/N ratio	≥60 dB (typical 68)	
Synchronous AM S/N ratio	≥50 dB (typical 58)	
MONO OPERATION		
S/N FM Ratio	> 80 dB RMS (typical 83 dB)	

Frequency Response	< ± 0.5 dB 30Hz ÷ 15kHz (typical ± 0.2 dB)
Total Harmonic Distortion	< 0.1 % 30 Hz ÷ 15 kHz (typical 0.07 %)
Intermodulation distortion	< 0.02 % with 1 kHz and 1,3 kHz tones
MPX OPERATION	
Composite S/N FM Ratio	> 80 dB RMS (typical 83 dB)
Frequency Response	± 0.2 dB 30Hz ÷ 53kHz / ± 0.5 dB 53kHz ÷ 100 kHz
Total Harmonic Distortion	< 0.1% 30Hz ÷ 53kHz
Intermodulation distortion	< 0.05% with 1 kHz and 1,3 kHz tones
INTERNAL STEREO CODER OPERATION	
Stereo S/N FM Ratio	> 75 dB RMS (typical 77dB)
Frequency Response	± 0.5 dB 30 Hz ÷ 15 kHz
Total Harmonic Distortion	< 0.05% 30 Hz ÷ 15 kHz
Intermodulation distortion	≤0.03% with 1 kHz and 1,3 kHz tones
Stereo separation	> 50 dB 30 Hz ÷ 15 kHz (typical 55 dB)
AUDIO INPUT CONNECTORS	
Left / Right	XLR balanced; Impedance: 10 k or 600 ohm; Level: -13 to +13 dBu
MPX unbalanced/RDS	BNC unbalanced; Impedance: 10 k or 50 ohm; Level: -13 to +13 dBu
SCA/RDS	2 x BNC unbalanced; Impedance: 10 k; Level: -8 to +13 dBu
OTHER CONNECTORS	
RF Output	N (50 ohm)
RF Monitor	BNC (- 30dBr referred to RF output)
Pilot output	BNC (1Vpp)
Interlock Input	BNC
STANDARD COMPLIANCE	
Safety	EN 60215:1989 EN60215/A1:1992-07 EN60215/A2:1994-09
EMC	EN 301 489-1 V1.4.1 (2002-08) EN 301 489-11 V1.2.1 (2002-11)
Radio	EN 302 018-2 V1.2.1 (2005-06)

- All pictures are RVR’s property and they are only indicative and not binding. The pictures can be modified

without notice.

- These are general specifications. They show typical values and are subject to change without notice.

Ordering information

Options for TEX-LCD

Code/Description

- /CW Morse-coded station ID code generated through FSK (Frequency Shift Keying) function *
- /CNT7/8-150 7/8″ output RF connector. **
- TCPIPINT-TEX Telemetry system via the Internet ***
- /TLM-TEX3HE
    - Telemetry system via internal GSM modem
    - Battery and battery changer included
- /TLC-TEX3HE Internal telemetry system without modem
- /MODGSM Telemetry system via external GSM modem ***
- /MODPSTN Telemetry system via external PSTN modem ***
- TELINK-C1 Telemetry interface ANTLAN/BURK protocol ***
- TELINK-SNMP2 Telemetry interface RVR/SNMP 1 HE ***
    - Please specify the station name on the order.
    - Available for model TEX1000LIGHT.
    - Usable only in combination with /TLC-TEX2HE option.

Contact Information

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Documents / Resources

	R V R TEX700LCD Exciters Transmitters [pdf] Owner's Manual TEX700LCD Exciters Transmitters, TEX700LCD, Exciters Transmitters, Transmitters

References

- R.V.R. Elettronica - Broadcast Systems