

> *Synthesized transmitters and receivers
(200-380, 400-470, 845-852
and 915-960 MHz)*

**PTRL-LCD...
RXRL-LCD...
PTRL-LCD** with
/S-PTRLLCD option on board
RXRL-LCD with
/05-RXRLLCD option on board



PTRL-LCD and RXRL-LCD front view

Features

- > **PRIMARY APPLICATION:** **PTRL-LCD** and **RXRL-LCD** are a broadband radio transmitter and receiver manufactured by **R.V.R. Elettronica** designed to carry audio signals to support sound FM radio broadcasting. This type of device is also known as STL (Studio-to-Transmitter Link).
- > **RADIO LINKS TOPICS:** **R.V.R.** radio links are reputed for their optimal price/performance ratio at a world-wide level.
- > **AUDIO PERFORMANCE:** key audio features are low distortion and intermodulation values and a high noise/signal ratio.
- > **HARDWARE FEATURES:** signal is available in the form of **MPX** (multiplexed, i.e. complete base band signal) and mono signal. In the **stereo version** (PTRL-LCD/S and RXRL-LCD/S) only, signal is available in the form of stereo (LEFT and RIGHT connectors), MPX (complete base band signal) and mono signal.
- > **INPUT/OUTPUT INTERFACE:** built-in high-performance coder, Mono and MPX composite signal analogue audio inputs, and auxiliary inputs for SCA / RDS signals. L&R analogue audio inputs available only in **stereo version** (PTRL-LCD/S and RXRL-LCD/S).
- > **WORKING FREQUENCIES:** standard working frequency bands are **220 MHz ÷ 240 MHz** (5KHz steps) or **420 MHz ÷ 440 MHz** (5KHz steps) or **900 MHz ÷ 960 MHz** (5KHz steps). Working frequency (hence, the frequency band) must be specified on order.
- > **EASE OF MAINTENANCE:** advanced module engineering ensures extreme ease of access and simple maintenance.
- > **TECHNOLOGICAL INNOVATION:** the SMD technology ensures enhanced business continuity.
- > **INTERFACE CONTROL:** total control thanks to microprocessor easily programmed from menu or via RS232 with all key parameters displayed on LC.
- > **REMOTE CONTROL:** key parameters are also available at the telemetry connector for machine remote control.
- > **RELIABILITY/CONTINUITY:** a **24V DC** connector connected to a battery or other power source ensures uninterrupted operation in the event of mains failure.

STL link exciter & receiver 200 - 960 MHz



PTRL-LCD and RXRL-LCD rear view

Caratteristiche

- > **PRIMARY APPLICATION:** il **PTRL-LCD** ed il **RXRL-LCD** prodotti dalla **R.V.R. Elettronica**, sono rispettivamente un trasmettitore ed un ricevitore radio a larga banda per il trasporto di segnali audio in ausilio alla radiodiffusione sonora a modulazione di frequenza. Questo tipo di apparati è spesso denominato STL (Studio-to-Transmitter Link).
- > **RADIO LINKS TOPICS:** i radio links RVR sono conosciuti nel mondo per l'ottimo rapporto prezzo/prestazioni.
- > **AUDIO PERFORMANCE:** le caratteristiche audio di rilievo di questi apparati sono i bassi valori di distorsione, di intermodulazione e l'alto rapporto segnale rumore.
- > **HARDWARE FEATURES:** il segnale è disponibile nelle forme **MPX** (cioè il segnale di banda base completo) e in versione mono. Solo per la **versione stereo** (PTRL-LCD/S e RXRL-LCD/S) il segnale è disponibile nelle forme stereo (connettori LEFT e RIGHT), MPX e nella versione mono.
- > **INPUT/OUTPUT INTERFACE:** coder integrato ad elevate prestazioni, ingressi audio analogici Mono e segnale composito MPX ed ausiliari per segnali SCA/RDS. Solo per la **versione stereo** (PTRL-LCD/S e RXRL-LCD/S) sono previsti ingressi audio analogici L&R.
- > **WORKING FREQUENCIES:** le bande di frequenza di lavoro standard sono 220 MHz ÷ 240 MHz (step di 5KHz) oppure 420 MHz ÷ 440 MHz (step di 5KHz) oppure 900 MHz ÷ 960 MHz (step di 5KHz). La frequenza di lavoro (e quindi la banda) va specificata al momento dell'ordine.
- > **EASE OF MAINTENANCE:** estrema accessibilità e semplicità di manutenzione grazie ad una avanzata ingegnerizzazione modulare dell'apparato.
- > **TECHNOLOGICAL INNOVATION:** elevata continuità di esercizio garantita dalla tecnologia costruttiva SMD.
- > **INTERFACE CONTROL:** controllo completo basato su di un microprocessore facilmente programmabile da menu o via RS232 con lettura su display LCD di tutti i parametri principali.
- > **REMOTE CONTROL:** i principali parametri sono disponibili anche su connettore di telemetria per controllo da remoto delle macchine.
- > **RELIABILITY/CONTINUITY:** la presenza del connettore **24V CC** collegato a una batteria o fonte di alimentazione alternativa, permette all'apparato il funzionamento anche in caso di interruzione dell'alimentazione di rete.

Technical specifications

Parameters	PTRL-LCD	RXRL-LCD
	Values	Values
GENERALS		
Rated output power	10 W	
Frequency range	130 ÷ 176 MHz 190 ÷ 510 MHz 780 ÷ 980 MHz In 25 MHz bands Other frequencies available on request	
Operational mode	Mono, Stereo, Multiplex	
Modulation type	Direct carrier frequency modulation	
Primary Power	80 ÷ 260 VAC or 24 VDC	
AC power Consumption	120VA	
Physical Dimensions (W x H x D)	483 x 88 x 394 mm	
Weight	7 kg	6 kg
Environmental working temperature	-10 ÷ 50 °C / 95% relative Humidity non condensing	
Frequency stability	±1 ppm	
Spurious & harmonic suppression	<70 dBc	
Asynchronous AM S/N ratio	≥60 dB	
Synchronous AM S/N ratio	≥50 dB	
Preemphasis	0/50 (CCIR) μS, 75 (FCC) μS selectable through DIP-switch	
MONO/MPX OPERATION		
S/N FM	> 75 dB	> 70 dB
Frequency response	± 0.3 dB (40 Hz ÷ 100kHz)	
Total harmonic distortion	≤ 0.04 %	
OPTIONAL INTERNAL STEREO CODER OPERATION		
S/N FM	> 75 dB	> 65 dB
Frequency response	± 0.3 dB (40 Hz ÷ 15kHz)	
Total harmonic distortion	≤ 0.04 %	
Stereo separation	> 50 dB	> 48 dB
AUDIO INPUTS / OUTPUTS		
Left-Mono	XLR F balanced; Impedance: 600 or 10 k ohm; Level: -13 ÷ +13 dB	XLR M balanced; Impedance: 100 ohm; Level: -10 ÷ +14 dB
Right	XLR F balanced; Impedance: 600 or 10 k ohm; Level: -13 ÷ +13 dB	XLR M balanced; Impedance: 100 ohm; Level: -10 ÷ +14 dB
MPX unbalanced/RDS	BNC unbalanced; Impedance: 10 k or 50 ohm; Level: -20 ÷ +13 dBu	BNC unbalanced; Impedance: 100 ohm; Level: -20 to +13 dBu
SCA	2 x BNC unbalanced; Impedance: 10 k ohm; Level: -20 ÷ +13 dBu	2 x BNC unbalanced; Impedance: 100 ohm; Level: -20 to +13 dBu
OTHER CONNECTIONS		
RF output / input	N (50 ohm)	
RF Monitor	BNC; Level: +13 dBm ±6 dB	
IF Monitor		BNC; Lvl: -25 dBm; Freq: 10,7 MHz
Interlock in	BNC	
Interlock out / Mute		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)	
Spectrum Optimization	EN 300 454-2 V1.1.1 (2000-08)	

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.

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Ordering information

<i>PTRL-LCD unit version</i>		<i>RXRL-LCD unit version</i>	
<i>Code</i>	<i>Description</i>	<i>Code</i>	<i>Description</i>
PTRL-LCD.200-220	LCD Radio Link transmitter 200-220 MHz	RXRL-LCD.200-220	LCD Radio link receiver 200-220MHz
PTRL-LCD.220-240	LCD Radio Link transmitter 220-240 MHz	RXRL-LCD.220-240	LCD Radio link receiver 220-240MHz
PTRL-LCD.230-250	LCD Radio Link transmitter 230-250 MHz	RXRL-LCD.230-250	LCD Radio link receiver 230-250MHz
PTRL-LCD.240-260	LCD Radio Link transmitter 240-260 MHz	RXRL-LCD.240-260	LCD Radio link receiver 240-260MHz
PTRL-LCD.260-280	LCD Radio Link transmitter 260-280 MHz	RXRL-LCD.260-280	LCD Radio link receiver 260-280MHz
PTRL-LCD.280-300	LCD Radio Link transmitter 280-300 MHz	RXRL-LCD.280-300	LCD Radio link receiver 280-300MHz
PTRL-LCD.300-320	LCD Radio Link transmitter 300-320 MHz	RXRL-LCD.300-320	LCD Radio link receiver 300-320MHz
PTRL-LCD.310-330	LCD Radio Link transmitter 310-330 MHz	RXRL-LCD.310-330	LCD Radio link receiver 310-330MHz
PTRL-LCD.320-340	LCD Radio Link transmitter 320-340 MHz	RXRL-LCD.320-340	LCD Radio link receiver 320-340MHz
PTRL-LCD.340-360	LCD Radio Link transmitter 340-360 MHz	RXRL-LCD.340-360	LCD Radio link receiver 340-360MHz
PTRL-LCD.360-380	LCD Radio Link transmitter 360-380 MHz	RXRL-LCD.360-380	LCD Radio link receiver 236-380MHz
PTRL-LCD.380-400	LCD Radio Link transmitter 380-400 MHz	RXRL-LCD.380-400	LCD Radio link receiver 380-400MHz
PTRL-LCD.400-420	LCD Radio Link transmitter 400-420 MHz	RXRL-LCD.400-420	LCD Radio link receiver 400-420MHz
PTRL-LCD.420-440	LCD Radio Link transmitter 420-440 MHz	RXRL-LCD.420-440	LCD Radio link receiver 420-440MHz
PTRL-LCD.440-460	LCD Radio Link transmitter 440-460 MHz	RXRL-LCD.440-460	LCD Radio link receiver 440-460MHz
PTRL-LCD.460-480	LCD Radio Link transmitter 460-480 MHz	RXRL-LCD.460-480	LCD Radio link receiver 460-480MHz
PTRL-LCD.815-838	LCD Radio Link transmitter 815-838 MHz	RXRL-LCD.815-838	LCD Radio link receiver 815-838MHz
PTRL-LCD.845-852	LCD Radio Link transmitter 845-852 MHz	RXRL-LCD.845-852	LCD Radio link receiver 845-852MHz
PTRL-LCD.920-940	LCD Radio Link transmitter 920-940 MHz		
PTRL-LCD.940-960	LCD Radio Link transmitter 940-960 MHz		

Options for RXRLLCD - Opzioni per RXRLLCD

<i>Code</i>	<i>Description</i>
/O5-RXRLLCD	Stereo decoder card option <i>Opzione scheda decoder stereo integrato</i>
/S-PTRLLCD	Stereo coder card option <i>Opzione scheda stereo integrata</i>

The installation of stereo card option can be performed only by an RVR certified service centre.
L'installazione della scheda stereo può essere eseguita solo ed esclusivamente da un centro di assistenza autorizzato RVR.



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