



**RE 1**  
WIRELESS™

P R O F E S S I O N A L

M I C R O P H O N E

S Y S T E M



*The loudspeaker arrays have gone up. The stage design is finished. The pyrotechnics have been coordinated. The front-of-house engineer has everything tweaked to his liking. Yet, he takes the time to test and retest the wireless several times. Why? Because like most engineers worth their weight, this guy knows that poor wireless can ruin a show. It is absolutely essential that everything work 100% — with no drop-outs or interference — all systems go, without-a-hitch.*

*Where does the engineer turn to minimize the stress of his job? To Electro-Voice®, a company that has over 25 years of experience in wireless innovations. The RE-1™ Wireless system takes frequency agility to a whole new level... touring market power with unmatched simplicity. The clear channels have always been there — but it took*



*EV to bring them to your fingertips. Now you can feel secure that even the most crowded RF environments — places like New York City or the San Francisco Bay area — are fully manageable with the Electro-Voice RE-1!*

*So, when the demands of high-energy, real-world touring present themselves, be prepared... whether the show is in Yankton, South Dakota or Dallas, Texas, performers have to sound their very best. Wired or wireless, professional sound engineers will tell you that there is absolutely no room for mistakes in the production of upscale performances. Bottom line: When only the very best in wireless technologies will do, step up to the Electro-Voice RE-1™ Wireless...*

## RECEIVER FEATURES AND BENEFITS



- Optimized channel groups allow up to 16 systems to operate simultaneously in one frequency band. For groups larger than 16, EV can help with the coordination and custom groups are easily programmed.
- Programmable in 25 kHz steps across 24 MHz operating bandwidth, there are over 950 possible channels so you can always find a clear channel.
- Advanced ClearScan™ automatic group and channel selections, allows quick, simple setup.
- Backlit LCD Display shows the Sound Engineer the Group/Channel, transmitter battery status, diversity operation, RF and Audio level meters, and space for a custom name (2 lines, 10 characters each).
- Specially designed "Sound Check" mode provides the ability for one person to walk test the microphone in the performance space with tangible results.
- Patented DSP Posi-Phase™ Diversity System for maximum range and audio quality.
- Balanced XLR microphone output and 1/4-inch unbalanced adjustable line-level output to match the application.
- CDR-1000 Dual Receiver includes internal power supply, headphone monitoring jack, balanced line-level output, antenna pass through, DC power on antenna jacks for optional RF amplifier, and RE-OneLink™ PC software for remote monitoring and control.
- Rackmount hardware included.
- Three-Year Limited Warranty.

# PROFESSIONAL MICROPHONE SYSTEM

## TRANSMITTER FEATURES AND BENEFITS

### Transmitter Features

- Unique "smart" battery circuit in the transmitters means there is no way to put the battery in wrong.
- LCD display and the same four control buttons as the receiver so programming a channel or frequency is quick and easy.
- Low battery LED will light when the battery needs a replacement.
- One on/off switch that also acts as a mute, great for pauses in presentations and worship services.
- On/off button can be disabled to prevent accidental turnoffs during a performance.
- Normal and High power transmit means you use just enough power for the application, which maximizes the number of simultaneous systems and limits RF spill over into adjacent buildings/theaters.

### Handheld Features

- Interchangeable microphone head allows a choice of elements to fit the vocalist's style and environment.
- N/DYM® 767a premium dynamic vocal microphone with VOB™ (Vocal-Optimized Bass), excellent gain-before-feedback for high SPL stages.
- The new RE-510 premium condenser vocal microphone for experienced vocalists, spoken word and quieter stages.
- Internal 1/2-wave antenna for excellent range; stays out of harm's way.
- An over-molded Warm-Grip™ handle reduces handling noise and encourages proper microphone technique for better performances.



## APD-4 ANTENNA DISTRIBUTION SYSTEM

- Drives up to four CSR-1000 diversity receivers using a single pair of antennas to conserve rack space and eliminate the "antenna farm". (8 TNC output and 2 front-mount antenna cables included, 1/2-wave antennas sold separately.)
- Drive 24 receivers from one APD-4 and 2 antennas using the antenna pass through splitter included on every CDR-1000 Dual Receiver.
- Supports "cascade" arrangement of multiple APD-4 splitters to drive up to 16 CSR-1000 receivers using just 2 antennas.
- Power outputs for up to four CSR-1000 receivers help conserve power strip space (4 cables included).



### Bodypack Features

- Cast magnesium housing weighs only ounces but is durable enough to take the pounding on tour.
- Detachable 1/4-wave antenna allows for easy replacement or the use of different antenna options.
- Cell phone style beltclip included for quick and easy attachment. Optional pouches also available for wearing under costumes or for more vigorous applications.
- EV has a wide selection of lapel and headworn microphones and microphone accessories to go with the RE-1 bodypack transmitter.

### Unique Bodypack Features for Guitar Applications

- Dual band compander circuit provides the audio bandwidth required to cover the lows of a bass guitar to the highs of a solid body.
- Mic/Instrument switch adds a 20 dB pad in the transmit path so the standard bodypack can be used for microphone and guitars.
- Guitar patch cord featuring George L's® cable with solderless, interchangeable right angle and straight plugs included to fit your guitar.



## Advanced ClearScan™

*Frequency agile wireless microphones solve many problems with interference and compatibility. They also create a problem, how do you know which channel is best to use in your application? Advanced ClearScan scans the energy on each channel, and it selects the clearest preset groups of up to 16 compatible channels and the clearest channels within the clearest group. Without a separate computer, difficult software, or an RF consultant... with the touch of a couple of buttons and a few seconds, Advanced ClearScan gives you the confidence of knowing you have clear, compatible channels.*

## ADVANCED CLEARSCAN™ INCLUDES THREE OPTIONS:

### ClearScan™ All

- Scans all 10 factory preset groups and any user-defined groups that have channels assigned in them.
- The scan produces a list of open groups and channels in order of maximum number of open channels.
- The results are displayed as the group number and the open channels within that group starting with the most open group. The Arrow keys allow you to step through the other groups so you can see all of your options.
- Once you have selected the group you like, pressing SET with that group showing starts the ClearScan Group function.

### ClearScan™ Group

- Scans all of the channels in the currently selected group.
- The results are displayed in a screen that shows the group number and all of the open channels listed in the order of clearness.
- The Arrow keys allow you to scroll through the channels to highlight the channel you want to install.
- Pressing the SET key installs the highlighted group/channel and returns to the main operating screen.
- Set the transmitter group and channel to match and set up is complete.

### ClearScan™ Band

- This unique feature scans the entire 24 MHz operating band looking for clear frequencies, regardless of channels and groups.
- This function can be used to find one clear frequency in a very tough RF environment or find starting points for custom channel programming.
- Since the frequencies returned from the ClearScan Band function have not been screened for inter-modulation problems, walk testing or coordination help from EV would be required before multiple channels from ClearScan Band results could be used at the same time.

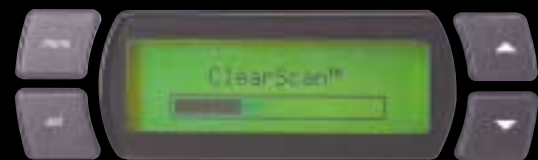
### Multiple System Setup with Advanced ClearScan™

- Because the factory preset groups are made up of compatible channels, setting up to 8, 10 or even 16 systems is a snap. Just run ClearScan All once to select a group with enough free channels for all of your systems.
- Once the first system is set up, you simply leave that transmitter on and run ClearScan Band on the next receiver. The next clearest channel is then set on system number two, leave that transmitter on and repeat until all of the systems have channels assigned.

## A D V A N C E D ClearScan™



THE MENU KEY SELECTS THE CLEARSCAN MENU



PRESSING THE SET KEY STARTS THE SCANNING PROCESS



THE CLEAREST GROUP AND OPEN CHANNELS WITHIN THAT GROUP ARE DISPLAYED.



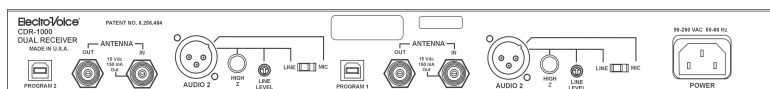
PRESSING THE SET KEY ACCEPTS THE GROUP, RUNS CLEARSCAN GROUP AND DISPLAYS THE OPEN CHANNELS IN ORDER OF CLEARNESS.



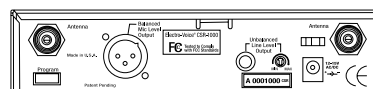
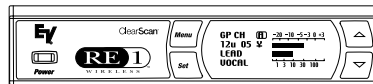
PRESSING THE SET KEY ACCEPTS THE CHANNEL, INSTALLS THE GROUP AND CHANNEL AND RETURNS TO THE MAIN SCREEN.



## CDR-1000 Receiver



## CSR-1000 Receiver



## CSR-1000 Receiver

<b>Controls</b>	
Front Panel:	On/Off, Menu, Set, Up, Down Buttons
Rear Panel:	1/4 in. output level
<b>Indicators LCD</b>	
Backlit Display:	Group, Channel, Diversity, Label, Set-up Transmitter Battery Level, Audio Signal Amplitude and RF Signal Strength, Squelch
<b>Connectors</b>	
Back Panel:	1/4 in. unbalanced adjustable line level output XLR balanced mic level output USB programming port
<b>Antennas:</b>	Detachable 1/4 wave
<b>RF Specifications</b>	
Frequency Range:	A Band 680 – 704 MHz (TV Channels 49-52) B Band 722 – 746 MHz (TV Channels 56-59)
<b>Number of Channels:</b>	950 possible (programmable in 25kHz steps)
<b>Diversity:</b>	DSP SecurePhase True Diversity
<b>Squelch:</b>	Tone Code plus Adjustable Amplitude
<b>Receiver Type:</b>	Synthesized PLL Agile UHF
<b>RF Sensitivity:</b>	<0.8uV for 12 dB SINAD
<b>FCC Type Acceptance:</b>	Approved under Part 15
<b>Audio Specifications</b>	
Frequency Response:	100 – 15 kHz +/- 2 dB Microphone 30 – 15 kHz +/- 2 dB Instrument
<b>Audio Output Level:</b>	
Line Level	8 mV - 0.775V RMS @ 100 k ohm load
Balanced	-10 dBV max (@ 40kHz deviation)
<b>Distortion:</b>	Less than 0.5% (@ 1kHz, 40 kHz deviation)
<b>Signal to Noise Ratio:</b>	> 110 dB (A)
<b>Dynamic Range:</b>	>100 dB
<b>General Specifications</b>	
Power Supply:	External 12 VAC 750mA in-line with cord
<b>Size:</b>	1.72 in. H x 7.50 in. W x 8.38 in. D 43.69 mm H x 190.50 mm W x 212.85 mm D

## CDR-1000 Features

<b>Additional Audio Output:</b>	Adjustable Balance Line Level at XLR
<b>Additional Controls:</b>	1/4 in. Headset Jack with Selector and Volume Control
<b>Antenna Output:</b>	TNC
<b>Powered Antenna Inputs:</b>	12Vdc, 15mA
<b>Power Supply:</b>	Internal, Universal Cord
<b>USB Monitoring &amp; Control:</b>	RE-OneLink Software
<b>Size:</b>	1.72 in. H x 16 in. W x 12 in. D 43.69 mm H x 406.4 mm W x 304.8 mm D

## CSB-1000 Bodypack Transmitter

<b>Controls:</b>	Power On/Off, Audio Gain Adjustment with 40 dB range, Transmit Power Switch, Microphone/Instrument Switch (0, -20 dB), Menu, Set, Up, Down Buttons
<b>Indicators:</b>	Red LED Low Battery Indicator, LCD displays one of the following: Channel/Group, Frequency, or Battery Level
<b>Battery Life:</b>	8 hours with 9V alkaline typical
<b>Antenna:</b>	External 1/4 wave detachable
<b>Connector:</b>	TA4F input for microphone Pin 1 ground, Pin 2 Mic input Pin 3 +5V Bias, Pin 4 +5V through 3k ohm
<b>RF Output:</b>	
Normal:	5 mW typical
High:	50 mW typical
<b>Case Material:</b>	Cast Magnesium
<b>Size:</b>	3.75 in. H x 2.6 in. W x 0.9 in. D 94 mm H x 66 mm W x 23 mm D

## CSH-1000 Handheld Transmitter

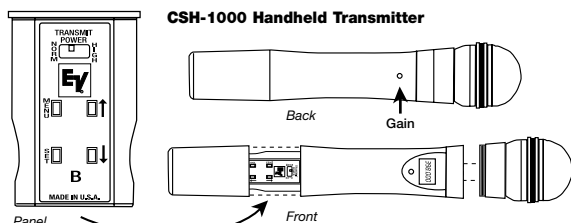
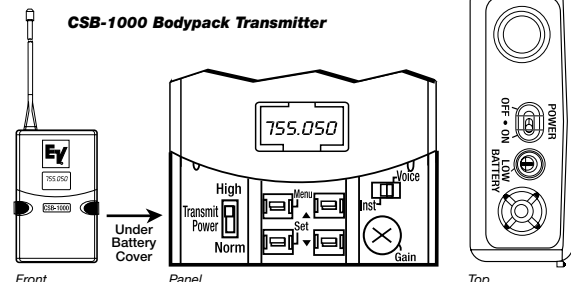
<b>Controls:</b>	Power On/Off, Audio Gain Adjustment with 40 dB range Transmit Power Switch, Menu, Set, Up, Down Buttons
<b>Displays:</b>	Red LED Low Battery Indicator, LCD displays one of the following: Channel/Group, Frequency, or Battery Level
<b>Battery Life:</b>	8 hours with 9V alkaline typical
<b>Antenna:</b>	Internal 1/2 wave
<b>Microphone Elements:</b>	EV N/D 767a Dynamic or RE-510 Condenser
<b>RF Output:</b>	
Normal:	5 mW typical
High:	50 mW typical
<b>Size:</b>	10.5 in. (26.8 cm) long

Front

Back

Front

Back



## RE-1 Accessories and Parts

	Model #	Order #
<b>Omnidirectional MicroMini™ Lapel Mic:</b>	RE90TX	71753318
<b>Unidirectional MicroMini™ Lapel Mic:</b>	ELM-33S	70926001
<b>Crown® CM-311 Headworn Uni Mic:</b>	HM311	HM311
<b>Headworn Cardioid Condenser Mic:</b>	HM7	HM7
<b>1/4 Wave Rx Antenna 600-746 (A/B):</b>	ANU-14	879010
<b>1/2 Wave Rx Antenna (A and B) (680-860 MHz):</b>	FA-1	860031
<b>1/2 Wave Antenna Bracket:</b>	AB-2	71138000
<b>UHF Antenna Amplifier (520 - 806 MHz):</b>	UAA-500	7186400
<b>Antenna /Pwr Distribution (A/B) (600-780 MHz):</b>	APD- 4	APD4
<b>Termination Plug For APD-4:</b>	TP-2	650095
<b>Directional Rx Antenna (450-900 MHz):</b>	LPA-500	LPA500
<b>Low Loss Coaxial Antenna Cable:</b>		
	CXU-25 ft	71151025
	CXU-50 ft	71151050
	CXU-75 ft	71151075
	CXU-100 ft	71151100
<b>1/4 Wave Bodypack Tx Antenna (A):</b>	AN-Flex A (GREEN)	879220-4
<b>1/4 Wave Bodypack Tx Antenna (B):</b>	AN-Flex B (RED)	879220-5
<b>1/4 Wave Super-Flex Tx Antenna (A):</b>	AN-Sflex A (GREEN)	879538-4
<b>1/4 Wave Super-Flex Tx Antenna (B):</b>	AN-Sflex B (RED)	879538-5
<b>Bodypack Pouch:</b>	WP-1000	879553
<b>Guitar Cord:</b>	MAC-G2	879526
<b>767a Dynamic Head for CSH-1000:</b>	RC767A	71837000
<b>RE510 Condenser Head for CSH-1000:</b>	RC510	71839000
<b>Mic Stand Adapter for CSH-1000:</b>	MSA-1000	879564



STEP UP TO ELECTRO-VOICE®

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