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03/2015 F.01U.311.591 Rev 03

UHF WIRELESS MICROPHONE

USER GUIDE

R-300C
HT-300C
BP-300C

EZsync
Electro-Voice
R 300
ClearScan
SYNC
ARSCAN
SET

Electro-Voice

CE 1177 ⓘ

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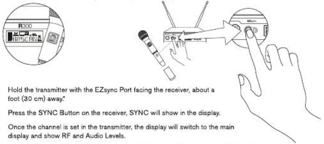
01 **QUICK SET-UP:** RECEIVER

1. Do not connect the receiver to any other equipment yet!
2. Connect the two Antennas to the receiver.
3. Install the blades into the power supply, plug it into the back of the receiver, and into an outlet.
4. Press the POWER switch. Display will light up.
5. Press and hold the ► button until CLEARSCAN scrolls across the screen.
6. When CLEARSCAN stops, the receiver will be set to the clearest channel.
7. Mute the Audio Mixer channel where the receiver will be plugged in, or set it to minimum.
8. Leave the receiver ON and connect it to the audio system using either the XLR connector or ¼-inch line level jack.

Receiver "Quick Set-up" is complete.

QUICK SET-UP: TRANSMITTER

1. With the Power switch on the transmitter OFF, install two fresh AA batteries into the transmitter.
2. Press the transmitter Power Switch until the display comes on.
3. Loosen the transmitter battery cover to expose the EZsync Port, as shown.



4. Hold the transmitter with the EZsync Port facing the receiver, about a foot (30 cm) away.*
5. Press the SYNC Button on the receiver, SYNC will show in the display.
6. Once the channel is set in the transmitter, the display will switch to the main display and show RF and Audio Levels.

***Note**: When performing EZsync, make sure lighting conditions are not too bright. Extremely bright lighting can interfere with EZsync.

Transmitter "Quick Set-up" is complete.

QUICK SET-UP: SYSTEMS OPERATION

1. Set the mixer/amp gain.
2. Talk or sing into the microphone or play the guitar at a normal volume. You should hear audio coming out of the system.
3. You may have to adjust the gain (via the control next to the connector on the receiver back panel) to provide the best input volume for your mixer/amp.

Notes:

- See page 10 of this manual for more information.
- See Image 11 of the Quick Start Guide for gain control location.

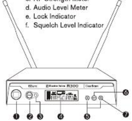
"Quick Set-up" is now complete. Please enjoy your R300 system.

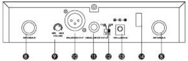
DETAILED COMPONENT DESCRIPTIONS

2.1 | R300 Receiver

RECEIVER CONTROLS, CONNECTORS

1. Power ON/OFF
2. SYNC Data Transfer Button
3. Infrared EZsync Window
4. Graphical Display
    a. Channel or Frequency Display
    b. Diversity Indicator
    c. RF Strength Meter
    d. Audio Level Meter
    e. Lock Indicator
    f. Squelch Level Indicator
5. Scroll Down and Up (◀ and ▶) Control Buttons
6. SET Control Button
7. ClearScan Control (press and hold ▶ button)
8. TNC Antenna Input Connectors (2)
9. Audio Output Volume Control
10. XLR Balanced Output Connector
11. ¼ Inch Unbalanced Line Level Audio Output Connector
12. Unbalanced Output Level Switch (-10dB or 0dB)
13. DC Power Connector (12V DC, 500mA)
14. Power Cord Retainer

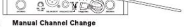




2.1 | Receiver Setup & Operation

1. Place the receiver and antennas where there is a clear line of sight to the area where the transmitter will be used. Rotate the antennas to separate them by 90 degrees.

2. **Install the appropriate power connection blades into the power supply and connect the power supply** cord to the receiver. Plug the power supply into an AC outlet. Push the power button to turn the receiver on and confirm that it is on by checking the main display screen.



3. **Manual Channel Change**
   a. The ◄ and ► buttons allow you to scroll through the Channels. When the Channel you desire is displayed, stop scrolling.
   b. After 2 seconds the displayed channel number will start to flash.
   c. The number will stop flashing and the new channel is installed.
   d. Turn on the transmitter and hold the EZsync port facing the receiver EZSync port, about a foot (30 cm) away, as described on page 5.

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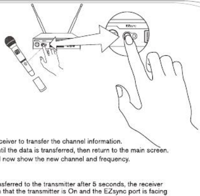


   e. Press the SYNC button on the receiver to transfer the channel information.
   f. The receiver will display SYNC until the data is transferred, then return to the main screen.
   g. The transmitter display screen will now show the new channel and frequency.

NOTE:

1. If the channel data was not transferred to the transmitter after 5 seconds, the receiver will display ERROR. Be certain that the transmitter is On and the EZsync port is facing the receiver and try again.
2. If the data still does not transfer, try new batteries, or move the unit to a shaded area away from direct sunlight or bright lights before trying again.

continued on next page

4. ClearScan: This feature automates the process of finding a clear channel.
   a. To scan for the clearest channel in a group, press and hold ► until CLEARSCAN appears in the display, then release the button.
   b. When the scan is complete, the display will show the clearest available channel.
   c. Use the SYNC button to transfer the new channel as in step 3.

5. During set up make sure the mixer or amplifier input used for the R300 is muted or turned down to a minimum level.

6. Plug an audio cable (not supplied) into the 3 pin XLR or ¼-inch TRS output of the R300.

Note: The XLR connector is the preferred connection since the output is balanced and will be more immune to noise for longer runs of cable although either can be used with good results. Set the balanced output level on the back panel to 12 o'clock (midway in the range) to start and adjust later if necessary. If the ¼-inch unbalanced output is used, start with adjustment switch in the -10dB setting.

continued on next page

7. With the transmitter on, speak into the microphone or play the guitar. Turn up the level on the mixer or amplifier until you are able to hear the desired signal. If no audio is present, repeat setup and refer to the troubleshooting section.

Note: It may be necessary to adjust the receiver output until the volume level from the wireless system approximates the level of an equivalent wired microphone/instrument.

8. **DISPLAY** The main display can be adjusted to display the Channel number or the Frequency.

Note: At any time the item not selected for the main display can be shown for 5 seconds by pushing the SET button once.

   a. Press and hold the SET button until DISPLY shows in the display.
   b. Press SET and FREQUENCY or CHANNEL will flash in the display.
   c. Press ◄ for FREQUENCY or ► for CHANNEL and press SET.
   d. Display will return to the main screen and the selected item will be displayed.
   e. At any time the item not selected for the main display can be shown for 5 seconds by pushing the SET button once.

continued on next page

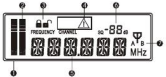
9. **Change Lock-Out** This feature can be useful when the receiver is in a location where unauthorized personnel have access to the receiver. With the LOCK ON, the channel cannot be changed and the word LOCK is displayed when the ◄ or ► button is pushed.

   a. Press and hold the SET button until DISPLY shows in the display.
   b. Press ► to display LOCK.
   c. Press SET and ON or OFF will be displayed to show the status of the lock-out.
   d. Press ◄ to turn the LOCK ON or ► to turn the LOCK OFF and press SET.
   e. Display will return to the main screen and padlock symbol in the upper left of the display will show the lock status.

continued on next page

10. **Squelch Adjustment** – The squelch setting can be used to maximize range or immunity to noise.
   a. Turn the transmitter off.
   b. On the receiver, press and hold the SET button until DISPLY shows in the display.
   c. On the receiver, press ► two times to display SQELCH.
   d. On the receiver, press SET and the squelch setting in the middle right of the screen (SQ 10dB) will flash.
   e. On the receiver, press ◄ to decrease the squelch setting or ► to increase it.
   f. On the receiver, press SET to enter the new setting and return to the main screen.
   g. Turn on the transmitter and walk test the unit. Maximum squelch (50dB) maximizes noise immunity but limits the range. Minimum squelch (5dB) will maximize the range but allow more noise to break through the squelch. **Never leave the squelch set to 0dB except for testing, white noise will be constantly present on the audio outputs.**
   h. Repeat to fine tune receiver squelch to the desired setting.

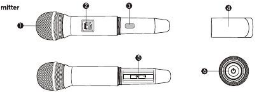
2.1.2 | Receiver Main Operating Screen



Display:
1. RF Signal Meter
2. Audio Meter
3. Lock Indicator
4. No Signal Indicator
5. Channel Number (01 to 32) or Frequency
6. Squelch Setting
7. Antenna Diversity Status A or B antenna

Controls:
1. Press ◄ or ► to change channels
2. Press and hold ► for 3 seconds starts ClearScan, CLEARSCAN scrolls across the display
3. Press SET once to display FREQUENCY or CHANNEL, whichever is not showing
4. Press and hold SET for 3 seconds to access settings menu

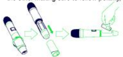
2.2 | Handheld Transmitter



HT-300 CONTROLS, CONNECTORS AND INDICATORS
1. Microphone Element
2. Backlit LCD Display
    a. Channel
    b. Frequency
    c. Battery Level
    d. Mute Indicator
3. EZSync Infrared Port
4. Battery Cover – Screw type
5. Battery Compartment – Two AA Batteries
6. On/Off/Mute button

2.2 | Handheld Transmitter Setup & Operation

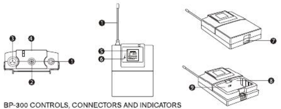
1. **Insert Batteries.**
    a. Remove the battery compartment cover by unscrewing it completely.
    b. Insert two AA batteries as shown, sliding one up into the housing to make room for the other making sure to follow polarity, as marked.



2. Turn the unit on by pressing and holding the on/off button for 3 seconds, and the display will light up.
3. If a new channel is desired, use EZsync as in Section 2.1 and close battery compartment.
4. **Verify reception.**
    a. With the transmitter and receiver on a matching Channel, the main receiver display should be indicating a RF signal on the bar graph.
    b. Speak into the microphone and the Audio Meter bar graph should indicate audio signal presence.
    c. If the level meters do not show reception, make sure the channels are matching and refer to the troubleshooting section.

5. **Mute Function** – press and hold on/off button for 2 seconds until MUTE appears in the LCD display and sound mutes. Repeat to turn mute off.

2.3 | Bodypack Transmitter



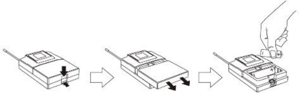
BP-300 CONTROLS, CONNECTORS AND INDICATORS

1. Antenna – Flexible ¼ wave antenna
2. Power On/Off/Mute Button
3. TA4 Microphone Connector
4. On/Mute LED – Green when transmitter is on, Red when muted

continued on next page

2.3 | Bodypack Transmitter *continued*

5. LCD Display
    a. Channel
    b. Frequency
    c. Battery Level
    d. Mute Indicator
6. EZsync infrared window
7. Battery Compartment Latch – push down latch and slide cover as shown
8. Two AA Battery Compartment – follow polarity as marked
9. LAV/INS Gain Switch



2.3.1 | Bodypack Transmitter Setup & Operation

1. **Insert Batteries**
    a. Open the battery compartment by pressing in on the latch and sliding the door down.
    b. Insert two AA batteries with + and – as indicated.
    c. Close the battery door by pushing up.

2. Turn the unit on by pressing and holding the on/off button for 3 seconds, and the LCD display will light up. If channel has not been set, set channel according to 2.1.

3. **Microphone/Guitar Operation.**
    a. For Lapel the gain switch should be in the LAV position.
    b. For Headworn Microphones the gain switch should be in the INS position.
    c. If lapel microphones are too sensitive and the audio meter on the receiver is reaching the peak, put the gain switch in INS to lower the gain.
    d. For guitar operation using the optional R300GTRCBL cable, the gain switch should be in the LAV position for passive pickups, and in the INS position for active pickups. Should the output of the passive pickups be too high in the LAV position, switch to the INS position for reduced transmitter input gain.

4. **Mute Function** – press and hold on/off button for 2 seconds until MUTE appears in the LCD display, On LED turns red, and sound mutes. Repeat to turn mute off.

03 GUIDELINES AND RECOMMENDATIONS For Best Performance

Compatibility

The transmitter and receiver must be of the **same frequency band** and set to the same channel in order to work together. The R300 is available in four frequency bands, A, B, C and E (Europe only). The band information is available in the serial number label on the receiver, the serial number label on the handheld transmitter, and on the back panel label on the bodypack.

Using Multiple Wireless Systems

If three or more R300 systems and/or other UHF/VHF wireless systems are being used in the same location, proper frequency coordination is necessary to avoid interference. Some channels in the R300 are designed to work together, see the channel groups in the back of this guide for more information. Contact your dealer or Electro-Voice for assistance if you are planning more systems or using the R300 with other wireless equipment.

Multiple Systems and R300

The ClearScan function can be used to set up any two R300 systems. Just scan with the first unit receiver, set the transmitter to that clear channel and leave it on. Then scan the second unit receiver for another clear channel. If 3 or more systems in the same frequency band are used in the same room, put all of the channels in the same group as indicated by the channel groups on page 28-31.

Potential Sources of Interference

There are many potential sources of interference for your wireless system. Any electronic product that contains digital circuitry including digital signal processors (reverb/multi-effects units), electronic keyboards, digital lighting controllers, CD and DVD players, and computers, all emit RF energy that can adversely affect the performance of your wireless system. It is always best to place the receiver as far away as possible from these devices to minimize potential problems.

Analog and Digital Television stations can also interfere with your wireless system. The R300 is designed to operate over 16MHz of RF bandwidth, which covers 3 US TV stations. If two of the three stations are used in your area, it will severely limit the number of systems that will operate together and you should be using a different band.

Battery Recommendations

Fresh AA alkaline batteries from a quality manufacturer will yield the best performance from your R300 transmitters. If sound quality degrades during use, it may be the result of a weakening battery.

Receiver and Antenna Placement

Do not place the receiver near a large metal object or surface. Locate the receiver as close as possible to the area where the transmitter will be used. Ideally, position the receiver/antennas within sight of the transmitter. When using multiple systems, do not allow antennas to cross or touch each other.

Transmitter and Antenna Distance

Keep all transmitters at least 3 meters (10ft) away from the receivers and antennas for best operation. If possible, mount the receiver antennas 3 meters (10ft) above the stage so transmitters can not come too close.

04 TROUBLESHOOTING GUIDE

Problem	Possible Causes	Solutions
No audio and no display on the receiver	Receiver is off	Make sure that the power supply is properly connected and the on/off button is in the on position.
No audio and no RF signal indicator on the receiver display	Transmitter is off	Turn on transmitter power switch.
	Transmitter is on a different channel or is a different band	Check band information on serial number label and match to receiver, reset channel (see section 2.1).
	No (or dead) battery in transmitter	Insert fresh batteries in transmitter.
	Faulty battery contacts	Clean and or bend contacts to improve connection.
No Audio with good RF signal indicator	Microphone not connected	Check the TA4F connector on the bodypack or the detachable microphone element connection on the handheld. If possible, try another microphone.
	Transmitter Mute On	Press and hold On/Off button to stop Mute.
No (or low) Audio with good RF signal and Audio indicators on receiver display	Receiver audio output cable is damaged or disconnected	Connect, repair or replace audio output cable.
	Gain not sufficient on mixer/preamp/amp input or it is muted	Increase gain on mixer or un-mute the input.
	Receiver output too low	Increase the audio output setting.
Distorted audio signal	Receiver output too high	Decrease the receiver output setting.
	Loud instrument or audio source	Change the bodypack gain switch to INS.
	Battery level low in transmitter	Insert fresh batteries in transmitter.
Interference	Another R300 system in the installation is on the same channel or signals are mixing.	Make certain all units are on different channels. See Frequently Asked Questions section for more helpful information.

Problem	Possible Causes	Solutions
Interference	Another wireless product in the area is on the same frequency or the signals are mixing	Use ClearScan to change the operating frequency.
	Receiver is too close to digital signal processor or similar device	Move the receiver to a different location.
	Strong electromagnetic field from stage lighting or other source near the transmitter or receiver, which may be producing RF noise at or near the operating frequency	Use ClearScan to change the operating frequency. Repair or remove the source of interference. Move the receiver to a different location.
Short range or drop-outs	RF reflective metal obstacles between the transmitter and receiver	Move the obstacles, or reposition the receiver/antennas.
	Poorly oriented beltpack antenna	Check the antenna connection and reorient the bodypack so the antenna is vertical (up and down) and facing the receiver, if possible.
	Squelch set too high	Check squelch setting, higher numerical settings mean shorter range (see page 13).
	Faulty receiving antenna system	Check all antenna connections and reposition to be in line-of-sight with the transmitter.
Can't change settings on receiver	Lockout feature is enabled	Disable lockout by pressing SET for 3 seconds, press ▶ to display LOCK, press SET, press ▶ to turn lock off, press SET.
Transmitter will not sync with receiver	Battery cover on handheld	Remove battery cover, see page 15 for location of EZsync window.
	Lighting in environment is too bright	Shadow infrared ports from light.

05 **FREQUENTLY** ASKED QUESTIONS

Frequently Asked Questions
Q: How can I make sure my R300 system's frequency band will work in my location?
A: If you will be using your system in the USA, you can check R300 compatibility in your location by using the frequency band selector located at http://www.electrovoice.com/frequencyselector. If you are outside of the USA, please contact your local Electro-Voice dealer or technical support center.
Q: Are there any web-based materials or how-to's available which will help me understand my R300 system?
A: R300 how-to videos are posted at http://www.electrovoice.com/evtv.php?category=knowledge
Q: How many R300 systems can I operate at the same time?
A: The number of R300 systems you can operate simultaneously is completely dependent on your local RF (radio frequency) conditions. Under ideal RF conditions (meaning there are no other sources of RF operating within or near your system's bandwidth), the maximum number of simultaneous R300 system within **one tuning bandwidth** is limited to 8 channels within ONE channel group. However, local television broadcasts or other wireless systems operating within your system's tuning bandwidth will reduce that number.
Q: Can I mix frequencies from different groups?
A: No. Multi-channel R300 systems in the same bandwidth (A, B, C, or E) must operate within the same channel group. Only frequencies within the same group are inter-modulation free. Frequencies from different groups may interfere with one another.
Q: Can I use R300 systems from different bands at the same time?
A: Yes. Mixing systems from different bands is possible as long as you follow the group coordination guidelines of each band.

Frequently Asked Questions
Q: Why did I suddenly begin getting interference? During sound check, everything was fine – but after the show began, I started getting interference.
A: Another radio system that wasn't on during sound check began transmitting on, or near your system's frequency. If this happens, ClearScan you system again to find a new, clear frequency.
Q: I've hear the term line-or-sight. What does that mean?
A: In a wireless microphone system, line-of-sight means that optimal performance occurs within one room, with no walls or structural barriers between the transmitter and receiver antennas. Any wall or enclosure the transmitted signal must pass through will diminish the transmitted signal strength at the receiver. Your receiver antennas should be in the room your transmitter is operating within and out in the open, unobstructed by walls or enclosures.
Q: Can I move the receiver antennas that came with my R300 system to another location?
A: Only with the appropriate hardware. And only to the appropriate location. The flexible ½-wave dipole antennas which came with your system only function when connected directly to your receiver's antenna jacks, or when front-mounted in a 19-inch audio rack with the R300 antenna mounting hardware listed in the system accessories table in this guide. Moving these antennas anywhere outside of the rack (such as on a stand or mounted to a wall) will not work. If your needs include the remote mounting of receiver antennas, you must use antennas designed for that application, such as the LPA500 log periodic antenna.

05

FREQUENTLY ASKED QUESTIONS

Frequently Asked Questions
Q: Where is the EZsync port on the R300 handheld transmitter?
A: The EZsync port is located under the handheld transmitter's removable battery cover. Just as you would do in order to change the batteries, you must loosen the battery cover to expose the EZsync port and aim the port directly at the receiver's EZsync port during the syncing operation.
Q: Sometimes I can't get EZsync to work properly. Am I doing something wrong?
A: EZsync uses an infrared beam of light to sync transmitter to receiver. Extremely bright or fluorescent light can interfere with the sync signal. If you experience difficulties with EZsync, shade the ports from extremely bright light sources during the syncing operation.

COMPONENTS AND ACCESSORIES

06

Accessories and Parts	Model #	Order #
R300-L System Uni Lapel	ULM18	F.01U.168.803
R300-E System Headworn Microphone	HM3	F.01U.168.804
Windscreen for ULM18	WS-18	F.01U.168.802
Windscreen for HM3	WS-H3	F.01U.170.778
Beltclip for BP-300	BC-300	F.01U.168.797
Guitar Cord	R300GTRCBL	F.01U.289.662
PL22 Dyanmic Mic Head	RCC-PL22	F.01U.170.777
Foam Windscreen for Handheld	379-1	F.01U.117.911
½ Wave Receiver Antenna A Band	CRA-A	F.01U.168.794
½ Wave Receiver Antenna B Band	CRA-B	F.01U.168.795
½ Wave Receiver Antenna C Band	CRA-C	F.01U.310.181
½ Wave Receiver Antenna E Band	CRA-E	F.01U.168.796
Single Receiver Rack Mount Kit	RM-300	F.01U.168.792
Double Rack Mount Kit	RMD-300	F.01U.168.793
Front Mount Antenna Cables (4)	SFMC-300	F.01U251.469
ANTENNA/PWR DISTRIBUTION (600-760 MHz) (A and B only, not for C)	APD4+	F.01U.117.678
ANTENNA/PWR DISTRIBUTION (760-865 MHz) (E Band)	APD4+Euro	F.01U.117.679
TERMINATION PLUG FOR APD4+	TP-2	F.01U.086.103

07

COMPATIBLE CHANNEL FREQUENCY GROUPS

(Use only channels within the same group when using more than two R300 units in one room.
If you need additional help call 1-800-392-3497 (US and Canada only).

US/EURO Band A 618.5-633.5MHz							
Group 1		Group 2		Group 3		Group 4	
Channel	Freq	Channel	Freq	Channel	Freq	Channel	Freq
1	618.500	9	618.900	17	619.300	25	619.700
2	622.700	10	620.100	18	620.500	26	620.900
3	624.400	11	621.500	19	621.900	27	622.300
4	628.300	12	623.100	20	623.500	28	623.900
5	628.800	13	624.900	21	625.300	29	625.700
6	630.700	14	626.925	22	627.325	30	627.725
7	631.400	15	629.325	23	629.725	31	630.125
8	633.500	16	632.075	24	632.475	32	632.875

US/EURO Band B 678.5-693.5MHz

Group 1		Group 2		Group 3		Group 4	
Channel	Freq	Channel	Freq	Channel	Freq	Channel	Freq
1	678.500	9	678.900	17	679.300	25	679.700
2	682.700	10	680.100	18	680.500	26	680.900
3	684.400	11	681.500	19	681.900	27	682.300
4	688.300	12	683.100	20	683.500	28	683.900
5	688.800	13	684.900	21	685.300	29	685.700
6	690.700	14	686.925	22	687.325	30	687.725
7	691.400	15	689.325	23	689.725	31	690.125
8	693.500	16	692.075	24	692.475	32	692.875

US/EURO Band C 516.5-531.5MHz

Group 1		Group 2		Group 3		Group 4	
Channel	Freq	Channel	Freq	Channel	Freq	Channel	Freq
1	516.500	9	516.900	17	517.300	25	517.700
2	520.700	10	518.100	18	518.500	26	518.900
3	522.400	11	519.500	19	519.900	27	520.300
4	526.300	12	521.100	20	521.500	28	521.900
5	526.800	13	522.900	21	523.300	29	523.700
6	528.700	14	524.925	22	525.325	30	525.725
7	529.400	15	527.325	23	527.725	31	528.125
8	531.500	16	530.075	24	530.475	32	530.875

EURO Band E 850-862,863-865MHz

Group 1		Group 2		Group 3		Group 4	
Channel	Freq	Channel	Freq	Channel	Freq	Channel	Freq
1	850.400	9	850.800	17	851.200	25	850.000
2	851.600	10	852.000	18	852.400	26	854.200
3	853.000	11	853.400	19	853.800	27	855.900
4	854.600	12	855.000	20	855.400	28	859.800
5	856.400	13	856.800	21	857.200	29	860.300
6	858.425	14	858.825	22	859.225	30	863.100
7	860.825	15	861.225	23	861.625	31*	865.000
8*	863.575	16*	863.975	24	864.375	32	–

*Channels 8, 16 and 31 can be used as a group alone in the deregulated band.

08 SPECIFICATIONS

R300 Receiver	
Receiver Type	Synthesized PLL
Frequency Range (RF)	A Band 618.5-633.5MHz B Band 678.5-693.5MHz C Band 516.5-531.5MHz E Band 850-862,863-865MHz
Number of Channels	32
Modulation	+/- 40 kHz
Diversity	Antenna
RF Sensitivity	< 1.0 µV for 12 dB SINAD
Image Rejection	> 55dB
Squelch	Tone Code plus Amplitude
FCC Certification	Approved under Part 15
Power Requirements	12 - 16 VDC, 500mA max
Operating Temperature	5° to 45° C (41° to 113° F)
Dimensions	1.72 in H x 7.8 in W x 8.0 in D (43 mm H x 206 mm W x 210 mm D)

Audio Parameters	
Frequency Response	80 – 18kHz +/- 2dB
Balanced Output	20 dBV (max @ 40 kHz deviation)
Unbalanced Output	Adjustable 8 mV to 0.755V RMS
Distortion	< 1.0%, 0.4% typical (ref 1kHz, 40kHz deviation)
Signal-to-Noise Ratio	> 100dB A Weighted
Dynamic Range	> 95dB
Transmitters BP-300 and HT-300	
Radiated Output	8 mW typical
Microphone Head ElectroVoice	PL22 Dynamic
Power Requirements	Two AA Batteries
Standard Lavalier Microphone	EV ULM18 Uni-Directional Condenser
TA4F Connector Wiring	Pin 1: Ground; Pin 2 Mic Input; Pin 3: +5V bias; Pin 4: N/C
Power Requirements	Two AA Batteries
Battery Life (Typical)	> 14 hours with AA Alkaline Typical
Bodypack Antenna	Flexible external ¼ wave
Handheld Antenna	Internal
Dimensions (Handheld)	10.57 in (26.7 cm) Long
Dimensions (Bodypack)	3.3 in H x 2.6 in W x 0.89 in D (84 mm H x 66 mm W x 23 mm D)

09 CERTIFICATIONS

(Depending on frequency selected and country of operation)

R300 receiver, HT-300 and BP-300 transmitters: Certified to ETSI EN 300 422-2 and ETSI EN 301 489-9, Conforms to European Union directives, eligible to bear CE marking as per the R&TTE directive.

R300 receiver: Certified for use in Canada under RSS 210 Issue 5. HT-300 and BP-300 transmitters: Certified for use in Canada under RSS 123 Issue 1.

R300 receiver: Authorized under U.S. Federal communications Commission Part 15.

HT-300 and BP-300 transmitters: Certified under U.S. Federal Communications Commission Part 74.

These devices comply with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesired operation.

Licensing of this equipment is the user's responsibility and is determined by the user's classification, the user's application, and frequency selected. The user should contact the appropriate telecommunications authority for any desired clarification. Any changes or modifications made to the aforementioned equipment, by the user, could void the user's authority to operate the equipment.

This equipment is intended for use in wireless microphone applications.
Equipment intended for sale in (ISO 3166-1, 2 letter country code): AT, BE, BG, CY, CZ, DK, EE, FI, FR, DE, GR, HU, IS, IE, IT, LV, LT, LU, MT, NL, NO, PL, PT, RO, SK, SI, ES, SE, CH, GB.

This equipment is in compliance with the following directives:
2002/95/EC RoHS Directive and 2002/96/EC WEEE Directive

Please dispose of the base station and transmitters at the end of its operational life, by taking it to you closest collection point or recycling center.

Factory Service (North America)
If factory service is required, call service center for RMA# and shipping instructions:
EV Audio Service
c/o Bosch Security Systems, Inc.
8601 East Cornhusker Highway
Lincoln, NE 68507-9702 U.S.A.
Tel: 402-467-5321 or 800-553-5992
Fax: 402-467-3279
Enclose a note describing the problem along with any other pertinent information and how to contact you.

Factory Service (Europe)
If factory service is required, ship the unit prepaid in its original carton to:
Telex EVI Audio GmbH
Hirschberger Ring 45
D-94315 Straubing
Telephone: +49 (0) 9421 706 0
Fax: +49 (0) 9421 706 350
Enclose a note describing the problem along with any other pertinent information and how to contact you.

For more information about service in your local area go to www.electrovoice.com .

Warranty (Limited)
Please go to www.electrovoice.com for all current warranty information.

This device complies with Industry Canada's licence-exempt RSSs. Operation is subject to the following two conditions:
(1) This device may not cause harmful interference, and
(2) This device must accept any interference received, including interference that may cause undesired operation of the device.
THE MANUFACTURER IS NOT RESPONSIBLE FOR ANY RADIO OR TV INTERFERENCE CAUSED BY UNAUTHORIZED MODIFICATIONS OR CHANGE TO THIS EQUIPMENT. SUCH MODIFICATIONS OR CHANGE COULD VOID THE USER'S AUTHORITY TO OPERATE THE EQUIPMENT.
This device operates on a no-protection no-interference basis. Should the user seek to obtain protection from other radio services operating in the same TV bands, a radio license is required. Please consult Industry Canada's document CPC-2-1-28, Optional Licensing for Low-Power Radio Apparatus in the TV Bands, for details.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes :
(1) l'appareil ne doit pas produire de brouillage;
(2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.
LE FABRICANT EST PAS RESPONSABLE DE RADIO OU TV INTERFERENCE CAUSEE PAR MODIFICATIONS NON AUTORISEES OU CHANGEMENT DE CET ÉQUIPEMENT. DE TELLES MODIFICATIONS OU CHANGEMENT POURRAIT ANNULER LE DROIT DE L'UTILISATEUR À UTILISER L'APPAREIL.
Ce dispositif fonctionne selon un régime de non--brouillage et de non-protection. Si l'utilisateur devait chercher à obtenir une certaine protection contre d'autres services radio fonctionnant dans les mêmes bandes de télévision, une licence radio serait requise. Pour en savoir plus, veuillez consulter le document CPC-2-1-28 d'Industrie Canada intitulé, Délivrance de licences sur une base volontaire pour les appareils radio de faible puissance exempts de licence et exploités dans les bandes de télévision.