



WX3000

Wireless Microphone System

Manual and Quick Start-up Guide



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Individuals with cardiac pacemakers and other similar medical devices should consult with their physician before using any RF devices. Though the output level of this wireless system is below 50 milliwatts, the proximity of the transmitter to the implant device could pose a threat.

As with any wireless product, environmental conditions can reduce or in some cases prohibit a successful connection between the transmitter and the receiver.

This device complies with Part 15 of the FCC Rules. Most users of CAD Audio wireless products in the United States do not need a license for operation. However, the rules for unlicensed operation state that this device must not operate in excess of 50 milliwatts and it must not cause harmful interference to other wireless devices, and must accept interference received from other devices. Wireless products meeting CAD factory standards adhere to these rules. The FCC reserves the right to change these rules at any time. For more information contact the FCC at 1-888-CALL-FCC (TTY: 1-888-TELL-FCC) or visit the FCC's wireless microphone website at:

www.fcc.gov/cgb/wirelessmicrophones

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

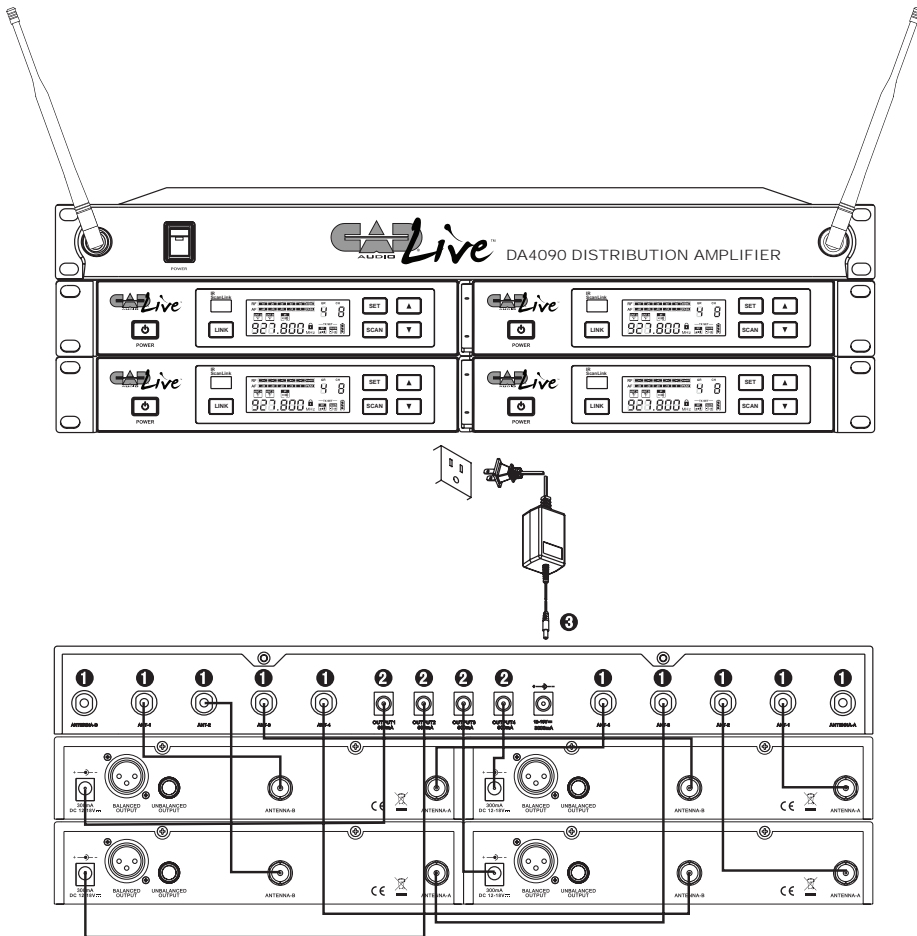
Under Industry Canada regulations, this radio transmitter may only operate using an antenna of a type and maximum (or lesser) gain approved for the transmitter by Industry Canada. To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (e.i.r.p.) is not more than that necessary for successful communication.

Conformément à la réglementation d'Industrie Canada, le présent émetteur radio peut fonctionner avec une antenne d'un type et d'un gain maximal (ou inférieur) approuvé pour l'émetteur par Industrie Canada. Dans le but de réduire les risques de brouillage radioélectrique à l'intention des autres utilisateurs, il faut choisir le type d'antenne et son gain de sorte que la puissance isotrope rayonnée équivalente (p.i.r.e.) ne dépasse pas l'intensité nécessaire à l'établissement d'une communication satisfaisante.

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, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Using the DA4090 Distribution Amplifier to Simplify Multiple-System Installations

1. BNC 50 ohm cable.
2. Power cable.
3. Power adapter.



CADLive™ WX3000

Introduction

CADLive™ is designed to outperform your expectations and deliver exceptional performance. Engineered to compliment the new generation of exceptional sound systems - The CADLive Series taps our Equitek studio heritage along with our live sound know-how in creating an impactful and easy-to-use line of mics.

The CADLive 3000 series feature True Diversity operation to minimize multipath interference along with CADLock™ Automatic Tone Encoded Squelch to eliminate unauthorized transmissions in the signal path. Frequency agile design when partnered with ScanLink™ technology will precisely scan, select and link to the optimum channel allowing for an easy, flexible frequency plan.

The CADLive handheld transmitter features metal construction and the CADLive D90 Supercardioid dynamic capsule provides a powerful, smooth and highly articulate profile. The handheld and body pack transmitters also include SoftTouch™ multi-function On-Off/Mute switches. CADLive bodypack transmitters are equipped with CADTone™ circuitry ensuring accurate reproduction of Hi-Z guitar and Lo-Z mic inputs.

CADLive wireless features 10, 30, 50mW transmitter power adjustment and dynamic range up to 110dB. Receivers and transmitters are equipped with a high definition LCD display and full RF, AF, Battery Life, Mic Sensitivity and RF power metering.

Receivers are housed in an all-metal chassis and supplied with single/dual rack ears and a BNC relocation kit. Body pack systems include Equitek E19 earworn and E29 lavalier mics. Both systems are supplied with a heavy-duty carry case.

The CADLive™ WX3000 includes the following features:

- True Diversity to minimize multipath interference
- CADLock™ Automatic Tone Encoded Squelch eliminates unauthorized interference
- Frequency agile operation for maximum frequency plan flexibility
- ScanLink™ technology for instantaneous and automatic channel configuration
- CADTone™ Body Pack input – Optimized Impedance interface - Hi-Z for Guitar and Lo-Z for mic
- Metal construction Handheld Transmitter equipped with CADLive™ D90 capsule
- High Contrast LCD displays on TX and RX
- Transmitters feature 10, 30, 50mW power adjustment to aid in multiple system applications

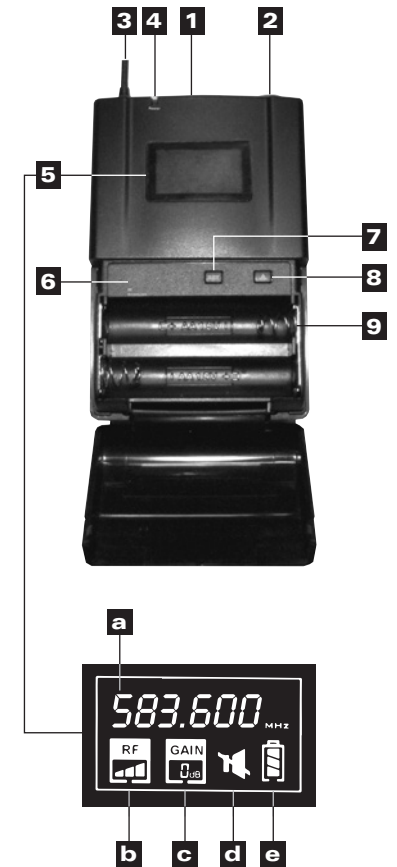
- Simultaneous usage of up to 15 systems per frequency band
- Dynamic Range > 110dB
- AA Batteries with up to 15 Hrs of battery life
- Systems ship with rack ears single/dual BNC relocation kit and durable carry case
- BodyPack systems include miniature E19 Earworn, E29 Lav, WXGTR guitar cable
- XLR and 1/4" outputs on receiver

Startup Guide

1. Install new high quality alkaline batteries into transmitter, observing proper polarity.
2. Power up receiver by holding power button for one second.
3. Hold the SET button for one second to unlock the receiver menu.
4. Hold the SCAN button for one second to activate the ScanLink™ environmental frequency analysis, which automatically selects a clear operating frequency.
5. Turn on the transmitter by holding the power button for one second.
6. Open the battery compartment to reveal the IR node.
7. Press the LINK button (note the IR node will illuminate). Align the two IR nodes (transmitter and receiver) at a distance of 4"-12" (ambient room light can affect distance) for a few seconds while the receiver updates the transmitter. Your system is now ScanLink'd.

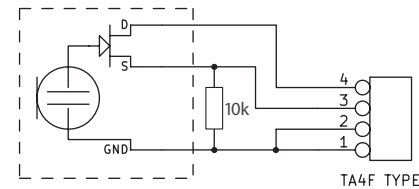
Bodypack TX3010 Transmitter

1. Power/Mute button: hold for power, press for mute.
2. CADTone TB4M-type audio input connector.
3. Transmitting antenna
4. Power indicator
5. High-contrast display
 - a) Operating frequency
 - b) RF power indicator
 - c) transmitter audio gain indicator
 - d) mute indicator
 - e) battery strength indicator
6. IR node for ScanLink
7. SET button. Unlocks advanced features.
8. UP arrow button. Use to adjust advanced feature menu items.
9. Battery compartment. Use only high quality AA alkaline batteries observing proper polarity.

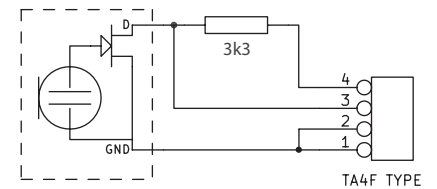


Interfacing to CADTone TB4M-type input connector

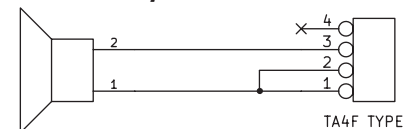
3-wire type electret mic



2-wire type electret mic



Dynamic mic

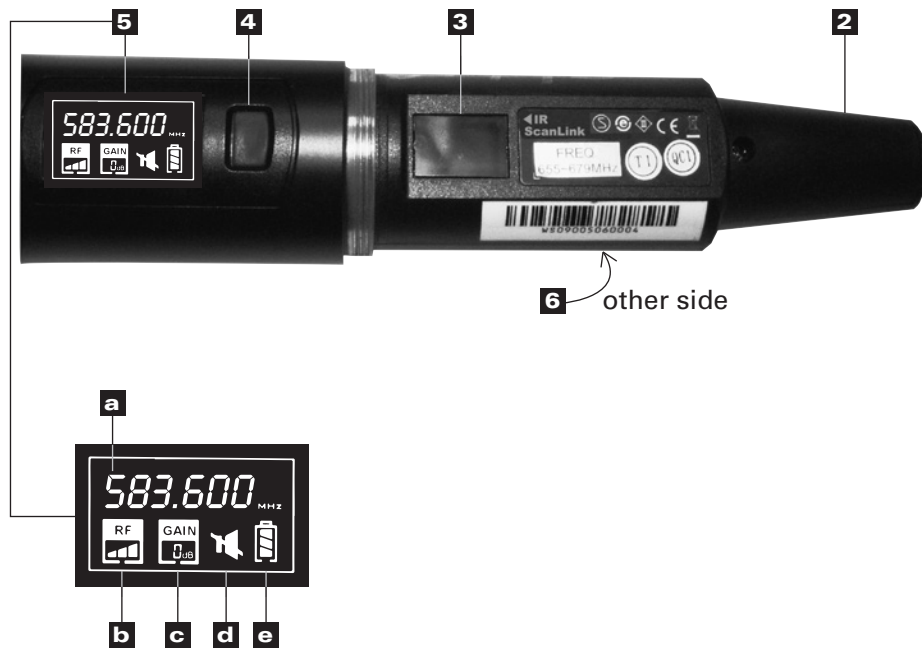


Instrument



Handheld TX3000 Transmitter

1. CADLive D90 supercardioid dynamic capsule.
2. Enclosed transmitting antenna.
3. IR node for Scan-Link™
4. Power/Mute button. Hold for power, press for mute.
5. High-contrast display
 - a) Operating frequency
 - b) RF power indicator
 - c) Transmitter audio gain indicator
 - d) Mute indicator
 - e) Battery strength indicator
6. Battery compartment. Use only high quality AA alkaline batteries. Observe polarity.



Accessing Advanced Features (SET button)

All advanced features are accessed by holding the "SET" button for one second to unlock the menu. Press the "SET" button to advance through menu items. Menu items may be adjusted using arrow keys.

1. Manually Select Frequencies
 - GR** (frequency group)
 - CH** (channel)
2. Receiver Squelch Level
 - SQL** (used to reduce sensitivity to competing RF by sacrificing operating distance)
3. Transmitter Power
 - TX SET RF** (higher power increases operating distance, lower power improves simultaneous usage)
4. Transmitter audio gain
 - TX SET GAIN** (lower gain may be used as needed for louder performers)
5. Receiver Output Volume
 - VOL** (may be reduced if audio signal overloads mixer)

Specifications WX3000

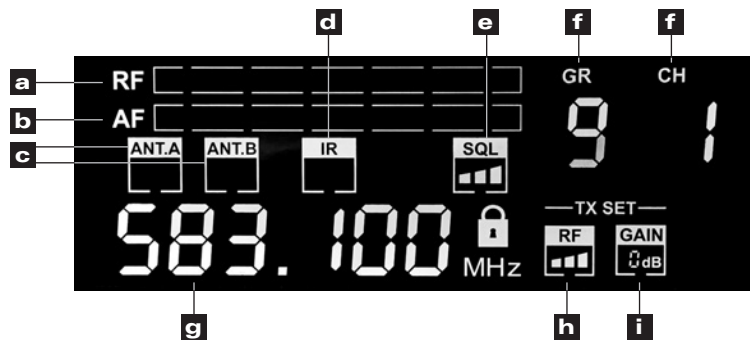
Frequency Range	Q Band 470 - 489MHz
	N Band 520 - 542MHz
	R Band 580 - 600MHz
Frequency Response	40Hz - 15kHz
Dynamic Range.....	>110dB
Transmitter Power.....	Switchable 10, 30, 50mW
Battery Life	Up to 15 Hrs
Dimensions	17" [43.2cm] x 12" [30.5cm]
	x 4" [10.2cm]
Weight.....	5lbs [2.3kg]

Receiver RX3000 (Front)

1. Power button.
2. IR ScanLink node. Use for linking transmitter and receiver.
3. LINK button. Use to initiate TX-RX link.
4. SET button. Unlocks advanced features.
5. SCAN button. Use to initiate environmental frequency analysis.
6. UP and DOWN buttons. Use to adjust advanced feature menu items.



7. High-Contrast display.
 - a) Multi-segment RF signal strength meter.
 - b) Multi-segment AF signal level meter.
 - c) ANTA/ANT.B diversity indicator.
 - d) IR indicates active IR communication.
 - e) SQL squelch level indicator.
 - f) GR CH group and channel indicator.
 - g) Operating Frequency.
 - h) TX SET RF indicates transmitter RF power setting.
 - i) TX SET GAIN indicates transmitter audio gain setting.



Simultaneous Use 470 - 489MHz Band Q		
Group	Channel	Frequency
1	1	470.000
1	2	470.400
1	3	471.200
1	4	472.800
1	5	474.800
1	6	478.000
1	7	482.000
1	8	487.600
3	1	471.000
3	3	472.200
3	5	475.800
3	7	483.000
3	8	488.600
5	7	484.400
5	8	488.400

Simultaneous Use 520 - 542MHz Band N		
Group	Channel	Frequency
1	1	521.325
1	2	522.325
1	3	523.725
1	4	525.575
1	5	526.675
1	6	533.025
1	7	534.250
1	8	536.000
1	9	537.325
1	10	538.225
2	4	528.150
2	6	533.500
2	8	536.925
8	4	527.025
10	2	524.925
Simultaneous Use 580 - 600MHz Band R		
Group	Channel	Frequency
1	1	580.000
1	3	584.600
1	9	600.000
3	5	586.900
3	6	588.800
3	7	590.900
3	9	597.400
4	2	581.000
4	3	583.300
4	7	588.600
5	9	598.100
6	1	581.300
6	8	595.700
8	5	591.200
9	9	599.400

Receiver RX3000 (Rear)

1. DC power input jack. 12-18VDC, 300mA min, center positive.
2. XLRM-type low-impedance balanced audio output.
3. 1/4" [6.35mm] high-level unbalanced output
4. BNC 50 ohm antenna inputs.



Channelization

These frequencies have been approved for use within the **United States and Canada** as of the date of publication of this manual. It is the user's responsibility to comply with local regulations.

470 - 489MHz Band Q

These frequencies have been approved for use within the **United States and Canada** as of the date of publication of this manual. It is the user's responsibility to comply with local regulations.

CH	Group 1	Group 2	Group 3	Group 4	Group 5
1	470.000	470.500	471.000	471.500	472.000
2	470.400	470.900	471.400	471.900	472.400
3	471.200	471.700	472.200	472.700	473.200
4	472.800	473.300	473.800	474.300	474.800
5	474.800	475.300	475.800	477.500	478.000
6	478.000	478.500	479.000	479.500	480.000
7	482.000	482.500	483.000	483.900	484.400
8	487.600	488.100	488.600	487.900	488.400

520 - 542MHz Band N

These frequencies have been approved for use within the *United States, Canada and Australia* as of the date of publication of this manual. It is the user's responsibility to comply with local regulations.

CH	Group 1	Group 2	Group 3	Group 4	Group 5
1	521.325	524.475	521.000	521.500	520.600
2	522.325	525.075	521.775	523.125	521.775
3	523.725	526.150	523.025	524.450	522.025
4	525.575	528.150	523.700	527.275	522.650
5	526.675	530.500	532.050	528.250	523.750
6	533.025	533.500	534.200	528.900	529.575
7	534.250	535.550	534.875	536.325	530.525
8	536.000	536.925	536.050	537.025	531.850
9	537.325	537.900	536.650	538.325	532.550
10	538.225	539.250	538.750	539.950	533.675
CH	Group 6	Group 7	Group 8	Group 9	Group 10
1	520.775	521.775	520.600	522.450	522.650
2	522.025	523.675	523.575	523.375	524.925
3	524.675	525.075	524.675	524.750	527.925
4	527.900	526.000	527.025	527.775	529.675
5	529.550	527.725	528.300	529.350	532.325
6	531.600	532.375	531.375	532.650	533.925
7	532.550	534.325	534.025	533.550	536.025
8	536.575	535.275	535.275	538.175	537.525
9	537.600	537.475	537.550	540.075	540.625
10	539.025	539.225	538.700	540.975	541.625

580 - 600MHz Band R

These frequencies have been approved for use within the *United States and Canada* as of the date of publication of this manual. It is the user's responsibility to comply with local regulations.

CH	Group 1	Group 2	Group 3	Group 4	Group 5
1	580.000	580.600	582.500	580.500	580.800
2	582.200	581.100	583.500	581.000	583.000
3	584.600	582.400	584.900	583.300	584.000
4	586.600	583.400	586.100	584.700	585.400
5	588.500	584.800	586.900	585.900	587.400
6	590.600	586.000	588.800	586.700	589.300
7	593.500	586.800	590.900	588.600	591.400
8	596.500	594.300	594.400	590.700	595.200
9	600.000	597.300	597.400	594.200	598.100
CH	Group 6	Group 7	Group 8	Group 9	
1	581.300	581.900	582.100	583.100	
2	582.800	584.100	583.600	584.200	
3	584.500	586.500	584.300	587.300	
4	587.100	587.700	585.300	593.300	
5	587.900	591.000	591.200	599.200	
6	589.800	593.700	593.900	584.400	
7	592.700	595.800	596.000	587.500	
8	595.700	597.700	597.900	589.500	
9	598.200	599.300	599.500	599.400	