

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.



©2016 CAD Audio Part No. 62221-03-02 Feb2016



StageSelect™ 1600 Series

Wireless Microphone System

Manual and Quick Start-up Guide



StageSelect™ 1600 Series

Introduction

Thank you for purchasing the CAD Audio StageSelect™ system. We hope that you enjoy the easy and exciting performance that the StageSelect™ delivers for your next gig. CAD Audio/Astatic Commercial has been creating high-value products since 1938 and prides itself on supporting and developing the live performer. Our design criterion for the 1600 Series was straightforward: develop a high-performance wireless microphone system agile enough to cope with today's dynamic RF environment that is both easy to use and exciting to operate.

The StageSelect™ 1600 Series includes the following features:

- 100 Channel UHF Agility for frequency plan flexibility
- Diversity Operation to minimize multipath interference
- Scan-Link™ technology for instantaneous “scan” of the RF environment and automatic “link” to the transmitter.
 - First, the receiver conducts an environmental frequency evaluation then selects a channel.
 - Second, the receiver links to the transmitter and sets the transmit frequency automatically.
- CADLock™ Automatic Tone Encoded Squelch to eliminate unauthorized interference.
- Transmitters have Softtouch™ Switches with multicolor LED indicators of On/Mute and Low Battery.
- AA batteries with >15hrs of battery life
- Metal Chassis for a durable and formidable shielded enclosure with included rack ears.

Channelization

The CAD 1600 Series wireless has 100 selectable UHF channels. Channel indicators 0 through 99 are displayed on the receiver. Corresponding frequencies (in MHz) are listed below. CH 13, CH 17, CH 34, CH 37, CH 50, CH 51, CH 57 and CH 59 are recommended for simultaneous usage for both G and F Bands.

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.

542.125 - 564.175MHz Channel Table Band G

CH	Freq(MHz)	CH	Freq(MHz)	CH	Freq(MHz)	CH	Freq(MHz)
00	542.125	25	559.000	50	553.375	75	547.750
01	553.600	26	547.975	51	542.350	76	559.225
02	542.575	27	559.450	52	553.825	77	548.200
03	554.050	28	548.425	53	542.800	78	559.675
04	543.025	29	559.900	54	554.275	79	548.650
05	554.500	30	548.875	55	543.250	80	560.125
06	543.475	31	560.350	56	554.725	81	549.100
07	554.950	32	549.325	57	543.700	82	560.575
08	543.925	33	560.800	58	555.175	83	549.550
09	555.400	34	549.775	59	544.150	84	561.025
10	544.375	35	561.250	60	555.625	85	550.000
11	555.850	36	550.225	61	544.600	86	561.475
12	544.825	37	561.700	62	556.075	87	550.450
13	556.300	38	550.675	63	545.050	88	561.925
14	545.475	39	562.150	64	556.525	89	550.900
15	556.750	40	551.125	65	545.500	90	562.375
16	545.725	41	562.600	66	556.975	91	551.350
17	557.200	42	551.575	67	545.950	92	562.825
18	546.175	43	563.050	68	557.425	93	551.800
19	557.650	44	552.025	69	546.400	94	563.275
20	546.625	45	563.500	70	557.875	95	552.250
21	558.100	46	552.475	71	546.850	96	563.725
22	547.075	47	563.950	72	558.325	97	552.700
23	558.550	48	552.925	73	547.300	98	564.175
24	547.725	49	564.400	74	558.775	99	553.150

638 - 662MHz Channel Table Band F

CH	Freq(MHz)	CH	Freq(MHz)	CH	Freq(MHz)	CH	Freq(MHz)
00	638.125	25	655.000	50	649.375	75	643.750
01	649.600	26	643.975	51	638.350	76	655.225
02	638.575	27	655.450	52	649.825	77	644.200
03	650.050	28	644.425	53	638.800	78	655.675
04	639.025	29	655.900	54	650.275	79	644.650
05	650.500	30	644.875	55	639.250	80	656.125
06	639.475	31	656.350	56	650.725	81	645.100
07	650.950	32	645.325	57	639.700	82	656.575
08	639.925	33	656.800	58	651.175	83	645.550
09	651.400	34	645.775	59	640.150	84	657.025
10	640.375	35	657.250	60	651.625	85	646.000
11	651.850	36	646.225	61	640.600	86	657.475
12	640.825	37	657.700	62	652.075	87	646.450
13	652.300	38	646.675	63	641.050	88	657.925
14	641.475	39	658.150	64	652.525	89	646.900
15	652.750	40	647.125	65	641.500	90	658.375
16	641.725	41	658.600	66	652.975	91	647.350
17	653.200	42	647.575	67	641.950	92	658.825
18	642.175	43	659.050	68	653.425	93	647.800
19	653.650	44	648.025	69	642.400	94	659.275
20	642.625	45	659.500	70	653.875	95	648.250
21	654.100	46	648.475	71	642.850	96	659.725
22	643.075	47	659.950	72	654.325	97	648.700
23	654.550	48	648.925	73	643.300	98	660.175
24	643.725	49	660.400	74	654.775	99	649.150

Bodypack TX1610 Transmitter

1. IR Node for Scan-Link™ operation
2. 4 pin connector (TB4M-type)
3. 3 Color LED indicator
 - **Green** = Transmitter is powered up and audio is live
 - **Orange** = Transmitter is powered up and audio is muted
 - **Flashing Red** = Low battery status (change battery ASAP)
4. Power Switch – Soft touch switch
 - Holding the switch for 2 seconds turns the transmitter on/off
 - Quick momentary press of the switch mutes or unmutes the audio
5. Volume control

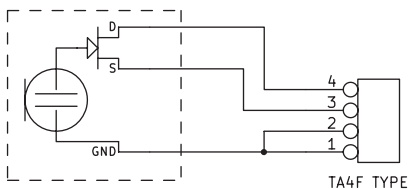


Specifications TX1610

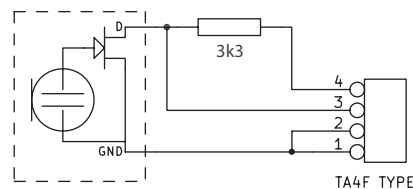
Frequency Response	40Hz – 15KHz
Maximum Input Level	
Microphone Input:	-10dBV
Instrument Input:	+15dBV
RF Output	10mW
Dimensions	2-9/16" [6.5cm] x 4-1/4" [10.8cm] x 15/16" [2.3cm]
Net Weight	2.8oz [82g]
Power Requirements	2x AA batteries
Battery Life	>15hrs, high-quality alkaline batteries

Interfacing to TX1610 input connector

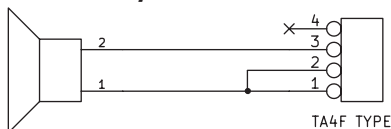
3-wire type electret mic



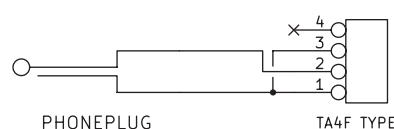
2-wire type electret mic



Dynamic mic



Instrument



Operating Instructions

- Insert new high-quality alkaline AA batteries into your transmitter, observing proper direction.
- Power up the receiver and transmitter.
- Scan-Link™ your system by pressing the Down/Pair button for approximately 1 second on the receiver to automatically activate the Scan-Link™ function. A clean channel will be selected and the display will flash.
- While the receiver display is flashing hold the transmitter IR node in alignment with the receiver IR node within a distance of approximately 12". The receiver will automatically set the transmitter channel. When the display stops flashing the system is "Scan-Link'd." (The IR node on the handheld transmitter is on the bottom near the on/off switch. The IR node on the bodypack is inside the battery compartment.)
- To set up additional units continue the sequence while keeping previously linked transmitters away from the receiver (and out of the way of the IR Beam, about 2-3 feet away) that is attempting to Scan-Link™.

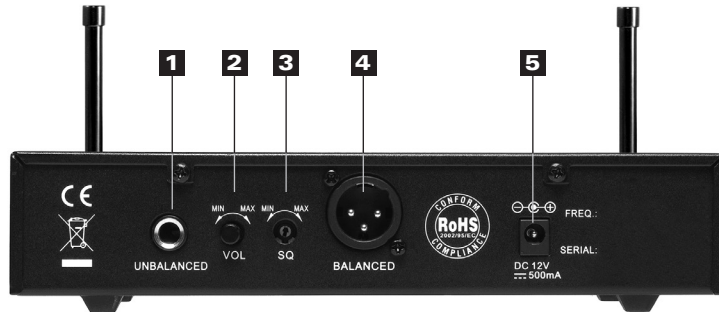
Receiver RX1600 (Front)

1. Antenna A
2. Channel up/Channel down/pair
3. IR node
4. AF peak indicator
5. Channel display
6. Diversity active
7. Antenna B



Receiver RX1600 (Rear)

1. 1/4" unbalanced output
2. Volume control
3. Squelch adjustment (factory preset - do not adjust without factory support)
4. XLR-type balanced output
5. DC power jack (use included supply)



Specifications RX1600

Maximum Output Level	
Balanced Output.....	-3dBV
Unbalanced Output.....	0dBV
Output Impedance	
Balanced Output.....	350ohms
Unbalanced Output.....	250ohms
Switchable Channels.....	100
Dimensions.....	9-1/2" [23.0cm] x 4-1/2" [11.4cm] x 1-9/16" [4.0cm]
Weight.....	12.3oz [350g]
Power requirements.....	12-15VDC, =<500mA

Handheld TX1600 Transmitter

1. Power Switch – Soft touch switch
 - Holding the switch for 2 seconds turns the transmitter on or off
 - Quick momentary press of the switch mutes or unmutes the audio
2. Tri-color LED indicator
 - **Green** = transmitter is powered up and audio is live
 - **Orange** = transmitter is powered up and audio is muted
 - **Flashing Red** = low battery status (change battery ASAP)
3. IR node for Scan-Link™ operation



Specifications TX1600

Microphone Operating Principle.....	Moving coil dynamic
Polar Pattern.....	Cardioid
Frequency Response.....	40Hz – 15KHz
Maximum SPL.....	130dB
Dynamic Range.....	110dB
RF Output.....	10mW
Dimensions.....	9-1/2" [24.1cm] x 1-7/8" [4.8cm]
Net Weight.....	7.3oz [208g]
Power requirements.....	2x AA batteries
Battery Life.....	>15hrs, high-quality alkaline batteries