

COACHCOMM

COBALT[®]

PLUS

OPERATING MANUAL



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INTRODUCTION

We at CoachComm want to thank you for purchasing CoachComm Cobalt PLUS. CoachComm Cobalt PLUS is a compact, economical wireless intercom system that operates in the 900 MHz frequency band to provide excellent range and performance. The system features small, lightweight belt packs and provides excellent sound quality, ease-of-use, and long-life battery operation.

In order to get the most out of your new CoachComm Cobalt PLUS system, please take a few moments to read this manual completely so that you better understand the operation of this product. For questions not addressed in this manual, feel free to contact the CoachComm Customer Support Department.

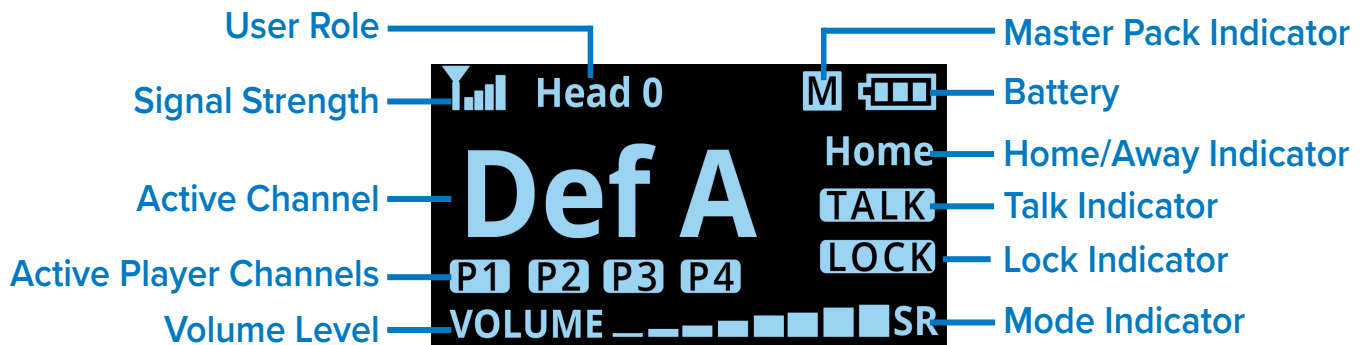
PRODUCT FEATURES

- Ideally suited for larger staffs
- Works great in larger stadiums
- Up to six available Talk Channels
- Compatible with the Cobalt PLUS Player Communications for practice
- Coach-friendly user interface with large, easy-to-read display
- 900MHz avoids Wi-Fi Interference and works better through press box glass
- Outstanding audio performance in high noise environments
- Rugged IP54-rated construction for all weather conditions
- No Basestation Required!
- D-1 SmartBoom® Headsets

BELPACK CONTROLS



DISPLAY INDICATORS



HEADSET CONTROLS



HEADSET SETUP

1. **Headset Adjustment:** Use the slide adjustment on each side of the headband to achieve proper fit and size.

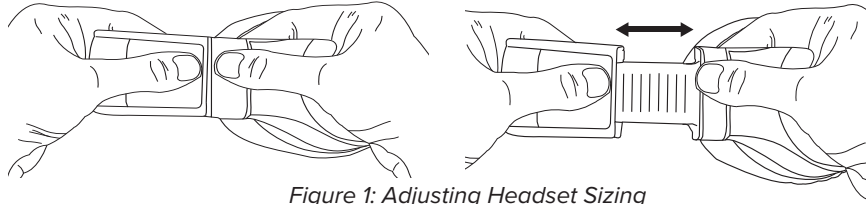


Figure 1: Adjusting Headset Sizing

2. **Mic Position:** For best performance, it is recommended the microphone be positioned directly in front of your mouth, sitting a finger's width from your lips.

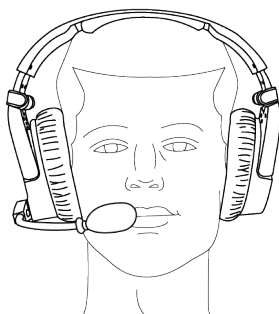


Figure 2: Correct Mic Position



Figure 3: Incorrect Mic Position

3. **SmartBoom Mic Mute:** During operation, swiveling the boom up above the brow at approximately 45 degrees will mute the microphone. To activate the microphone again, simply lower the boom back down.

Note: To adjust the boom, swivel it so that the microphone is on the preferred side (right or left).

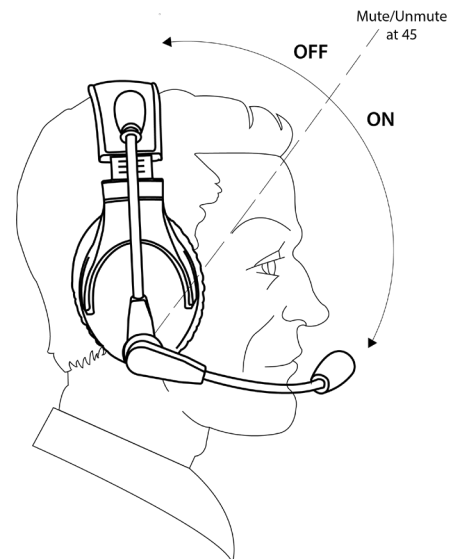


Figure 4: SmartBoom Mute On/Off

SYSTEM SETUP

- Connect a headset to the backpack.** The backpack headset connection supports dual mini and single mini headsets. Dual mini connectors can be inserted in either direction. Single mini connectors can be inserted in either port of the headset connection.
- Power on.** Press and hold the **POWER** button for three (3) seconds, until the screen turns on.
- On the Master backpack, select Home if you are the home team or Away if you are the visiting team.** Use the + and - buttons to toggle between the options. (Selected option will blink.) Press and hold the **MODE** button to save your selection. This setting provides proper wireless coordination for your other backpacks and between your team and another CoachComm Cobalt or Cobalt PLUS team.
- Maintain optimal line of sight with other backpacks.** The “Head 0” backpack is the master (identified with “M” on the OLED) and is required for all backpacks to work. For best system performance, use the master on the sideline near other backpacks.

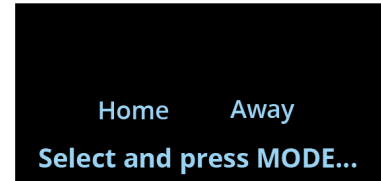


Figure 5: Home/Away Selection



Figure 6: Master Pack Indicator

BATTERY

BELTPACK

The rechargeable Lithium-ion battery is installed in the device. To recharge the battery, either 1) plug the USB charging cable into the device USB port or 2) connect the device to the drop-in charger (CCB-PL-CHG5 sold separately). The charging LED in the right top corner of the device will illuminate solid red while the battery is charging and will turn off once the battery is fully charged. The battery charge time is approximately 3.5 hours from empty (USB port connection) or approximately 6.5 hours from empty (drop-in charger). The backpack may be used while charging, but doing so may lengthen battery charge time.

HEADSET

The rechargeable Lithium-poly battery is installed in the device. To recharge the battery, either 1) plug the USB charging cable into the device USB port or 2) connect the device to the drop-in charger (CCB-PLA1-CHG6 sold separately). The charging LED in the right top corner of the device will illuminate solid red while the battery is charging and will turn off once the battery is fully charged. The battery charge time for the single headset model is approximately 4 hours from empty (USB port connection drop-in charger) The battery charge time for the dual headset model is approximately 6 hours from empty (USB port connection or drop-in charger). The battery charge time for a single battery is approximately 4 hours from empty (drop-in charger).

The batteries are housed within the earcups of the Cobalt Plus A1 headset. To remove, press the latch/button and pull the battery sled from the earcup. Hold the headset upright for the battery sleds to slide out easier.



OPERATION

- **LED Modes -**

- » Left-hand Talk/State LED is blue and double blinks when logged in and single blinks when logged out.
- » Right-hand Charging LED is red when charging in progress. LED turns off when charging is complete.

- **Lock** - To toggle between Lock and Unlock, press the **TALK** and **MODE** buttons simultaneously for 2 seconds. When the beltback is locked, the “Lock” will be displayed on the screen.

- **Volume Up and Down** - Use the **+** and **-** buttons to control the volume. “Volume” and a stair-step indicator display the beltback’s current volume setting on the OLED.

- **Talk** - Ensure “TALK” appears on the OLED to indicate that Talk is enabled.

- **Channel** - Cycles between talk channels or accesses player channels.

- » **Talk Channel:** Short-press the **CHANNEL** button to cycle between the coaches’ talk channels enabled on your beltback.



Figure 7: Lock Indicator

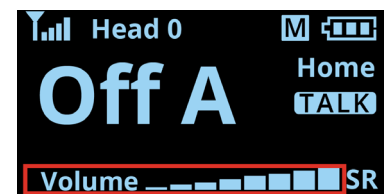


Figure 8: Volume Setting



Figure 9: Talk Indicator



And so on...

Figure 10: Sample Talk Channel Options for Head Coach User Role

Refer to the table below for the available talk channels per Cobalt PLUS user role:

Available Talk Channels							
User Roles	IDs	Offense			Defense		
		A	B	C	A	B	C
Head Coach	H0–H9	✓	✓	✓	✓	✓	✓
Offense Coach	O1–O9	✓	✓	✓			
Offense Shared*	OS	Shared Talk**					
Offense Receive Only	OR	Listen Only					
Defense Coach	D1–D9				✓	✓	✓
Defense Shared**	DS				Shared Talk**		
Defense Receive Only	DR				Listen Only		

*Only one Offense Shared Talk user and one Defense Shared Talk user can talk at a time.

**Shared Talk IDs (OS and OR) cannot be used at the same time as the last Offense/Defense full-duplex IDs.

- » **Player Channel:** Press and hold the **CHANNEL** button to communicate to any player channels enabled on your beltpack.

Refer to the table below for the available player channels per Cobalt PLUS user role:

Available Player Channels								
User Roles	Offense				Defense			
	P1	P2	P3	P4	P1	P2	P3	P4
Head Coach***	✓	✓	✓	✓	✓	✓	✓	✓
Offense	✓	✓	✓	✓				
Defense					✓	✓	✓	✓

***When enabled, Head Coach roles can communicate to either Offense or Defense player channels, depending on what talk channel is currently active on the beltpack.

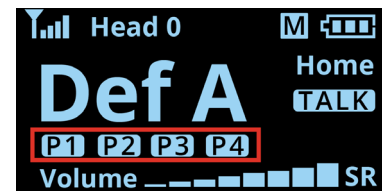


Figure 11: Indicator for Enabled Player Channels

MENU SETTINGS

The following settings are adjustable from the backpack and headset menu.

1. To access the menu, press and hold the **MODE** button for 3 seconds, until the screen changes to **<Setting Mode>**.
2. Short-press the **TALK** button to scroll through the settings: Head Coach Number, User role, Talk Channels, Player Channels, Mic Gain, and Side Tone.
3. While viewing each setting, you may scroll through its options using the **VOLUME +/-** buttons; then, continue to the next menu item by pressing the **TALK** button. See the Table below for the available options under each setting.
4. Once you have finished your changes, press and hold **MODE** to save your selections and exit the menu.

Setting	Options	Description
Head Coach Number	01–10	Number of head coach user roles available on the system; the head coach user role is for anyone who needs the ability to switch between offense and defense talk channels.
User Role*	H0–H9 O1–O9 OS OR D1–D9 DS DR	Head Coach 1–10 Offense Coach Offense Shared Offense Receive Only Defense Coach Defense Shared Defense Receive Only
Talk Channels <i>(list of channels depends on the user role selection)</i>	Talk/Listen Listen Only Disable	Determines the behavior of each channel’s talk function
Player Channels <i>(list of channels depends on the user role selection)</i>	Talk/Listen Listen Only Disable	Determines the behavior of each player channel’s talk function
Mic Gain	1–8	Determines the headset microphone audio level being sent from the microphone pre amp.
Side Tone	On Off	Side tone allows you to hear yourself while talking. Louder environments may require you to enable your side tone.

**When selected, Head Coach roles default to Offense A and Defense A. Offense roles default to Offense A and Offense B. Defense roles default to Defense A and Defense B.*

RECOMMENDED MIC GAIN

The recommended mic gain setting for best compatibility with SmartBoom® PRO and SmartBoom® LITE headsets is 1.

TECH MENU - MODE SETTING CHANGE

IMPORTANT! Do not change this setting during a game. Doing so may cause system settings to malfunction. Contact CoachComm Customer Support for assistance with mode setting if needed.

DEVICE SPECIFICATIONS

CoachComm Cobalt PLUS Beltpack	
Specification*	Details
Radio Frequency Type	ISM 902–928 MHz
Modulation	GFSK with FHSS
Maximum Effective Isotropically Radiated Power (EIRP)	400 mW
Number of Talk Channels	6
Number of Player Channels	8
Antenna	Detachable Type Dipole Antenna
Charge Type	USB Micro, 5V 1–2A
Maximum Full Duplex Users	19
Number of Shared Users	Unlimited
Number of Listen Only Users	Unlimited
Battery Type	Rechargeable 3.7 V, 2,000 mA Li-ion fixed battery
Battery Life	Approx. 12 hours
Battery Charging Time	3.5 hours (USB cable) 6.5 hours (Drop-in charger)
Dimension / Weight	4.83 in. (H) × 2.64 in. (W) × 1.22 in. (D, with belt clip) / 6.35 oz.
Display	OLED

CoachComm Cobalt PLUS All-in-One Headset	CCB-PLA1-SNG	CCB-PLA1-DBL
Microphone		
Microphone Type	Electret Condenser	
Frequency Response	20–16,000 Hz	
Mic Sensitivity	-45 ± 2 dBV/Pa at 1 kHz	
Pattern	Unidirectional	
Output Impedance	1–1.9 kΩ	
Biased Voltage	1.5V~2.2V	
Speaker (Headphone)		
Frequency Response	20–20,000 Hz	
Nominal Impedance	100 Ω	
Sensitivity at 1 kHz	117 dB SPL/mW	121 dB SPL/mW
Speaker Type	Dynamic	
Max Input Power	500 mW	
Radio Pack		
Radio Frequency Type	ISM 902–928 MHz	
Modulation	GFSK with FHSS	
Frequency Response	50 Hz ~ 4 kHz	
Maximum Transmit Output Power	320 mW Typical	
Number of Talk Channels	6	
Number of Player Channels	8	
Maximum Full Duplex Users	19	
Number of Shared Users	Unlimited	
Number of Listen Only Users	Unlimited	
Antenna	FPC	
Battery Type	Rechargeable 3.7 V Li-Poly field-replaceable battery	
	1,200 mA	2,400 mA (1,200 mA battery x2)
Battery Life	Approx. 7 hours	Approx. 14 hours
Battery Charging Time	4 hours (USB cable and drop-In charger)	6 hours (USB cable and drop-In charger)
Charge Type	USB Micro, 5V 1–2A	
Physical Features		
Mic Boom Length	8.50 in. (215.90 mm)	
Weight	8.1 oz (229.63 g)	11.4 oz (323.18 g)
Display	OLED	
Storage Temperature	-4 °F ~ 122 °F (-20 °C ~ 50 °C, +/-2°C)	

**Notice about Specifications: While CoachComm makes every attempt to maintain the accuracy of the information contained in its product manuals, that information is subject to change without notice. Performance specifications included in this manual are design-centered specifications and are included for customer guidance and to facilitate system installation. Actual operating performance may vary. Manufacturer reserves the right to change specifications to reflect latest changes in technology and improvements at any time without notice.*

PRODUCT CARE AND MAINTENANCE

SHORT TERM STORAGE (BETWEEN GAMES)

- After the game, power off all all beltpacks, all-in-one headsets (hold down the power button), and receivers.
- Be sure to fully charge your all beltpacks, all-in-one headsets, and receivers after each use. Charge time: 3.5 hours from dead with USB cable, 6.5 hours from dead with drop-in charger (sold separately). When charging, LED is red. When charge complete, LED is off.
- Thoroughly dry off any moisture. Properly stow away all gear in your case.
- Clean using a soft, damp cloth.

CAUTION! Do not use cleaners that contain solvents. Keep liquid and foreign objects out of the device openings. If the product is exposed to rain, gently wipe off all surfaces, cables, and cable connections as soon as possible and allow unit to dry before storing.

LONG TERM STORAGE (OFF SEASON)

- Power off all all beltpacks, all-in-one headsets (hold down the power button), and receivers.
- Be sure to charge your all beltpacks, all-in-one headsets, and receivers before storage. CoachComm highly recommends storing them at a 40–50% charge level, which generally minimizes any permanent power capacity loss. The battery indicator should have 2 notches to represent approximately 50%.
- Thoroughly dry off any moisture and properly stow away all gear in a cool dry location.
- Clean using a soft, damp cloth.

CAUTION! Do not use cleaners that contain solvents. Keep liquid and foreign objects out of the device openings. If the product is exposed to rain, gently wipe off all surfaces, cables, and cable connections as soon as possible and allow unit to dry before storing.

PRODUCT SUPPORT

CoachComm support and service personnel are ready to help you with any issues you may have. CoachComm offers product support from 8:00 a.m. to 5:00 p.m. (Central Time), Monday through Friday. Customers who annually renew their support plan have access to CoachComm's gameday and weekend coverage support hotline as well. (Access this line by dialing our voice number and following the automated prompts to the After Hours line.) Our company website, www.coachcomm.com, offers supporting product documentation and live chat for help. All questions should be directed to the Customer Service department:

CoachComm Customer Service Department
Voice: 1.800.749.2761
Fax: 1.888.329.2658
Email: customer.service@coachcomm.com

RETURNING EQUIPMENT FOR REPAIR OR MAINTENANCE

Do not return any equipment directly to the factory without first obtaining a Return Material Authorization (RMA) Number. All RMA number requests should be directed to the Customer Service department. Obtaining a Return Material Authorization Number will ensure that your equipment is handled promptly.

All shipments of CoachComm products should be made via UPS, or the best available shipper, prepaid and insured. The equipment should be shipped in the original packing carton; if that is not available, use any suitable container that is rigid and of adequate size to surround the equipment with at least four inches of shock-absorbing material.

All shipments should be sent to the following address and must include a Return Material Authorization Number:

CoachComm Customer Service Department
Attn: Return Material Authorization #
205 Technology Parkway
Auburn, AL 36830-0500

Battery Shipping Disclaimer: When shipping equipment to CoachComm that includes batteries, it is the shipper's responsibility to ensure that batteries are properly packaged, labeled, and shipped according to local and international guidelines. "Shipper" is defined as the person or school placing the equipment in the package and offering it to the carrier. Refer to CoachComm's [Lithium-Polymer Battery Shipping Guidelines](#) document on our website for more information.

LICENSE INFORMATION

COACHCOMM COBALT PLUS™ FCC COMPLIANCE STATEMENT

00004394 (FCCID: YJH-GM-900MSS)

00005219 & 00005220 (FCCID: 2AX9C-00005220)

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

CAUTION

Modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

FCC Compliance Information: This device complies 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.

IMPORTANT NOTE

FCC RF Radiation Exposure Statement: This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment.

The antennas used for this transmitter must be installed to provide a separation distance of at least 5 mm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter.

COACHCOMM WARRANTY STATEMENT

LIMITED WARRANTY

CoachComm X-System® products are warranted to be free from defects in materials and workmanship for a period of one year from the date of sale to the end user.

CoachComm Cobalt® and Tempest® systems carry a two-year product warranty from the date of sale to the end user.

All headsets and accessories (including CoachComm-branded batteries) carry a one-year warranty from the date of sale to the end user.

The purchase of a maintenance and support plan is not a condition of coverage under this limited warranty; however, purchasing a plan does extend a product's warranty for an additional year.

The sole obligation of CoachComm, LLC during the warranty period is to provide, without charge, parts and labor necessary to remedy covered defects appearing in products returned prepaid to CoachComm, LLC. This warranty does not cover any defect, malfunction, or failure caused by circumstances beyond the control of CoachComm, LLC, including but not limited to negligent operation, abuse, accident, failure to follow instructions in this Operating Guide, product misuse, defective or improper associated equipment, product alteration, modification and/or repair not authorized by CoachComm, LLC or shipping damage. Products with their serial numbers removed or effaced are not covered by this warranty.

This limited warranty is the sole and exclusive warranty given with respect to CoachComm, LLC products. It is the responsibility of the user to determine before purchase that this product is suitable for the user's intended purpose.

THE PROVIDED WARRANTIES ARE EXCLUSIVE AND TAKE THE PLACE OF ALL OTHER EXPRESS OR IMPLIED WARRANTIES OR CONDITIONS INCLUDING BUT NOT LIMITED TO WARRANTIES OR CONDITIONS OF MERCHANTABILITY, SATISFACTORY QUALITY, INFRINGEMENT AND FITNESS FOR A PARTICULAR PURPOSE, ALL OF WHICH ARE DISCLAIMED.

PARTS LIMITED WARRANTY

Replacement parts for CoachComm, LLC products are warranted to be free from defects in materials and workmanship for 120 days from the date of sale to the end user.

This warranty does not cover any defect, malfunction, or failure caused by circumstances beyond the control of CoachComm, LLC, including but not limited to negligent operation, abuse, accident, failure to follow instructions in the Operating Manual, defective or improper associated equipment, attempts at modification and/or repair not authorized by CoachComm, LLC, and shipping damage. Any damage done to a replacement part during its installation voids the warranty of the replacement part.

This limited warranty is the sole and exclusive express warranty given with respect to CoachComm, LLC products. It is the responsibility of the user to determine before purchase that this product is suitable for the user's intended purpose. ANY AND ALL IMPLIED WARRANTIES, INCLUDING THE IMPLIED WARRANTY OF MERCHANTABILITY, ARE LIMITED TO THE DURATION OF THIS EXPRESS LIMITED WARRANTY. NEITHER COACHCOMM, LLC NOR ANY AUTHORIZED RESELLER WHO SELLS COACHCOMM PRODUCTS IS LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES OF ANY KIND.

BATTERY WARRANTY

CoachComm provides a one-year warranty for all CoachComm branded lithium-polymer rechargeable batteries (one year from the date of sale to and purchase by the end user). The warranty period is based upon the expectation that the battery will deliver 80% of its initial capacity after 300 cycles at typical power loads. Lithium-polymer batteries will continue to operate below 80% capacity threshold; however, the capacity (run time) delivered between charges will continue to decrease. Apart from this warranty, batteries are also covered as part of the customer's annual maintenance plan (where applicable).

