CAUTION

This appliance is not intended for use by persons (including children) with reduced physical, sensory and mental capabilities, or lack of experience or knowledge, unless they have been given supervision or instruction concerning the use of the appliance by a person responsible for their safety.

Children should be supervised to ensure they do not play with the appliance.

Disclaimer:

For repair or service please contact your place of purchase.

Note: Under no circumstances should you attempt to repair the player yourself or via a non-authorised Altronics service centre as this will invalidate the warranty!

During the warranty period, we undertake to repair or replace your product at no charge if found to be defective due to a manufacturing fault. The warranty excludes damage by misuse, neglect, shipping accident, incorrect installation or no fault found.

NOT FIELD SERVICEABLE.

Distributed by:
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Okayo Wireless Audio Link System

okayo
The sound option

Operating Instructions

C 7280 *UHF Wireless Link Receiver*
C 7282 *UHF Wireless Link Transmitter*

Revision Date: 17/10/2011

Manufactured for Altronic Distributors Pty Ltd.

The C 7280 and C 7282 wireless receiver and transmitter combination provides an ideal solution for extending a PA system to a nearby building where cabling is impossible or impractical to install.

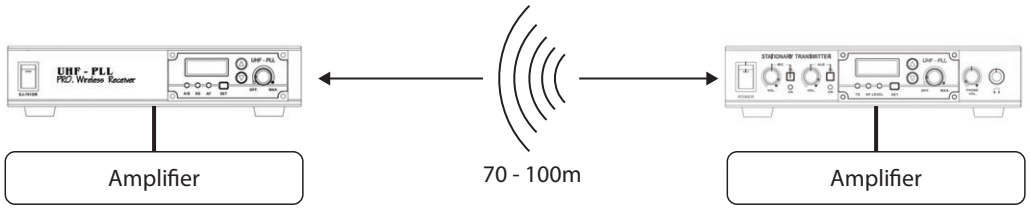
The desktop transmitter accepts a standard paging microphone or line level feed from the existing PA system and transmits it to the receiver unit in the remote location. This then feeds the signal into the amplifier at that location. This allows any program source fed into the primary amplifier to be relayed to the remote PA system. Ideal for both permanent or temporary installations such as PA systems at carnivals, sporting events, mine sites, construction sites, agricultural shows etc. Transmission range up to 100m line of sight in ideal conditions.

Setup

The C 7280 receiver unit integrates with the “B” series Okayo handheld & beltpack lavalier transmitters for use as a standard UHF wireless system for direct connection to an amplifier. It may also be used with Okayo portable PA units fitted with the C 7189B wireless link transmitter.

When used with the C 7282 transmitter it allows you to send the audio signal from one PA system to another without the use of cables (up to 100m away - in ideal conditions). See Fig. 1 below:.

Figure 1: Extending a PA system Wirelessly



Receiver Operation

See Fig. 2 & 3.

1. Turn the main power switch on and turn power switch/volume knob clockwise to turn the receiver unit on
2. The LCD screen will display “ON” then revert to the factory default channel (or the channel last selected).
3. To select a channel press the SET button. Using the UP/DOWN frequency adjustment buttons you can set the receiver to match the channel used by the transmitter.
4. Adjust the volume level to the desired position.
5. The module is now ready to receive a signal from either a handheld or a beltpack transmitter. When receiving a signal the A/B diversity indicator will illuminate red or green to show the diversity status. The RX indicator will illuminate when the signal from the transmitters is being received. The AF indicator displays audio level when users are speaking into the microphone.

Okayo Wireless Audio Link System

Specfications

Overall System

Carrier frequency range: .....640-664MHz (96 channels)
LCD indication: .....Channel, frequency, battery status
Frequency selection: .....Set, up, down
Switching bandwidth: .....Max 12MHz
Maximum deviation:.....80kHz with level limiting
Dynamic range: 110dB
Total harmonic distortion: .....Less than 0.5%
Pre/de-emphasis: 50µs
Silent mode: .....Tone key and noise lock dual-squelch
Frequency response: .....70Hz - 17kHz
Range: 70-100m

C 7280 Receiver Unit

Antenna connection: .....TNC
Audio output: .....6.35mm jack, 3 pin XLR balanced
Output level: .....CH-out: 80mV,
Mixer out: 80mV/700mV (low/high)
Power supply: .....12V d.c. 1A plugpack
Size: .....210D x 215W x 44Hmm

C 7282 Transmitter Unit

Antenna connection: .....TNC
Audio input: .....6.35mm jack, 3 pin XLR balanced, stereo RCA
Audio output:.....Stereo RCA & 6.35mm headphone jack
RF output: 10-30mW
Aux input: 700mV
Aux output:.....1V
Mic input sensitivity: 10mV
Headphone output:.....0.5W/32Ω
Power supply: .....12V d.c. 1A plugpack
Size: .....214D x 187W x 44Hmm

Beltpack Transmitter (C 7195B)

Mic Insert: .....Condenser
RF Output: 10mW
Spurious Emission:.....<250mW
Audio Input: .....Mic in, Aux in
AF Controls: .....Mute switch, hi/mid/lo switch
Battery: .....1.2V NiMH rechargeable x 2 or 1.5V Alkaline x 2
Operating Life (fully charged) 11 hrs (NiMH) or 14 hrs (Alkaline)
Dimensions: .....88 x 64 x 24mm
Weight (with batteries):.....170g

Handheld Transmitter (C 7192B)

Mic Insert: .....Dynamic
RF Output: 10mW
Spurious Emission:.....<250mW
AF Controls: .....Hi/lo/mute switch
Battery: .....1.2V NiMH rechargeable x 2 or 1.5V Alkaline x 2
Operating Life (fully charged) 11 hrs (NiMH) or 14 hrs (Alkaline)
Dimensions: .....46Ø x 264mm
Weight (with batteries):.....280g

IMPORTANT

Maintenance / Operation Guidelines

Avoid excessive heat: Do not leave units in direct sun for extended periods, in front of heaters or any source of high temperature

Avoid rough handling: Transmitter or receiver may be damaged if dropped

Remove batteries: Remove batteries from transmitters when not in use.

Replace batteries: Ensure replacement batteries are the same or equivalent to existing. Batteries may explode under charge or unit may malfunction if incorrect batteries are used.

Battery terminals: Ensure battery contacts are clean and free of corrosion before operation. If corrosion occurs it could be a sign of faulty batteries. Return to your place of purchase if service is required.

Table 1: UHF Wireless Channel Guide

640-664MHz Frequency											
1	640.1	17	640.9	33	640.4	49	641.1	65	640.6	81	641.4
2	641.6	18	642.4	34	641.9	50	642.6	66	642.1	82	642.9
3	643.1	19	643.8	35	643.3	51	644	67	643.5	83	644.3
4	644.5	20	645.3	36	644.8	52	645.5	68	645	84	645.8
5	646.1	21	646.9	37	646.4	53	647.1	69	646.6	85	647.4
6	647.6	22	648.4	38	647.9	54	648.6	70	648.1	86	648.9
7	649.1	23	649.8	39	649.3	55	650	71	649.5	87	650.3
8	650.5	24	651.3	40	650.8	56	651.5	72	651	88	651.9
9	651.7	25	652.6	41	652.1	57	652.8	73	652.3	89	653.1
10	653.3	26	654.1	42	653.6	58	654.3	74	653.8	90	654.6
11	655.2	27	656	43	655.5	59	656.2	75	655.7	91	656.5
12	656.7	28	657.5	44	657	60	657.7	76	657.2	92	658
13	658.2	29	658.9	45	658.4	61	659.1	77	658.6	93	659.4
14	659.6	30	660.4	46	659.9	62	660.6	78	660.1	94	660.9
15	661.2	31	662	47	661.5	63	662.2	79	661.7	95	662.5
16	662.7	32	663.4	48	662.9	64	663.6	80	663.1	96	663.9

Frequency Combinations 640-664MHz

1. If using 4 channels at the same time

(1) 19 20 35 36 (2) 10 57 58 59 (3) 19 34 36 39 (4) 20 35 39 69
(5) 59 75 77 90 (6) 11 44 45 57 (7) 07 53 84 87

2. If using 8 channels at the same time

(1) 06 39 42 45 55 70 89 90 (2) 17 18 20 33 34 36 37 89
(3) 01 02 06 37 49 50 70 84 (4) 02 49 50 52 68 69 71 87
(5) 34 40 52 57 68 69 81 82

3. If using 12 channels at the same time

(1) 05 21 49 50 52 58 65 66 75 85 87 91
(2) 02 17 22 25 26 36 41 42 67 82 86 92

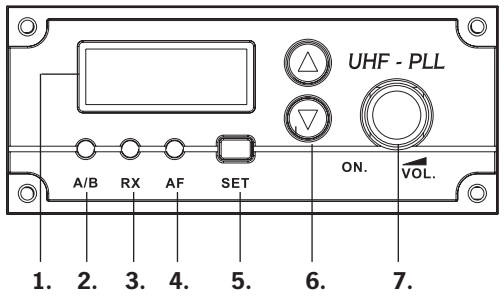


Fig. 2: Receiver Controls

1. LCD screen
2. A/B diversity indicator
3. RX audio indicator
4. AF audio level indicator
5. Frequency set button
6. Up/down frequency adjustment buttons
7. Power switch & mic level control

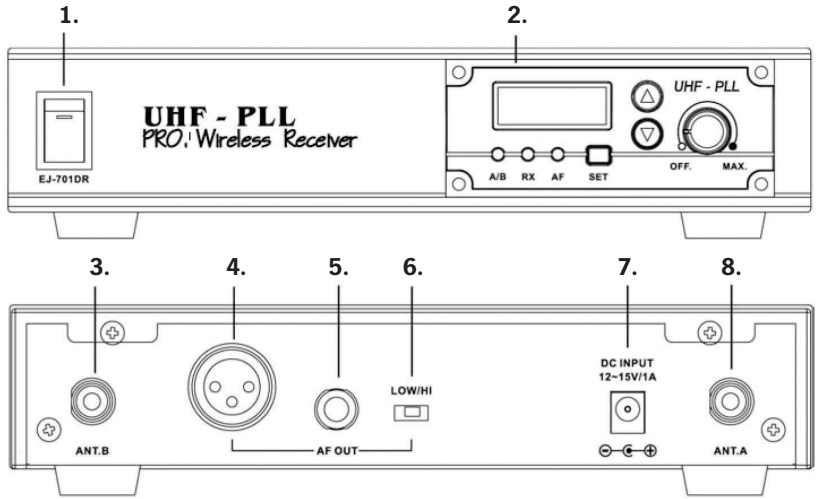
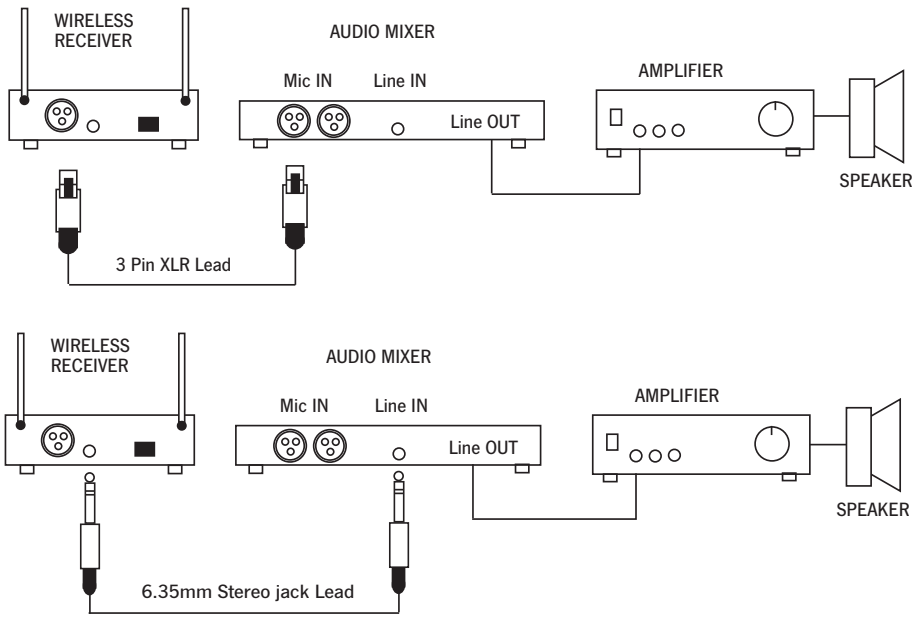


Fig. 3: Receiver Front and Rear Panel

1. Power switch
2. Receiver module (see Fig. 2 detail)
3. Antenna B TNC connector
4. Balanced 3 pin XLR output
5. 6.35mm jack output
6. Low/high impedance switch for 6.35mm output
7. DC power input socket
8. Antenna A TNC connector

Fig. 4: Receiver Connection To Amplifier/Mixer



Receiver Connection

See Fig. 4.
Connection to your amplifier or mixer unit can be made via 6.35mm unbalanced jack or 3 pin XLR balanced lead. Connect the output of the receiver to the input of your amplifier or mixer with an appropriate lead. The 6.35mm output is provided with a high/low impedance switch. This switches between 80mV and 700mV impedance. If connecting to a mic input jack select “low” or 80mV. If connecting to a line or aux input jack select high or 700mV.

Transmitter Operation

See Fig. 5 & 6.
1. Turn the main power switch on and turn power switch/AF level knob clockwise to turn the transmitter unit on
2. The LCD screen will display ‘ON’ then revert to the factory default channel (or the channel last selected).
3. To select a channel press the SET button. Using the UP/DOWN frequency adjustment buttons you can set the transmitter to match the channel used by the receiver (C 7280).
4. Adjust the AF level to the desired position.
5. The module is now ready to transmit signal to the receiver unit (C 7280). When transmitting audio the TX indicator will light green. The AF indicator displays audio level when users are speaking into a mic or music is playing.
   In addition individual transmission indicators are provided for wired mic input and aux/line input (number 3 & 5 respectively on Fig. 6). These will illuminate whenever signal from each input is being transmitted.
6. A stereo phone jack and level control is provided on the front panel for local monitoring of aux/line input signal).

C 7192B and C 7195B Transmitter Troubleshooting

- **Power LED does not illuminate after pressing power switch.**
  Check batteries are charged and inserted correctly.
  For handheld microphone, when pressing power switch ensure you hold it down for 2-3 seconds.
- **LCD shows “Err” when switching off.**
  Contact your place of purchase for information on resetting your transmitter.
- **LCD panel displays garbled information.**
  Remove batteries and re-insert them.
- **No sound output**
  Check frequency of transmitter is the same as the receiver.
  Check volume level of both transmitter and receiver.
  For beltpack transmitter, ensure mute button is not activated.
  Ensure transmitter is within range of the receiver.
  Check for sources of interference, large metal objects etc. within range of the transmitter.
- **Signal disturbance.**
  When operating two transmitters in the same area, ensure frequencies selected are several channels apart. This helps to reduce crosstalk between transmitters. Also note that other wireless devices can cause interference, ensure you adjust your frequency around these devices where possible.

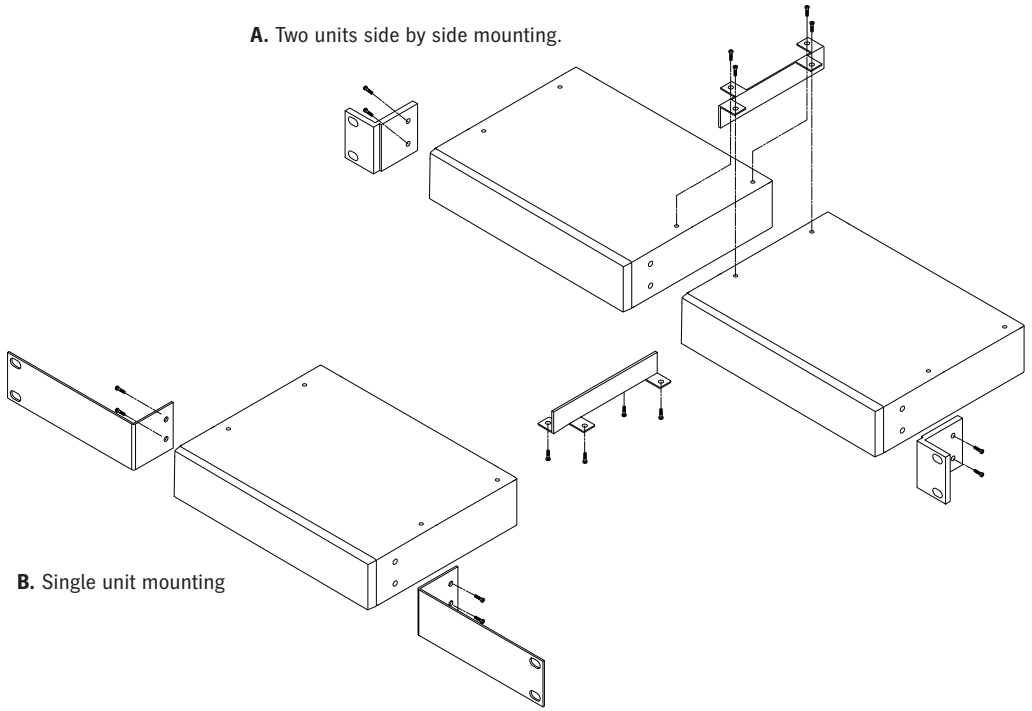
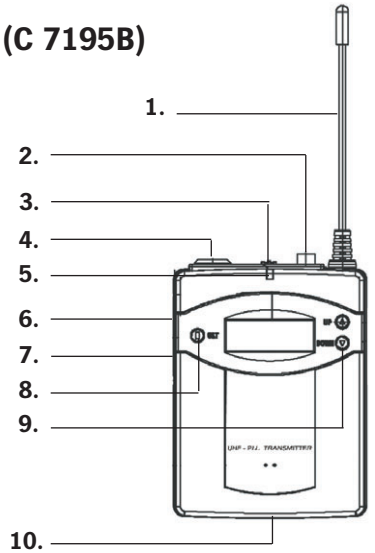


Fig. 11: Mounting C 7280 & C 7282 In 19” Racking

Fig. 10: Beltpack UHF Wireless Transmitter (C 7195B)

1. Aerial
2. Mute button (top)
3. On/off switch (top)
4. Mini XLR 3 Pin input socket (top)
5. LED power indicator
6. Sensitivity selection switch (side)
7. 3.5mm aux input socket (side)
8. Frequency set button
9. Up/down frequency adjustment buttons
10. Charging jack



C 7195B Lavalier Beltpack Transmitter - Figure 10.

1. Ensure microphone is switched off before inserting batteries.
2. Remove battery clip. Insert two AA batteries (alkaline or rechargeable's are recommended).
3. Switch the top mounted power switch to ON. The power LED will illuminate red and 'ON' will be displayed on the LCD screen.
4. A selection switch on the side of the beltpack provides three level settings (low, mid & high) depending on the application or environment in which it is to be used. The mute button allows beltpack to be put on standby without switching the power off.
5. The LCD screen will display the channel selected. To determine which frequency this channel is operating on, press the UP or DOWN frequency adjustment buttons.
6. Press the frequency set button for one to two seconds. The LCD screen will flash the currently selected channel number. You can cycle through the channels by pressing the UP or DOWN frequency adjustment buttons. Press the frequency set button again to lock in your channel selection.
7. The battery status is displayed on the left of the screen. When battery capacity is critical the icon will flash three times before switching the microphone off automatically.
8. When using with rechargeable NiMH batteries, you can use the C 7196 charging pod. This allows you to put up to two beltpacks on charge at the same time. Charging time is dependant on the capacity of batteries used, typically 10-12 hours charging is required. If battery icon is flashing when charger is connected, ensure rechargeable batteries are inserted in the microphone. If batteries have failed both the battery icon and screen backlight will flash. During normal charging the battery icon will cycle through the charge "bar" icons. Once full capacity is reached the full battery icon and all "bars" will be displayed.

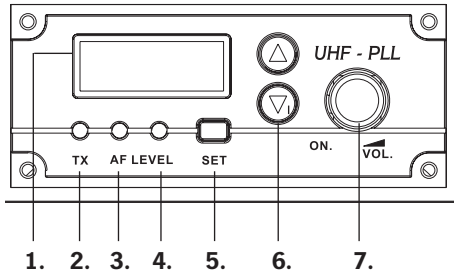


Fig. 5: Transmitter Module

1. LCD screen
2. TX transmitting indicator
3. AF transmitting indicator
4. AF audio level indicator
5. Frequency set button
6. Up/down frequency adjustment buttons
7. Power switch & AF level control

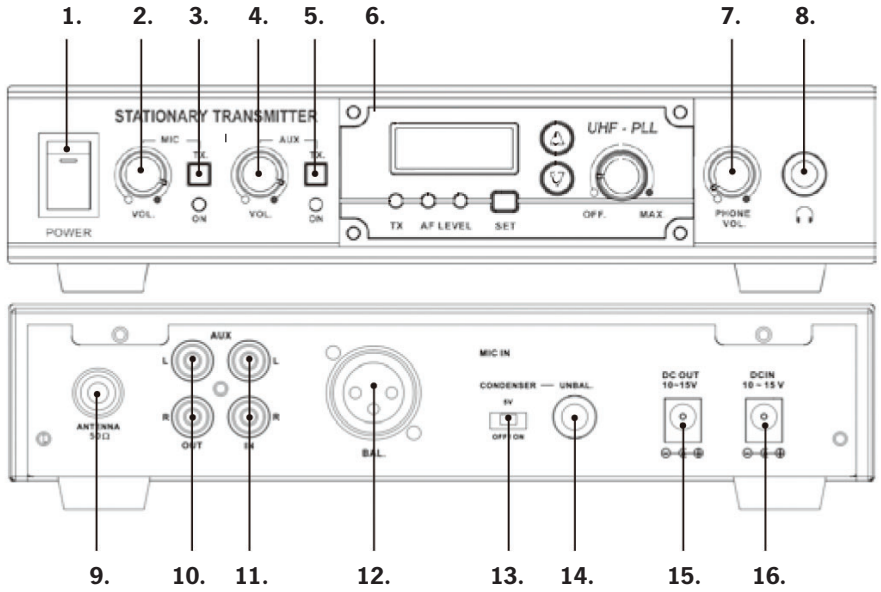
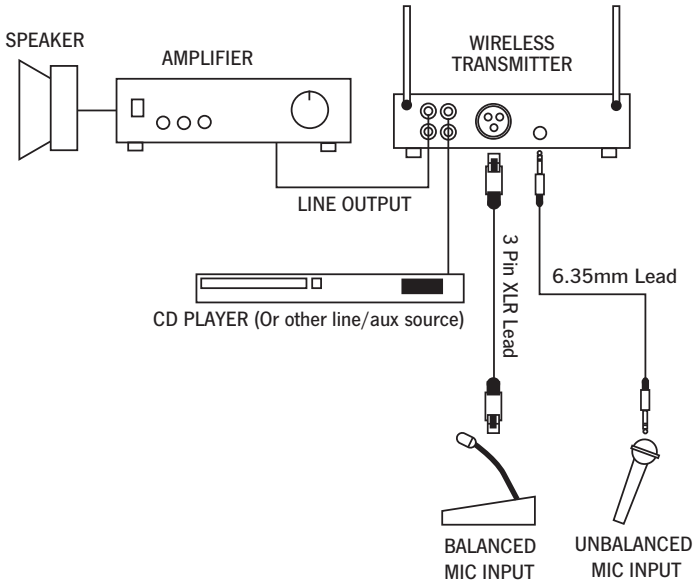


Fig. 6: Transmitter Front & Rear Panel

1. Power switch
2. Wired mic volume
3. Wired mic transmission indicator
4. Aux/Line input volume
5. Aux/line input transmission indicator
6. Transmitter module (see Fig. 5)
7. Headphone volume
8. 6.35mm headphone jack
9. Antenna TNC connector
10. Aux/Line stereo RCA output
11. Aux/Line stereo RCA input
12. Balanced 3 pin XLR input
13. Condenser mic p/supply selector (5V)
14. 6.35mm jack input
15. DC power loop output socket
16. DC power input socket

Fig. 7: Transmitter Connection To Amplifier/Mixer and Audio Sources



Transmitter Connection

See Fig. 7.
The wireless transmitter can be connected to a local line level input source via stereo RCA connection. In addition two microphone inputs are provided via balanced 3 pin XLR and unbalanced 6.35mm jack connection. A stereo RCA loop output is fitted, this may be connected to a local zone amplifier input.

A 5V phantom power switch for condenser microphones may be selected on the 6.35mm jack input.

Transmitter Microphone Operation

C 7192B handheld microphone and C 7195B lavalier beltpack transmitter may be used in conjunction with the C 7280 receiver unit. **Transmitter microphones are sold separately.**

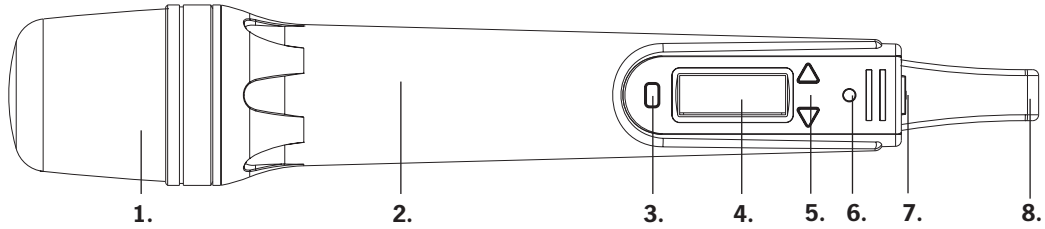


Figure 9: Handheld UHF Wireless Microphone (C 7192B)

1. Protective screen head
2. Rubberised body
3. Frequency set button
4. LCD screen
5. Up/down frequency adjustment buttons
6. LED power indicator
7. Power switch
8. Charging port connection

C 7192B Handheld Microphone Transmitter - Figure 9.

1. Ensure microphone is switched off before inserting batteries.
2. Remove lower housing and battery clip. Insert two AA batteries (alkaline or rechargeable's are recommended).
3. Press and hold the power switch for a few seconds (located on the base of the microphone). The power LED will illuminate red and 'ON' will be displayed on the LCD screen. Note: power switch is more easily accessed with lower housing removed.
4. A selection switch on the rear of the microphone provides three level settings (mute, mid & high) depending on the application or environment in which it is to be used. Mute setting allows microphone to be put on standby without switching the power off.
5. The LCD screen will display the channel selected. To determine which frequency this channel is operating on, press the UP or DOWN frequency adjustment buttons.
6. Press the frequency set button for one to two seconds. The LCD screen will flash the currently selected channel number. You can cycle through the channels by pressing the UP or DOWN frequency adjustment buttons. Press the frequency set button again to lock in your channel selection.
7. The battery status is displayed on the left of the screen. When battery capacity is critical the icon will flash three times before switching the microphone off automatically.
8. To turn the microphone off press the power switch for a few seconds until the LCD screen displays 'OFF'
9. When using with rechargeable NiMH batteries, connect a DC 5V plugpack (Altronics M 8909A plus M 9187 tip adaptor) to the charging port on the base of the microphone. Charging time is dependant on the capacity of batteries used, typically 10-12 hours charging is required. If battery icon is flashing when charger is connected, ensure rechargeable batteries are inserted in the microphone. If batteries have failed, both the battery icon and screen backlight will flash.
10. During normal charging the battery icon will cycle through the charge "bar" icons. Once full capacity is reached the full battery icon and all "bars" will be displayed.
    Note: Microphone is unable to be used during charge process.