



## Freedom Back System

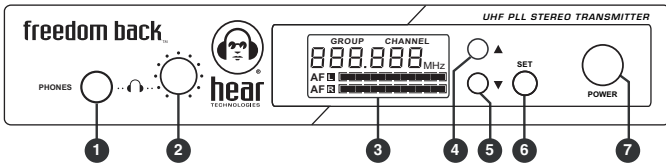
Freedom Back is a high quality UHF wireless stereo in-ear monitor system designed to replace loud, bulky and unsightly stage monitors while allowing the talent the freedom to move about the stage. It is a perfect companion to our highly successful Hear Back personal monitor mixer system and the acclaimed Mix Back matrix monitor mixer.

The Freedom Back system includes a transmitter with antenna, wireless stereo receiver, carrying case, and rack mount kit with an extension cable for mounting the antenna on the front panel. Freedom Back is available in UA and UB bands making it possible to utilize numerous units on a stage at one time. Band A operates from 584 – 608 MHz and band B operates from 655 – 679 MHz. With 120 channels per band, the user will be able to select frequencies that will not be subject to local TV station interference even after the impending FCC changes.

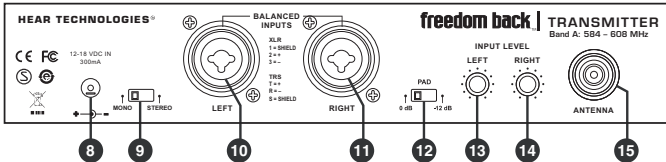
### Transmitter Features:

- 120 digitally selectable UHF channels
- Up to 10 transmitters may be used in the same space, depending on local UHF interference
- Stereo or Mono switch on the rear of the transmitter
- Back-lit LCD display of frequency, audio level, group and channel
- XLR and 1/4" combo input connectors
- Built-in automatic limiter
- Stereo headphone or in-ear monitor jack with volume control
- PAD switch attenuates signal by 12 dB
- External whip antenna can be front mounted with included rack ears and extension cable

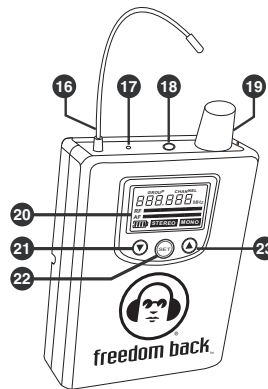
### TRANSMITTER | FRONT PANEL



### TRANSMITTER | REAR PANEL



### RECEIVER | DETAIL



### TRANSMITTER

- |                                    |   |
|------------------------------------|---|
| 1 - Stereo Headphone jack          | 9 - Stereo / Mono switch                          |
| 2 - Headphone Output level control | 10 - Left / Mono audio balanced input, XLR or TRS |
| 3 - Back-lit LCD screen            | 11 - Right audio balanced input, XLR or TRS       |
| 4 - Menu "up" button               | 12 - 0 dB / -12 dB PAD switch                     |
| 5 - Menu "down" button             | 13 - Left audio input level control               |
| 6 - Program "set" button           | 14 - Right audio input level control              |
| 7 - Power switch                   | 15 - Antenna connector, 50 ohm                    |
| 8 - Power adapter jack             |   |

### RECEIVER

- |   |
|---|
| 16 - Antenna                                  |
| 17 - RF signal LED                            |
| 18 - Stereo earphone jack                     |
| 19 - Audio volume control and On / Off switch |
| 20 - Back-lit LCD screen                      |
| 21 - Menu "down" button                       |
| 22 - Program "set" button                     |
| 23 - Menu "up" button                         |

### Receiver Features:

- Wireless stereo belt pack allows freedom to move about the stage
- Unlimited receivers may be used with one transmitter, when on the same frequency
- Back-lit LCD displays frequency, group, channel, battery indicator, and Mono/Stereo
- Stereo headphone or in-ear monitor jack with volume control
- RF present LED
- Batteries included

freedom back™

# SPECIFICATIONS

## FREEDOM BACK SYSTEM

Frequency Range and Transmitter Output Level		
Bands:	UA	UB
Frequency Range:	584 ~ 608 MHz	655 ~ 679 MHz
Transmitter Output Level:	10 dBm	10 dBm
Channels:	120 (10 groups of 12 channels)	120 (10 groups of 12 channels)
Operating Range:		
	330 ft (100 m) line of sight, under typical conditions <i>Note: Actual range depends on RF signal absorption, reflection, and interference.</i>	
Frequency Response (+/- 3 dB):	40 Hz ~ 16 KHz	
Total Harmonic Distortion (+/- 30 KHz deviation, 1 KHz tone):	<1%	
Dynamic Range:	>90 dB A-weighted	
Operating Temperature Range:	-10°C to +50°C <i>Note: Battery characteristics may limit this range.</i>	

## TRANSMITTER

Max Audio Input Level:	+6 dBV, +18 dBV with -12dB PAD engaged
Gain Adjustment Range:	60 dB
Input Impedance:	10 K Ohms unbalanced, 20 K Ohms balanced
<b>Physical</b>	
Dimensions:	1.5" H x 8.35" W x 3.78" D (38mm H x 212mm W x 96mm D)
Weight:	1.34 lbs (0.6 kg)
Power Requirements:	12-18 VDC at 300 mA, supplied by external power supply
XLR Input:	Balanced Pin 1 = Shield Pin 2 = + Audio Pin 3 = - Audio
TRS Input:	Tip = + Audio Ring = - Audio Sleeve = Shield

## WIRELESS STEREO RECEIVER

Audio Output Level:	100 mW
Sensitivity:	-94 dB for 30 dB SINAD, typical
Image Rejection:	>55 dB
<b>Physical</b>	
Dimensions:	3.74" H x 2.56" W x 0.98" D (95mm H x 65mm W x 25mm D)
Weight:	3.52 oz (100 g) without batteries
Power Requirements:	2 "AA" size Alkaline or rechargeable batteries
Battery Life:	Approximately 4 ~ 5 hours (alkaline), load and level dependent

Note: 0 dBu = 0.775 V rms

\*Specifications and features subject to change without notice.

### FCC Statement

Note: 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 or more 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.

