

## IMPORTANT SAFETY INSTRUCTIONS WARNING



An equilateral triangle enclosing a lightning flash/arrowhead symbol is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure which may be of sufficient magnitude to constitute a risk of electric shock.



An equilateral triangle enclosing an exclamation point is intended to alert the user to the presence of important operating and service instructions in the literature enclosed with this unit.

When using this electronic device, basic precautions should always be taken, including the following:

1. Read all instructions before using the product.
2. Do not use this product near water (e.g., near a bathtub, washbowl, kitchen sink, in a wet basement, or near a swimming pool, etc.).
3. This product should be used only with a cart or stand that will keep it level and stable and prevent wobbling.
4. This product, in combination with headphones or speakers, may be capable of producing sound levels that could cause permanent hearing loss. Do not operate for a long period of time at a high volume level or at a level that is uncomfortable. If you experience any hearing loss or ringing in the ears, you should consult an audiologist.
5. The product should be positioned so that proper ventilation is maintained.
6. The product should be located away from heat sources such as radiators, heat vents, or other devices (including amplifiers) that produce heat.
7. The product should be connected to a power supply only of the type described in the operating instructions or as marked on the product. Replace the fuse only with one of the specified type, size, and correct rating.
8. The power supply cord should: (1) be undamaged, (2) never share an outlet or extension cord with other devices so that the outlet's or extension cord's power rating is exceeded, and (3) never be left plugged into the outlet when not being used for a long period of time.
9. Care should be taken so that objects do not fall into, and liquids are not spilled through, the enclosure's openings.
10. The product should be serviced by qualified service personnel if:
  - A. The power supply cord or the plug has been damaged.
  - B. Objects have fallen into, or liquid has been spilled onto the product.
  - C. The product has been exposed to rain.
  - D. The product does not appear to operate normally or exhibits a marked change in performance.
  - E. The product has been dropped, or the enclosure damaged.
11. Do not attempt to service the product beyond what is described in the user maintenance instructions. All other servicing should be referred to qualified service personnel.

*This unit is to be installed by qualified personnel only.*



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# IRW-2PA

## INFRARED WIRELESS MICROPHONE PA SYSTEM



OWNERS MANUAL

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## SPECIFICATIONS

### IRW-2PA Wireless PA

|                                 |   |
|---------------------------------|---|
| Mode .....                      | Infrared Frequency Modulated  |
| Receiving channels .....        | Dual channels A & B   |
| Carrier frequency .....         | (Ch A) 2.0MH; (Ch B) 2.6MH  |
| Range (line of sight) .....     | Up to 50 ft. (15M)  |
| Audio frequency response: ..... | 60Hz~14KHz  |
| S/N ratio .....                 | >82db   |
| THD .....                       | 0.8%  |
| Aux Input sensitivity .....     | 18mV  |
| Mic Input sensitivity .....     | 280mV   |
| Bass control .....              | +/- 12dB at 100Hz   |
| Treble control .....            | +/- 12dB at 8KHz  |
| Speaker Output Power .....      | 35W RMS @ 4Ω; 25W RMS @ 8Ω  |
| Controls .....                  | Power On/Off (inside panel); A and B Volume controls;<br>Mic Input Volume; Aux Input Volume; Bass EQ; Treble EQ;<br>Charging Selector Switch, Battery Charging Power Switch |
| Connectors .....                | 4 x IR Sensor Input coax jacks; Speaker Output dual spring clip;<br>Aux Input 1/4" jack; Mic Input 1/4" jack; AC Power Input Jack   |
| Power Requirements .....        | AC/AC Power Supply 24VAC 2500mA (UL Approved)   |
| Power Fuse .....                | 2A 250V   |
| Dimension (H x W x D) .....     | 14.1" x 10.6" x 6.2" (358 x 269 x 157mm)  |
| Weight .....                    | 13.2 lbs. (6 kg)  |

### HT-6SC Handheld Microphone Transmitter

|                         |   |
|-------------------------|---|
| Carrier frequency ..... | Ch A 2.0MHz, Ch B 2.6MHz                |
| Controls .....          | ON/OFF switch                           |
| Audio Input .....       | DM-10D Unidirectional Dynamic Cartridge |
| Power Requirement ..... | 2xAA battery (2.4VDC)                   |
| Battery Life .....      | Up to 6 hours                           |
| Dimensions .....        | 2.2" x 10.2" (56 x 260mm)               |
| Weight .....            | 14.1 oz (400g)                          |

### LT-6SC Bodypack Transmitter

|                         |   |
|-------------------------|---|
| Carrier frequency ..... | Ch A 2.0MHz, Ch B 2.6MHz  |
| Audio input .....       | LM-14/O lavalier/lapel omni-directional condenser microphone,<br>DM-14/O direct plug-in omni-directional<br>condenser microphone, HM-10 condenser headmic |
| Controls .....          | ON/OFF switch, Volume Control, Ch A/B Select Switch   |
| Connectors .....        | 3.5 mm locking jack   |
| Power Requirement ..... | 2xAA battery (2.4VDC)   |
| NiMH Battery Life ..... | Up to 6 hours   |
| Dimensions .....        | 3.9" x 1.2" x 2.6" (100 x 30 x 66mm)  |
| Weight .....            | 3.6 oz (100g)   |

## OPTIONAL ACCESSORIES

|               |  |
|---------------|--|
| <b>IRDR-2</b> | Dual recharger for two HT-6SC                    |
| <b>IRRA-1</b> | LT bodypack recharging adapter                   |
| <b>IR-HBP</b> | Battery pack for HT-6SC                          |
| <b>IR-BBP</b> | Battery pack for LT-6SC                          |
| <b>IRW-1S</b> | Infrared sensor and 35' extension cable          |
| <b>IRW-SY</b> | Multiple sensor Y-adapter                        |
| <b>AL-40</b>  | Adjustable lanyard with safety "breakaway" clasp |

If your dealer can't supply you with the available accessories for your IRW-2PA, you can order direct from Nady Systems, Inc. by calling our Nady Service Department at (510) 652-2411.

## SERVICE

**(U.S.)** Should your NADY IRW-220X Infrared Wireless Microphone System require service, please contact the Nady Service Department via telephone at (510) 652-2411 or e-mail to [service@nady.com](mailto:service@nady.com) for a Return Authorization (R/A) Number and a service quote (if out of warranty). Make sure the R/A Number is clearly marked on the outside of the package and enclose a cashier's check or money order (if not prepaid with a credit card). Ship the unit prepaid to: Nady Systems, Inc., Service Department, 6701 Shellmound Street, Emeryville, CA 94608. Include a brief description of the problems you are experiencing.

The warranty card enclosed with this system contains additional valuable warranty and service information. Keep it in a safe place for future possible reference. Do not attempt to service this unit yourself as it will void the warranty.

**(International)** For service, please contact the Nady distributor in your country through the dealer from whom you purchased this product.

## INTRODUCTION

Thank you for purchasing the NADY IRW-2PA Infrared Wireless PA System and congratulations on your choice. The IRW-2PA is loaded with top professional operating features and is the best performance and price value available in Infrared Wireless PA Systems.

## USING THIS MANUAL

This booklet gives instructions for the installation and operation of the IRW-2PA system, including handheld and lavalier wireless microphone transmitters. Please read the instructions for your system completely before operating unit.

This manual will first list the features of the IRW-2PA and then will take you step by step to show you how to install and operate your new system. After reading the PA receiver instructions, turn to the section of the booklet that covers the type of transmitter used with your new system. Each section will give you detailed operating instructions. Also included in this manual are system specifications and servicing information.

## IRW-2PA SYSTEM CONTENTS

- IRW-2PA dual channel wireless infrared receiver
- (2x) Infrared transmitters - either HT-6SC handheld microphone or LT-6SC bodypack with clip-on lavalier microphone and lanyard
- (2x) IRW-1S Infrared Sensor w/20 ft. and 35 ft. extension cables
- AC/AC Power supply for PA
- (2x) lockbox keys
- Users Manual
- Warranty Card

**IRW-2PA INFRARED PA SYSTEM**

- All-in-one infrared wireless PA system—ideal for schools, lectures, conferences, or karaoke applications
- Multi-functional wall hanging lockbox houses dual infrared wireless receiver, preamp, power amp, and transmitters with battery-charging holders for safe and secure charging and storage
- Two wireless microphones, an Aux Input and a hard-wired Mic Input allow up to four total input signals, each with their own volume control
- Master Treble and Bass controls, and a 35W RMS power amp, perfect for driving two 8Ω speakers or any number of small ceiling speakers
- Handheld microphones and/or bodypack/neck worn lapel microphones available (2 x NiMH battery operation)
- Battery chargers with unique safety shut-down protection circuitry to detect reverse polarity, damaged batteries, or non-rechargeables
- Line of sight transmission with no interference from systems in adjoining rooms providing ultimate confidentiality and isolation
- Power on, IR reception, and battery charging status LED indicators
- 2 remote mount IR Sensors supplied, with 20 ft. and 35 ft. connecting cables and variable-position wall mounts; each sensor with a Multiple Array of Wide-Angle Infrared Sensitive LEDs
- UL approved AC/AC power supply

**HT-6SC HANDHELD MICROPHONE TRANSMITTER**

- Multiple array of high efficiency infrared emitter LEDs for optimum IR transmission and range
- Power On LED
- Powerful uni-directional dynamic cartridge for optimum audio, minimal handling noise, and maximum feedback rejection; rugged steel mesh ballscreen with anti-roll ring
- Operates up to 6 hours on 2 NiMH rechargeable batteries
- Equipped with a charger protection circuitry that can detect and shut down charging function if regular alkaline or non-rechargeable batteries are mistakenly recharged

**LT-6SC BODY-PACK TRANSMITTER**

- Multiple array of high efficiency infrared emitter LEDs for optimum IR transmission and range
- Power ON LED
- Channel A/B selector switch
- 3.5mm mini-jack for connection of lapel microphone/direct mic/headmic
- Audio input volume control
- Belt Clip and neck worn lanyard
- Operates up to 6 hours on 2 NiMH AA rechargeable batteries
- Equipped with a charger protection circuitry that can detect and shut down charging function if regular alkaline or non-rechargeable batteries are mistakenly recharged

**2. Operation**

**a.** The IRW-LT6 is provided with a 3.5mm **Locking Jack (5)** for connecting the microphone. Plug in either the LM-14/O lavalier/lapel mic, DM-14/O direct mic, or HM-10 headmic as supplied. To secure the connection, turn the metal slip ring on the plug clockwise to thread it on the jack. To unplug, reverse the process. Clip the transmitter to your clothes/belt, or hang the transmitter on your chest using the supplied neck worn lanyard. Make sure the LT-6SC **Emitter (4)** has a clear line of sight with the IR Sensor. To use the lavalier mic, attach it at upper chest level. Do not place the mic too far from the mouth – a distance of about 5"- 7" usually works best.

**b.** Adjust the LT-6SC Volume Control (6) to minimum and slide the **Power Switch (2)** to the ON position. The bi-color Power ON/LOW **Battery LED Indicator (1)** will light green, indicating that the transmitter is on. In the case of low battery strength, the indicator will light red, indicating that the batteries should be replaced with fresh ones or the NiMH batteries should be recharged.

The IRW-2PA IR **Reception LED Indicator (6)** of the corresponding channel should change from red to green if the sensors are properly receiving the signal. If it is not, check the IRW-2PA power, sensor connections, and make sure the transmitter is within range of the sensor. For optimum performance and range, make sure that the LT-6SC **Emitter (4)**, on the "bubble" side of the bodypack, is not covered by the body or clothing and has an unobstructed line-of-sight with the IR sensor.

**c.** While speaking into the microphone, slowly increase the LT-6SC **Volume Control (6)** and adjust the corresponding IRW-2PA **Volume Control (7)** to the desired level while taking care to avoid acoustic feedback. The microphone is now ready to use.

*Note: Observe care in selecting volume, transmitter location, and speaker placement so that acoustic feedback (howling and screeching) will be avoided. Please also observe the pickup patterns of the microphone selected: omnidirectional mics pick up sound equally from all directions and are prone to feedback if not used carefully. Unidirectional mics are more resistant to feedback, but pick up sound sources best that are directly in front of the microphone. Also, mics that are farther from the sound source, such as lapel mics, require more acoustic gain and thus are also more prone to feedback than close-source mics such as handheld mics that are used close to the mouth.*

If there is no audio, check your speaker connections and verify proper impedance is being used. If there is still no audio, try turning the IRW-2PA power switch on and off in case the amp went into short-circuit protection mode due to accidental wiring during speaker installation.

**3. Charging**

The IRW-2PA **Bodypack Charging Connector (13)** can be plugged directly into the LT-6SC **DC Input Jack (3)** using the connecting cable for easy charging of NiMH batteries. One or two bodypacks can be charged simultaneously. When the charger is connected, the corresponding IRW-2PA **Battery Charging LED Indicator (15)** will light brightly red. The LED indicator will light green when the batteries are fully charged.

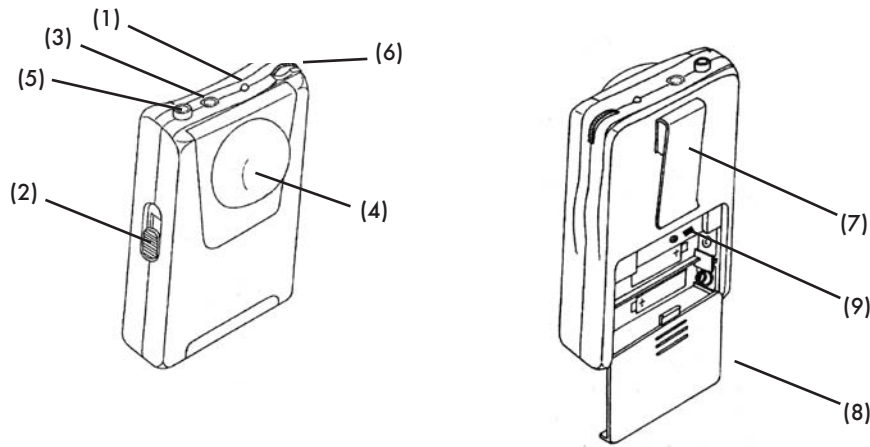
*Note: See charger section on page 9 for important charger operation information.*

### 3. Charging

The IRW-2PA can be used to recharge one or two HT-6SC simultaneously by placing the handheld microphones directly into the **Handheld Microphone Holders (12)** without removing the rechargeable batteries. Turn on the **Battery Charging Power Switch (14)**. When the microphone is placed in the holder, the corresponding **Battery Charging LED Indicator (15)** on the IRW-2PA will light brightly red. The LED indicator will light green when the batteries are fully charged.

*Note: See charger section on page 9 for important charger operation information.*

## LT-6SC BODYPACK TRANSMITTER



- (1) Power LED Indicator
- (2) Power Switch
- (3) Battery Charging DC Input Jack
- (4) IR Emitter
- (5) Microphone Input Jack
- (6) Volume Control
- (7) Belt Clip
- (8) Battery Compartment Cover
- (9) Channel Selector Switch

### 1. Transmitter Set-up

Slide down the **Battery Compartment Cover (8)**, as shown, exposing the battery compartment. Insert 2 fresh AA alkaline batteries, NiMH rechargeable batteries, or the optional IR-BBP battery pack while observing the correct polarity as marked. Set the **Channel Selector Switch (9)** to the desired channel of operation and slide the cover back into position on the unit. Note, only one transmitter per channel can be used simultaneously.

*(Note: Make sure the transmitter is off when changing the batteries.)*

**1.** The IRW-2PA lockbox should be positioned in the room while considering the following criteria:

- IR Sensors should be placed on either side of operating area and as close to microphone operating area as possible. All rules of sensor installation should be observed as per instructions 2 below.
- IRW-2PA can be easily connected to AC power.
- IRW-2PA optional features such as Aux input and hard-wired mic input can be easily used as desired.
- IRW-2PA LED indicators can be viewed with ease.
- If placing the IRW-2PA on a table or shelf, it should be securely fastened so that it cannot fall over or cause any damage if the transmitters accidentally fall when inserted or removed from the case.
- If hanging on the wall, the IRW-2PA should be properly secured to a strut or solid wall at a reasonable height (no more than 65" from the floor).
- Installation should be performed by qualified personnel using proper hardware to ensure there is absolutely no risk of the unit falling or causing damage of any kind.

*(Nady Systems is not liable for any damage or harm caused due to improper installation or use of this product. All installation should be done by qualified personnel only)*

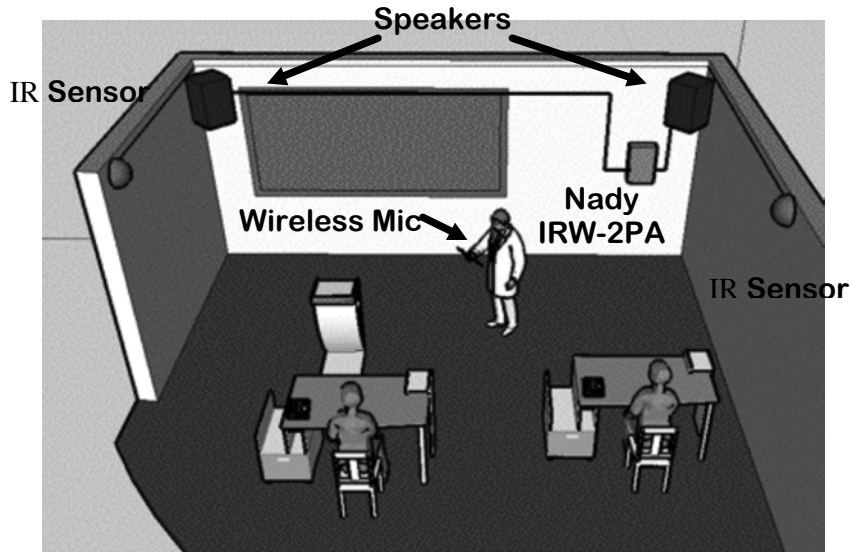
**2.** The IRW-1S sensors can be mounted on walls using any of the wall mounts included. To ensure proper optimum operation, observe the following installation rules:

- a.** Position the IR Sensors with their front panel receptors facing the entire area of transmitter operation. If this is a wide area, angle the receptors to cover the maximum area range. The diagrams on the opposite page shows some suggested positioning for the IR Sensors.
- Note: The IR sensors will need to be positioned differently for each environment. During installation, power up the IRW-2PA and have one person walk around the desired location, with the transmitters on, while another person positions the IR Sensors for greatest range of mobility.*
- b.** Since the unit utilizes infrared light reflected off of room surfaces, do not mount the sensors near a black ceiling, wall, or heavy curtains as they may limit the range by eliminating such reflection. Mounting the sensors in an uncluttered area near a light colored wall will provide the best operation.
- c.** Although the unit can be used in most brightly lit rooms, it works best if bright lights are not shined directly on the sensors. *(Note: Never operate the unit outdoors in daylight as it will not operate properly under such conditions)*
- d.** Never cover the IR Sensors as this will disrupt normal operation. If they become dirty, clean with a soft cloth. Make sure the sensors are not obstructed and always have a clear line-of-sight with the transmitters.

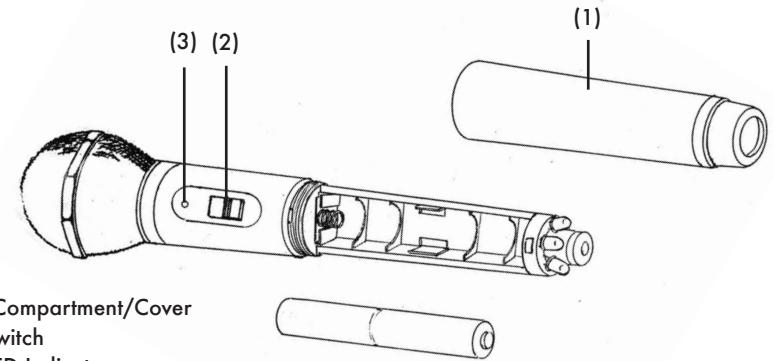
Additional external IR sensors can be added using the IRW-SY Multiple Sensor Y-adaptor which allows multiple sensors to be connected to each input. See diagrams for some examples of installation (next page).

**WARNING: MAKE SURE ALL POWER IS OFF TO THE IRW-2PA WHEN CONNECTING OR DISCONNECTING THE IRW-1S IR SENSORS TO AVOID DAMAGE TO THE UNIT. IMPROPER OPERATION WILL VOID THE WARRANTY**

## INSTALLATION



## HT-6SC HANDHELD MICROPHONE TRANSMITTER



- (1) Battery Compartment/Cover
- (2) Power Switch
- (3) Power LED Indicator

### 1. Transmitter Set-up

Unscrew and remove the **Battery Compartment Cover (1)** by sliding it down off the microphone to expose the battery holders. Insert 2 fresh AA alkaline batteries, NiMH rechargeable batteries, or the optional IR-HBP battery pack while observing the correct polarity as marked, and screw the cover back on the battery compartment.

*(Note: Make sure the transmitter is off when changing the batteries.)*

### 2. Operation

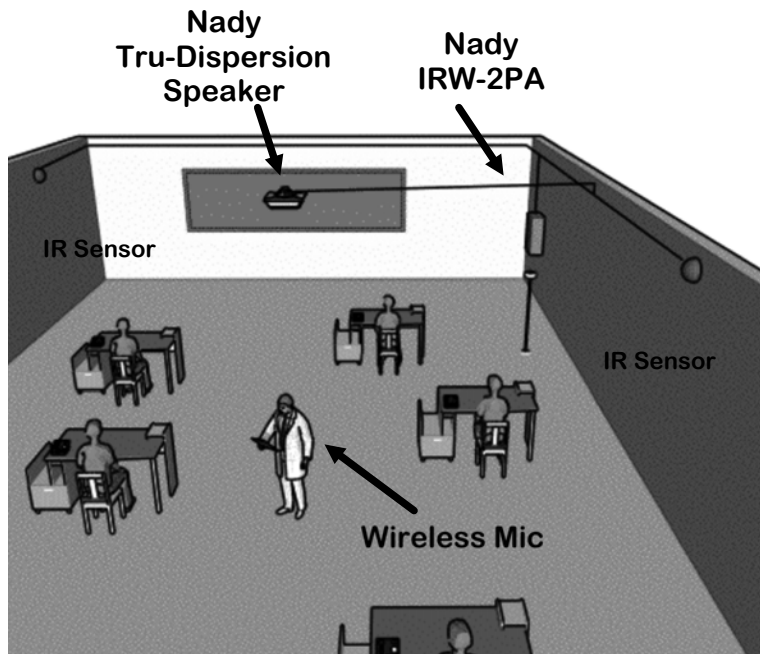
a. Slide the **Power Switch (2)** to the ON position. The **Power LED Indicator (1)** will light green, indicating that the transmitter is on. In the case of low batteries, the indicator will be off, indicating that the batteries should be replaced with fresh ones or the batteries should be recharged.

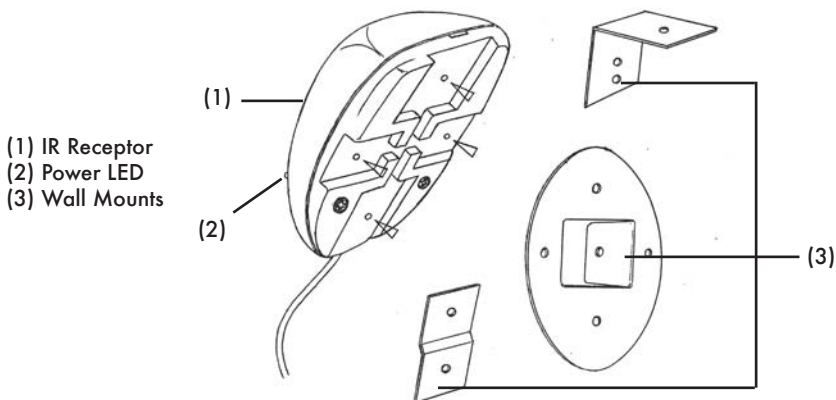
The IRW-2PA **IR Reception LED Indicator (6)** of the corresponding channel should change from red to green if the sensors are properly receiving the signal. If it is not, check the IRW-2PA power, sensor connections, and make sure the transmitter is within range of the sensor. For optimum performance and range, make sure that the IR emitter, at the base of the transmitter, is not covered by the hand and has an unobstructed line-of-sight with the IR sensor.

b. While speaking into the microphone, increase the corresponding **Volume Control (7)** on the IRW-2PA to the desired level. The EQ Bass and Treble controls can also be adjusted for audio preference. The microphone is now ready to use.

*[Note: Observe care in selecting volume, transmitter location and speaker placement so that acoustic feedback (howling and screeching) will be avoided.]*

If there is no audio, check your speaker connections and verify proper impedance is being used. If there is still no audio, try turning the IRW-2PA power switch on and off in case the amp went into short-circuit protection mode due to accidental wiring during speaker installation.





### 1. Operation

The IR Sensors act as "antenna" for your infrared wireless microphone system. A multiple array of wide angle IR-sensitive LED's in each sensor receives the infrared signal emitted by your IR transmitter. The **Sensor Power LED (2)** will light to indicate the sensor is properly connected to the IRW-2PA when powered on. The Channel A and B IR LED indicators, located on the front panel of the IRW-2PA, will light green when an infrared signal on the corresponding channel is detected. These sensors should be positioned for maximum range and mobility of the wireless microphone user.

### 2. Additional Sensors

To increase mobility and maximum range, additional sensors can be either plugged into the remaining **Infrared Sensor Inputs (1)** or daisy-chained with existing sensors using the optional IRW-SY Multiple Sensor Y-adapter.

### 3. Wall Mounting

The IRW-1S sensors can be mounted on walls using any of the **Wall Mounts (3)** included. See the Installation section on pg 6 of this manual for information re sensor positioning.

### 3. Connections:

- a. Connect the IRW-1S IR Sensors to the IRW-2PA receiver by plugging the sensor coaxial extension cable plugs into the Infrared **Sensor Inputs (1)**. Each sensor input will receive both channels A and B signals. To increase mobility and maximum range, additional sensors can be added by plugging into the two remaining inputs, or by daisy-chaining sensors. To daisy-chain sensors, disconnect the sensor from the coaxial extension cable and use the optional IRW-SY Multiple Sensor Y-adapter to reconnect the original sensor as well as the additional sensor/extension cable.
- b. Connect the speakers to the **Speaker Output (2)** spring clip connector using speaker cable (not included). The power amp can handle loads of 4Ω impedance or greater. When using multiple speakers, care must be taken to ensure that the total impedance is not less than 4Ω and that all speakers are in phase with each other. Following are some speaker combinations that the amplifier can handle.

#### One Speaker

4Ω = one 4Ω speaker

8Ω = one 8Ω speaker

16Ω = one 16Ω speaker

#### Two Speakers

8Ω = 4Ω + 4Ω (wired in series)

4Ω = 8Ω || 8Ω (wired in parallel)

8Ω = 16Ω || 16Ω (wired in parallel)

#### Four Speakers

4Ω = (4Ω + 4Ω) || (4Ω + 4Ω) (wired in series/parallel)

8Ω = (8Ω || 8Ω) + (8Ω || 8Ω) (wired in series/parallel)

4Ω = 16Ω || 16Ω || 16Ω || 16Ω (wired in parallel)

#### Six Speakers

6Ω = (4Ω + 4Ω + 4Ω) || (4Ω + 4Ω + 4Ω)

5.3Ω = (8Ω || 8Ω || 8Ω) + (8Ω || 8Ω || 8Ω)

10.6Ω = (16Ω + 16Ω) || (16Ω + 16Ω) || (16Ω + 16Ω)

#### Eight Speakers

8Ω = (4Ω || 4Ω) + (4Ω || 4Ω) + (4Ω || 4Ω) + (4Ω || 4Ω)

4Ω = (8Ω || 8Ω || 8Ω || 8Ω) + (8Ω || 8Ω || 8Ω || 8Ω)

8Ω = (16Ω || 16Ω || 16Ω || 16Ω) + (16Ω || 16Ω || 16Ω || 16Ω)

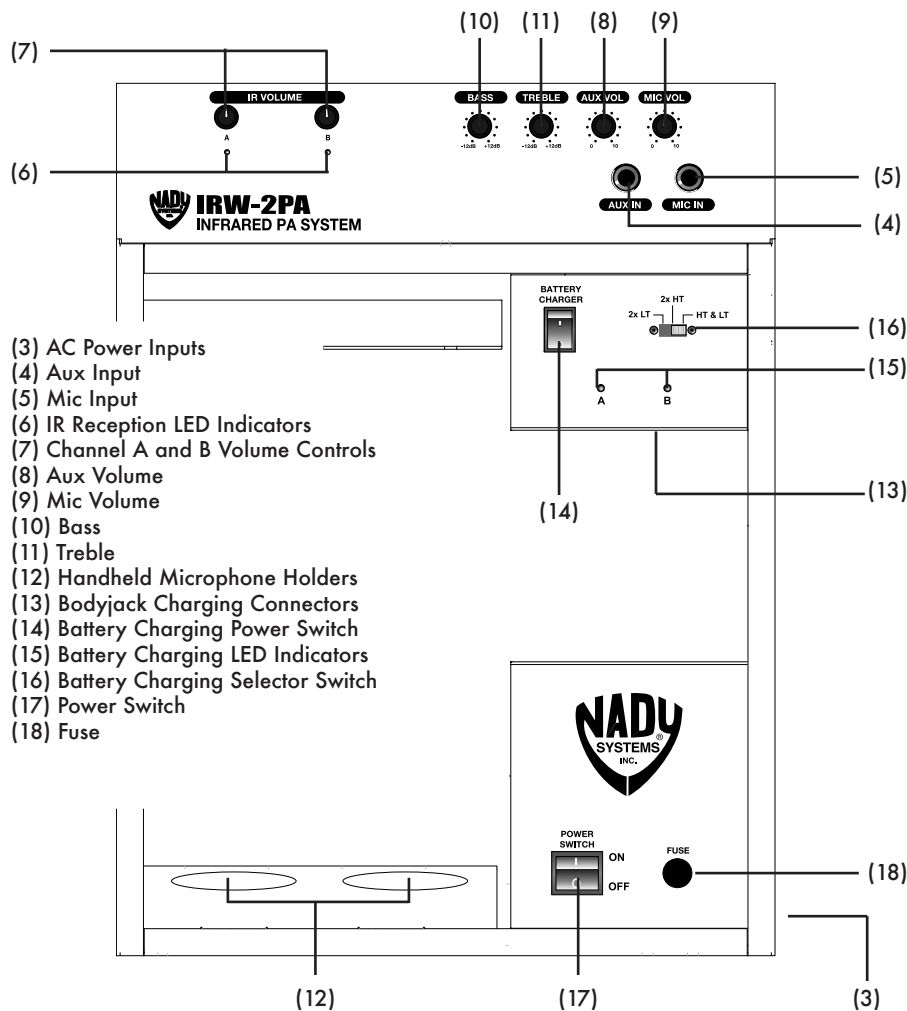
- c. Connect the AC/AC power supply to the side panel 3-prong **AC Power Input (3)** and connect the other end to an AC outlet.
- d. If desired, connect an auxiliary device to the IRW-2PA using the **Aux Input (4)** 1/4" jack. This input is designed to accept line level inputs from CD players, MP-3 players, and tape decks. Use a stereo-to-mono adapter cable so that the right signal is not lost from the stereo mix. If the audio level is too low, try using the Mic Input.
- e. If desired, connect a microphone to the **Mic Input (5)** 1/4" jack. This input is designed to accept mic level to low line level signals.

TOP



- (1) Infrared Sensor Inputs
- (2) Speaker Outputs

FRONT



- (3) AC Power Inputs
- (4) Aux Input
- (5) Mic Input
- (6) IR Reception LED Indicators
- (7) Channel A and B Volume Controls
- (8) Aux Volume
- (9) Mic Volume
- (10) Bass
- (11) Treble
- (12) Handheld Microphone Holders
- (13) Bodyjack Charging Connectors
- (14) Battery Charging Power Switch
- (15) Battery Charging LED Indicators
- (16) Battery Charging Selector Switch
- (17) Power Switch
- (18) Fuse

### 1. Powering the IRW-2PA

Turn on the IRW-2PA using the **Power Switch (17)** located inside the lockbox on the lower right panel. When powered on, the Ch A and Ch B **IR Reception LED Indicators (6)** will light green if the corresponding transmitters are on and red when the transmitters are off. Turn off the IRW-2PA when not charging or in use.

### 2. Inputs

The IRW-2PA has two additional inputs allowing for up to four audio signals to be heard simultaneously when used with the wireless transmitters. An external line-level device such as a CD/MP3-player, VCR audio, tape deck, or keyboard can be added to the mix using the **Aux Input (4)** 1/4" jack. A hardwired microphone can be plugged into the **Mic Input (5)** 1/4" unbalanced jack. This input can also be used for other low-level audio signals, however, be careful to avoid input distortion by turning down the volume of the external device.

### 3. Adjusting the Audio

The Channel A and B mix is dependent on the separate Channel A and B **Volume Controls (7)**. These should be adjusted to balance the audio from the channel A and B microphones. The **Aux Volume (8)** and **Mic Volume (9)** can also be adjusted to balance the levels from those sources. Turn all volume controls down before turning on the transmitters, or connecting any audio devices, to avoid loud noise or feedback that can damage your speakers.

### 4. EQ

The **Bass (10)** and **Treble (11)** controls can be adjusted to cut or boost up to 12dB of gain at 100Hz and 8KHz respectively. These controls affect the master mix. Add warmth to vocals by turning the bass control to the right. Turn to the left to reduce boomy vocals or to improve a mushy sound. Increase the treble control to boost high frequencies, adding crispness too the audio. Turn to the left to cut these frequencies, reducing sibilance and possible feedback.

### 5. Charger

The IRW-2PA can recharge the NiMH batteries for two transmitters simultaneously. Simply turn on the battery charger by switching on the **Battery Charging Power Switch (14)** and select the types of transmitters that are to be recharged using the **Battery Charging Selector Switch (16)**.

| Transmitters                | Selector Switch |
|-----------------------------|-----------------|
| 2x Bodypack Transmitters    | 2x LT           |
| 2x Handheld Transmitters    | 2x HT           |
| 1x Bodypack and 1x Handheld | HT & LT         |

Place the handheld microphones directly into the **Handheld Microphone Holders (12)** and/or connect the bodypack transmitters using the **Bodypack Charging Connector (13)**. When the charger is connected, the corresponding IRW-2PA **Battery Charging LED Indicator (15)** will light brightly red. The LED indicator will light green when the batteries are fully charged. Turn the battery charger off when the transmitters are fully charged, being stored, or being used.

**Note:** The IRW-2PA is equipped with unique charger protection circuitry which detects and shuts down if you attempt to charge alkaline or other non rechargeable batteries. This is important because charging non rechargeable batteries can result in fire or explosion and should never be attempted.