iPort®

Instruction Manual
IW-20
IW-21
IW-22

Introduction

The iPort® is an in-wall digital media system that allows an iPod® or iPhone™ to become part of a whole-home or local audio/video system. Before installing and using the iPort please read and follow all of the instructions in this guide carefully.

iPort System Components and Capabilities

This manual covers three iPort systems (IW-20, IW-21, and IW-22). Each system has different capabilities and includes different components.
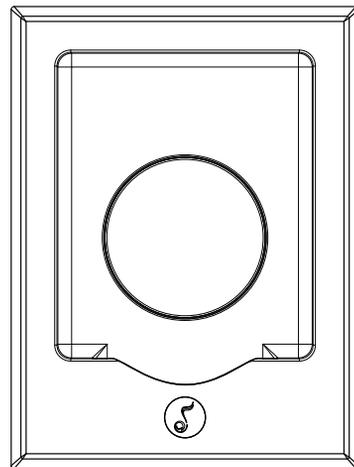
IW-20 System Capabilities:

- Delivers local-zone unbalanced audio up to 30 feet from the iPort. Note: The audio system must supply volume control.

- Charges the iPod/iPhone while it is docked.

- Compatible with iPhone 3G and most dockable iPod models, including iPod nano 4th gen, iPod classic 120GB, and iPod touch 2nd gen. For current compatibility information, visit iportmusic.com.

IW-20 System Box Contents:

(1) iPort in-wall docking system (faceplate and utility box)

(1) Audio wall plate

(1) Regulated power supply

(1) Installation cut-out template

(1) Instruction manual

IW-21 System Capabilities:

- Delivers local-zone unbalanced audio up to 30 feet from the iPort. Optional Balanced Audio Upgrade Kit (part number 70130) required for distributed audio distances up to 500 feet from the iPort.

- Delivers unbalanced video output (iPod video content only, *not* program metadata) via RJ-45 connector up to 30 feet from the iPort. Optional Balanced Video Upgrade Kit (part number 70131) required for distances up to 500 feet from the iPort.

- Built-in preamplifier allows variable volume control.

- IR capability allows remote control of most iPod/iPhone audio functions when in general control mode. (Optional iPort remote available part number 70030 — black, 70032 — white.) Optional RS-232 Control Upgrade Kit (part number 70012) and Balanced Audio Upgrade Kit (part number 70130) enable two-way communication and control of the iPod/iPhone via compatible control systems. (Please visit iportmusic.com for a complete list of compatible control systems.)

- Charges the iPod/iPhone while it is docked.

- Compatible with iPhone 3G and most dockable iPod models, including iPod nano 4th gen, iPod classic 120GB, and iPod touch 2nd gen. For current compatibility information, visit iportmusic.com.

IW-21 System Box Contents:

(1) iPort in-wall docking system (faceplate and utility box)

(1) Audio wall plate

(1) Unbalanced video wall plate and cable

(1) Regulated power supply

(1) Installation cut-out template

(1) Instruction manual

IW-22 System Capabilities:

• Delivers long-distance balanced audio up to 500 feet from the iPort.

• Delivers unbalanced video output (iPod video content only, *not* program metadata) via RJ-45 connector (up to 30 feet from the iPort). Optional Balanced Video Upgrade Kit (part number 70131) required for distances up to 500 feet from the iPort.

• Built-in preamplifier allows variable volume control.

• Allows extensive long-distance IR control of iPod functions via wall plate IR connection (requires compatible 3rd-party controller).

• IR connection allows remote control of most iPod/iPhone audio functions when in general control mode. (Optional iPort remote available part number 70030 — black, 70032 — white.)

• Integrated RS-232 control enables two-way communication (including iPod program metadata) and control of the iPod/iPhone via compatible control systems. (Please visit iportmusic.com for a complete list of compatible control systems.)

• Charges the iPod/iPhone while it is docked.

• Compatible with iPhone 3G and most dockable iPod models, including iPod nano 4th gen, iPod classic 120GB, and iPod touch 2nd gen. For current compatibility information, visit iportmusic.com.

IW-22 System Box Contents:

(1) iPort in-wall docking system (faceplate and utility box)

(1) Balanced audio wall plate

(1) Balanced audio sender plug-in circuit card

(1) RS-232 control plug-in circuit card and RS-232 cable

(1) Unbalanced video wall plate and cable

(1) Regulated power supply

(1) Installation cut-out template

(1) Instruction manual

Required Tools

The following tools are required to install the iPort:

• #2 Phillips screwdriver

• Wire cutters and wire strippers

• RJ-45 cable crimp tool and modular connectors

• Sheet rock saw (if retrofitting into an existing wall)

Selecting an Installation Location

The iPort IW-20, IW-21, and IW-22 are designed for use in normal interior environments. When selecting an installation location for the iPort, please consider the following:

• Do not use the iPort outside or in a humid or wet environment. The iPort is not waterproof, nor is it water-resistant.

• The iPort cut-out is 4" (102mm) wide x 5 $^9/_{16}$" (141mm) high. There also must be at least 3½" (89mm) depth within the wall cavity for the iPort and its connections.

• The iPort has angled screw mounting holes on both sides that allow it to be installed up against a stud.

• Avoid installing the iPort in a location that is in direct sunlight a portion of the day, as it can interfere with IR operation.

Selectable Features (IW-21 and IW-22 only)

IMPORTANT: Before installing the iPort you need to select the audio output mode, the video output type, and the default control mode. The selector switches are located on the iPort main circuit board, as shown in *Figure 1*.

1. Select the desired audio output mode (fixed or variable). See *Figure 1*.

   • Var = Variable (iPort volume can be controlled via IR when in general control mode)

   • Fixed = iPort volume is fixed, and it must be controlled via the connected audio system.

2. Select the desired video output type (Component Video or Composite/S-Video). See *Figure 1*.

   • SV = Composite/S-Video

   • CV = Component Video

   Note: Component and S-Video output are only available in the IW-21 and IW-22 models with the Balanced Video Upgrade Kit installed, and is dependent on the specific iPod model.

Figure 1: Switches for Selectable Features
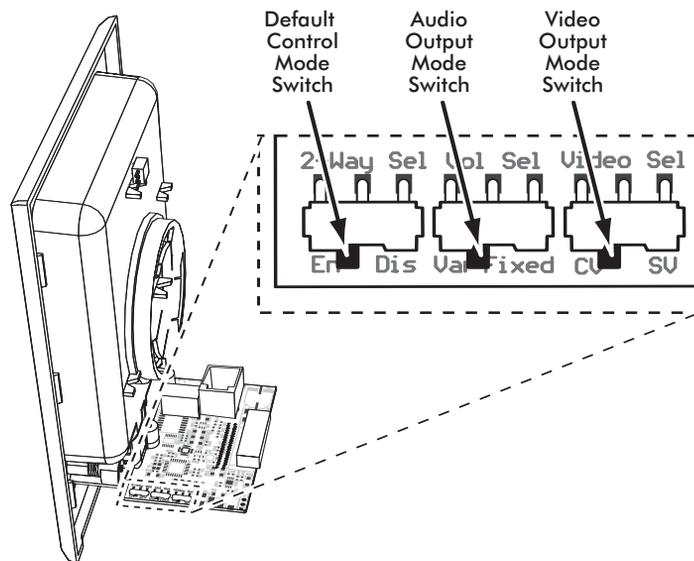
3. Select the desired default control mode (General or Extended). See *Figure 1*. Note: This switch only sets the control mode the iPod first enters whenever it is docked in the iPort. The iPod can be commanded into either control mode at any time by the RS-232 controller.

 • Dis = Defaults to general (normal) control mode

 • En = Defaults to extended (RS-232) control mode

 Note: Extended control is only available in the IW-22, and in IW-21 units with RS-232 and Balanced Audio Upgrade Kits installed.

iPort Rear Connections
See *Figure 2*

Audio Connector: RJ-45 jack connects to the audio wall plate via Cat5 cable. The AUDIO connection transmits unbalanced or balanced audio to the audio wall plate, receives IR control signals from the balanced audio wall plate, transmits and receives RS-232 control data to and from the balanced audio wall plate, and receives DC power from the audio wall plate.

Video Connector (IW-21/IW-22 only): RJ-45 jack connects to the video wall plate. Unbalanced video wall plates use the included 5-foot RJ-45 to female RCA cable, and require a male-to-male RCA cable (not included). Balanced video wall plates require that the installer make a Cat5/RJ-45 cable, as described on page 6. The VIDEO connection transmits unbalanced or balanced NTSC video to the video wall plate.

Supplemental Power Connector (IW-21/IW-22 only): Removable 4-Pin screw connector that connects to the balanced audio wall plate's Aux Power connector via 16/2 speaker wire, for use when the audio Cat5 cable run is longer than 250 feet in IW-22s and IW-21s with the Balanced Audio Upgrade Kit installed. This supplies DC power to the iPort in addition to the DC power wires in the audio Cat5 cable, avoiding the voltage drop and associated performance degradation that can occur when transmitting DC power over long runs of Cat5 cable.

Figure 2: iPort Rear Connections

- Roto-Lock Clamp
- Audio Connector
- Video Connector (IW-21/IW-22 only)
- Supplemental Power Connector (IW-21/IW-22 only)
- Roto-Lock Clamp

In addition to the connectors, the rear panel also has two Roto-Lock® clamps. When properly tightened, the Roto-Lock clamps hold the iPort firmly on the mounting surface.
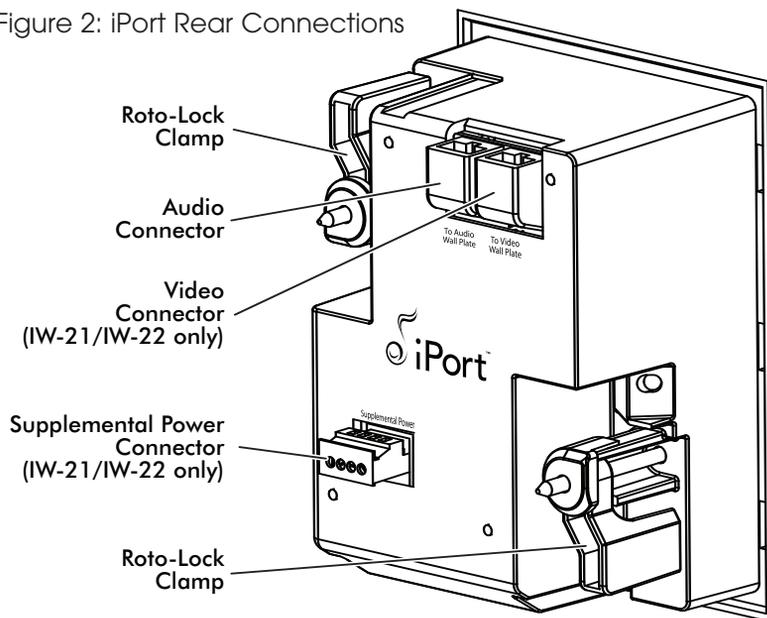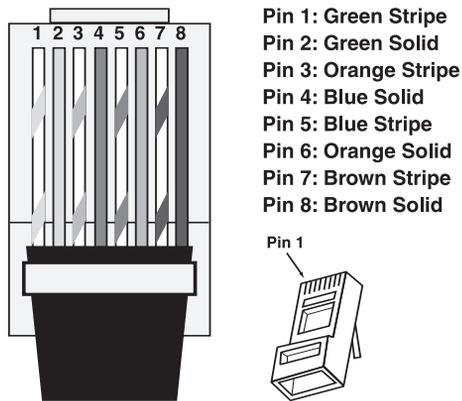
Wiring Cat5/RJ-45 Cables

All Cat5/RJ-45 cables used in iPort IW installations must be wired according to the T568A ("Straight-Through") Standard with cables wired identically at both ends.

To prepare Cat5/RJ-45 cables for iPort installations:

1. Pull the Cat5 wire through the wall between the desired locations.

2. Use a stripper or knife to strip about 1" of the cable jacket off each end of the wire.

   • Be careful not to nick any of the individual wires.

3. Untwist the wire pairs and spread them flat. Arrange them as shown in *Figure 3*.

4. Trim the ends of the individual wires to ½" in length, making sure that they are even with each other. Flatten the wires against each other, leaving no space between them.

5. Hold the RJ-45 connector clip-side down and insert the Cat5 wire ends firmly into the connector. Make sure that all the wires are flat all the way to the very front of the connector.

6. Re-confirm that the color orientation matches the diagram and that cable jacket fits against the connector stop.

7. Firmly crimp the RJ-45 connector with the crimp tool. Confirm that the connector is crimped firmly and that all the wires are flat right up against the front of the connector. If even one of these wires is incorrect, cut the connector off the cable and repeat steps 2 – 7 with a new RJ-45 connector.

Figure 3: Cat5/RJ-45 Cable Wiring

Pin 1: Green Stripe
Pin 2: Green Solid
Pin 3: Orange Stripe
Pin 4: Blue Solid
Pin 5: Blue Stripe
Pin 6: Orange Solid
Pin 7: Brown Stripe
Pin 8: Brown Solid

Pin 1

Installation Preparation (all models)

The iPort features an integral Roto-Lock mounting system for quick mounting directly into existing walls. Once the hole is cut and the cables have been run, you can install the iPort into the wall in a matter of seconds.

1. Determine the location for the iPort and the wall plate(s). Note that the unbalanced audio in IW-20/IW-21 systems and the unbalanced video in IW-21/IW-22 systems are designed for use in a local-zone system where the iPort wall plate and audio/video equipment are located less than 30 feet from the iPort.

2. Perform an obstruction survey to be certain that there are no studs, conduit, pipes, heating ducts, or air returns that will interfere with the iPort.

   Note: You can mount the iPort directly next to a wall stud on either side (see Step 8, *on page 8).*

3. The iPort cut-out is 4" (102mm) wide x 5⁹/₁₆" (141mm) high. There also must be at least 3½" (89mm) depth within the wall cavity for the iPort and its connections.

4. Find the cut-out template provided in the iPort packaging. Position the template where the iPort is to be located and pencil an outline on the wall.

   • If you are unsure about obstructions, drill a small hole in the center of the outline and insert a coat hanger wire into the hole to feel around for possible obstructions.

5. Cut the opening using a drywall saw.

iPort IW-20 Connections and Installation

See *Figure 4*

1. Before making connections, run a length of Cat5 cable through the wall from the iPort location to the audio wall plate location, as shown in *Figure 4*. The wall plate can be located up to 30 feet from the iPort.

   • Find a location for the wall plate that is near both a source of AC power and the local-zone audio system.

Figure 4: iPort IW-20 System Connections
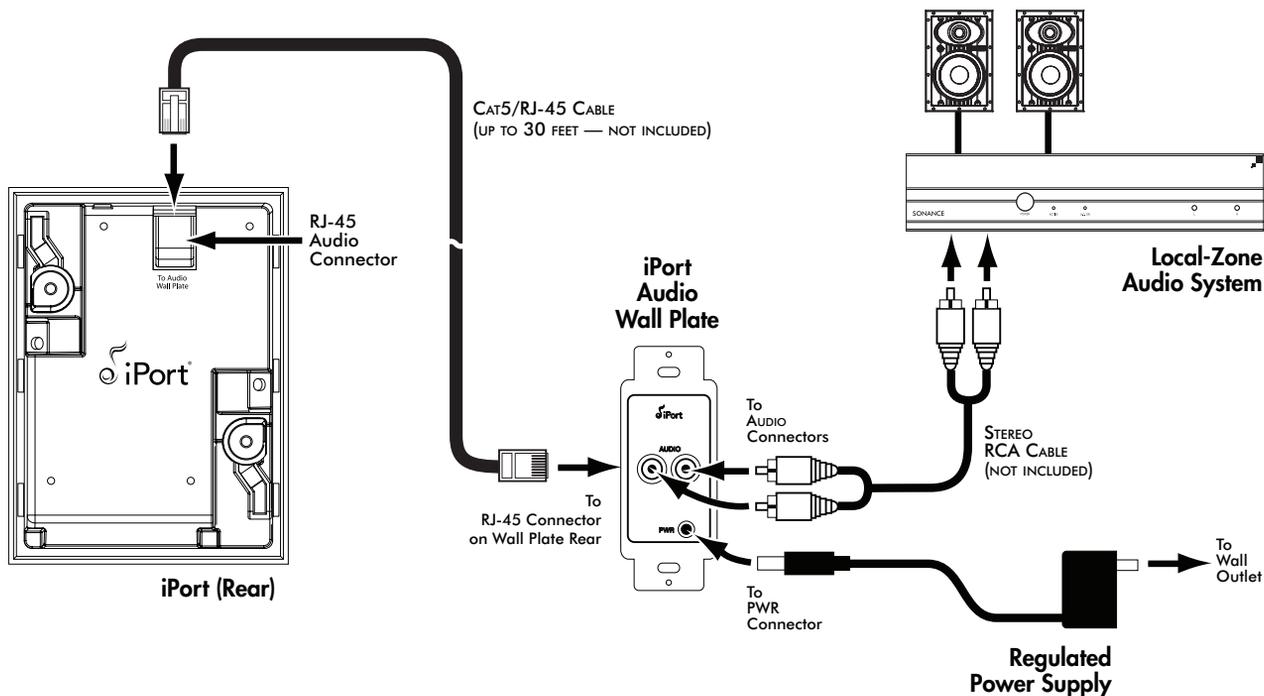
2. Install RJ-45 connectors on both ends of the Cat5 cable as explained in the *Wiring Cat5/RJ-45 Cables* section on page 6.

   The audio Cat5/RJ-45 cable pin assignment is:

Pin 1:	Data Receive	Pin 5:	Audio Right
Pin 2:	Data Transmit	Pin 6:	Unused
Pin 3:	Audio Left	Pin 7:	Ground
Pin 4:	Unused	Pin 8:	+15V

3. Plug the Cat5 cable into the AUDIO connector on the iPort and the RJ-45 jack on the wall plate, as shown in *Figure 4*.

4. Install the wall plate into an electrical box in the room near the audio system.

IMPORTANT: Do *not* install the iPort wall plate in the same electrical box as AC house wiring, a light switch, or any other high-voltage device or control. The wall plate can share gang boxes with other iPort wall plates or with controls such as A/B speaker switches, infrared receivers, and volume controls, if these other devices are rated as Class 2 devices according to the National Electrical Code.

5. Use a stereo RCA audio cable to connect the wall plate's AUDIO connectors to a source input on the local-zone audio system, as shown in *Figure 4*, page 7.

6. Insert the iPort utility box into the opening in the wall.

   • First insert the top edge into the opening, then rotate the bottom edge into the opening.

   Note: The Roto-Lock system can accommodate a maximum wall material thickness of $1^3/8$".

7. Hand-tighten the two Roto-Lock screws on the iPort utility box as shown in *Figure 5*. The Roto-Lock clamps will automatically rotate into position behind the wall and begin clamping the iPort.

   • When you notice resistance on the two screws, the iPort has been clamped successfully.

   IMPORTANT: NEVER over-tighten the Roto-Lock screws.

8. If there is a wall stud up against one side of the utility box that prevents one Roto-Lock clamp from operating, secure the box by hand-driving a 1½" #6 drywall screw (not provided) through the angled hole on that side of the chassis and into the wall stud. See *Figure 5*.

   IMPORTANT: Do not over-tighten the drywall screw.

9. Attach the iPort face to the utility box as shown in *Figure 6*. Slide the face all the way into the box until it fits snugly into place.

10. Plug the included DC power supply into the *Power* connector on the wall plate and into a wall outlet, as shown in *Figure 4*, page 7.

Figure 5: Attaching the Utility Box to a Wall

If mounted next to a stud, drive a 1½" #6 drywall screw here

Roto-Lock Screw
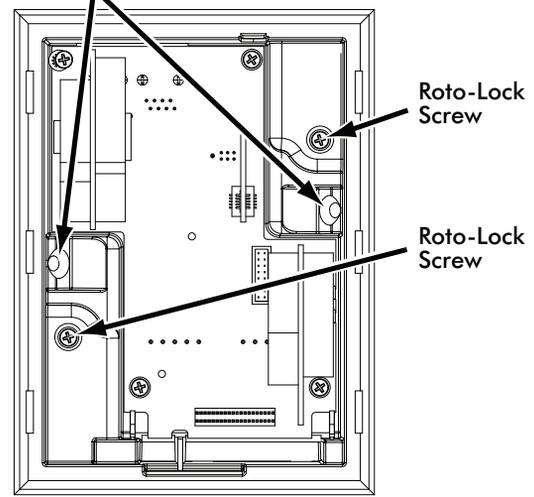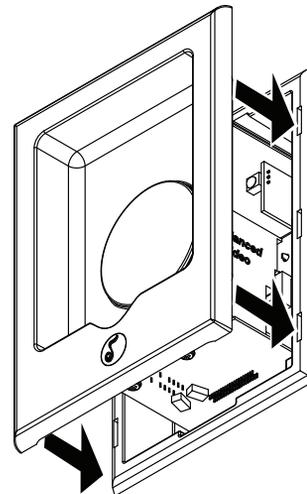
Roto-Lock Screw

Figure 6: Attaching the Face to the Utility Box

iPort IW-21 Connections and Installation

See *Figure 7*

1. Before making connections, run a length of Cat5 cable through the wall from the iPort location to the audio wall plate location, and run a standard male-to-male RCA cable through the wall from the iPort location to the unbalanced video wall plate location, as shown in *Figure 7*. Each wall plate can be located up to 30 feet from the iPort.

   • Find a location for the audio wall plate that is near both the local-zone audio system *and* a source of AC power.

Figure 7: iPort IW-21 System Connections
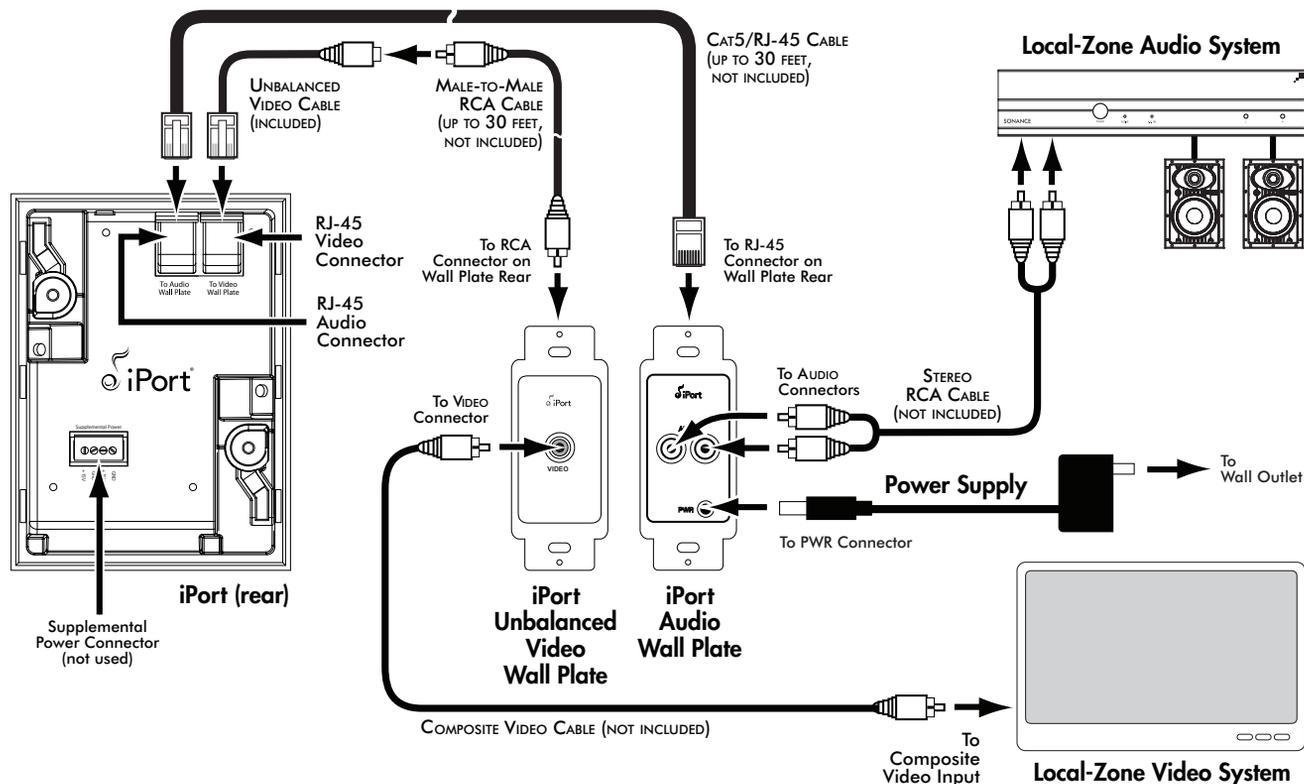
2. Install RJ-45 connectors on both ends of the audio Cat5 cable as explained in the *Wiring Cat5/RJ-45 Cables* section on page 6.

   The audio Cat5/RJ-45 cable pin assignment is:

Pin 1:	Data Receive	Pin 5:	Audio Right
Pin 2:	Data Transmit	Pin 6:	Unused
Pin 3:	Audio Left	Pin 7:	Ground
Pin 4:	Unused	Pin 8:	+15V

3. Plug the audio Cat5 cable into the AUDIO connection on the iPort and the RJ45 connector on the rear of the audio wall plate, as shown in *Figure 7*, page 9.

4. Plug the RJ45 end of the unbalanced video cable into the VIDEO connection on the iPort. Plug the female RCA end of the unbalanced video cable into the male RCA cable you ran through the wall to the wall plate. Plug the other end of the male RCA cable into the RCA jack on the rear of the unbalanced video wall plate. See *Figure 7*, page 9.

5. Install both wall plates into electrical boxes in the room near the audio and video systems.

   IMPORTANT: Do *not* install the iPort wall plates in the same electrical boxes as AC house wiring, a light switch, or any other high-voltage device or control. The two wall plates can share a gang box with each other or with controls such as A/B speaker switches, infrared receivers, and volume controls, if these other devices are rated as Class 2 devices according to the National Electrical Code.

6. Use a stereo RCA audio cable to connect the audio wall plate's AUDIO connectors to a source input on the local-zone audio system, as shown in *Figure 7*, page 9.

7. Use a composite video cable to connect the unbalanced video wall plate's VIDEO connector and to the composite video input of the local-zone video system, as shown in *Figure 7*, page 9.

8. Insert the iPort utility box into the opening in the wall.

   • First insert the top edge into the opening, then rotate the bottom edge into the opening.

   Note: The Roto-Lock system can accommodate a maximum wall material thickness of 1³/₈".

9. Hand-tighten the two Roto-Lock screws on the iPort utility box as shown in *Figure 5*, on page 8. The Roto-Lock clamps will automatically rotate into position behind the wall and begin clamping the iPort.

   • When you notice resistance on the two screws the iPort has been clamped successfully.

   IMPORTANT: NEVER over-tighten the Roto-Lock screws.

10. If there is a wall stud up against one side of the utility box that prevents one Roto-Lock clamp from operating, secure the box by hand-driving a 1½" #6 drywall screw (not provided) through the angled hole on that side of the chassis and into the wall stud. See *Figure 5*, page 8.

    IMPORTANT: Do not over-tighten the drywall screw.

11. Confirm that the switches for the Selectable Features are set in the correct positions (see *Selectable Features*, on page 4). In particular, make sure that the Default Control Mode switch is set in the *Dis* (general) control position.

12. Attach the iPort face to the utility box as shown in *Figure 6*, on page 8. Slide the face all the way into the box until it fits snugly into place.

13. Plug the included DC power supply into the PWR connector on the audio wall plate and into a wall outlet, as shown in *Figure 7*, page 9.

14. In installations where the balanced audio wall plate is located more than 250 feet from the iPort: Run a length of 16/2 speaker wire through the wall, from the wall plate's Aux Power 2-pin connector to the iPort's Supplemental Power 4-pin connector as shown below in Figure 5. (The connector has two parallel sets of terminals — you can use either set.) This will avoid performance degradation caused by a loss of DC voltage over wire runs longer than 250 feet.

iPort IW-22: Installing the Balanced Audio and RS-232 Circuit Cards

The iPort IW-22 is shipped from the factory with the appropriate balanced audio and RS-232 control circuit cards included in the box, but *THEY ARE NOT INSTALLED IN THE IPORT'S BACKPLANE PCB*. For these functions to work, you must install these cards into the iPort's backplane circuit board *BEFORE* installing the iPort into a wall.

Before beginning, locate the two circuit cards in the iPort box.

- The Balanced Audio circuit card is *WHITE*.

- The RS-232 control circuit card is *BLUE.*

Use care when handling the circuit cards:

- Avoid squeezing or bending any of the electronic components mounted on the cards.

- Do not force the cards into their connectors. They will only fit into the connectors one way.

- Be sure to insert the cards all the way into their connectors.

Installing the Balanced Audio Circuit Card

1. Locate the balanced audio PCB Connector and BALANCED/UNBALANCED audio switch on the iPort backplane circuit board (see *Figure 8a*). The backplane circuit board is red, and it is located at the rear of the iPort chassis utility box.

Figure 8: Installing the Balanced Audio Circuit Card

A   Balanced Audio PCB Connector   Balanced/Unbalanced Audio Switch

B   Slide Switch UP

C   Insert Balanced Audio PCB Card
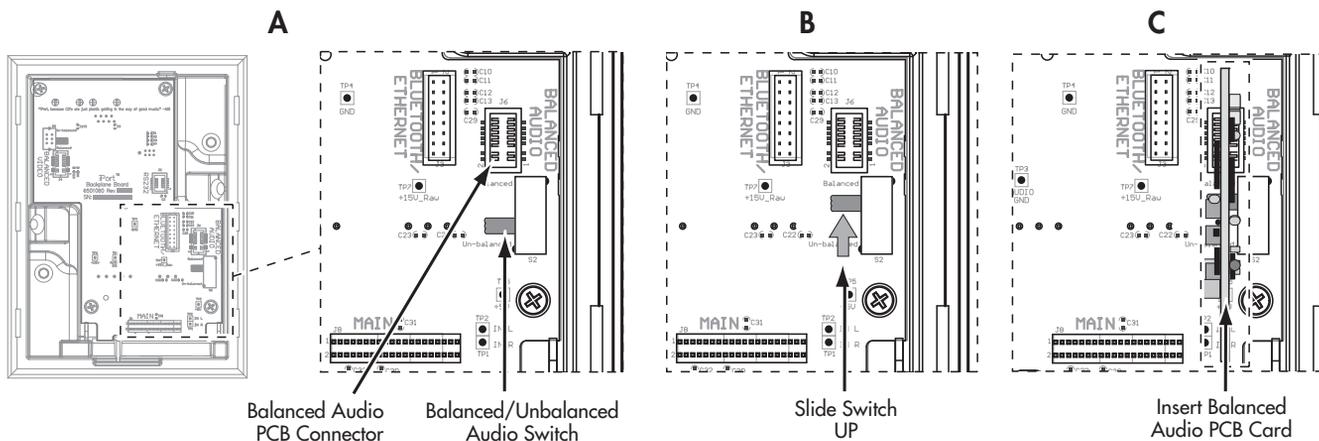
2. Slide the BALANCED/UNBALANCED audio switch UP to the *Balanced* position (see *Figure 8b*).

   NOTE: The balanced audio circuit card cannot be installed unless the switch is in the Balanced *position.*
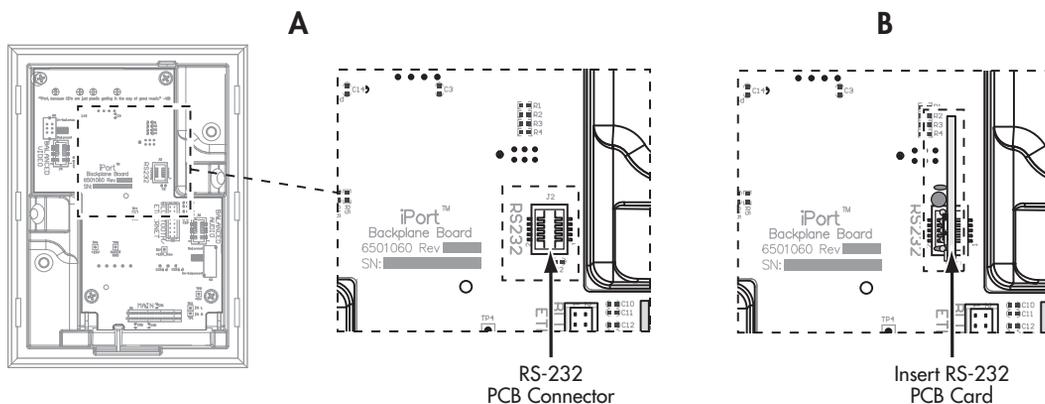
3. Carefully insert the balanced audio circuit card all the way into the balanced audio PCB connector (see *Figure 8c*).

   Note: The circuit card will only fit into the connector one way. Although the circuit card fits somewhat loosely, when the iPort face is inserted into the utility box it holds the card in place.

Installing the RS-232 Circuit Card

1. Locate the RS-232 PCB connector on the iPort backplane circuit board (see *Figure 9a*). The backplane circuit board is red, and it is located at the rear of the iPort chassis utility box.

Figure 9: Installing the RS-232 Circuit Card

A

B

RS-232
PCB Connector

Insert RS-232
PCB Card

2. Carefully insert the RS-232 circuit card all the way into the RS-232 PCB connector (see *Figure 9b*).

Note: The circuit card will only fit into the connector one way. Although the circuit card fits somewhat loosely, when the iPort face is inserted into the utility box it holds the card in place.

# iPort IW-22 Connections and Installation

See *Figure 10,* page 13

1. Before making connections, run a length of Cat5 cable through the wall from the iPort location to the balanced audio wall plate location, and run a standard male-to-male RCA cable through the wall from the iPort location to the unbalanced video wall plate location, as shown in *Figure 10*, page 13. The balanced audio wall plate can be located up to 500 feet from the iPort; the unbalanced video wall plate can be located up to 30 feet from the iPort.

   • Find a location for the balanced audio wall plate that is near the audio system, control systems, and a source of AC power..

   • Find a location for the unbalanced video wall plate that is near the local-zone video system.

2. Install RJ-45 connectors on both ends of the audio Cat5 cable as explained in the *Wiring Cat5/RJ-45 Cables* section on page 6.

   The balanced audio Cat5/RJ-45 cable pin assignment is: The RS-232

Pin 1:	Data Receive	Pin 5:	Audio Right +
Pin 2:	Data Transmit	Pin 6:	Audio Right –
Pin 3:	Audio Left +	Pin 7:	Ground
Pin 4:	Audio Left –	Pin 8:	+15V

Figure 10: iPort IW-22 System Connections
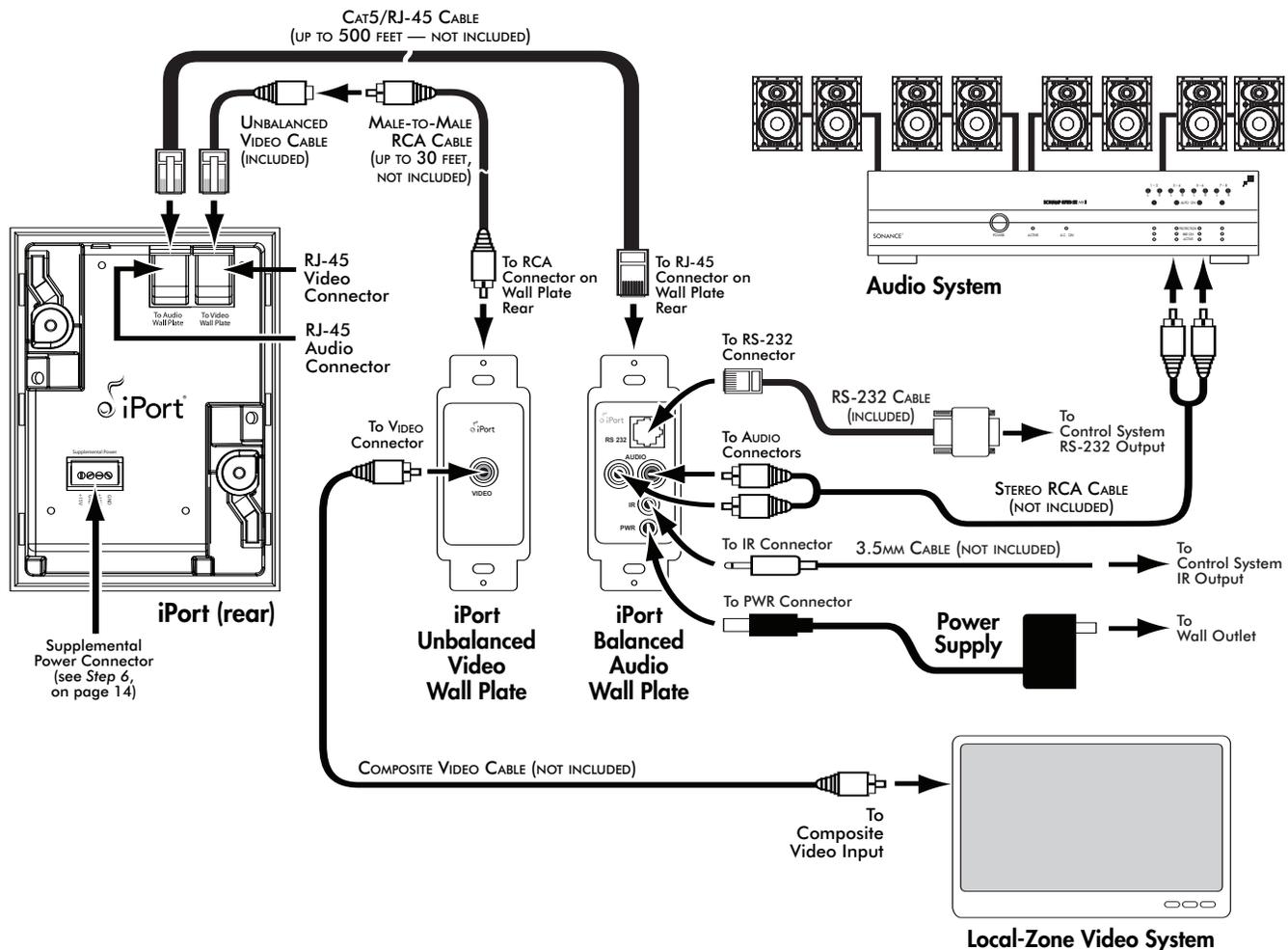
3. Plug the audio Cat5 cable into the Audio connection on the iPort and the RJ45 connector on the rear of the audio/IR wall plate, as shown in *Figure 10*.

4. Plug the RJ45 end of the unbalanced video cable into the Video connection on the iPort. Plug the female RCA end of the unbalanced video cable into the male RCA cable you ran through the wall to the wall plate. Plug the other end of the male RCA cable into the RCA jack on the rear of the unbalanced video wall plate. See *Figure 10*.

5. Before mounting the balanced audio wall plate into its electrical box be sure the IR/RS-232 control switch is in the **RS-232** position (see *Figure 11*). **IMPORTANT: The switch must be in the RS-232 position, *even if the system will only be using IR control*.**

6. **For installations where the balanced audio wall plate is located more than 250 feet from the iPort:** Run a length of 16/2 speaker wire through the wall from the wall plate's Aux Power connector to the iPort's Supplemental Power connector as shown below in *Figure 12*. (The Supplemental Power connector has two parallel sets of terminals — you can use either set.) This will avoid performance degradation caused by a loss of DC voltage over Cat5 wire runs longer than 250 feet.

7. Install the wall plates into electrical boxes in the rooms near the audio and video systems.

   IMPORTANT: Do *not* install the iPort wall plates in the same electrical boxes as AC house wiring, a light switch, or any other high-voltage device or control. The two wall plates can share a gang box with each other or with controls such as A/B speaker switches, infrared receivers, and volume controls, if these other devices are rated as Class 2 devices according to the National Electrical Code.

8. Use a stereo RCA audio cable to connect the balanced audio wall plate's Audio connectors to a source input on the audio system, as shown in *Figure 10*, page 13.

9. **For IR control systems:** Use a 3.5mm cable (mono or stereo) to connect the balanced audio wall plate's IR connector to the IR control output of a compatible IR control system. (Please go to iportmusic.com for a complete list of compatible control systems.)

10. **For RS-232 control systems:** Use the supplied RS-232 cable to connect the balanced audio wall plate's RS-232 connector to the control output of a compatible control system, as shown in *Figure 10*, page 13. The wall plate RS-232 connector pinout is:

Pin 1: PC RX	Pin 3: GND	Pin 5: PC RX
Pin 2: GND	Pin 4: PC TX	Pin 6: Unused

    For complete information about RS-232 connections, programming, and operation go to iportmusic.com.

11. Use a composite video cable to connect the unbalanced video wall plate's Video connector to the composite video input of the local-zone video system, as shown in *Figure 10*, page 13.
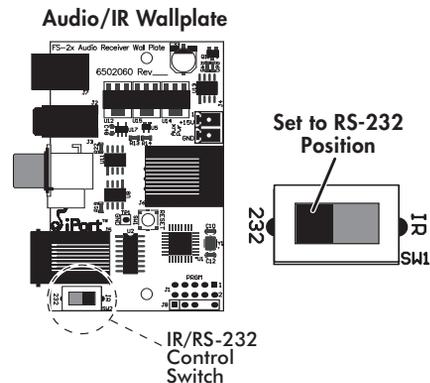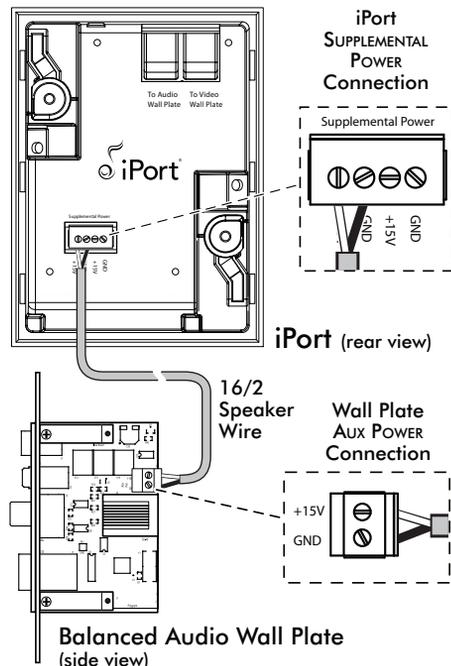
Figure 11: Wall Plate IR/RS-232 Control Switch

Audio/IR Wallplate

Set to RS-232 Position

IR/RS-232 Control Switch

Figure 12: Supplemental Power Connection

iPort Supplemental Power Connection

Supplemental Power

iPort (rear view)

16/2 Speaker Wire

Wall Plate Aux Power Connection

Balanced Audio Wall Plate (side view)

12. Insert the iPort utility box into the opening in the wall.

   • First insert the top edge into the opening, then rotate the bottom edge into the opening.

   Note: The Roto-Lock system can accommodate a maximum wall material thickness of 1$\frac{3}{8}$".

13. Hand-tighten the two Roto-Lock screws on the iPort utility box as shown in *Figure 5*, page 8. The Roto-Lock clamps will automatically rotate into position behind the wall and begin clamping the iPort.

   • When you notice resistance on the two screws, the iPort has been clamped successfully.
   IMPORTANT: NEVER over-tighten the Roto-Lock screws.

14. If there is a wall stud up against one side of the utility box that prevents one Roto-Lock clamp from operating, secure the box by hand-driving a 1½" #6 drywall screw (not provided) through the angled hole on that side of the chassis and into the wall stud. See *Figure 5*, page 8.
   IMPORTANT: Do not over-tighten the drywall screw.

15. Confirm that the switches for the Selectable Features are set in the correct positions (see *Selectable Features*, page 4), and attach the iPort face to the utility box as shown in *Figure 6*, page 8. Slide the face all the way into the box until it fits snugly into place.

16. Plug the included DC power supply into the PWR connector on the wall plate and into a wall outlet, as shown in *Figure 10*, page 13.

Adjusting the iPort for Different iPod Models

The iPort is compatible with most dockable iPods including 4th Generation and newer iPod models, iPod touch, and iPhones, including iPhone 3G. iPod features change often. For updated compatibility visit iportmusic.com.

• To adjust the iPort for smaller iPod models, extend the iPort's center disc forward by rotating it counter-clockwise until you feel the detent (see *Figure 13*). Spring-loaded clamps at the bottom of the iPort well will hold smaller models in place.

• When switching back to larger iPod models, retract the iPort's center disc backwards by rotating it clockwise until you feel the detent (see *Figure 13*). When these larger models are placed in the iPort well the spring-loaded clamps will rotate out of the way.

Figure 13: Adjusting the iPort for Different iPod Models

For Smaller iPod Models
ROTATE DISC
For Larger iPod Models
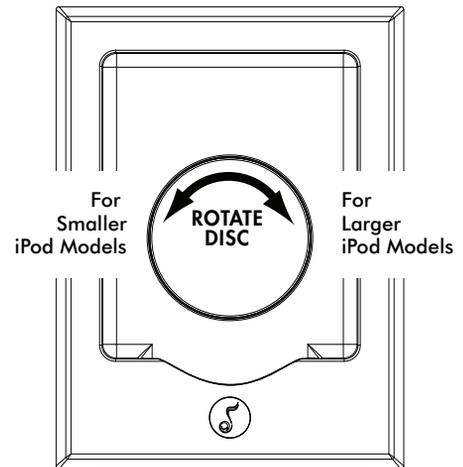
Controlling the iPod in an iPort System

IW-20 Systems

• The iPod/iPhone can be controlled from its own front panel.

IW-21 Systems

• The iPod/iPhone can be controlled from its own front panel

• iPod/iPhone audio functions can also be controlled by an optional iPort IR remote (part number 70030 — black, 70032 — white). The following functions can be controlled via IR: volume up/down, play, pause, next track/fast-forward, previous track/fast-rewind, mute, next/previous album, playlist and chapter, repeat, and shuffle.

• The optional RS-232 Control Upgrade Kit (part number 70012) enables two-way control of the iPod/iPhone from compatible control systems, along with communication of iPod metadats to the control system. (Note: Requires optional Balanced Audio Upgrade Kit, part number 70130.) For complete information about RS-232 programming and operation, go to iportmusic.com.

IW-22 Systems:

• The iPod/iPhone can be controlled from its own front panel.

• iPod/iPhone audio functions can also be controlled by an optional iPort IR remote (part number 70030 — black, 70032 — white). The following functions can be controlled via IR: volume up/down, play, pause, next track/fast-forward, previous track/fast-rewind, mute, next/previous album, playlist and chapter, repeat, and shuffle.

• Extensive long-distance control of the iPod/iPhone from a compatible IR control system is also available through the IR connector on the balanced audio wall plate. (Go to iportmusic.com for a complete list of compatible control systems.)

• Extensive two-way long-distance communication and control of the iPod/iPhone is also available from compatible RS-232 control systems. For complete information about RS-232 programming and operation, go to iportmusic.com.

IR Control Notes:

• iPort IR codes for universal remotes can be downloaded from iportmusic.com. At press time supported formats are: RTI, Phillips Pronto style, Universal Electronics (UEI), and Universal Remote. Check iportmusic.com for the most up-to-date information.

• For iPort remote control commands, please see the instruction manual accompanying the remote.

RS-232 Control Notes:

• When the RS-232 control mode is active, the controls on the iPod/iPhone will not operate (the iPod interface is disabled).

• When the RS-232 control mode is active, the iPod will only respond to the following IR control codes: Volume up/down, play/pause, next track, previous track.

• iPod photo features cannot be controlled in the RS-232 control mode. The iPod must be placed in the general control mode. The photo features can then be controlled from the iPod's front panel controls. The iPod must be put back into the RS-232 control mode to control other functions.

• When the RS-232 control mode is active, if the iPod is placed in the dock while in the *Play* mode, it will automatically enter the *Pause* mode. The installer or programmer may wish to set the RS-232 control system to automatically send a *Play* command to return the iPod to the last playing song when it is inserted in the dock. For RS-232 commands and programming information, please go to iportmusic.com.

iPort Status Indication (IW-21/IW-22 only)

The logo on iPort IW-21 and IW-22 front panels serves as a Status Indicator (see *Figure 14*).

Factory Default Settings:

Figure 14: iPort Status Indicator

Status Indicator

• When the iPort is first installed and powered-up, the indicator illuminates DIM* for 2 minutes, then turns OFF.

• When an iPod is docked in the iPort, the indicator illuminates BRIGHT* for 2 minutes, then turns OFF.

• When the iPod is un-docked from the iPort, the indicator illuminates DIM* for 2 minutes, then turns OFF.
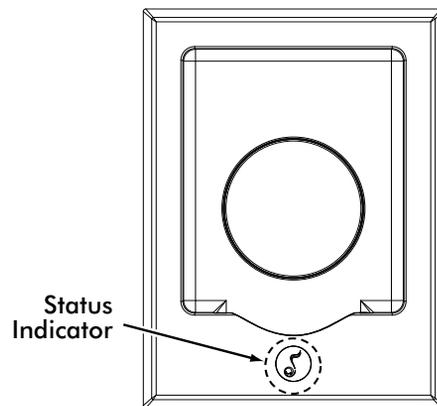
* The user can change these settings to any of three illumination levels (bright, medium, and dim) via RS-232 or the iPort remote.

Always ON Mode: The installer or user can defeat the 2-minute turn-off function (the indicator will operate as above, but will not turn OFF after two minutes) via RS-232 or the iPort remote.

Always OFF Mode: The installer or user can turn the indicator OFF in all modes via RS-232 or the iPort remote.

Note: If power to the iPort is lost or the power supply is disconnected, the Status Indicator will return to the factory default settings.

Specifications

Frequency Response:	20Hz – 20kHz (±0.25dB) @ 500 ft. Cat5
THD+Noise:	< 0.015%, 20Hz – 20kHz @ 500 ft. Cat5
Signal to Noise:	> 90dB (A wtd.) @ 500 ft., Cat5
Maximum signal input:	1.5V RMS
Power supply:	12 ~ 15V DC, regulated
Dimensions (W x H x D):	4¾" x 6⁵/₁₆" x 3½" (121mm x 160mm x 89mm)
Cut-out Dimensions (W x H):	4" x 5⁹/₁₆" (102mm x 141mm)

LIMITED ONE (1) YEAR WARRANTY

iPort warrants to the first end-user purchaser that this iPort-brand product ("Product"), when purchased from and installed by an authorized iPort Dealer/Distributor, will be free from defective workmanship and materials in the initial installation for the period stated below. iPort will at its option and expense during the warranty period, either repair the defect or replace the Product with a new or remanufactured Product or a reasonable equivalent at no charge for parts, labor and return shipping.

EXCLUSIONS

TO THE EXTENT PERMITTED BY LAW, THE WARRANTY SET FORTH ABOVE IS IN LIEU OF, AND EXCLUSIVE OF, ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, AND IS THE SOLE AND EXCLUSIVE WARRANTY PROVIDED BY IPORT. ALL OTHER EXPRESS AND IMPLIED WARRANTIES, INCLUDING THE IMPLIED WARRANTY OF MERCHANTABILITY, IMPLIED WARRANTY OF FITNESS FOR USE, AND IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE ARE SPECIFICALLY EXCLUDED. No one is authorized to make or modify any warranties on behalf of iPort.

The warranty stated above is the sole and exclusive remedy and iPort's performance shall constitute full and final satisfaction of all obligations, liabilities and claims with respect to the Product. IN ANY EVENT, IPORT SHALL NOT BE LIABLE FOR CONSEQUENTIAL, INCIDENTAL, ECONOMIC, PROPERTY, BODILY INJURY, OR PERSONAL INJURY DAMAGES ARISING FROM THE PRODUCT, ANY BREACH OF THIS WARRANTY OR OTHERWISE.

This warranty statement gives you specific legal rights, and you may have other rights which vary from state to state. Some states do not allow the exclusion of implied warranties or limitations of remedies, so the above exclusions and limitations may not apply. If your state does not allow disclaimer of implied warranties, the duration of such implied warranties is limited to the period of iPort's express warranty.

Your Product Model and Description: iPort IW-20, IW-21, IW-22

Warranty Period for this Product: One (1) year from the date on the original sales receipt, invoice or other satisfactory proof of purchase.

Additional limitations and Exclusions From Warranty Coverage: The warranty described above is non-transferrable, and does not include damage to allied or associated equipment which may result for any reason from use with this Product, and does not include Product failure caused by accident, disaster, negligence, improper installation, misuse (e.g. overdriving the amplifier or speaker, excessive heat or cold or humidity, outdoor installation), or from service or repair which has not been authorized by iPort.

Obtaining Authorized Service: If you purchased your iPort from an iPort Dealer, you (1) must contact your authorized iPort Dealer/Installer or call iPort Customer Service at (800) 582-0772 within the warranty period, (2) must obtain a return merchandise number (RMA), and (3) deliver the Product to iPort shipping prepaid during the warranty period, together with the original sales receipt, invoice or other satisfactory proof of purchase from your iPort Dealer. If you did not purchase from an iPort dealer, you must contact your authorized seller within the warranty period and obtain instructions for obtaining authorized service.

Notes:

iPort

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