

INTRODUCTION

The Sonance iPort™ In-Wall Docking System allows an Apple iPod® to become part of a whole-home audio system, and/or to be used as a source in a variety of local audio systems. The video output allows photos and slide shows stored on iPod Photo players to be displayed on TVs and monitors anywhere in a home entertainment system. The iPort's built-in IR emitters allow users to operate the iPod via IR controllers (an optional 3rd-party IR receiver is required); the iPod can also be operated directly from its own controls. The iPort supplies DC power to the iPod and recharges it while it is docked.

Before using the iPort Docking System please read and follow all of the instructions in this guide carefully.

BOX CONTENTS

The Sonance iPort Docking System box should contain the following items:

- One (1) Sonance iPort In-Wall Docking System (ver G1B)
- One (1) Cradle for 40GB Click Wheel iPod and iPod Photo.
- One (1) Back plate for 40GB click Wheel iPod and iPod Photo.
- One (1) Cradle for 20GB Click Wheel iPod.
- One (1) Back plate for 20GB Click Wheel iPod.
- One (1) Cradle for iPod Mini.
- One (1) Back plate for iPod Mini.
- One (1) iPort Wallplate.
- One (1) Stereo Audio cable (3.5mm mini jacks).
- One (1) IEEE 1394 to DC adapter cable.
- One (1) 15V DC regulated power supply.
- One (1) Instruction manual.
- One (1) Mounting template.

iPort REAR-PANEL CONNECTIONS

The Sonance iPort can supply balanced audio via the 8-pin connector, unbalanced audio via the stereo mini audio output in the base, composite video from the video mini video output in the base (for pictures and slide shows stored on iPod Photo players), and has a 5-pin connector that serves as an in-out loop for an optional low-level volume control (part#s 92126; 92127). See Figure 1 for an explanation of all the iPort's connections.

INSTALLING THE iPort BASE CRADLE

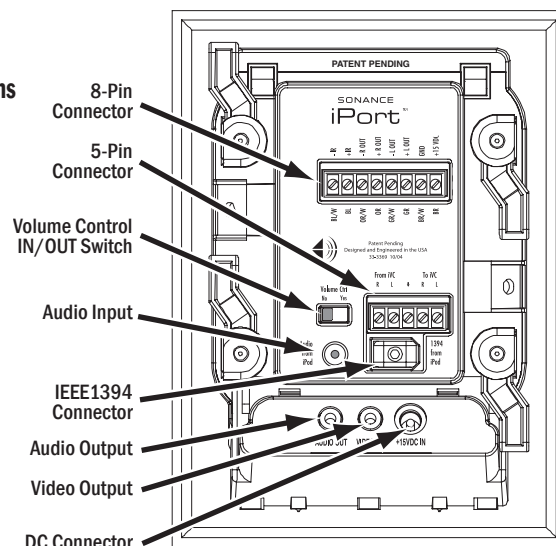
The iPort can accommodate the 40GB Click Wheel iPod, 20GB Click Wheel iPod iPod Photo and the iPod Mini. Each model requires a different base cradle and back plate, all of which are included with the iPort. (The iPod Photo uses the 40GB iPod base cradle and back plate.)

Since the back plate covers the chassis mounting screws it won't be installed until after the iPort chassis has been mounted into a wall.

Before making connections and mounting the iPort into a wall, install the appropriate base cradle (see Figure 2):

1. Find the base cradle for the model of iPod that will be used with the iPort. The model designations ('40GB', '20GB', 'Mini') are molded into the underside of each cradle.
2. Insert the base cradle into the iPort chassis with the rectangular cutout centered over the multi-pin connector in the chassis base.
3. Tilt the cradle forward slightly and fit it down on the chassis base by inserting 3 rectangular pegs on the front of the cradle into the corresponding holes on the chassis.
4. Press on the cradle's rear panel so the 2 rear rectangular pegs snap into place.

Figure 1:
iPort
Connections



8-Pin Connector: Sends balanced left & right channel audio to the iPort Wallplate (the Wallplate unbalances the audio before output); Receives IR control signals and DC power from the iPort Wallplate.

5-Pin Connector: Sends and receives 900mV unbalanced left & right channel audio to and from a Line Level Volume Control (part#s 92126; 92127).

Volume Control IN/OUT Switch: Routes the audio signal through the 5-pin connector. (Left = Volume Control OFF; Right = Volume Control ON.)

Audio Input: Stereo mini jack receives unbalanced audio from the iPort Base Audio Output.

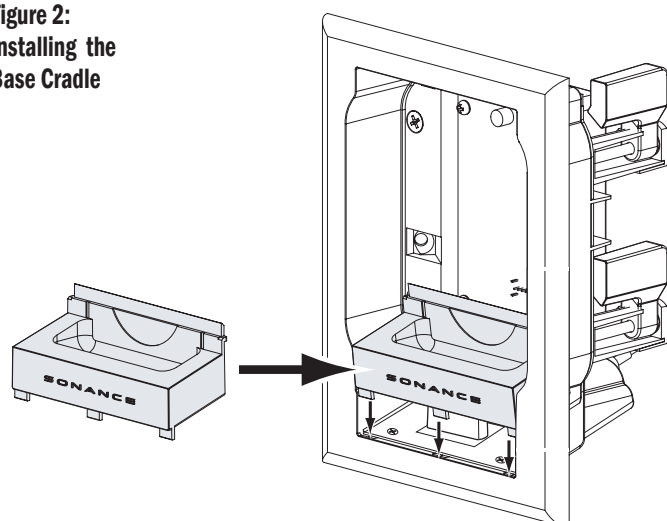
IEEE1394 Connector: Sends DC power to the iPort base via the IEEE 1394 > DC adapter cable.

Audio Output: Stereo mini jack outputs 900mV unbalanced left & right channel audio directly from the iPod.

Video Output: 3.5mm mono mini jack supplies composite video from iPod Photo players.

DC Connector: Receives DC power via the IEEE 1394 > DC adapter cable.

Figure 2:
Installing the
Base Cradle



iPort SYSTEM CONNECTIONS

The Sonance iPort can be used where it is located some distance away from the audio equipment (such as in a multi-zone system) with IR control, or in a local-zone system where the audio equipment is located close to the iPort and the iPod is controlled only from its front panel.

Figure 3 is a block diagram showing the iPort signal flow in a typical local audio system.

Figure 4 is a block diagram showing the iPort signal flow in a typical long-distance (multi-zone) system.

Figure 3:
Local iPort System
Block Diagram

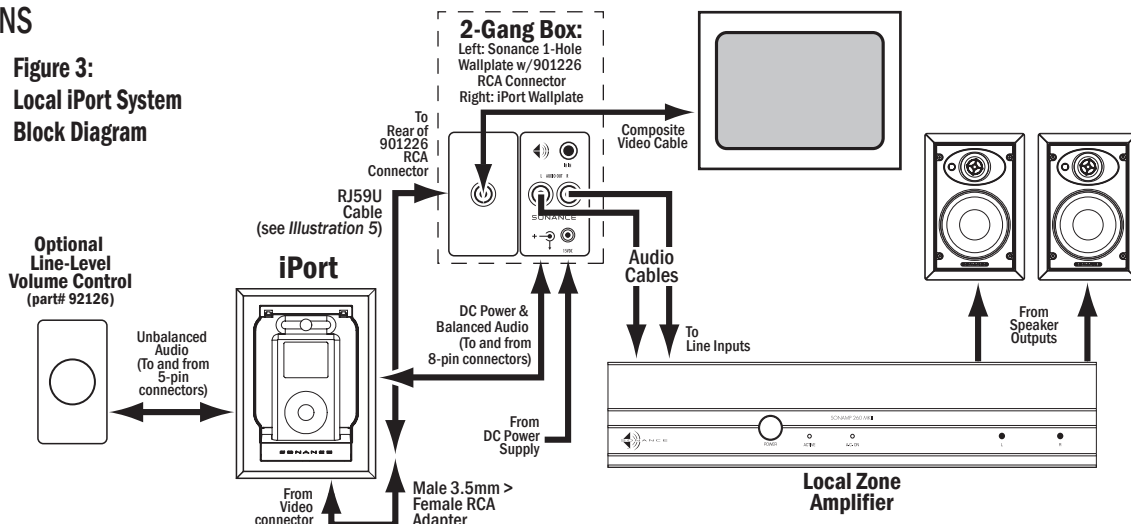
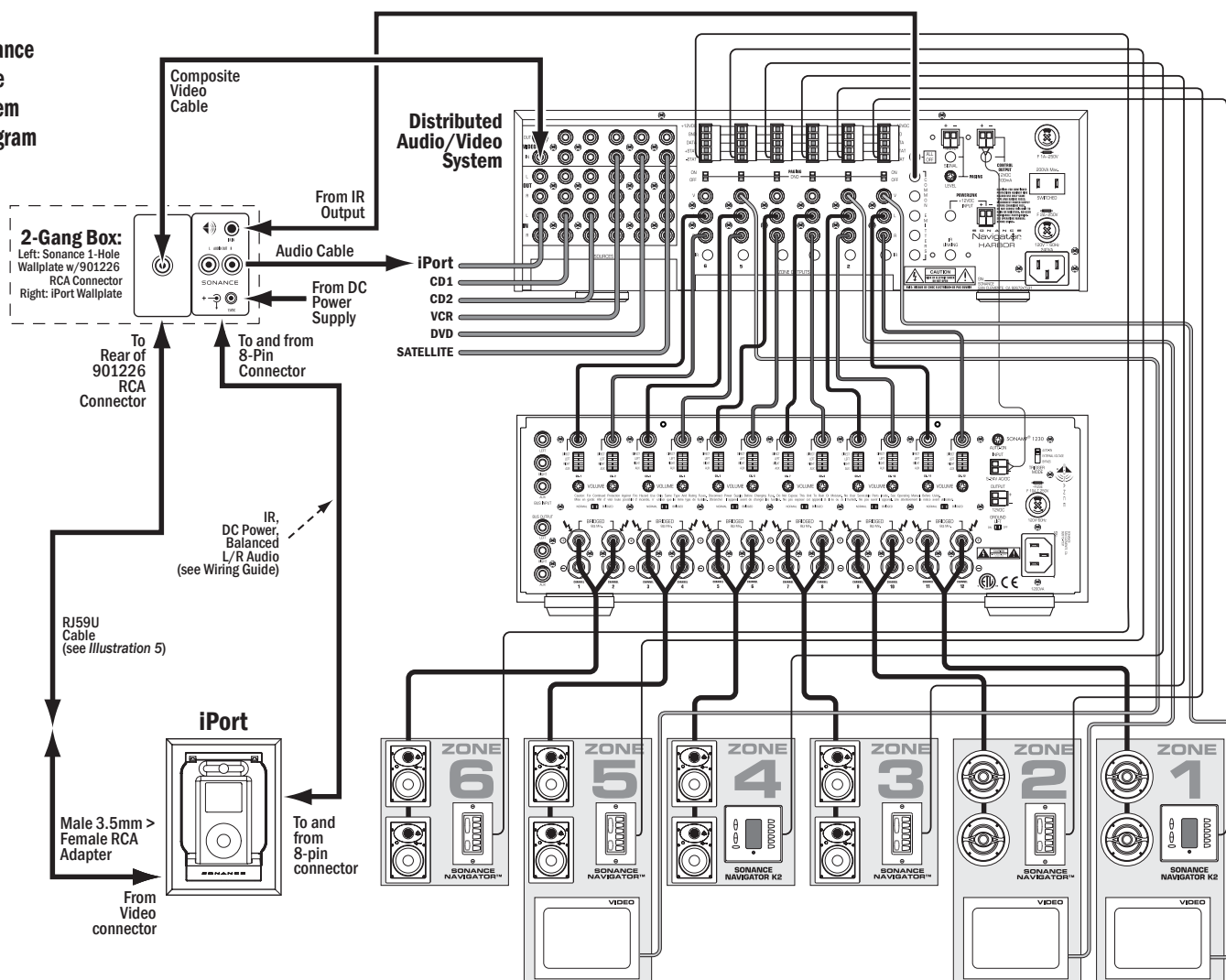


Figure 4:
Long-Distance
Multi-Zone
iPort System
Block Diagram



SELECTING AN INSTALLATION LOCATION FOR THE iPort

The iPort is designed for installation and use in normal interior environments. When selecting an installation location for the iPort, please consider the following:

- The iPort is not waterproof, nor is it water-resistant. Do not install the iPort outside, or in a humid or wet environment.
- The iPort cutout is 4¹/₈" (105mm) wide x 5⁷/₈" (150mm) high. There also must be at least 3" (76mm) 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. (See *Installing The iPort In A Wall*, on page 7.)
- Direct sunlight can interfere with IR operation. Avoid installation locations that are in direct sunlight a portion of the day. (See *IR Control In An iPort System*, on page 8.)

iPort VIDEO CONNECTIONS FOR iPod PHOTO PLAYERS

The iPort allows photos and slide shows stored on iPod Photo players to be displayed on TVs and monitors anywhere in the home. The Video Output on the iPort base passes the iPod's standard composite video signal (both NTSC and PAL format) through a 3.5mm mini connection.

Note: The iPort video output is only active when the iPod is in Slide Show mode.

The iPort video signal should be routed to a wallplate located in the room with the video display or video distribution amplifier. We recommend fitting a single RCA connector (Sonance part# 901226) in a 1-hole wallplate (Sonance part#s 901229 – 901233) and installing this wallplate into a 2-gang box along with the iPort wallplate.

Important: Do NOT install the video termination wallplate in the same electrical box as AC house wiring, a light switch or any other high-voltage device or control. The wallplate can share gang boxes with other 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.

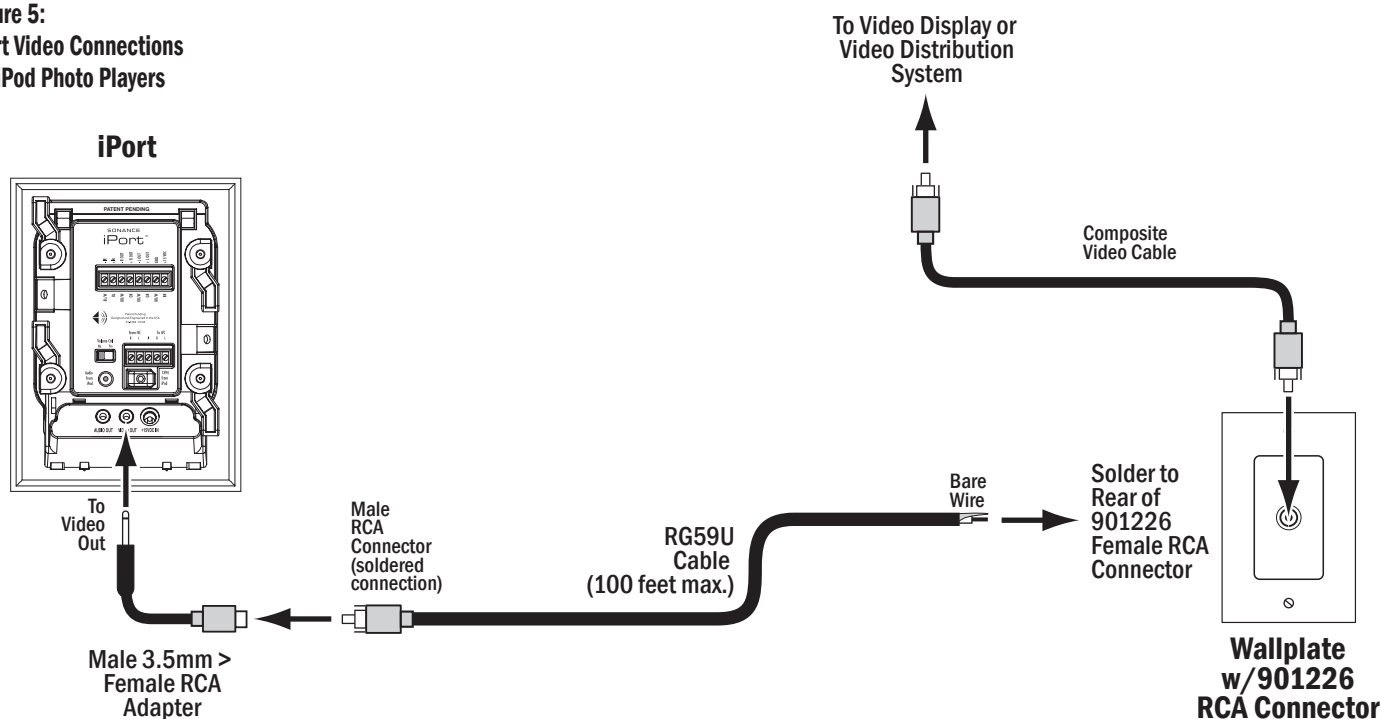
1. Prepare a video cable of the appropriate length using RG59U cable with copper braid shielding (DO NOT use conventional CATV cable with aluminum shielding):
 - a. Solder one end of the cable to a male RCA connector.
 - b. Run the cable from the iPort location through the wall to the RCA wallplate location.
 - c. Solder the other end of the cable to the RCA wallplate (see above).

Note: To maintain proper video quality, we recommend that the RG59U video cable be no longer than 100 feet.

2. Connect the end of the video cable with the male RCA connector to the iPort Video Output (use a male 3.5mm mini > female RCA adapter, not included).
3. Use a composite video cable to connect the RCA wallplate to the video equipment.

See Figure 5, below.

Figure 5:
iPort Video Connections
for iPod Photo Players



INSTRUCTION MANUAL

SONANCE iPort™ IN-WALL DOCKING SYSTEM

Local System Connections (see Figure 6):

Note: For Video Connections see *iPort Video Connections for the iPod Photo* on Page 3

Before making connections, run a length of CAT5 cable through the wall from the iPort location to the iPort Wallplate location. (See *iPort Long-Distance System Wiring Guide*, on page 5.)

1. Connect the IEEE1394 > DC adapter cable between the IEEE1394 connector and the DC connector.
2. Connect the stereo mini > stereo mini audio cable from the lower mini-jack (Audio Output) to the upper mini jack (Audio Input).

Note: The above two connections are necessary to carry audio from the iPod to the iPort, and DC power from the iPort to the iPod.

3. Connect the CAT5 cable to the iPort's 8-pin connector block in the following configuration (Pin 1 is the left-most pin):

Pin 1:	Blue/White	– IR
Pin 2:	Blue	+IR
Pin 3:	Orange/White	–R Out (balanced line-level audio)
Pin 4:	Orange	+R Out (balanced line-level audio)
Pin 5:	Green/White	–L Out (balanced line-level audio)
Pin 6:	Green	+L Out (balanced line-level audio)
Pin 7:	Brown/White	Ground
Pin 8:	Brown	+15V DC

Note: you can connect an additional (optional) local IR controller to Pins 1 and 2. (IR Data & Ground) in parallel with the CAT5 wire connections.

- 4a. If the system is using Sonance low-level volume control, use a small screwdriver or similar tool to set the iPort's Volume Control switch to the right (ON) position (Volume control in system).

- 4b. Use 5-conductor twin-shielded wire (such as Sonance part# 91874, colors listed below) to connect the volume control to the iPort 5-pin connector block. To avoid crosstalk, connect the wires in the following configuration (Pin 1 is the left-most pin on the iPort; Pin 1 is the bottom pin on the volume control):

Pin 1:	Green	R ch line-level audio from volume control to iPort
Pin 2:	White	L ch line-level audio from volume control to iPort
Pin 3:	Bare Wire	Ground
Pin 4:	Red	R ch line-level audio from iPort to volume control
Pin 5:	Black	L ch line-level audio from iPort to volume control

Note: Do NOT use CAT5 wire to make these connections. This wire carries high-impedance unbalanced line-level audio and must be twin-shielded to avoid noise. Two standard stereo RCA audio cables with the ends removed will work for this application.

5. Connect the CAT5 cable to the iPort Wallplate's 8-pin connector block in the above configuration (Pin 1 is the top-most pin).

6. Install the iPort Wallplate in a single-gang electrical box in the room where the audio equipment is located.

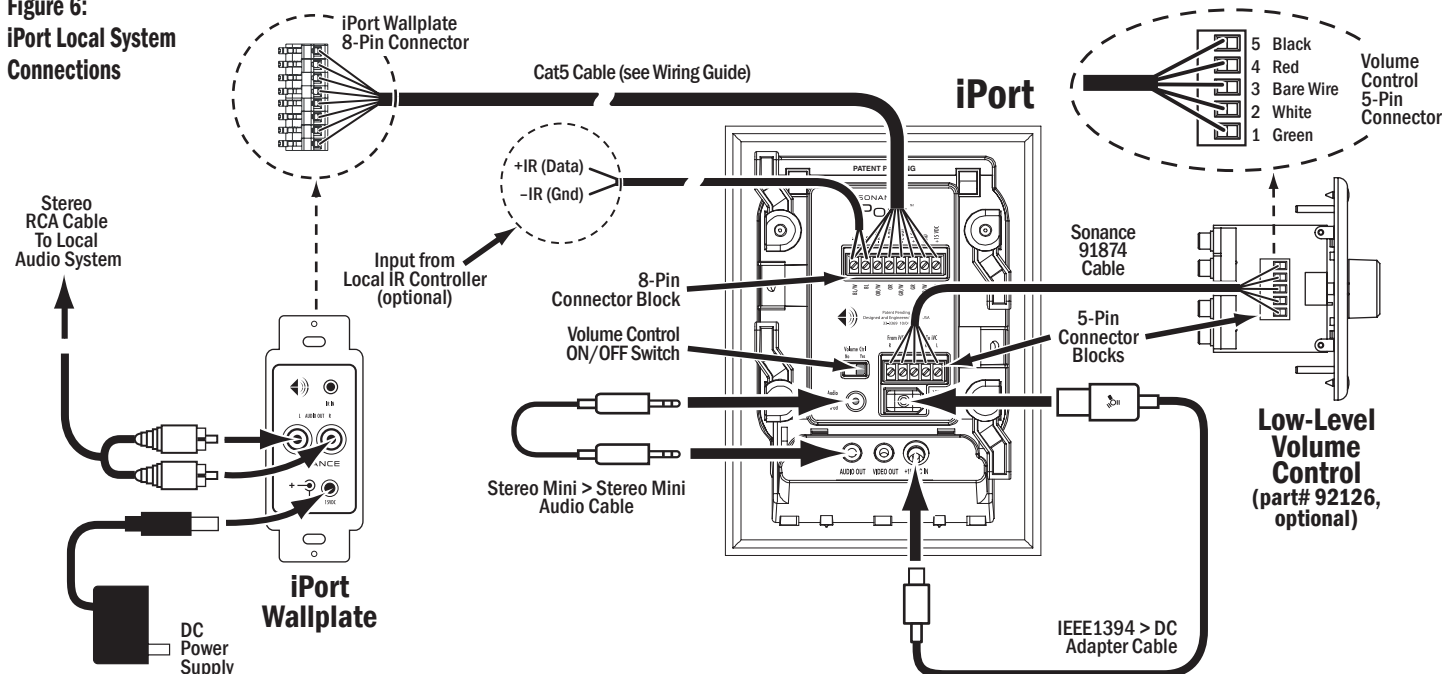
Important: Do NOT install the iPort Wallplate in the same electrical box as AC house wiring, a light switch or any other high-voltage device or control. The Wallplate can share gang boxes with other controls such as A/B speaker switches, infrared receivers and volume controls, if these other devices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

7. Plug the included DC power supply into the proper connector on the iPort Wallplate.

8. Use a stereo RCA audio cable to connect the iPort Wallplate to a source input on the audio system.

9. After confirming that the system operates properly, install the iPort in the wall (see *Installation in a Wall*).

Figure 6:
iPort Local System Connections

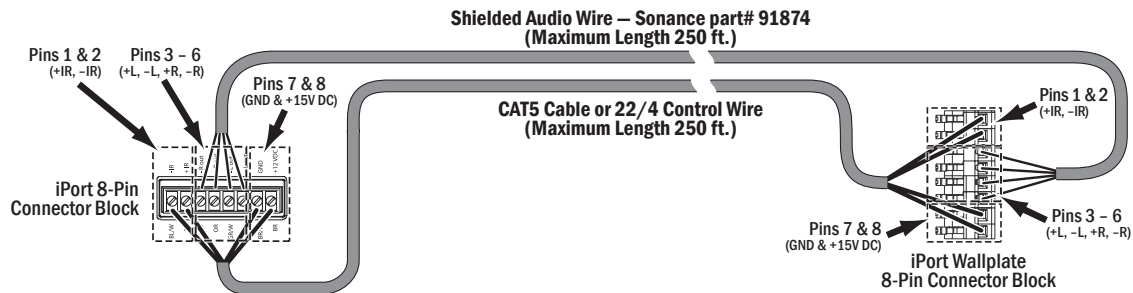


iPort LONG-DISTANCE SYSTEM WIRING GUIDE

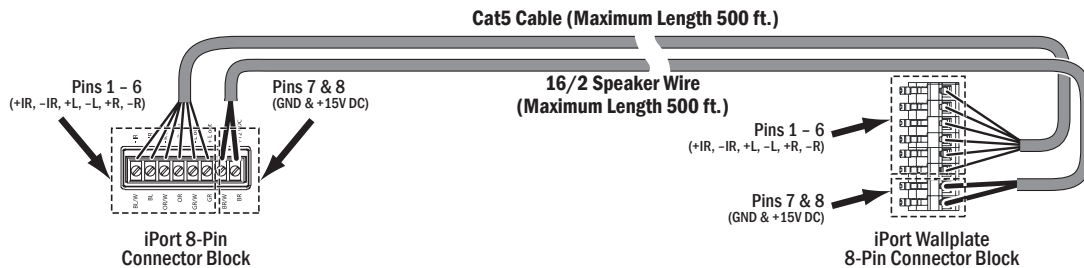
Thin gauge wire like CAT5 can greatly reduce voltage levels over long wire runs, and long parallel audio wire runs that are near high-voltage cable runs (i.e. for electric ranges and refrigerators) can inject hum and reduce audio quality. To avoid performance degradation of the iPort system, please follow these wiring recommendations:

Runs 1' - 250': Use CAT5 cable for all 8 connections. (See *Figure 7* on Page 6 for example.)

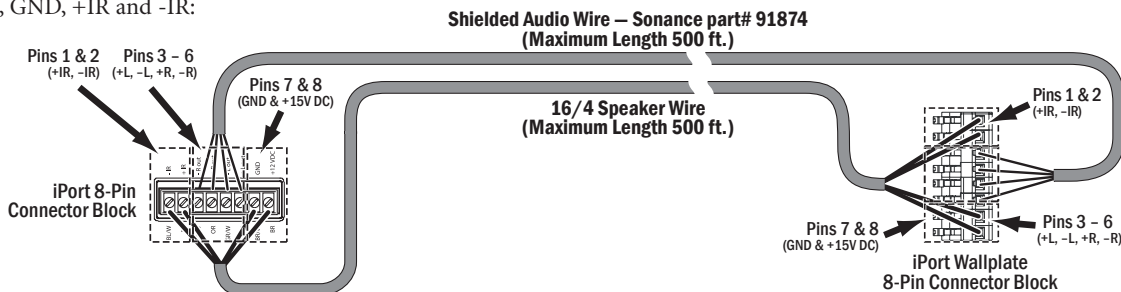
Runs 1' - 250' near extensive high voltage cable runs: Use shielded audio wire (Sonance part# 91874) for +L, -L, +R and -R. Use 22/4 control wire or CAT5 cable for +15V DC, GND, +IR and -IR:



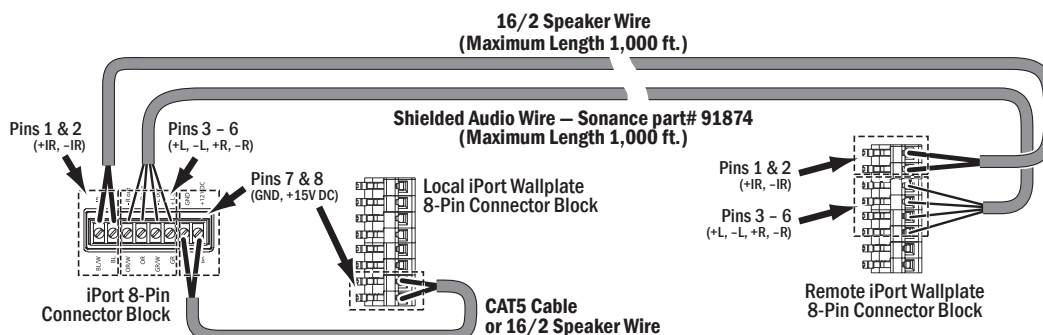
Runs 250' - 500': Use CAT5 wire for +L, -L, +R, -R, +IR and -IR. Use 16/2 speaker cable for +15V DC and GND:



Runs 250' - 500' near extensive high voltage cable runs: Use shielded audio wire (Sonance part# 91874) for +L, -L, +R and -R. Use 16/4 speaker cable for +15V DC, GND, +IR and -IR:



Runs 500' - 1000': Install a second iPort Wallplate (Sonance part# 92115) near the iPort to inject 15V DC locally and to avoid significant loss of supply voltage. Use shielded audio wire (Sonance part# 91874) for +L, -L, +R and -R. Use 16/2 speaker cable for +IR and -IR:



Long-Distance System Connections (see Figure 7):

Note: For Video Connections see *Video Connections for the iPod Photo* on Page 3

Important: Before making connections, you will need to run cable through the wall(s) from the iPort location to the room where the iPort Wallplate and the audio equipment is located. The type of cable depends on the length of the run and other factors. See iPort Long-Distance System Wiring Guide, on page 5, for details.

Make sure there is enough cable to reach the iPort and the iPort Wallplate. See iPort Long-Distance System Wiring Guide, on page 5, for details.

1. Connect the IEEE1394 > 30-pin adapter cable between the bottom multi-pin connector and the IEEE1394 connector.
2. Connect the stereo mini > stereo mini audio cable from the lower mini-jack to the upper (PCB) mini jack.

Note: The above two connections are necessary to carry audio from the iPod to the iPort, and DC power from the iPort to the iPod.

3. Use a small screwdriver or similar tool to set the iPort's volume control switch to the left (OFF) position (No volume control in system).

- The iPort's volume control circuit attenuates the level of the unbalanced audio output and will affect all zones in a multi-zone system. It is designed for use only in a local zone system.

4. Connect the cable that was run through the walls to the iPort's 8-pin connector block in the following configuration (Pin 1 is the left-most pin):

Pin 1:	Blue/White	– IR
Pin 2:	Blue	+IR
Pin 3:	Orange/White	–R Out (balanced line-level audio)

Pin 4:	Orange	+R Out (balanced line-level audio)
Pin 5:	Green/White	–L Out (balanced line-level audio)
Pin 6:	Green	+L Out (balanced line-level audio)
Pin 7:	Brown/White	Ground
Pin 8:	Brown	+15V DC

5. Connect the cable that was run through the walls to the iPort Wallplate's 8-pin connector block in the above configuration (Pin 1 is the top-most pin). See *Wiring Guide*, on page 5, for details.

6. Install the iPort Wallplate in a single-gang electrical box in the room where the audio equipment is located.

Important: Do NOT install the iPort Wallplate in the same electrical box as AC house wiring, a light switch or any other high-voltage device or control. The Wallplate can share gang boxes with other 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.

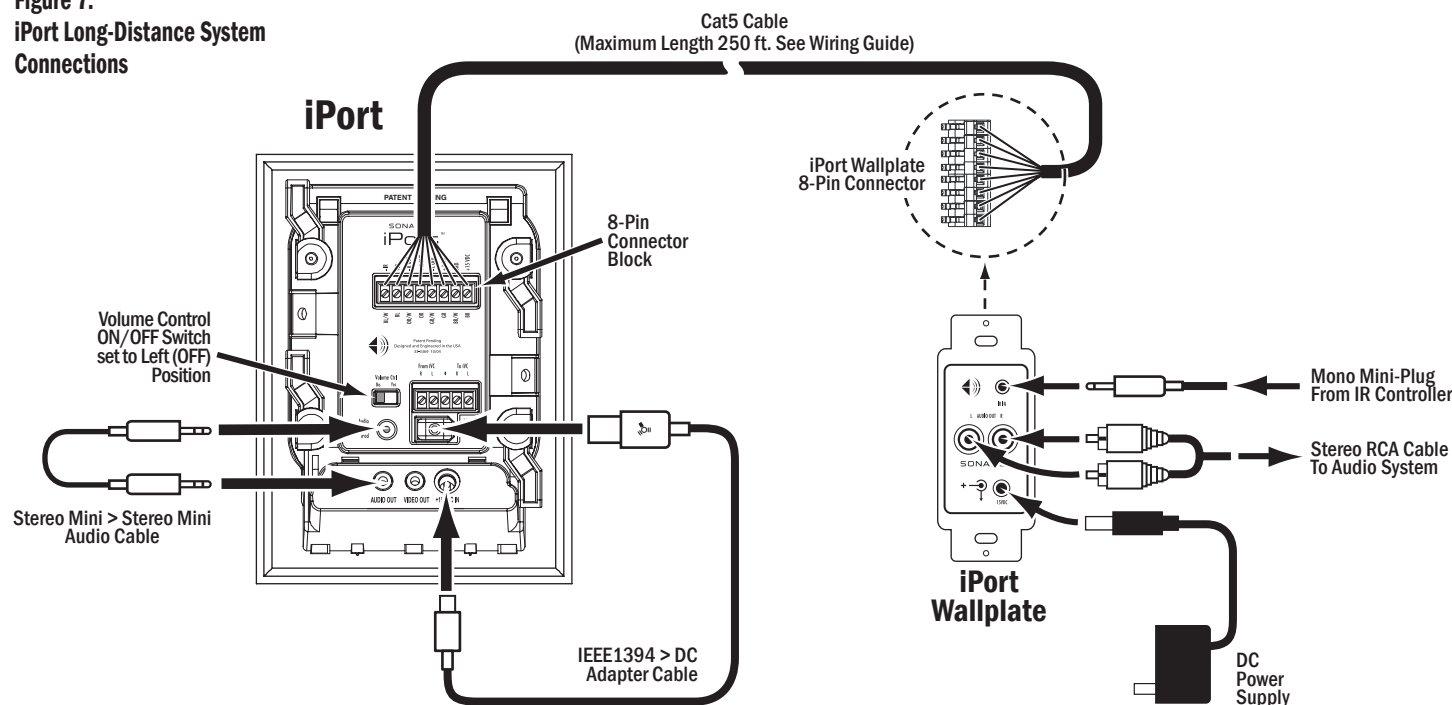
7. Plug the included 15V DC power supply into the proper connector on the iPort Wallplate.

8. Use a stereo RCA audio cable to connect the iPort Wallplate to a source input on the audio system.

9. If the audio system has a compatible IR control output, use a mono 3.5mm mini cable to connect it to the IR IN connector on the iPort Wallplate.

10. After confirming that the system operates properly, install the iPort in the wall (see *Installing The iPort In a Wall*, on page 6).

Figure 7:
iPort Long-Distance System Connections



INSTALLING THE iPort IN A WALL

The Sonance iPort features an integral RotoLock® mounting system for quick mounting directly into existing walls. Once the hole is cut and the cables are run (see *iPort System Connections* and *iPort Long Distance System Wiring Guide*), you can install the iPort in a matter of seconds.

1. Determine the location for 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 wall studs on either side (see Step 9).

3. The iPort cutout is 4 1/8" (105mm) wide x 5 7/8" (150mm) high. There also must be at least 3" (76mm) depth within the wall cavity for the iPort and its connections.

4. Find the cutout 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.

6. Make all cable connections according to *System Connections*, above. Double-check that all the connections are correct.

7. Insert the iPort into the opening in the wall.

Note: The RotoLock system can accommodate a maximum wall material thickness of 1 3/8".

8. Tighten the four RotoLock screws on the iPort chassis (2 on each side). The RotoLock clamps will automatically rotate into position and begin clamping the iPort.

- When you notice resistance on the four screws the iPort has been clamped successfully.

Important: Always use low-torque settings – NEVER over-tighten.

9. If there are wall studs up against either side of the iPort that prevent the RotoLock clamps from operating, secure the iPort by driving a 1 1/2" #6 drywall screw (not provided) through the angled hole on the side of the chassis and into the wall stud.

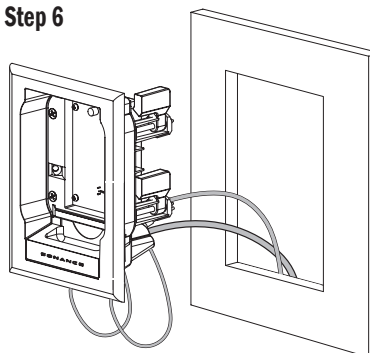
Note: This feature is Patent Pending.

Important: Always use low-torque settings – NEVER over-tighten.

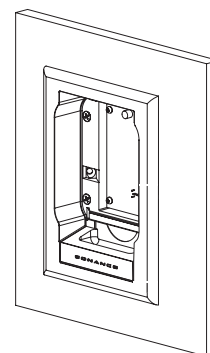
10. Install the appropriate back plate. (The model designations ('40GB', '20GB', 'Mini') are molded-into the rear of each back plate.)

- Insert the hooks at the bottom of the back plate into the slots at the bottom of the opening in the iPort chassis. Rotate the back plate up into the chassis so that the locking tabs at the top of the back plate snap into place in the chassis.
- To remove the back plate, pull-down on the locking tabs, rotate the plate forward and lift it out of the chassis.
- To remove the base cradle, insert a small screwdriver behind the left side of the cradle's rear panel and twist it slightly until the left rear peg pops out. Repeat for the right rear peg, then lift the base cradle out of the iPort chassis.

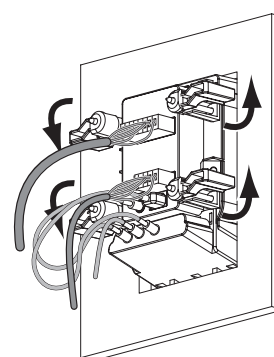
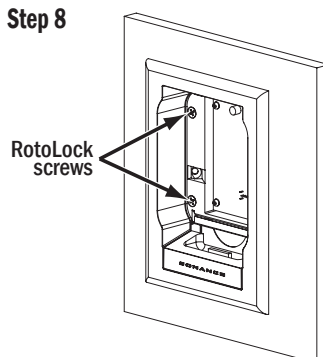
Step 6



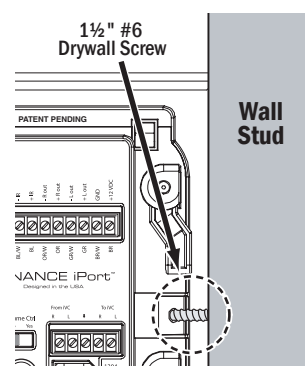
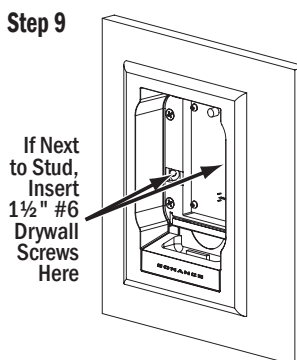
Step 7



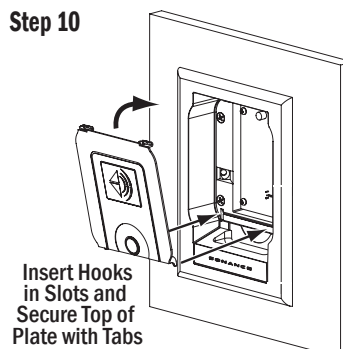
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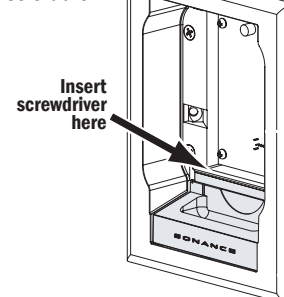
Step 9



Step 10



Removing the base cradle





INSTRUCTION MANUAL

SONANCE iPort™ IN-WALL DOCKING SYSTEM

IR CONTROL IN AN iPort SYSTEM

The iPort has built-in IR emitters that allow it to relay IR control signals to the iPod from Sonance OptiLinQ products or distributed audio systems like the DAB1 and Navigator Harbor. Through these systems, the iPort/iPod can be controlled by the K2, K1, DAB1 and Navigator keypads. See *Figure 7* for connections.

In local zone systems, IR signals from a local IR controller can be injected on the iPort's +IR (Data) and -IR (GND) connections. See *Figure 6* for details.

iPort IR control codes for the K2, K1, DAB1 and Navigator keypads can be downloaded for free at the Sonance website (www.sonance.com). These codes allow extensive remote control of the iPod: Play, Pause, Next Track/Fast-Forward, Previous Track/Fast-Rewind, Mute (Toggle) Next/Previous Chapter (Album), Next/Previous Play List, Power Off, Power On, Repeat, Shuffle, Stop, Volume Up/Down (headphone only).

Important: The iPort requires the naviPod™ IR receiver (not included) to control the iPod via IR. The naviPod IR receiver can be purchased online from the Apple iStore, ClubMac.com or DrBott.com. The naviPod must be connected to the iPod before the iPod is docked in the iPort.

Note: Painting the iPort may hinder IR operation. Please see the iPort Technical Bulletin for details.

CONTROLLING VOLUME IN iPort SYSTEMS

Volume in a Local (single-zone) iPort system can be controlled by:

- At the local zone's amplifier or with amplified volume controls (such as the Sonance AVC100 series), depending on system configuration.
- Installing an (optional) Sonance low-level volume control in the iPort system.

Volume in a Long-Distance (multi-zone) iPort system can be controlled by:

- Volume controls in each local zone (determined by system configuration).
- Zone volume controls on the distributed audio system controller.

Note: The iPod volume control only controls the iPod's headphone jack.

SPECIFICATIONS

Frequency Response:	20Hz – 20kHz (±0.25dB) @ 500 ft. CAT-5
THD+Noise:	< 0.015%, 20Hz – 20kHz @ 500 ft. CAT-5
Signal to Noise:	> 90dB (A wtd.) @ 500 ft. CAT-5
Maximum signal input:	1.5V RMS
Power supply:	15V DC, 500mA, regulated
Dimensions (W x H x D):	5" x 6 ^{13/16} " x 3 ^{1/4} " (127mm x 173mm x 83mm)
Cutout Dimensions (W x H):	4 ^{1/8} " x 6" (105mm x 153mm)

TECHNICAL ASSISTANCE AND SERVICE

If you any have questions about the operation or installation of this product, please call our Technical Assistance Department on any business day at (800) 582-0772 or (949) 492-7777; from 7 a.m. to 5 p.m., PST.

If your Sonance OptiLinQ IR Learner should need repair or service, contact your Sonance Authorized Dealer for help, or use the following procedure:

1. Prior to calling, note the product's model number, serial number, purchase date, and the name and address of the dealer where you purchased the product.
2. Contact our Technical Assistance Department at the above number(s) and describe the problem the unit is experiencing. If applicable, they will issue a Return Authorization Number.

IMPORTANT: YOU MUST HAVE PRIOR AUTHORIZATION TO RETURN YOUR iPort TO SONANCE!

3. If you're directed to return the unit to Sonance for repair, pack the unit in its original shipping carton. If needed, you can obtain replacement packaging from us for a small charge. Note: it is best if you place the box into an additional outer "overcarton" before shipment to minimize a chance of theft in shipment. Please include a copy of the original bill of sale inside the package.
4. Contact United Parcel Service, Federal Express, or RPS to arrange prepaid (not collect) shipping. Do not use the U.S. Mail Service.

IMPORTANT: FREIGHT COLLECT SHIPMENTS WILL BE REFUSED.

5. **Write the Return Authorization Number on the outside of the shipping carton.**

6. Ship the packaged unit to:

Quality Assurance Department
Sonance
212 Avenida Fabricante
San Clemente, CA 92672-7531

WARRANTY COVERAGE (U.S. ONLY)

If the unit fails due to a defect in workmanship or material **for a period of one year if installed inside of a house/home, or for a period of six months if installed other than inside of a house/home**, Sonance will, at its option and at no charge, repair or replace the components of such unit which prove to be defective.

For this warranty to be effective, the bill of sale must show that the unit was purchased from an "Authorized Sonance Dealer" and must list the price paid. This warranty shall apply exclusively to the original purchaser and shall not apply to units purchased for industrial or commercial use.

Furthermore, this warranty shall not apply if:

- 1) Damage to the unit was caused by accident, abuse, or misuse;
- 2) The unit was opened, modified, or repaired by unauthorized personnel; or
- 3) The unit was not used as outlined in the operating instructions.

EXCLUSIONS AND LIMITATIONS

The warranty set forth above is in lieu of all other warranties, express or implied, of merchantability, fitness for a particular purpose, or otherwise. The warranty is limited to Sonance products registered herein and specifically excludes any damage to loudspeakers and other allied or associated equipment which may result for any reason from use with this product. Sonance shall, in no event, be liable for incidental or consequential damages arising from any breach of this warranty or otherwise. This warranty gives you specific legal rights, and you may have other rights which vary from state to state.

SONANCE

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www.sonance.com

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