

Integration Note

Manufacturer:	Sonance
Model Number(s):	iPort Model# FS-4, FS-5, FS-22, IW-4, IW-5, IW-22, FS-23
Comments:	FS-23 requires Core Module 5.7 or higher. Tested FW 1.1.1

OVERVIEW AND SUPPORTED FEATURES

The Sonance iPort connects to the **g!** system using an RS-232 serial connection or ethernet. The **g!** interface for the iPort allows selection of the music on an iPod device by artist, album, artist/album, track or playlist and displays the artist/album/track info while the music is playing. The interface can be accessed using a PC or touchscreen connected to the **g!** network.

SUPPORTED FEATURES:

Music Data: Artist, Album, Artist/Album, and Track data is displayed in the standard g! audio interface.

Cover Art (RS-232 Models): g! will search the internet to try to find the proper cover art for the current album and display it in the **g!** audio interface for the Now Playing screen.

Cover Art (FS-23 only): g! will pull cover art from the Sonance FS-23 if it does not already have artwork for the current track on the Now Playing screen.

Playlist Support: Playlists stored on the iPod are available to select and play from the **g!** interface. Note that playlists containing more than 500 tracks will not show the contents of the Playlist on the playlist tab.

Serial Control: RS-232 port control of supported models for two-way feedback and control.

Ethernet Control: FS-23 model (only) supports two-way feedback and control over IP. Note FW version at top of this document.

UNSUPPORTED FEATURES:

Video, Photos, audiobooks and other non-music options: Some iPort models have the ability to select and control video, photo or other content from the iPod. At this time these types of content are **not** supported from the **g!** interface.

Playlist Creation/Editing: Playlists must be maintained in iTunes and may not be edited from the g! interface.

Volume Control: The iPort audio out volume level cannot be adjusted through the g! system.

Lighting Adapters: Using Lighting to 30 pin adapters has not been evaluated and compatibility cannot be assured.

Any feature not specifically noted as supported should be assumed to be unsupported.

IMPORTANT NOTES:

- 1. The Sonance iPort is not compatible with the RS-232 serial port on the Global Cache device. They must be connected to either a serial port on the g! Controller or to the RS-232 port on a SerialBrick.
- 2. As a result of the amount of data g! receives from an iPod and the speed of the data transfer from the iPod, the g! interface may take time to properly display. This behavior may be seen on

the Now Playing tab while the interface is generating the current playlist, metadata, and album art or in the Music Library tab while populating artist, album, and track info. It is recommended to disable to the "Tracks" tab under Audio Library Options when integrating any iPod dock.

Installation Overview – RS232

- 1. Install the iPort at the desired location, and pull power and Cat5 as needed. Refer to the Sonance documentation for A/V data and power cabling at http://www.iportmusic.com/support.html.
- 2. Run a Cat5 for the RS-232 communication, from the RS-232 port on the iPort **Balanced Audio Wallplate** back to a **g!** serial port.
- 3. Connect the iPort electrically to a zone controller or amplifier and then configure the iPort to work with the audio system. Confirm proper operation of the iPort and zone controller or amplifier devices prior to connecting to **g!**. Refer to the Sonance documentation for more details.
- 4. Connect the iPort to g! electrically. Terminate and test the RS-232 CAT5 wire run for serial communication. Connect the RS-232 Cat5 cable to the Balanced Audio Wallplate, using the RS-232 cable included with the iPort and one **HA-CB-307** RS-232 x RJ45 Male adapter.
- 5. Integrate the iPort into the **g!** software using the **g!** configurator tool. See **g! Configuration Details**

Note: ELAN recommends disabling the Tracks Sort tab for speed and reliability when using any iPod dock. See Media>Global Options in the Configurator.

Installation Overview – Ethernet (FS-23 Only)

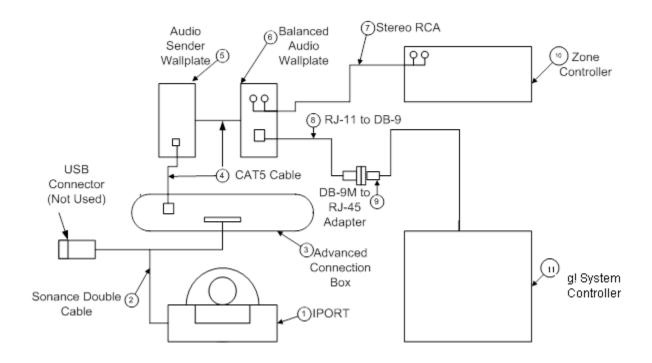
- 1. Install the iPort at the desired location, and pull power and Cat5 as needed. Refer to the Sonance documentation for A/V data and power cabling at http://www.iportmusic.com/support.html.
- 2. Run a Cat5 for the Ethernet connection from the location of the iPort to the location for your network connection (switch, router etc.).
- 3. Connect the iPort electrically to a zone controller or amplifier and then configure the iPort to work with the audio system. Confirm proper operation of the iPort and zone controller or amplifier devices prior to connecting to q!. Refer to the Sonance documentation for more details.
- 4. Connect the iPort to the network. Terminate and test the wire run for ethernet communication.
- 5. Configure the iPort to utilize a Static IP for reliable integration
- 6. Integrate the iPort into the g! software using the g! configurator tool. See g! Configuration Details

Note: ELAN recommends disabling the Tracks Sort tab for speed and reliability when using any iPod dock. See Media>Global Options in the Configurator.

NOTE ABOUT PLAY BEHAVIOR ON IPOD DOCKS:

Play behavior matches the iPod play behavior. If play is pressed on a track from the tracks menu, it will load all tracks and start playing from the selected track. If play is pressed on a track within an album, the album will load to the gueue and start playing from that track, and so on. This is not g! defined behavior.

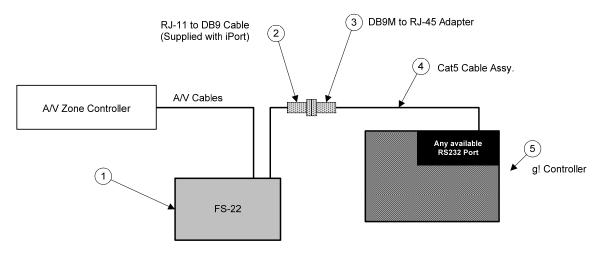
Follows the connection diagram for models FS-4 and FS-5:



BILL OF MATERIALS

#	Device	M anufacturer	Part Number	Protocol	Connector Type	Notes
1	Sonance IPORT	Sonance		RS-232	Sonance	
2	Sonance Double Cable	Sonance		RS-232	Sonance X USB Male	Included with IPORT, USB not used
3	Advanced Connection Box	Sonance		RS-232	Sonance X RJ-45 M ale	Included with IPORT
4	Cat5 Cable	Installer	N/A	RS-232	RJ-45 M ale X RJ-45 M ale	M ust terminate all 8 conductors
5	Audio Sender Wallplate	Sonance		RS-232	RJ-45 Female	Included with IPORT
6	Balanced Audio Wallplate	Sonance		RS-232	RJ-45 Female X RCA Female X RJ-11 Fe	Included with IPORT
7	Stereo RCA Cable	Installer	N/A	Audio	RCA Male X RCA Male	
8	RJ-11to DB-9	Sonance		RS-232	RJ-11M ale X DB-9 M ale	Proprietary, included with IPORT
9	DB-9 M to RJ-45 Adapter	ELAN	HA-CB-307	RS-232	DB-9 Male / RJ-45 Female	
10	Audio Zone Controller	Various	Vario us	Various	Various	
11	g! System Controller	ELAN	Various (e.g. HC12)	RS-232	RJ-45	

Follows the connection diagram for model FS-22:

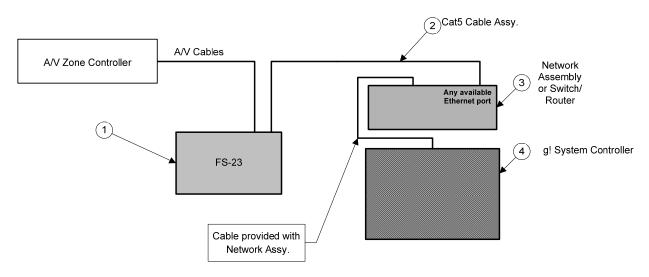


BILL OF MATERIALS

#	Device	Manufacturer	Part Number	Protocol	Connector Type	Notes
1	iPort Desktop Base Unit	Sonance	FS-22	RS-232	Various	
2	Serial Interface Cable	Sonance	N/A	RS-232	RJ11x DB-9 Female	Included with iPort
3	DB9M to RJ45 Adapter	HomeLogic	HA-CB-307	RS-232	DB-9 Male X RJ45 Female	
4	Cat5 Cable	Installer	N/A	RS-232	RJ-45 M ale X RJ-45 M ale	Must terminate all 8 conductors
5	Controller	Elan	Various (ex. HC12)	RS-232	RJ-45 Female	

IMPORTANT! Enable RS-232 Jumper: The FS-22 Requires RS-232 "Extended Control Mode" to be enabled by switching a jumper on the unit. To switch the Jumper, remove the top cover of the base unit and find a jumper to the side of the iPod connector labeled RS232. Set the Jumper to enable RS232 by moving it to short the two pins closest to J11 (front of unit). See Sonance documentation for more details.

Follows the connection diagram for model FS-23:



BILL OF MATERIALS

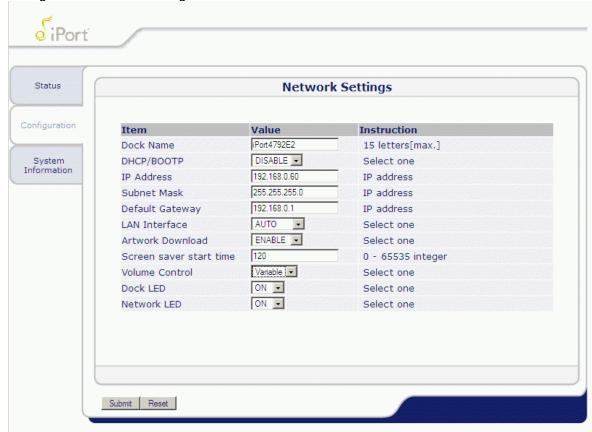
#	Device	M anufacturer	Part Number	Protocol	Connector Type	Notes
1	iPort Desktop Base Unit	Sonance	FS-23	Ethernet	Various	
2	Cat5 Cable	Installer	N/A	Ethernet	RJ-45 Male X RJ-45 Male	Must terminate all 8 conductors
3	Network Assembly	Elan	NWA 18	Ethernet	RJ-45 M ale X RJ-45 M ale	or Installer supplied switch/router
4	Controller	Elan	Various (ex. HC12)	Ethernet	RJ-45 Female	

Ethernet Configuration:

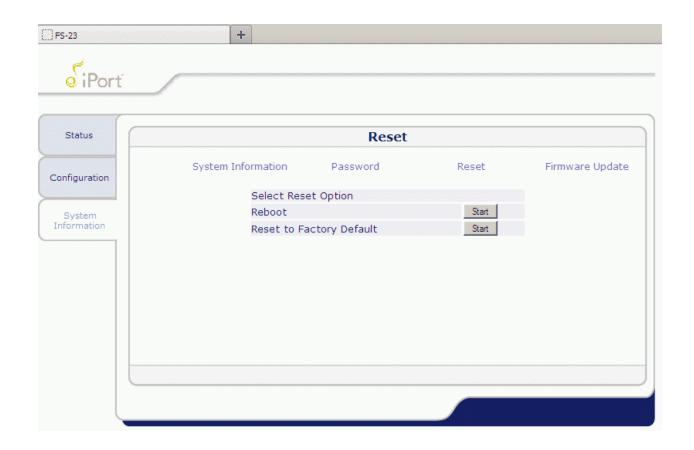
It is strongly recommended you set a static IP address for the FS-23 iPort for reliable communication. To assign a static IP, you will need the unit powered up and on the network, with a component video display attached.

- 1. Use the included remote to navigate the iPort's On Screen Display (OSD) to the Status page and take note of the IP address.
- 2. Using a computer, type the FS-23's IP address into the Address bar of a web browser such as Firefox or Internet Explorer. The iPort Web interface will appear.
- 3. Click Configuration and enter the Network Settings section. Note: You may be prompted for login—the default is **root** with no password.
- 4. Edit the DHCP/BOOTP drop down to DISABLE, which will allow you to enter Static IP address information. It is recommended to set the first iPort (or any Media Player) to 192.168.0.60, the second to 192.168.0.61 and so on. If you are using a custom IP range or non-Elan router, ensure the IP selected is available and outside your DHCP range.

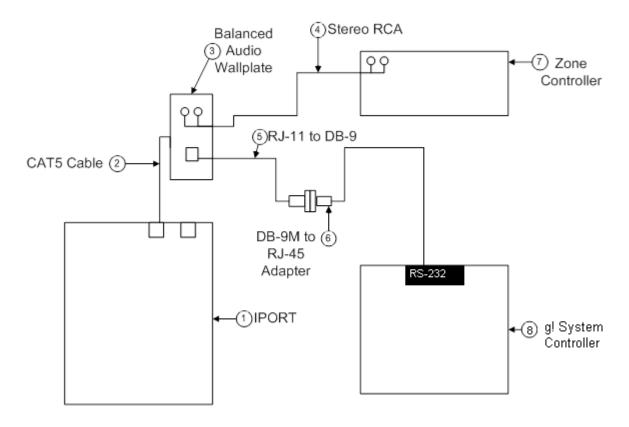
5. Configure the Network Settings as follows and click Submit when done.



6. The iPort must be rebooted before the new settings will take effect. You may either physically power cycle the unit or utilize the System Information>Reset>REBOOT option to reboot the unit.



Follows the connection diagram for the IW Series:



BILL OF MATERIALS

#	Device	M anufacturer	Part Number	Protocol	Connector Type	Notes
1	Sonance IPORT	Sonance		RS-232	Sonance	
4	Cat5 Cable	Installer	N/A	RS-232	RJ-45 M ale X RJ-45 M ale	Must terminate all 8 conductors
3	Balanced Audio Wallplate	Sonance		RS-232	RJ-45 Female X RCA Female X RJ-11Fe	Included with IPORT
4	Stereo RCA Cable	Installer	N/A	Audio	RCA Male X RCA Male	
5	RJ-11to DB-9	Sonance		RS-232	RJ-11M ale X DB-9 M ale	Proprietary, included with IPORT
6	DB-9 M to RJ-45 Adapter	ELAN	HA-CB-307	RS-232	DB-9 Male / RJ-45 Female	
7	Audio Zone Controller	Various	Various	Various	Various	
8	g! System Controller	ELAN	Various (e.g. HC 12)	RS-232	RJ-45	

IMPORTANT! – **Enable RS232 Switch (IW-22):** To enable RS-232 "Extended Control Mode" on the IW-22, you **must** install the balanced audio and RS-232 boards. See Sonance documentation for detail. In addition, the rear of IW-22 circuit board has 3 switches to set modes for RS-232, audio and video. Set the switch labeled "**2-Way Sel**" to "**En**" to enable RS-232 communications. Set the audio and video switches as desired.

g! Configuration Details

The following table provides settings used in the **g!** Configurator when connecting to an iPort. Please refer to the *Configurator Reference Guide* for more details.

In the table below:

o "<Select>" Select the appropriate item from the list (or drop-down) in the Configurator.

o "<User Defined>", etc. Type in the desired name for the item.

o "<Auto Detect>", etc. The system will auto detect this variable.

Devices Variable Name Audio Library Options Show Sorting Tabs		Setting - Ethernet	Setting - RS232	Comments See Note 1
		<user defined=""></user>	<user defined=""></user>	
Communication Devices	Name	<pre><user defined=""> (Default: New Device)</user></pre>	<pre><user defined=""> (Default: New Device)</user></pre>	
	Туре	Ethernet	Serial Port	
	Communication Type	Standard Connection	Standard Connection	
	Location	<use><user defined=""> (Not Required)</user></use>	User Defined> (Not Required)	
	IP Address/Comm Port	<user defined=""> Enter IP address</user>	<select></select>	
MP3 Players	Name	<pre><user defined=""> (Default: Sonance iPort)</user></pre>	User Defined> (Default: Sonance iPort)	
•	Device Type	Sonance iPort	Sonance iPort	
	Location	<use><user defined=""> (Not Required)</user></use>	<user defined=""> (Not Required)</user>	
	Communication Device	<select></select>	<select></select>	
	Settings	<select> (Default: Max. Query Size: 40)</select>	<select> (Default: Max. Query Size: 40)</select>	Allows setting of maximum query size. This occasionally must be adjusted for performance depending on your serial run; changes the number of entries g! pulls from the iPod at a time. Lower settings may be needed for long/problematic serial runs but will impact speed.
<audio controllers="" zone=""></audio>	Add a Audio Zone Controller and confi			
lotes:				
1. Elan recommends removin	g the Track Sort Tab in systems with an iP	ort to reduce the time required to scan the iPods I	ibrary.	

COMMON MISTAKES

- 1. Failing to set the switch correctly on the IW-22 for RS-232 control. The switch on the back of the IW-22 labeled **2-Way Sel** must be set to **En** for RS-232 control in **g!**.
- 2. Failing to install the RS-232 board in the IW-22. Though the RS-232 board is included with the IW-22, it is not pre-installed and must be installed according to Sonance documentation.
- 3. Failing to set the RS-232 Jumper on the FS-22 to enable RS-232. See FS-22 Connection Diagrams above.
- 4. Trying to operate the iPort without an iPod properly docked. If all cabling, board, jumper/switch settings are correct the iPod should display an iPort logo on its face when docked. If the logo does not display on a standard iPod, either it is not docked properly, or there may be an incorrect or missing RS-232 component/setting. Note that iPhones/iPod Touch may not display the logo. When in doubt, it may be helpful to try a different iPod.
- 5. Incorrect IP address settings on the FS-23. Ensure the device is using the IP address specified in Configurator by checking the Status section of the iPort OSD.
- 6. Short stroke when changing iPods in the dock. The iPort itself needs a moment in between iPod un-dock and re-dock to recognize the change.