

Integration Note

Manufacturer:	Sony	
Model Number(s):	BDP-CX7000ES	
Core Module Version:	5.0 Build 620 or later	
Comments:	Sony Software Version: 15.4.015 or later	
Document Revision Date:	1/28/2013	

OVERVIEW AND SUPPORTED FEATURES

The Sony BDP-CX7000ES is an internet enabled Blu-Ray and DVD Changer. The changer connects to an **g!** system controller using RS232 to provide communications, enabling reliable control and feedback from the changer.

THE FOLLOWING FEATURES ARE SUPPORTED:

Basic Transport Control: Play, stop, etc.

Metadata Lookup: The changer has its own metadata lookup service. The metadata is relayed to the ELAN system for display on Viewer interfaces.

Cover Art Browser: The Viewer interface enables browsing the library by cover art image. The entire library can viewed at once, or filtered by genre.

List Browser: The Viewer interface enables browsing the movie title. The entire library can viewed at once, or filtered by genre.

THE FOLLOWING FEATURES ARE NOT SUPPORTED:

CD Audio: The BDP-CX7000ES catalogs and plays Audio CDS. The **g!** system does not recognize or catalog CDs in the Viewer Interface. The Viewer interface, can however, be used to navigate the built in Sony interface that appears on a TV.

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

INSTALLATION OVERVIEW

- 1. During the rough-in phase install the necessary power, A/V, and network cabling for the Sony Changer.
- 2. Also during the rough-in phase, run a Cat5 wire from the location of the changer back to the Network Assembly of the **g**! system to provide the RS232 connection needed to control the changer.
- 3. Install the changer and other theater components.
- 4. Test the changer with the other theater components to ensure that the audio and video play correctly.
- 5. Configure the **g!** system for the changer. This step is outlined in **g! Configuration Details**.
- 6. Test the system by playing Audio and Video with the various transport controls.

BDP-CX7000ES CONFIGURATION

In addition to normal Sony setup procedures, it is required to set the BDP-CX7000ES to static IP addresses for reliable communications. To set a changer to a static IP address, use the remote to navigate the on screen interface:

- 1. Press the HOME button.
- 2. Scroll all the way to the left until the SETUP icon is highlighted.
- 3. Scroll UP or DOWN to NETWORK SETTINGS and select.
- 4. Select INTERNET SETTINGS.
- 5. Select IP ADDRESS ACQUISITION and choose USE STATIC IP ADDRESS.
- Select IP ADDRESS and enter an available static IP address; typically media players are recommended to be set 192.168.000.060 for the 1st unit, 192.168.000.061 for the second unit, and so on.
- 7. Select SUBNET MASK and set to 255.255.255.000
- 8. Set the DEFAULT GATEWAY and DNS SERVER (PRIMARY) to the router IP address. By default, 192.168.000.001.
- 9. Scroll down to NETWORK DIAGNOSTIC and select.
- 10. Select START to begin the diagnosis process.
- 11. If the diagnosis fails, check your connections and settings and try again. If the diagnosis succeeds, select FINISH, the press RETURN repeatedly to get back to the HOME screen

The BDP-CX7000ES must be running software version 15.4.015 or later in order to work with a g! system. To update the changer to the latest version:

- 1. Press the HOME button.
- 2. Scroll all the way to the left until the SETUP icon is highlighted.
- 3. Scroll UP or DOWN to NETWORK UPDATE and select.
- 4. Start the update process. The unit will turn off when the update is complete.

The BDP-CX7000ES must be configured to communicate using the RS232 connection. To configure the connection:

- 1. Press the HOME button.
- 2. Scroll all the way to the left until the SETUP icon is highlighted.
- 3. Scroll UP or DOWN to SYSTEM SETTINGS and select.
- 4. Scroll UP or DOWN to CUSTOM INSTALLATION CONTROL and select.
- 5. Select RS232C.
- 6. Press RETURN to get back to the HOME screen.

CONNECTION DIAGRAM



BILL OF MATERIALS

#	Device	Manufacturer	Part Number	Protocol	Connector Type	Notes
1	DB9M to RJ45 NULL Adapter	ELAN	HA-CB-328	RS-232	DB-9 Female X RJ-45 Female	
2	Cat5 Cable Assy.	Installer	N/A	RS-232	RJ-45 M ale X RJ-45 M ale	Must terminate all 8 conductors
3	g! System Controller	ELAN	Various (e.g. HC12)	RS-232	RJ-45	

g! CONFIGURATION DETAILS

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

- "<User Defined>", etc. Type in the desired name for the item.
- "<Auto Detect >", etc. The system will auto detect this variable.

Devices	Variable Name	Setting	Comments
Communication Devices	Name	<user defined=""> (Default: DVD)</user>	
	Туре	Serial Port	
	Communication Type	Standard Connection	
	Location	<user defined=""> (Not Required)</user>	
	COM Port	<select></select>	
DVD Players Name <us< th=""><th><user defined=""></user></th><th>Defaults to the make and model of your DVD, after selecting Device Type</th></us<>		<user defined=""></user>	Defaults to the make and model of your DVD, after selecting Device Type
	Device Type	<select></select>	Select your model of DVD player or changer
	Location	<user defined=""> (Not Required)</user>	
	COM Device	<select> (Default: DVD)</select>	

DISC CATALOGING

The changer has a built-in lookup service. The g! software uses this lookup service to get the disc's title and genre. The g! system controller has its own lookup service for cover art in conjunction with GD3. It is not necessary to initiate a lookup from the changer's HOME screen. Instead, lookups can be initiated from the Viewer interface. Three Event Map commands are provided for this use:

- Start Scan Discs Scans every slot in the changer and catalogs the disc. This should be used the first time the changer is loaded.
- Start Scan Unknown Discs Scans slots that failed to lookup during the initial scan. Also scans for newly added discs. This should be used every time a new disc is added to the changer.
- Stop Scan Discs Cancels any lookup that is currently in progress.

The provided template does not include buttons for these functions. Instead it is recommended to add a "Settings" page to a zone, and place these functions on that page.

As an added feature, anytime an unknown disc is played, the system will automatically perform a lookup.

It is recommended to not swap discs from slot to slot. Anytime a disc is removed from the changer, it should be returned to the proper slot.

COMMON MISTAKES

- 1. Connecting the changer to the System Controller after configuration. The changer should be connected to the controller before performing any configuration. Failing to do so will result in improper configuration of certain changer settings. To resolve this, simply reboot the system controller.
- 2. Using an improper RS232 connection. An ELAN HACB328 Null Modem adapter or equivalent must be used to connect the changer.
- 3. Setting incorrect Device ID. The Device ID in the Configurator must match the ID set in the changer's setup menu.