

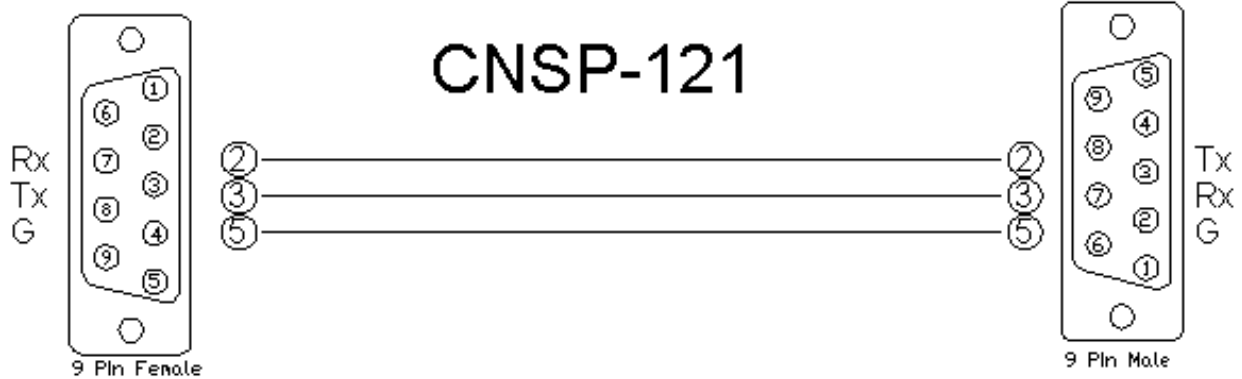
Partner: Oppo
Model: BDP-93
Device Type: Blu-Ray Player



GENERAL INFORMATION

SIMPLWINDOWS NAME:	Oppo BDP-93 v1.0
CATEGORY:	Transport Decks
VERSION:	1.0
SUMMARY:	This module provides RS232 control and feedback of the Oppo BDP-93 Blu-Ray player.
GENERAL NOTES:	<p>This module provides RS232 control of the Oppo BDP-93 Blu-Ray player. It also provides true feedback. Oppo uses the same protocol for several players; therefore this module should also control the BDP-95 and the BDP-83.</p> <p>NOTE: To jump to a title, chapter or time there are inputs on the module called Time_Entry_*. To jump to a title or chapter just enter the title or chapter number and press the Send_Title_Number or Send_Chapter_Number input. To jump to a time into the current title, enter the time with colon(s), and then press the Send_Title_Time input. I.E. the time 34 minutes 2 seconds MUST be entered as 34:02. To jump to a time into a chapter enter the time with colon(s) and then press the Send_Chapter_Time. If the chapter time you enter is more than the time of the chapter the disc will jump to the next chapter. I.E. if you are in chapter 4, chapter 4 is 12:34 long and you try to jump to 15:02 of the current chapter the disc will jump to 2:28 of chapter 5.</p>
CRESTRON HARDWARE REQUIRED:	C2I-COM, ST-COM, C2-COM-*
SETUP OF CRESTRON HARDWARE:	RS232 Baud:9600 Parity: None Data Bits: 8 Stop Bits: 1
VENDOR FIRMWARE:	BDP9x-57-0917
VENDOR SETUP:	None
CABLE DIAGRAM:	CNSP-121

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CONTROL:

Power_<On/Off/Toggle>	D	Pulse to turn the unit on and off.
<Open/Close>_Tray	D	Pulse to open and close the tray.
<Play/Stop/Pause>	D	Pulse to play stop or pause the disc.
<Next/Previous>_Track	D	Pulse to go to the next or previous track or chapter.
Fast_<Forward/Reverse>	D	Pulse to step through the fast forward and fast reverse speeds.
<Red/Green/Blue/Yellow>	D	Pulse to activate the red, green, blue and yellow functions.
On_Screen_Display	D	Pulse to turn the on screen display on and off.
Top Menu	D	Pulse to turn the top menu on and off.
Pop-up_Menu	D	Pulse to turn the menu or pop-up menu on and off.
Page_<Up/Down>	D	Pulse to move through displayed pages.
<Up/Down/Left/Right>	D	Pulse to move through the menus.
Enter	D	Pulse to select the highlighted menu item.
Setup	D	Pulse to turn the setup menu on and off.
Return	D	Pulse to return to the previous menu level.
Keypad_<0..9/Clear>	D	Pulse to send the keypad button presses to the BDP-93. These are the same as using the keypad on the IR remote.
Go_To_<Source/Home_Menu>_Screen	D	Pulse to go to the source or home menu screen.

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Volume_<Up/Down>	D	Press and hold to adjust the volume.
Volume_Mute_<On/Off/Toggle>	D	Pulse to turn the volume mute on and off.
Pure_Audio_<On/Off/Toggle>	D	Pulse to turn the pure audio mode on and off.
Audio	D	Pulse to cycle through the audio settings.
Subtitle	D	Pulse to cycle through the subtitle settings.
Angle	D	Pulse to cycle through the angle settings.
Zoom	D	Pulse to cycle through the zoom settings.
SAP	D	Pulse to cycle through the SAP settings.
AB_Replay	D	Pulse to set and clear the A and B replay end points.
Repeat	D	Pulse to cycle through the repeat settings.
PIP	D	Pulse to turn the PIP on and off.
Resolution	D	Pulse to cycle through the resolution settings.
Subtitle_Shift	D	Pulse to the subtitle shift menu on and off.
Direct_Play	D	Pulse to activate the direct play function.
Dimmer	D	Pulse to cycle through the front panel dimmer settings.
Set_Feedback_Mode_To_(3)_All	D	Pulse to set the automatic feedback mode to (3) which will provide all feedback including time updates every second.
Set_Feedback_Mode_To_(2)_No_Time_Updates	D	Pulse to set the automatic feedback mode to (2) which will provide feedback for power and transport but no time updates.
Set_Feedback_Mode_To_Off	D	Pulse to set the automatic feedback mode to off which will provide no feedback at all.
HDMI_Resolution_*	D	Pulse to set the HDMI output resolution.
TV_System_<NTSC/PAL/Auto>	D	Pulse to the TV system.
Zoom_Ratio_*	D	Pulse to set the zoom ratio. For HDMI Output: 1, AR, FS, US, 1.2, 1.3, 1.5, 2, 1/2. For Component Output: 1, 2, 3, 4, 1/2, 1/3, 1/4.
Repeat_*	D	Pulse to set the repeat mode.

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<Shuffle/Random>	D	Pulse to turn shuffle or random mode on. This will turn off repeat mode.
Time_Entry_Key_<0...9/Colon/Clear/Backspace>	D	Pulse to enter the title, chapter or time to jump to. Time must be entered with colon(s) in the format of h:mm:ss where h is hours, mm is minutes and ss is seconds. For more information see the GENERAL NOTES: section of this help file.
Send_Title_Number	D	Pulse to send the entered value as the title number to jump to.
Send_Title_Time	D	Pulse to send the entered time as the time into the current title.
Send_Chapter_Number	D	Pulse to send the entered value as the chapter number to jump to.
Send_Chapter_Time	D	Pulse to send the entered time as the time into the current chapter. For more information see the GENERAL NOTES: section of this help file.
Poll_<Title/Chapter/Total>_Time	D	Pulse to enable polling for the title, chapter or total time. If feedback mode is (3)_All this will set the feedback mode to (2)_No_Time_Updates. This will poll for the title or chapter number, elapsed time and remaining time.
Initialize	D	Pulse to get the initial status of the BDP-93.
From_Device	S	Serial signal to be routed from a 2-way serial com port.

FEEDBACK:

Power_Is_<On/Off>	D	High to indicate the current power state.
Tray_Is_<Open/Closed>	D	High to indicate the current tray state.
<Playing/Stopped/Paused>	D	High to indicate the current transport state.
<Fast/Slow>_<Forwarding/Reversing>	D	High to indicate the current transport state.
Step_<Forward/Reverse>_Mode	D	High to indicate the current transport state.
No_Disc	D	High to indicate that there is no disc in the tray.
Loading	D	High to indicate that the player is trying to read the disc in the tray.
<Fast/Slow>_<Forward/Reverse>_Speed_Text	S	Serial signals indicating the fast/slow forward/reverse speed.
Fast_<Forward/Reverse>_Speed_Is_<1/2/3/4/5>	D	High to indicate the current fast forward/reverse speed.
Slow_<Forward/Reverse>_Speed_Is_*	D	High to indicate the current slow forward/reverse speed.
Media_Center_Screen_Is_Showing	D	High to indicate that the media center screen is being displayed.

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Home_Menu_Screen_Is_Showing	D	High to indicate that the home menu screen is being displayed.
Volume_Level_Gauge	A	Analog signal indicating the current volume level.
Volume_Mute_Is_<On/Off>	D	High to indicate the current volume mute state.
Pure_Audio_Is_<On/Off>	D	High to indicate the current pure audio state.
Feedback_Mode_Is_*	D	High to indicate the current automatic feedback mode.
HDMI_Resolution_Is_*	D	High to indicate the current HDMI resolution setting.
TV_System_Is_<NTSC/PAL/Auto>	D	High to indicate the current TV system setting.
Zoom_Ratio_Is_*	D	High to indicate the current zoom ratio setting.
Repeat_Is_*	D	High to indicate the current repeat mode setting.
<Shuffle/Random>_Is_On	D	High to indicate that shuffle or random mode is on.
Entered_Text	S	Serial signal displaying the text entered using the _Time_Entry_Key_* inputs.
Poll_<Title/Chapter/Total>_Time_Is_Active	D	High to indicate the current poll mode. Only applies when feedback mode is no (3) All.
Current_<Title/Chapter/Total>_Elapsed_Time_Text	S	Serial signal indicating the title, chapter or total elapsed time.
Current_<Title/Chapter/Total>_Remaining_Time_Text	S	Serial signal indicating the title, chapter or total remaining time. (Only available when the corresponding Poll_*_Time_Is_Active is high.)
<Title/Chapter>_Number_Analog	A	Analog signal indicating the current title or chapter.
Total_<Titles/Chapters>_Analog	A	Analog signal indicating the total titles or chapters on the disc. (Only available when the corresponding Poll_*_Time_Is_Active is high.)
Disc_Type_Text	S	Serial signal indicating the type of disc in the tray.
Audio_Type_Text	S	Serial signal indicating the audio signal type.
<Audio/Sub_Title>_Language_Text	S	Serial signal indicating the current audio or sub title language.
<Audio/Sub_Title>_Track_Number_Analog	A	Analog signal indicating the current audio or subtitle language track number.
Total_<Audio_Tracks/Sub_Titles>_Analog	A	Analog signal indicating the total audio or subtitle language tracks available.
To_Device	S	Serial signal to be routed to a 2-way serial com port.

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TESTING:	
OPS USED FOR TESTING:	PRO2: v4.003.0015 MC3: 1.002.0000
SIMPL WINDOWS USED FOR TESTING:	3.02.14
DEVICE DB USED FOR TESTING:	38.00.002.00
CRES DB USED FOR TESTING:	29.00.008.00
SYMBOL LIBRARY USED FOR TESTING:	764
SAMPLE PROGRAM:	Oppo BDP-93 v1.0 Demo
REVISION HISTORY:	v1.0 – Initial Release