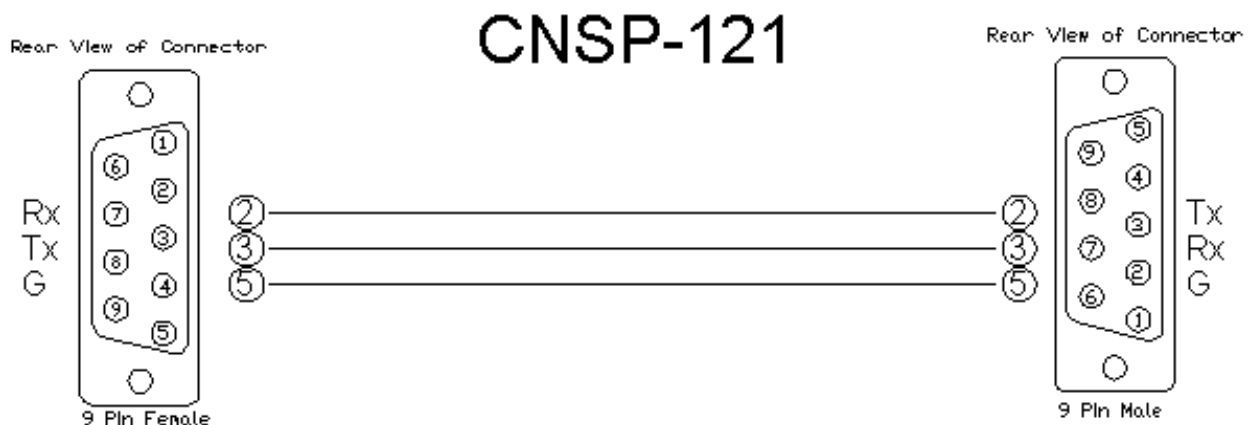


Partner: Lexicon
Model: BD-30
Device Type: Blu-Ray Player



GENERAL INFORMATION

| | |
|------------------------------------|--|
| SIMPLWINDOWS NAME: | Lexicon BD-30 v1.0 |
| CATEGORY: | Transport Decks |
| VERSION: | 1.0 |
| SUMMARY: | This module provides control and feedback for the Lexicon BD-30. |
| GENERAL NOTES: | <p>Only enable polling when needed, or else unpredictable results will occur.</p> <p>If the device returns "@Error [message]" it is because the command was given out of context or is not available in that particular mode. For instance, giving the player a command other than Power on when it is off will likely result in an error message.</p> <p>All feedback is true feedback.</p> |
| CRESTRON HARDWARE REQUIRED: | C2I-COM6, C2-COM2/3, CNXCOM-6, CNX-COM2, ST-COM |
| SETUP OF CRESTRON HARDWARE: | <p>RS232</p> <p>Baud: 9600</p> <p>Parity: None</p> <p>Data Bits: 8</p> <p>Stop Bits: 1</p> |
| VENDOR FIRMWARE: | BD30-38-0925 |
| VENDOR SETUP: | None |
| CABLE DIAGRAM: | CNSP-121 |



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CONTROL:

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| Power_On/Off/Toggle | D | Pulse to turn the power on and off. |
| Tray_Toggle | D | Pulse to open or close the disc tray. |
| Play/Stop/Pause | D | Pulse to play, stop, and pause the disc. Pulsing stop twice brings the disc to a full stop. |
| Next/Previous | D | Pulse to skip to the next or previous track/chapter. |
| Reverse/Forward | D | Pulse to search forward and reverse. |
| Set_Repeat_Mode | D | Sets Repeat mode: Chapter, Title, All, Off. |
| Set_Repeat_Chapter | D | Sets Repeat mode to Chapter. |
| Set_Repeat_Title | D | Sets Repeat mode to Track/Title. |
| Set_Repeat_All | D | Sets Repeat mode to All. |
| Set_Repeat_Off | D | Sets Repeat mode to Off. |
| Set_Shuffle | D | Sets Repeat mode to Shuffle. |
| Set_Random | D | Sets Repeat mode to Random. |
| A-B_Repeat | D | Pulse to set up A-B repeat. First pulse sets A-, second pulse sets B, third pulse turns it off. |
| Page+/- | D | Pulse to page up and page down in the menus. |
| Setup | D | Pulse to display setup options. |
| Top_Menu | D | Pulse to display the top menu. |
| Menu | D | Pulse to display the pop-up menu. |
| Menu_Return | D | Pulse to return to the previous menu. |
| Menu_Up/Down/Left/Right | D | Pulse to navigate through menus. |
| Menu_Enter/Clear | D | Pulse to select highlighted option, or clear entered options. |
| On_Screen_Display | D | Pulse to bring up the OSD. |

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| Dimmer | D | Pulse to change the brightness on the front panel of the Blu Ray player. |
| Num_0-9 | D | Pulse to enter 0 – 9. |
| Red/Green/Blue/Yellow | D | Pulse to enter that colored button. |
| Goto/Home | D | Pulse to activate the goto and home commands. |
| Picture_In_Picture | D | Pulse to display secondary video. |
| Set_SDI-i_480i/576i | D | Pulse to set to that specific resolution. |
| Set_SDI-p_480p/576p | D | Pulse to set to that specific resolution. |
| Set_720p | D | Pulse to set to that specific resolution. |
| Set_1080i | D | Pulse to set to that specific resolution. |
| Set_1080p | D | Pulse to set to that specific resolution. |
| Set_SRC | D | Pulse to set to the resolution of the source material. |
| Set_AUTO_Resolution | D | Pulse to set Resolution to AUTO. |
| TV_System | D | Pulse to set output to NTSC, PAL, or ATUO. |
| Set_NTSC/Set_PAL/ Set_AUTO_NTSC_PAL | D | Pulse to discretely set output to NTSC, PAL or AUTO. |
| Mute | D | Pulse to toggle mute status. |
| Volume_Up/Down | D | Pulse to increment or decrement volume. Works in blocks of 5. |
| Volume | A | Sets the Volume to that level (0 – 100) |
| Pure_Audio | D | Pulse to enter or exit Pure Audio mode (no video out). |
| Set_Audio | D | Pulse to iterate through the audio tracks/languages. |
| Set_Subtitle | D | Pulse to iterate through the subtitles. |
| Set_Angle | D | Pulse to iterate through the angles. |
| Set_Secondary_Audio | D | Pulse to iterate through the secondary audio tracks. |
| Set_Zoom | D | Pulse to set zoom: each pulse will go to the next zoom type, as defined below. |
| Set_HDMI_Aspect_Ratio_Correction | D | Pulse to discretely set zoom. |

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| Set_HDMI_Full_Screen | D | Pulse to discretely set zoom. |
| Set_HDMI_Underscan | D | Pulse to discretely set zoom. |
| Set_HDMI_Zoom_1.2 | D | Pulse to discretely set zoom. |
| Set_HDMI_Zoom_1.3 | D | Pulse to discretely set zoom. |
| Set_HDMI_Zoom_1.5 | D | Pulse to discretely set zoom. |
| Set_HDMI_&_Component_Zoom_2 | D | Pulse to discretely set zoom. |
| Set_HDMI_&_Component_Zoom_1/2 | D | Pulse to discretely set zoom. |
| Set_Component_Zoom_1 | D | Pulse to discretely set zoom. |
| Set_Component_Zoom_3 | D | Pulse to discretely set zoom. |
| Set_Component_Zoom_4 | D | Pulse to discretely set zoom. |
| Set_Component_Zoom_1/3 | D | Pulse to discretely set zoom. |
| Set_Component_Zoom_1/4 | D | Pulse to discretely set zoom. |
| Time_Poll_Enable | D | Pulse to enable polling. Resolution, Track, Chapter, Disc Type, Audio, Subtitle and whichever Time_*_Elapsed or Time_*_Remaining selected below will be polled every second. |
| Time_Poll_Disable | D | Pulse to disable polling. |
| Time_Poll_Toggle | D | Pulse to toggle polling state. |
| Initialize | D | Pulse to return Volume, Resolution, Track, Chapter, Disc_Type, Audio Track, and Subtitle. Initialize_Busy goes high while processing these tasks. |
| Time_Track_Title_Elapsed | D | If polling is enabled, will poll for Track/Title elapsed time. Pulse to activate, feedback is interlocked. |
| Time_Track_Title_Remaining | D | If polling is enabled, will poll for Track/Title remaining. Pulse to activate, feedback is interlocked. |
| Time_Chapter_Elapsed | D | If polling is enabled, will poll for Chapter elapsed time. Pulse to activate, feedback is interlocked. |
| Time_Chapter_Remaining | D | If polling is enabled, will poll for Chapter remaining time. Pulse to activate, feedback is interlocked. |
| Time_Total_Elapsed | D | If polling is enabled, will poll for Total elapsed time of the disc. Pulse to activate, feedback is interlocked. |

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| Time_Total_Remaining | D | If polling is enabled, will poll for Total remaining time of the disc. Pulse to activate, feedback is interlocked. |
| RS232_Reset | D | Reset RS232 Command – Clean all command buffers, do not wait for any pending/executing commands. Start over again. |
| From_Device | S | Connect to RX on COM port. |

FEEDBACK:

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| Power_Is_On/Power_Is_Off | D | True Feedback of the power status of the BD-30. |
| Tray_Is_Open/Tray_Is_Closed | D | Feedback of the tray. |
| Playing/Stopped/Full_Stop/Paused | D | Playback status. |
| Fast_Rev_Active/Fast_Fwd_Active | D | Rewind/Forward status. |
| Repeat_Chapter_Selected | D | Indicates that the chapter will be repeated. |
| Repeat_Title_Selected | D | Indicates that the title will be repeated. |
| Repeat_All_Selected | D | Indicates that everything will be repeated. |
| Repeat_Is_Off | D | Indicates that nothing will be repeated. |
| Repeat_Shuffle_Selected | D | Indicates when shuffle mode is active. |
| Repeat_Random_Selected | D | Indicates when random mode is active. |
| SDI-i_480i/576i_Selected | D | Current resolution. |
| SDI-p_480p/576p_Selected | D | Current resolution. |
| _720p_Selected | D | Current resolution. |
| _1080i_Selected | D | Current resolution. |
| _1080p_Selected | D | Current resolution. |
| Source_Resolution_Selected | D | Current resolution. |
| Auto_Resolution_Selected | D | Current resolution. |
| TV_System_NTSC_Selected / TV_System_PAL_Selected / TV_System_Auto_Selected | D | Current TV output type. |

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| Mute_Is_On/Mute_Is_Off | D | Mute feedback. |
| Current_Volume | A | Current volume, 0 – 100. |
| Audio_Track_Text | S | Reported string of the currently selected audio track. |
| Subtitle_Text | S | Reported string of the currently selected subtitle. |
| Angle_Text | S | Reported string of the currently selected angle. |
| Secondary_Audio_Track_Text | S | Reported string of the currently selected angle. |
| Zoom_Text | S | Zoom Feedback. |
| HDMI_Aspect_Ratio_Correction_Selected | D | Zoom Feedback. |
| HDMI_Full_Screen_Selected | D | Zoom Feedback. |
| HDMI_Underscan_Selected | D | Zoom Feedback. |
| HDMI_Zoom_1.2_Selected | D | Zoom Feedback. |
| HDMI_Zoom_1.3_Selected | D | Zoom Feedback. |
| HDMI_Zoom_1.5_Selected | D | Zoom Feedback. |
| HDMI_&_Component_Zoom_2_Selected | D | Zoom Feedback. |
| HDMI_&_Component_Zoom_1/2_Selected | D | Zoom Feedback. |
| Component_Zoom_1_Selected | D | Zoom Feedback. |
| Component_Zoom_3_Selected | D | Zoom Feedback. |
| Component_Zoom_4_Selected | D | Zoom Feedback. |
| Component_Zoom_1/3_Selected | D | Zoom Feedback. |
| Component_Zoom_1/4_Selected | D | Zoom Feedback. |
| Time_Polling_Enabled | D | Indicates that polling is enabled. |
| Time_Polling_Disabled | D | Indicates that polling is disabled. |
| Poll_Output_Text | S | The output value of the time polling command. For instance, if you are polling for time remaining, this output will have the time remaining. If you are polling for time elapsed, this output will have time elapsed. |

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| Initialize_Is_Busy | D | Feedback that the initialize command is still processing. |
| Resolution_Text | S | Current output resolution. |
| Track_Text | S | Reported string of the currently selected track/title. |
| Chapter_Text | S | Reported string of the currently selected chapter. |
| Time_Track_Title_Elapsed_Text | S | Serial signal indicating the current elapsed time of the track. To be displayed using an indirect text field on a touch panel. |
| Time_Track_Title_Remaining_Text | S | Serial signal indicating the current remaining time of the track. To be displayed using an indirect text field on a touch panel. |
| Time_Chapter_Elapsed_Text | S | Serial signal indicating the current elapsed time of the chapter. To be displayed using an indirect text field on a touch panel. |
| Time_Chapter_Remaining_Text | S | Serial signal indicating the current remaining time of the chapter. To be displayed using an indirect text field on a touch panel. |
| Time_Total_Elapsed_Text | S | Serial signal indicating the current elapsed time of the disc. To be displayed using an indirect text field on a touch panel. |
| Time_Total_Remaining_Text | S | Serial signal indicating the current elapsed time of the disc. To be displayed using an indirect text field on a touch panel. |
| Disc_Type_Text | S | Type of disc in the tray. |
| Error_Overtime | D | Goes high if the BD-30 reports an error of overtime. This can happen when a command times out |
| Error_Invalid_Input | D | Goes high if the BD-30 reports an error of invalid input. This will happen if you issue a command that is not supported in the current mode. For example if you try to open the tray while the unit is powered off, you will receive an invalid input error. |
| Error_Text | S | Error reported by the BD-30. There are other errors besides the two above, however they are the most common. |
| To_Device | S | Connect to transmit on the COM port. |

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**TESTING:**

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|---|----------------------------------|
| OPS USED FOR TESTING: | 4.001.1012 |
| SIMPL WINDOWS USED FOR TESTING: | 2.11.27.00 |
| CRES DB USED FOR TESTING: | 21.02.018.00 |
| DEVICE DATABASE: | 26.05.004.00 |
| SYMBOL LIBRARY USED FOR TESTING: | 508 |
| SAMPLE PROGRAM: | Lexicon BD-30 v1.0 Demo PRO2.smw |
| REVISION HISTORY: | V. 1.0 – Original release. |