

Partner: DISH  
 Model: Hopper  
 Device Type: DSS with DVR



**GENERAL INFORMATION**

<b>SIMPLWINDOWS NAME:</b>	DISH Hopper v1.1
<b>CATEGORY:</b>	Tuner
<b>VERSION:</b>	1.1
<b>SUMMARY:</b>	Provides control of 1 Hopper and up to 3 Joeys.
<b>GENERAL NOTES:</b>	This module will control of 1 Hopper and up to 3 Joeys via TCP/IP.
<b>CRESTRON HARDWARE REQUIRED:</b>	2-Series Processor or 3-Series Processor with Ethernet capability.
<b>SETUP OF CRESTRON HARDWARE:</b>	N/A
<b>VENDOR FIRMWARE:</b>	v3.009.0013
<b>VENDOR SETUP:</b>	<p>Pairing needs to be enabled on the DISH Hopper. Using the DISH remote, select Menu, then in the on screen menu, select Settings-&gt;Paired Devices. On this "Device Manager" screen, Pairing Request needs to be enabled.</p> <p>The IP address of the Hopper needs to be entered in the module's parameter fields. Using the DISH remote, select Menu, then in the on screen menu, select Settings-&gt;Network Setup-&gt;Broadband. On the "Network Setup: Broadband" screen, the IP address of the Hopper will be displayed.</p> <p>The STB (Receiver) IDs for each receiver also need to be entered in the module's parameter fields. Using the DISH remote, select Menu, then in the on screen menu, select Settings-&gt;Diagnostics-&gt;System Status. On this "System Status" screen, the receiver ID for the Hopper will be displayed in field "e" (the receiver ID's begin with an "R").</p> <p>If there are any linked Joeys included in this system, select Linked Joeys on the "System Status" screen. This will display the "Linked Joeys" screen which has the receiver IDs for any Joey that is connected to the Hopper.</p> <p>These receiver IDs need to be entered as displayed (i.e., R1887413544-55).</p> <p>To pair, simply trigger the "Hopper_Send_Pairing_Start" signal. This will instruct the Hopper to provide a PIN that will be displayed on the screen. Enter this PIN into the "PIN_Entry_Text" input of the module and then trigger the "Hopper_Send_Pairing_Complete" signal.</p>
<b>CABLE DIAGRAM:</b>	N/A

**CONTROL:**

<b>Hopper/Joey_&lt;1-3&gt;_Send_Power_On</b>	D	Pulse to turn the device on.
<b>Hopper/Joey_&lt;1-3&gt;_Send_Power_Off</b>	D	Pulse to turn the device off.
<b>Hopper/Joey_&lt;1-3&gt;_Send_Enter</b>	D	Pulse to select a desired option.

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Hopper/Joey_<1-3>_Send_Cancel	D	Pulse to return to a previous menu or to watch a program.
Hopper/Joey_<1-3>_Send_Guide	D	Pulse to display current and future satellite program listings.
Hopper/Joey_<1-3>_Send_Menu	D	Pulse to access receiver features and settings.
Hopper/Joey_<1-3>_Send_DVR	D	Pulse to display a list of recorded programs.
Hopper/Joey_<1-3>_Send_Search	D	Pulse to search for a program.
Hopper/Joey_<1-3>_Send_Rewind	D	Pulse to reverse the program.
Hopper/Joey_<1-3>_Send_Fast_Forward	D	Pulse to fast forward through the program.
Hopper/Joey_<1-3>_Send_Stop	D	Pulse to stop recording a program or playing a recorded program.
Hopper/Joey_<1-3>_Send_Skip_Back	D	Pulse to skip back about 10 seconds in a program.
Hopper/Joey_<1-3>_Send_Step_Forward	D	Pulse to skip ahead about 30 seconds in the program.
Hopper/Joey_<1-3>_Send_Keypad_<0-9,#>	D	Pulse to enter a channel number or navigate through menus and program guide.
Hopper/Joey_<1-3>_Send_Keypad_*	D	Pulse to format the picture to the desired width to match the program you are viewing.
Hopper/Joey_<1-3>_Send_Page_<Down/Up>	D	Receives information from Pulse to scroll through pages in the program guide and event content.
Hopper/Joey_<1-3>_Send_Pause	D	Pulse to pause a live or recorded program.
Hopper/Joey_<1-3>_Send_Play	D	Pulse to play a live or recorded program.
Hopper/Joey_<1-3>_Send_Record	D	Pulse to record a program.
Hopper/Joey_<1-3>_Send_<Blue/Green/Yellow/Red>	D	Pulse to access shortcuts to frequently used menus.
Hopper/Joey_<1-3>_Send_Left	D	Pulse to navigate through menus or search for programs using themes.
Hopper/Joey_<1-3>_Send_Right	D	Pulse to navigate through menus or see what is on other channels while watching TV.
Hopper/Joey_<1-3>_Send_Up	D	Pulse to navigate through menus or channel up.
Hopper/Joey_<1-3>_Send_Down	D	Pulse to navigate through menus or channel down.
Hopper/Joey_<1-3>_Send_Info	D	Pulse to retrieve info on programs or set a timer.

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Hopper/Joey_<1-3>_Send_Live_TV	D	Pulse to return to live TV.
Hopper/Joey_<1-3>_Send_Jump	D	Pulse to return to previously viewed TV channel(s).
Hopper/Joey_<1-3>_Send_PIP_Toggle	D	Pulse to enable or disable PIP mode if available.
Hopper/Joey_<1-3>_Send_PIP_Position	D	Pulse to cycle through PIP positions if available.
Hopper/Joey_<1-3>_Send_PIP_Swap	D	Pulse to swap PIP inputs if available.
Hopper/Joey_<1-3>_Send_DISH	D	Pulse to trigger the DISH function.
Hopper/Joey_<1-3>_Send_Sys_Info	D	Pulse to view the system info.
Hopper/Joey_<1-3>_Preset_Channel_In	A	Send a 3 digit analog value to this input to recall a channel.
Hopper_Send_Pairing_Start	D	Pulse to initiate pairing with the Hopper.
Hopper_Send_Pairing_Complete	D	Pulse to send the pairing PIN entry to the Hopper.
PIN_Entry_Text	S	Use to enter PIN for pairing with the Hopper.
Connect	D	Latch high to connect to the Hopper.

## PARAMETERS:

Hopper IP Address	S	Enter the IP address of the Hopper being controlled.
Hopper ID	S	Enter the STB ID of the Hopper being controlled.
Joey 1 ID	S	Enter the STB ID of the 1st Joey being controlled.
Joey 2 ID	S	Enter the STB ID of the 2nd Joey being controlled.
Joey 3 ID	S	Enter the STB ID of the 3rd Joey being controlled.

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**TESTING:**

<b>OPS USED FOR TESTING:</b>	2-Series: v4.008.0008 3-Series: v1.010.0060
<b>SIMPL WINDOWS USED FOR TESTING:</b>	v4.02.56
<b>DEVICE DB USED FOR TESTING:</b>	v61.00.002.00
<b>CRES DB USED FOR TESTING:</b>	v48.05.003.00
<b>SYMBOL LIBRARY USED FOR TESTING:</b>	v913
<b>SAMPLE PROGRAM:</b>	2 Series: DISH Hopper v1.1 Demo PRO2.smw 3 Series: DISH Hopper v1.1 Demo PRO3.smw
<b>REVISION HISTORY:</b>	v1.0 – Original Release v1.1 – Resolved issue with pairing being lost after processor reboot.