| ELA | | Integration Note |
|---|------------------------------|------------------|
| Manufacturer: | Dish | |
| | | |
| Model Number(s): | Hopper, Joey | |
| Model Number(s): Core Module Version: | Hopper, JoeyMinimum 8.0.278 | |
| Model Number(s): Core Module Version: Comments: | Hopper, Joey Minimum 8.0.278 | |

OVERVIEW AND SUPPORTED FEATURES

The ELAN Dish 2-way driver uses Ethernet communication for reliable feedback and control. ELAN's prebuilt interface includes controls for navigation of Hopper and Joey set top boxes and provides current channel and a now playing information window.

THE FOLLOWING DISH FEATURES ARE SUPPORTED:

Ethernet Communication: Network based communication between ELAN and Dish set top boxes.

Auto Discovery: ELAN will automatically discover all of the Hopper/Joey devices and add them as source devices in configurator.

Now Playing Metadata: The current channel and now playing broadcast info is displayed on the ELAN viewer interface.

Integration with ELAN TV Guide: The Dish driver can optionally utilize the ELAN TV Guide (new in v8.0) to view current TV guide listing. The Dish also supports automatic channel tuning from the ELAN TV Guide or from the Viewer managed TV favorites. For more info on this feature refer to the "What's New in Version 8" documentation. (Note: that the Dish driver is hard-coded to use tuning type Satellite 2 in configurator).

THE FOLLOWING DISH FEATURES ARE NOT SUPPORTED:

Hopper boxes as clients: All clients units must be Joey devices.

Search: The Dish guide search functionality is not supported at this time.

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

INSTALLATION OVERVIEW

The following steps outline the integration of Dish set top boxes with ELAN control systems:

- 1. Install and test all Dish devices (Hopper & Joey set top boxes) and verify proper operation prior to integrating with an ELAN system. Refer to Dish documentation for steps required to complete proper setup.
- 2. Additionally, connect all of the Dish devices to the local network. For reliable communication, ELAN recommends using the wired Ethernet connection for each Dish device. Refer to the Dish documentation for network configuration information.
- 3. Verify the network connection on each Dish device. Use the remote to view the network status as follows:
 - a. Press Menu then select the Settings icon and click OK
 - b. Select Network Setup, then Broadband.
 - c. Select Network Details then verify the LAN network is connected as shown below.

| | | Thu 12/8 1:04 PM |
|--|---|--|
| C 1 De | Press CANCEL on your remote to go back. | d sh |
| Network Setup: Broadba | and | |
| | Network Connection: OK Bridging Disabled by User | Save Network Details Reset Network Wireless Setup |
| Bedroom 2 Connection Type: Ethernet Top IP Address: 192.168.0.64 | Router Internet | |

4. In the ELAN configurator click on the Media tab and add a new communication device per the screen below. Once added, the ELAN system will automatically start to search for new Dish devices. All Dish device that are found on the network will be added as source devices in the Media tab.

| Device Name DISH Network | C . | Show | Unsupported Devices |
|---------------------------------|---------------------|----------|---------------------|
| Communication Type | | Hardwar | е Туре |
| Name | Version | Ethernet | |
| ADA Bus | 8.0 Build 274.0 Rel | | |
| Autonomic Media Server | 8.0 Build 274.0 Rel | | |
| Bose SoundTouch Discovery | 1.2.11324 | | |
| Denon AVR/AVC (Ethernet) | 8.0 Build 274.0 Rel | | |
| Denon AVR/AVC (RS-232) | 8.0 Build 274.0 Rel | | |
| Denon Heos | 8.0 Build 274.0 Rel | | |
| DISH Network | 0.0.8 | | |
| Elan DT11/DT22 Tuner (Ethernet) | 8.0 Build 274.0 Rel | | |
| Elan DT11/DT22 Tuner (RS-232) | 8.0 Build 274.0 Rel | | |
| Elan DTNR AM/FM Tuner | 8.0 Build 274.0 Rel | | |
| ELAN System | 8.0 Build 274.0 Rel | | |
| Elan XM-R3 Tuner | 8.0 Build 274.0 Rel | | |
| Gefen HD-FST Matrix (RS232) | 8.0 Build 274.0 Rel | | |
| Gefen HD-FST Matrix (TCP/IP) | 8.0 Build 274.0 Rel | | |
| Generic Serial | 8 0 Build 274 0 Rel | × | |

NOTES ABOUT AUTO-DISCOVER & THE DISCOVER DEVICES BUTTON:

- After successfully adding the Dish communication device, ELAN will automatically start a search on the local network. All of the Hoppers and Joeys that are discovered will be added under Sources in the ELAN configurator Media tab.
- The initial discovery period after adding the communication device will run for about 10 minutes. If Dish devices are either added after or not found during this time, pressing the Discover Devices button will restart another 10-minute search for Dish devices. Any new devices that are found will be added as sources.
- 5. Once the Dish devices are discovered you will need to add them as sources on the zone controller(s) that they will be used with. Refer to ELAN training or the integration note for additional information on configuring zones and sources.
- 6. All Dish devices that are discovered will need to be paired with the ELAN controller before they will enable full control and feedback to ELAN. Pairing can be done either in the configurator or the Viewer. Choose a method and pair the device using the steps below.

PAIRING FROM CONFIGURATOR

a. Select the 1st Hopper discovered device under Sources. Click the Start Pairing button at the bottom of the screen as shown below.



b. You should see a message appear on your TV that looks similar to the following:



c. Type this PIN into the Configurator as shown below:

| Name | Bedroom 2 |
|----------------|--------------------|
| System # | 14549 |
| Driver Version | 0.0.8alphaV |
| Driver Vendor | Elan |
| Device Type | DISH Hopper |
| Pairing Pin | 350328 |
| P Address | 192 . 168 . 0 . 64 |
| Port | 49314 |

d. Click **Apply** to save the PIN from the Dish device to the ELAN controller. (This step is commonly forgotten and can cause issues if ignored):



e. Click the Send Pairing Pin button to send the PIN from ELAN to the Dish device and complete the pairing process:

| Apply | Start Pairing | Send Pairing Pin | Update Driver |
|-------|---------------|------------------|---------------|

PAIRING WITH THE ELAN VIEWER

When a Hopper or Joey is not paired with ELAN you will see the message in the viewer as shown below. Follow the steps below to pair the Dish unit with ELAN from the Viewer interface:



a. Go to the All Tabs Page, and click the Settings Wheel.

| ᢙ | Home | | |
|------------|------------|---------------------|---|
| \bigcirc | Media | | |
| 1 | Security | | |
| * | Climate | | |
| • | Lighting | | |
| 0 | Messaging | 4 4 0 | |
| | Video | 4:13 0 | 1 |
| | Intercom | Wednesday October 5 | |
| | Photos | | |
| ۵ | Irrigation | | |
| | Pool | | ۲ |

b. Enter your setting PIN to access the settings page and click Device Settings.

| EL | ∧ N′ | \triangleleft | Settings |
|----|-------------|------------------|----------|
| | | | |
| | Change Se | ettings Passcode | |
| | Manage U | sers | |
| 7 | Door Lock | Settings | |
| | Intercom (| Global Settings | |
| | TV Chann | el Groups | |
| | Configure | this Station | |
| 6 | Touch Scr | een Security | |
| - | Device Se | ttings | |
| | | | |

c. Select the Hopper from the list, then click the Start button on the Start Pairing line.

| Family Room | |
|---------------|-------|
| Start Pairing | Start |
| Pairing Pin | Set |

d. The TV will display a pairing PIN. On the ELAN viewer, next to Paring Pin, select Set and enter the Pairing Pin from the TV. Press Done to complete the pairing process.



e. Once the unit is paired it will show the Now Playing info in the ELAN viewer.

ELAN CONFIGURATION DETAILS

The following table provides settings used in Configurator when connecting to Dish. Please refer to the Configurator Reference Guide for more details. In the table below:

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

| | Variable | | |
|------------------------------|-----------------------|---|----------|
| Devices | Name | Setting | Comments |
| | | | |
| Communication Devices | Name | <user defined=""> (Default: Dish Network)</user> | |
| | Device Type | Ethernet / Dish Network | |
| | Driver Name | Dish Network | |
| | Driver Version | 1.X.X | |
| | Driver Vendor | ELAN | |
| | IP Address | <auto-detect></auto-detect> | |
| | Port | <auto-detect></auto-detect> | |
| | | | |
| SOURCES | | | |
| | | | |
| Dish_Hopper | Name | Auto-detected | |
| Dish_Joey | Name | Auto-detected | |
| | | | |
| | | | |
| | | | |

Notes:

COMMON MISTAKES:

- 1. Unable to Discover the Dish Receiver(s):
 - a. All Dish Receivers must be on the same subnet as the Elan Controller.
 - b. Use the Dish remote to verify the network connection of the Hopper or Joey per step 3 above.
- 2. Not Paired:
 - a. Pairing will not succeed unless the Dish Box is awake. Make sure that you press Select on the Dish remote to wake up the Hopper or Joey before you begin the pairing process.
 - b. Do not forget to press Apply after entering pin# into Configurator. Pressing the Apply button is required before you can send the pairing pin to the hopper.
 - Make sure Pairing is enabled on the Dish unit. Use the Dish remote and the Dish On screen display to view the Paired devices and verify that Pairing is enabled. Press Menu
 Settings Paired Devices. The screen below shows all Paired devices and that Pairing is enabled on this device.

| | 10 | | | d sh |
|---|--|--------------------|-------------------|-----------------|
| D | evice Manager | | | |
| 1 | Paired Devices | Application | MAC Address | Save |
| 0 | Elan Hopper Driver | Elan g! Controller | cc:52:at:49:15:64 | Select All |
| | Elan Hopper Driver | Elan g! Controller | f8:57:2e:02:21:8d | Delete |
| | Elan Hopper Driver | Elan g! Controller | f8:57:2e:00:00:7f | Delete |
| - | Elan Hopper Driver | Elan g! Controller | f8:57:2e:00:02:64 | |
| | Charles of the sea of the sea of the sea | | | |
| | iPhone | dish-sg-iphone | 28:F8:58:EA:72:B3 | |
| | iPhone | dish-sg-iphone | 28:F8:58:EA:72:B3 | Pairing Request |
| | iPhone | dish-sg-iphone | 28:F8:58:EA:72:B3 | Pairing Request |

- d. Not Paired after a configuration restore: Use the Update Driver button on the communication device after restoring the system configurations to allow the Dish to repair. Note this is only required on a configuration only restore and is not required on a full system restore.
- 3. ELAN TV Guide not showing up or not working as expected. Incorrect tuning type or incorrect provider listing. The Dish driver is hard coded to use tuning type Satellite 2 for TV channel control. Verify that the TV Media tuner type was set as Satellite 2.