Using ZvSTB Control for Set Top Boxes

About ZvSTB Control

The ZvSTB Control functionality allows for simple control of H25 DirecTV receivers (also called set top box) through Maestro.

To use ZvSTB Control, first you configure the set top box and then you configure Maestro to manage the box.
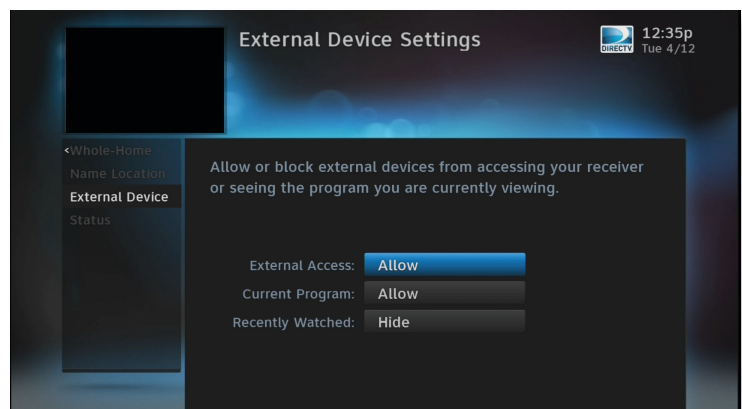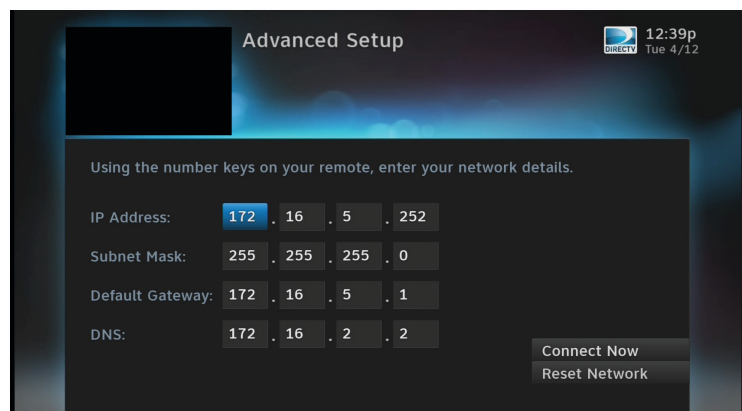
Note: STB control requires the H25 receivers be connected (via DECA) to an Ethernet switch along with the ZeeVee units.

Configuring the H25 DirecTV receiver

You must configure every DirecTV box with a static IP address on the same subnet as the ZeeVee device to ensure reliable communication between the two.

1. Connect the H25 DirecTV receiver to a television and power on both the receiver and the television. Ensure the H25 is connected to a satellite feed.

2. Navigate through the settings to the Network Configuration Page and take the following steps:
   a. Assign a unique IP address to each H25 unit. Note the IP address for easy reference later.
   b. Set a default gateway
   c. Set a DNS server

3. Navigate to the Whole-Home page and take the following steps:
   a. Set External Access to Allow
   b. Set Current Program to Allow

4. Navigate to the Video Settings Page and set allowed resolutions according ZeeVee product specifications:
   • If connected to an HDb 2500 unit, set 720p
   • If connected to an HDb 2600 unit, set 1080i (or 720p)

Note: Setting the allowed resolutions is important for the HDb2500 units to ensure that the STB does not auto select 1080i (beyond the supported resolution of the HDb2500). Setting the allowed resolutions for the HDb2600 products is optional, as the model will follow the input.

Advanced Setup

12:39p
Tue 4/12

Using the number keys on your remote, enter your network details.

IP Address:	172 . 16 . 5 . 252		
Subnet Mask:	255 . 255 . 255 . 0		
Default Gateway:	172 . 16 . 5 . 1		
DNS:	172 . 16 . 2 . 2		

Connect Now
Reset Network

External Device Settings

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<Whole-Home
Name Location
External Device
Status

Allow or block external devices from accessing your receiver or seeing the program you are currently viewing.

External Access: Allow
Current Program: Allow
Recently Watched: Hide

Configuring Maestro for set top box management

After configuring the set top box, use Maestro to specify options for managing the units.

1. Connect to Maestro by entering the IP address in the browser.

2. Click the STB tab to navigate to the set top box configuration and control page.

3. Set the IP address of the given set top box in the IP Address field of the STB Device section. Once entered, click Apply and the page refreshes with the appropriate data from the set top box (for example, Receiver ID and status information). To view and manage individual set top box units, you need to enter the proper IP address for the given box in its associated input field.

If an IP address is not present in the STB IP Address field for a given input, the ZeeVee unit does not enable remote management operations.

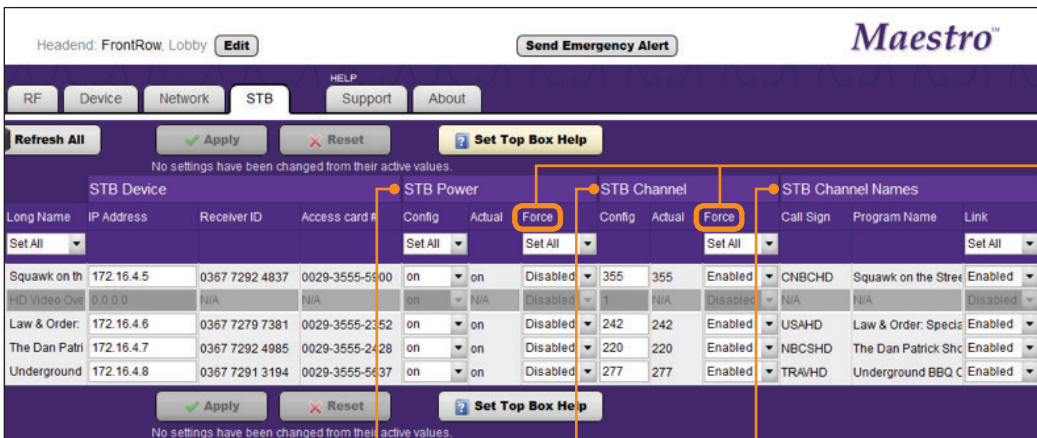**The fields on the STB tab page all contain values that live on the ZeeVee unit.**

The Call Sign Name, Program Name, Receiver ID, and Access Card values are all updated and displayed at regular intervals. These are informational and helpful to determine which STB is connected.

If using STB management on the HDbridge3000, all media modules require a valid IP address to be set via the network tab. The IP address can either be static or via DHCP.

Managing the set top box

Once you have programmed the IP addresses of the connected set top boxes through the boxes themselves and through Maestro, information from each managed unit such as power status (on/off), current channel, and program information is pulled into the STB tab. This information updates approximately every 5-10 seconds.

You can now control the following options on the STP page:

Force mode

When enabled, the associated STB participates in periodic and automatic queries that set the unit to the configuration specified in Maestro. The cycling occurs approximately every 5-10 seconds, on a free-running basis with no user intervention required.

STB power

In the STB Power section, you can power individual units on or off. The "on" or "off" text in the Actual field indicates the current state of the set top box for the specified input port **(on the ZeeVee unit).**

In the STP power section:

1. Click in the Config field and choose on or off.

2. (optional) Click in the Force field to enable (or disable), the associated set top box to "force" the setting you specify. With Force enabled, Maestro will query the box automatically and periodically and set the command to your configuration. For example, if the set top box is turned off, yet it's configured in Maestro as "on," an enabled Force sends a command to set the power on to match the Maestro setting.

3. Click Apply to **save.**

The entire block of set top box units under management can be controlled simultaneously by clicking Set All option at the top of the column.

STB Channel Number

In the STB Channel Number section, you can set the desired channel number to be sent to the set top box. The number in the Actual field indicates the current channel set to the STB for the specified input port (on the ZeeVee unit).

To set STP channel numbers:

1. Click in the Config field and enter the desired channel number for the STB.

2. (optional) Click in the Force field to enable (or disable), the associated set top box to "force" the setting you specify. With Force enabled, Maestro will query the box automatically and periodically and set the command to your configuration. For example, if "242" appears in the Actual field, yet it's configured in Maestro as "142," an enabled Force sends a command to set the channel to 142 to match the Maestro setting.

3. Click Apply to save.

The currently active channel number the STB uses may vary from the configured value because of events at the STB (reconfiguration, STB firmware download, etc.). If "Force" is enabled, that condition corrects at the next automatic interval. If not in Force mode and there is a mismatch, the STB channel number can be manually resent to be corrected.

If Maestro detects a mismatch between the configured channel and the actual active channel at the STB, a triangular warning flag will be displayed next to that value.

STB Channel Names

You can assign the Call Sign and Program Name to a ZeeVee channel using the Link option in the STB Channel Names section. These fields populate automatically as do all the fields from a ZeeVee unit when the set top box is assigned to it.

If you enable the Link function, the Call Sign (for example, CNBCHD) will be used for the ZeeVee Channel Name field and Program Name (for example, Closing Bell) will be used for the Long Channel Name field.   You cannot edit these fields when the Link option is enabled.

To link STB Channel Names with program information:

1. Click in the Link field and choose enabled or disabled.

2. Click Apply to save.