DiGiPanion OSC

DiGiPanion OSC uses DiGiCo's existing iPad command set for expanded control over a console using the bitfocus Companion app and an Elgato Stream Deck. Hopefully it's helpful for you! Please leave a comment at pandabearaudio.com with feedback, suggestions, issues, and feature requests.

NETWORKING THE CONSOLE AND COMPANION COMPUTER

The console and a computer running Companion need to be on a network together. You can use the built-in network ports on the console and go directly to your computer or use a network switch, it doesn't matter. The console's IP address is at the bottom of the External Control panel, which is in the Settings menu. It's easiest to set the Companion computer IP address and subnet mask to match the console.

**On firmware v2025 the console's IP and subnet mask are displayed at the bottom of the external control panel, but older firmware only shows the IP address. DiGiCo SD and Quantum consoles use a default subnet mask of 255.255.0.0, with the exception of the SD7 and Q7, which use 255.255.255.0.*

CONFIGURING EXTERNAL CONTROL ON THE CONSOLE

DiGiPanion OSC uses the DiGiCo iPad device and command set for Companion interaction.

1. Open the External Control panel, in the Settings menu.

2. Make sure the 'Enable External Control' button at the top of the panel is set to Yes.

3. Load the 'ipad' command set from the 'load' menu in the bottom right corner of the panel. You can add the iPad device before the command set, but it will prompt you to load it.

4. Select 'add device' and then'DiGiCo iPad' from the dropdown menu.

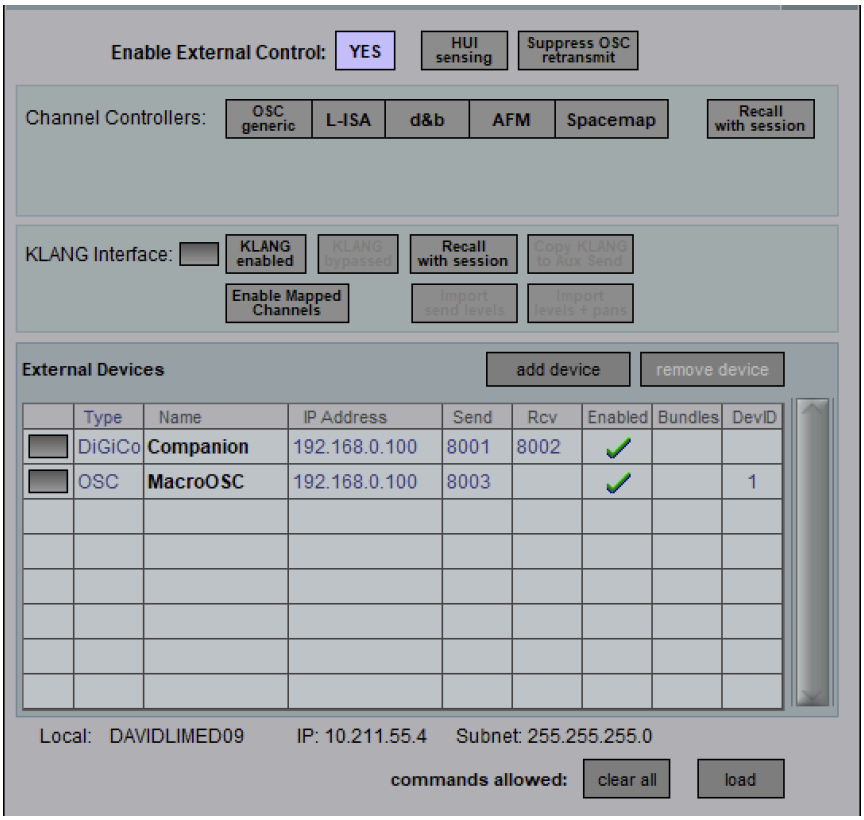
   *NOTE: Only one iPad device can be active at a time. If you want to use the iPad app alongside Companion you'll need to use the **Remote Connections** feature of DigiPanion, explained later in the guide.*

5. Name for the connection and enter the IP address of the computer running Companion, then choose a Send port for Console to Companion and a Rcv port for Companion to Console. Try these port settings to start with:

   - In External Control - Send: 8001, Rcv: 8002
   - In DiGiPanion - Target: 8002, Receive: 8001

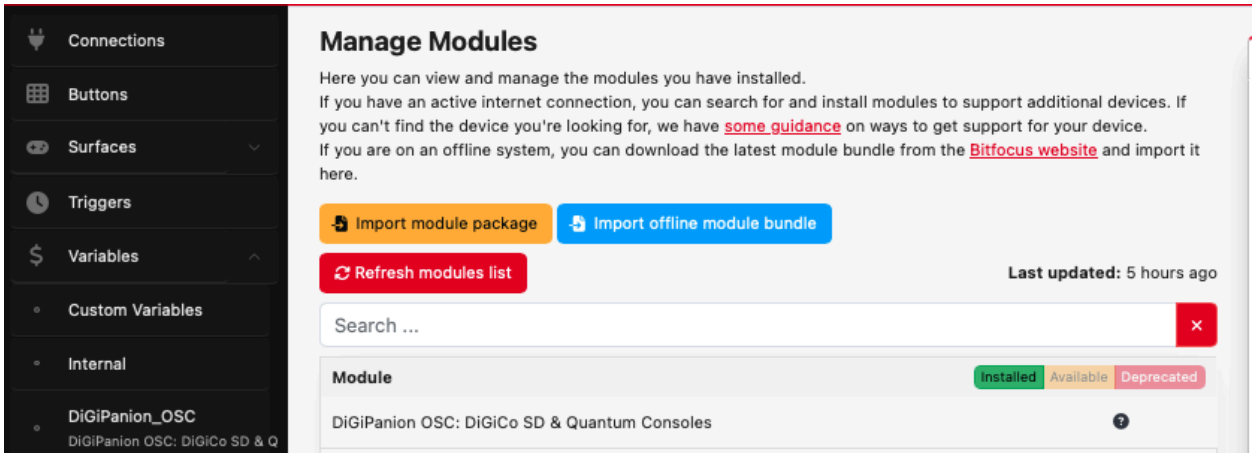
6. Click the red "X". It will become a green checkmark if entries are complete and valid.

The finished configuration will look something like this:



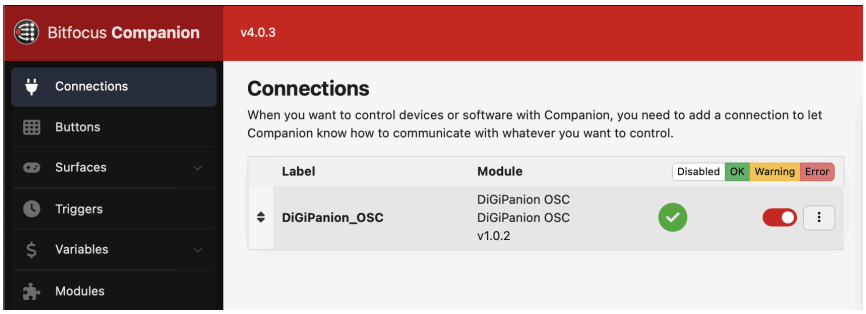
INSTALLING THE DIGIPANION OSC MODULE

Import the downloaded module (DiGiPanion-OSC-x.x.x.tgz) using the ‘Import module package’ button.If you have previous versions of the module imported you will be able to see all versions when you select DiGiPanion OSC from the Module list.



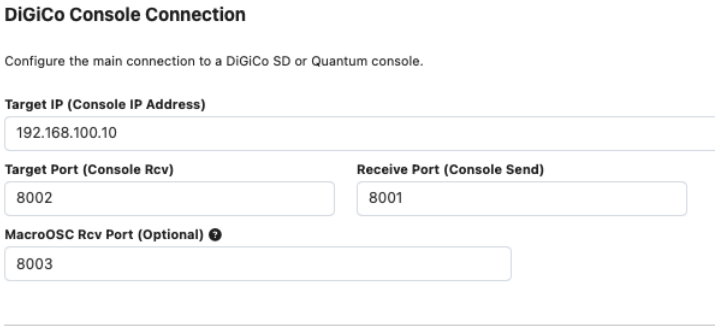
CONFIGURING THE MODULE CONNECTIONS

In the Connections tab of Companion, select the DiGiPanion OSC module and toggle it on. This will bring up the DiGiPanion connection settings.



DiGiCo Console Connections

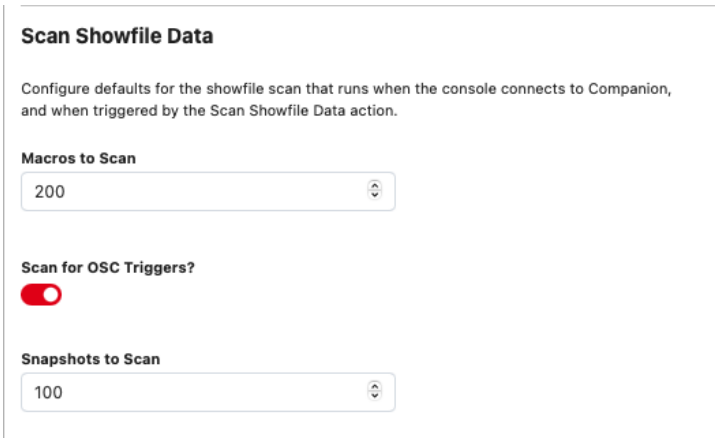
Enter the IP address of the console and the port numbers you set in the External Control panel. Target Port sends to the console's Rcv Port and the console Send Port to the module's Receive port. If you are using MacroOSC, enter the port number here too.



NOTE: The Console Connection is the only one that is essential.

Scan Showfile Data

Every time the module connects to the console it requests showfile data such as macro names and IDs, OSC triggers (if toggled On), and snapshot names and IDs. These are used for dropdown menu names and to update variables, and also refresh whenever the 'Scan Showfile Data' action is used. The module starts with default numbers which can be changed according to what you need, and will retain whatever you choose for future use. Smaller numbers take less time to scan and update, but just be sure that whatever numbers you choose are larger than the number of items you have in your showfile.

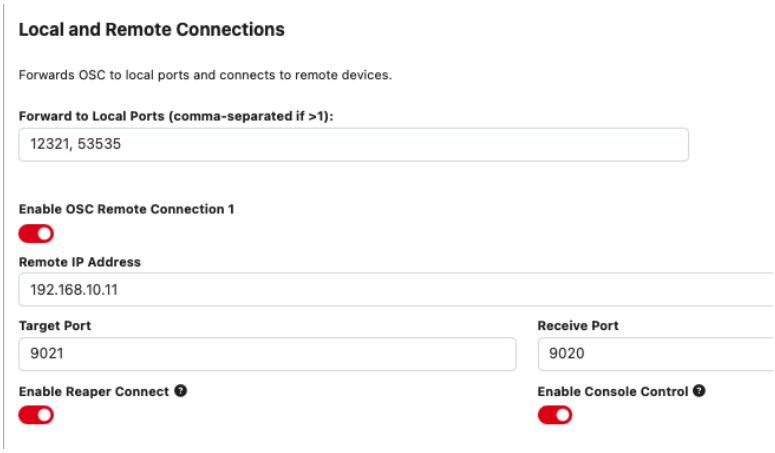


Local And Remote Connections

These connections are intended as a kind of network patchbay and allow any OSC from the console to be forwarded to local apps and other networked devices. Remote connections can also listen for OSC from networked devices to control Companion, local apps, and the console.

Forward to Local Ports

This connection forwards any OSC from the console to local apps through the port numbers listed. If there are multiple ports, use commas to separate them, e.g. ‘12321, 53535’. This is handy for using MacroOSC to trigger Companion using the native OSC Listener, or apps like QLab configured on the 127.0.0.1 local loopback network.



Remote Connections

Remote Connections forward all OSC messages from Companion and the console to devices on the network. The configuration is similar to the console connection. The IP address is the target device, but Send and Rcv port configuration depends on how you want to use the connection.

- Two-way interaction: Both the Target and Receive Ports are necessary.
- One-way from Companion to device: Only the Target Port is necessary.
- One-way from device to Companion and console: Only the Receive Port is necessary.

NOTE: OSC received on a Remote Connection does NOT forward to other Remote Connections.

Each Remote Connection also has 2 other features:

Reaper Connect enables DiGiPanion to either place and name, or jump to Reaper markers when snapshots are fired on the console. The action depends on the record/playback state:

- If Reaper is Recording, a marker will be placed at the current timeline location and named according to the snapshot name.
- If Reaper is Playing, it will jump to the marker matching the name of the snapshot. The names must be the same for DiGiPanion to jump to the marker, so if you rename a marker or snapshot, be sure to update both. If you have multiple markers with the same name, *Reaper will jump only to the first marker with the corresponding name.*

NOTE: When Reaper Connect is enabled on both Remote Connections, Connection 1 will become the primary Reaper connection, used for polling marker names and IDs. All connections will still auto-marker.

Console Control enables OSC received from a Remote Connection to be forwarded to the console. This allows for other control surfaces, such as the iPad app, to still be used with the console.

ACTIONS & FEEDBACKS

Most of the Actions and Feedbacks are fairly self-explanatory, but a few might merit explanation.

Actions

- **Recall 1 Macro/OSC Trigger** looks pretty basic, but has an extra feature added: if recalling an OSC trigger, you can choose whether to just toggle the macro, OR you can explicitly send an On or Off message so you can know which state your macro is in.

- **Pause Blink** is intended for use with buttons used as alerts. When feedback makes a button blink in response to something like a mute being on, you can pause the blinking to effectively "acknowledge" you've seen it. Blinking will restart when the event happens again.

- **Scan Showfile Data** *is very important*. The module scans macros at startup to refresh dropdown name and OSC trigger lists, but if you add or change the name of a macro or snapshot, you MUST rescan for the dropdown lists to be refreshed, and there are some important caveats.

    - Adding/Duplicating New Macros: Existing Button->Macro connections will NOT change, all your actions will retain the correct macro selections.

    - Renaming Existing Macros: Existing Button->Macro connections WILL change. You will need to re-select the macro from the drop-down list. The Companion app does not provide a way for a module to refresh buttons like that.

NOTE: Renaming existing macros/snapshots and adding new/deleting AT THE SAME TIME can cause errors in the dropdown menus. Best practice is to re-scan between renaming and adding/deleting.

Feedbacks

- **2 Generic OSC Messages** is useful with macroOSC or raw OSC messages from the console, and also for seeing the status of any remote OSC device actions. You could just use 2 single generic OSC feedbacks, but for me it's faster and a little more intuitive to use this.

- **1 OSC Trigger with ON/OFF States** is perfect for any macros with OSC On/Off triggers assigned. I like this because it lets me know exactly which state my macro is in.

- **Tap Tempo Blink** is a little utility to use with one of the two Tap Tempo actions and will blink in time with the button you're tapping, as well as display the BPM.

    PRO TIP*: Use the tap action/feedback combo without a macro as a simple tempo finder.*

- **"For Trigger" Feedbacks:** There are 2 feedbacks marked as being "For Triggers". These are not intended for buttons, they are slimmed down versions of their counterparts made to be compatible with Companion's native triggers 'Conditions' list.

TIPS AND THINGS TO REMEMBER

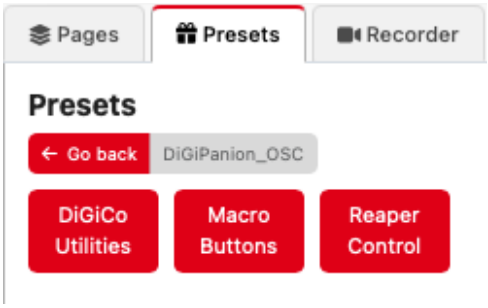
- **The Scan Showfile Data action is your friend.** This button is one of the most important and should be readily available. After any macro or snapshot changes (other than snapshot order), you MUST rescan to update dropdown menus. Remember, re-ordering/adding/deleting will NOT change your existing button-macro or snapshot connections, but re-naming WILL and you'll need to reselect the newly renamed macro/snapshot on any buttons it exists on.

- Use the Scan Showfile preset or add the Scan Showfile Data feedback to your button to verify scan success or failure.

- Try using the Remote Connections for redundant Reaper setups. Reaper Connect works on both at the same time!

BUTTON PRESETS

The Presets tab to the right of the button layout has pre-configured buttons you can grab and drag onto a button. Most presets use actions and feedback also available in the normal button menus, but Reaper Control and a few of the Utilities are only in the Preset menu.



Digico Utilities

Save, Tap, Scan Macros, Console Status.

Macro Buttons

These easy-grab presets have an action and corresponding feedback loaded for you.

Reaper Control

Reaper actions, including basic transport and a few utilities.

VARIABLES

In the Variables menu of the sidebar you'll find DiGiPanion variables. When you first boot Companion these will be left blank, but will change as events occur. I've tried to include variables that might be useful for information, as well as for triggering actions and feedback.

Variable	Description	Value
$(DiGiPanion_OSC:consoleName)	Console Name	T
$(DiGiPanion_OSC:isConsoleConnected)	DiGiCo Connection Status	T
$(DiGiPanion_OSC:loaded_macro_count)	Loaded Macro Count	T
$(DiGiPanion_OSC:loaded_osctrigger_count)	Loaded OSC Trigger Count	T
$(DiGiPanion_OSC:loaded_snapshot_count)	Loaded Snapshot Count	T
$(DiGiPanion_OSC:reaper_is_playing_1)	Reaper 1 Playing Status	T
$(DiGiPanion_OSC:reaper_is_playing_2)	Reaper 2 Playing Status	T
$(DiGiPanion_OSC:reaper_is_recording_1)	Reaper 1 Recording Status	T
$(DiGiPanion_OSC:reaper_is_recording_2)	Reaper 2 Recording Status	T
$(DiGiPanion_OSC:snapshotName)	Current Snapshot Name	T
$(DiGiPanion_OSC:snapshotNumber)	Current Snapshot Number	T
$(DiGiPanion_OSC:tap_tempo_bpm)	Tap Tempo BPM	T

TROUBLESHOOTING

- *The module connection tab doesn't show any options.*
    - The module is disabled, toggle it on.

- *The module-console connection won't work and shows the red triangle with an exclamation mark.*
    - Double-check IP addresses, subnets, and port numbers on all devices.
    - Make sure you have saved settings (at the bottom of Connections tab) after any changes.
    - If you know how and can, ping one device from another. If they won't ping, there is a network or firewall issue.
    - Sometimes the console will randomly just stop sending data, requiring a quick "reset" in the External Control panel. Try toggling Enable External Control at the top, and the green checkmark next to the device. Often just toggling these will reset the connection.

  Companion/console connection problems are most often caused by the IP address or port settings needing attention. Double-check that both devices are in the same subnet, have compatible IP addresses, and that the ports are set in a loop: the Send of one device goes to the Receive of the other, and vice-versa. If this doesn't help, toggling the green checkmarks and "Enable External Control" button on the console can do it, the console sometimes responding to OSC randomly. If all this is correct, ping the console from your computers CLI and verify the connection. Sometimes a computer reboot will also solve it.

- *A Remote Connection doesn't seem to be sending and/or receiving data.*
    - Same steps as above, for module-console connection.

- *Macro/Snapshot name dropdown menus have "??" before each name.*
    - Check module connection status.
    - Rescan showfile data.

- *Buttons show a red square in the top corner.*
    - The DiGiPanion-console connection is not on or has disconnected.

- *Buttons have turned grey, the default color.*
    - The DiGiPanion-console connection has failed and then re-connected. No harm done, buttons will reconnect when used.