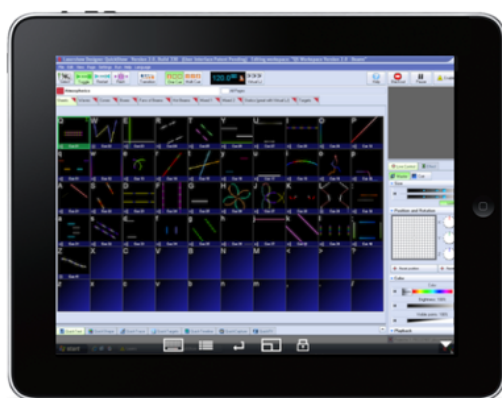


# Remote Usage Guide

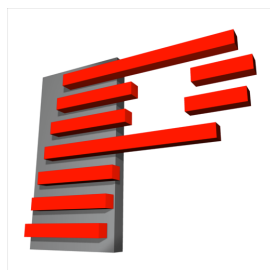
iPad VNC



LivePad Pro



## Pangolin Laser Systems



## USER GUIDE

V1.01

Written by: Daniel Briggs

December 2011



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## Introduction

Welcome to the guide on how to enjoy your Pangolin products remotely on an iPad, or other compatible mobile device

There are two main methods described in this guide; the first being a remote screen viewer approach using VNC-based software, allowing you to view on your iPad or mobile device exactly the same as your computer. This approach works best if you want to see content, such as cues or specific controls in Quickshow or BEYOND. The guide only explains how to setup a VNC connection with an iPad, but client software exists for many other platforms and devices, thus allowing you to use Pangolin products with your Android, Windows Mobile, Tablet or Netbook and many other mobile devices. Full instructions can be found in Chapter 1.

An alternative approach aimed at primarily controlling LivePro is to setup the LivePad Pro templates for TouchOSC and establish a MIDI connection to LivePro. This allows you to perform live shows from your iPad, by turning it into a full MIDI control surface, written especially for use with LivePro; which can also be tailored for personal use. There are even basic implementations of this for Quickshow and BEYOND. This method is iPad and iPhone only, and is fully detailed in Chapter 2.

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# Chapter 1

## iPad VNC - Configuration

### 1.1 Setup WiFi Ad-Hoc Connection

If you are already using a wireless access point to connect the laptop and iPad to, skip on ahead to the next section; this chapter describes how to establish a wireless link directly between a laptop and an iPad without such a device.

#### 1.1.1 Windows XP

- Open the Start menu.
- Click on Control Panel.
- Under Pick a category, click *Network and Internet Connections*.
- Under Pick a Control Panel icon, click *Network Connections*.
- Right-click your wireless network connection, and then click *Properties*.
- In the Wireless Network Connection Properties dialog box, click the *Wireless Networks* tab.
- On the Wireless Networks tab, under *Preferred networks*, click *Add*.
- In the Wireless network properties dialog box, on the *Association tab*, type the name of your ad hoc wireless network in Network name (SSID) box. For example, you could name your wireless network “LaserNetwork”.
- Clear the *The key is provided for me automatically check box*.
- Select the *This is a computer-to-computer (ad hoc) network* check box.



## 1. IPAD VNC - CONFIGURATION

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- Create a password and type it in both the Network key and Confirm network key boxes. For the best security, include letters, numbers, and punctuation. Then click OK.
- Click *OK* again to save your changes.
- Select the Ad hoc network, click Adapter properties.
- In the properties screen, highlight *Internet Protocol Version 4 (TCP/IPv4)* and click on Properties.
- Click “use the following IP address” and specify the following IP. For example:
  - IP address. 192.168.1.50
  - Subnet mask. 255.255.255.0

### 1.1.2 Windows Vista

- Open the Start menu.
- Click *Connect to*.
- Click *Set up a connection or network*.
- Select *Set up a wireless ad hoc network* and click Next.
- Enter the new network name such as “LaserNetwork”.
- Enter a Security key.
- Check *Save this network*.
- Select the Ad hoc network, click Adapter properties.
- In the properties screen, highlight *Internet Protocol Version 4 (TCP/IPv4)* and click on Properties.
- Click “use the following IP address” and specify the following IP. For example:
  - IP address. 192.168.1.50
  - Subnet mask. 255.255.255.0



### 1.1.3 Windows 7

- Open the Start Menu and click on Control Panel.
- Click *Network and Internet*.
- Click *Network and Sharing Centre*.
- Under *Change your networking settings*, click *Set up a new connection or network*.
- Select *Set up a wireless ad hoc (computer-to-computer) network*.
- Click on *Next twice*.
- Enter the Network name such as “LaserNetwork”.
- Select the Security WAP (or WEP).
- Enter the Security key or password.
- Check *Save this network check box*.
- Click *Turn on Internet connection sharing*.
- Select the Ad hoc network, click Adapter properties.
- In the properties screen, highlight *Internet Protocol Version 4 (TCP/IPv4)* and click on Properties.
- Click “use the following IP address” and specify the following IP. For example:
  - IP address. 192.168.1.50
  - Subnet mask. 255.255.255.0

## 1.2 Install RealVNC Server on a PC

Any VNC server will work with this, however a recommended suitable VNC server is RealVNC Free Edition.

- Download Real VNC Free Edition from the website:
  - <http://www.realvnc.com/products/free/4.1/download.html>

## 1. IPAD VNC - CONFIGURATION

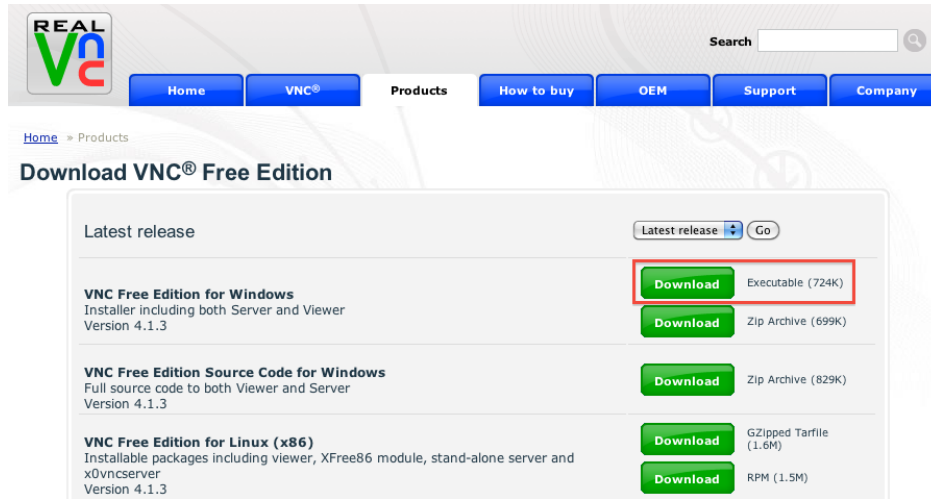


Figure 1.1: RealVNC Download website.

- Unzip and run the installer, click “Next”.
- Accept the licence agreement, click “Next”.
- Confirm file location, click “Next”.
- Ensure both components are ticked, and click “Next”.

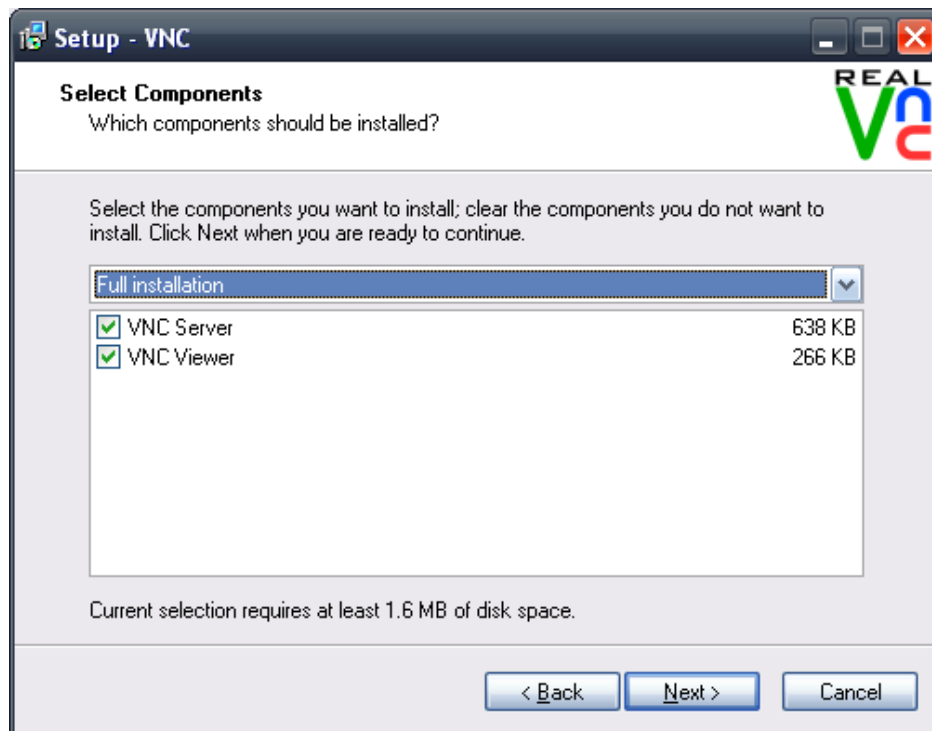


Figure 1.2: RealVNC Component Installation.

- Confirm start menu folder, click “Next”.
- Ensure at least the lower two options are ticked; *Register and configure VNC Server for Service-Mode* and *Start the VNC Server in Service-Mode*, click “Next”.
- Finally, click “Install”.



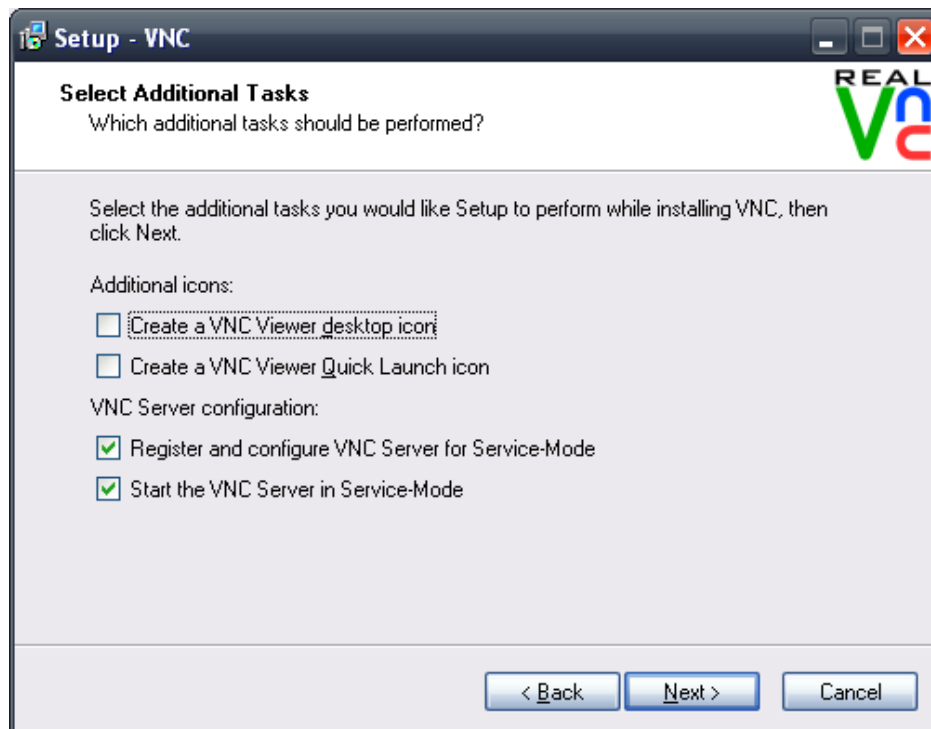


Figure 1.3: RealVNC Additional Tasks.

- When the installation is complete the VNC server will prompt for a password to be configured. It is strongly advised to set this! Click “Configure”.
- Enter a password twice, e.g. *laservnc* and click “OK”.

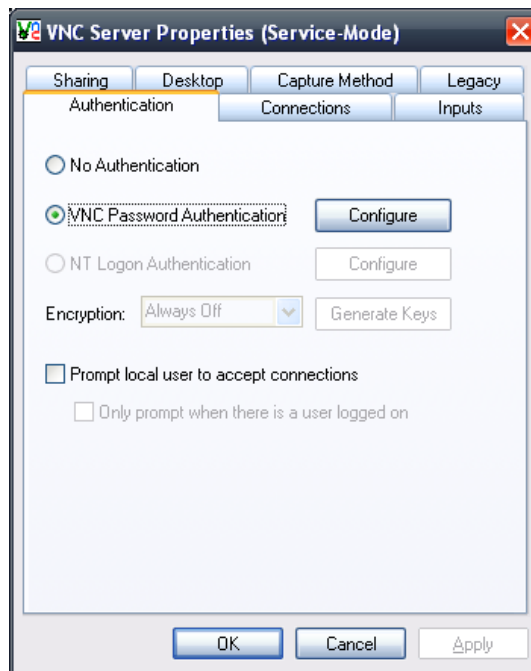


Figure 1.4: Configure VNC connection password.

- Finally click “Next” and “Finish” to complete the server installation process.

You should now notice a new tray icon has appeared in the lower right hand corner of the screen. A white VNC symbol indicates the server is ready to accept connections, a black VNC symbol indicates a client is connected. If you hover your mouse over this icon, the available IP addresses that the server can be connected via can be seen.

*For further advanced configuration see the following manufacturer’s documentation: <http://www.realvnc.com/products/free/4.1/winvnc.html>*

### 1.3 Install VNC Client on iPad

Any VNC client will work with this, however a recommended suitable VNC client is Mocha VNC Lite (free)

- Download and install Mocha VNC Lite from the app store:
  - <http://itunes.apple.com/app/mocha-vnc/id284981670?mt=8>



- Company webpage: [http://www.mochasoft.dk/iphone\\_vnc.htm](http://www.mochasoft.dk/iphone_vnc.htm)

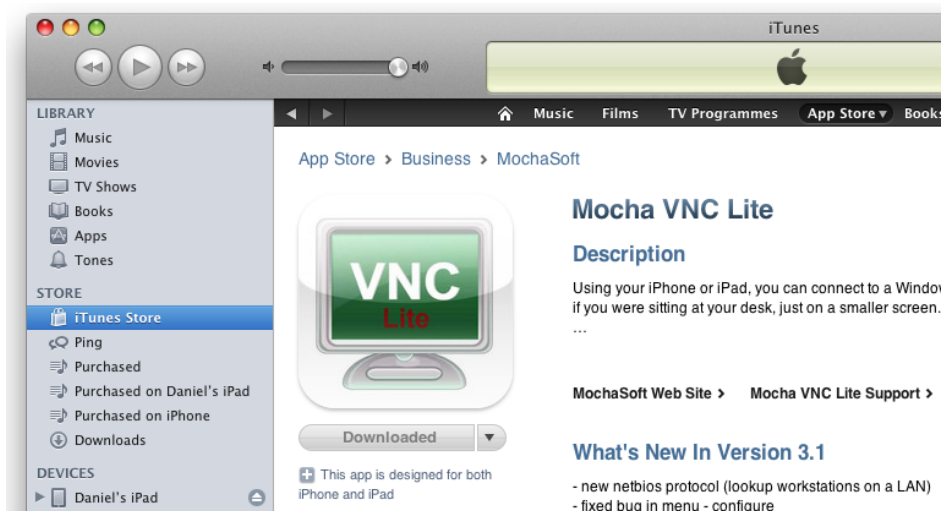


Figure 1.5: Mocha VNC Lite on the App Store.

### 1.4 Connect iPad via Wireless

- On the iPad, launch *Settings*, *Wi-Fi* you should be able to see the new “LaserNetwork” on list.
- Pick “LaserNetwork”, and tap the side arrow to expand the Wi-Fi settings.
- Switch to a Static, and manually specify the IP address for your iPad. For example, set:
  - IP address: 192.168.1.51
  - Subnet mask: 255.255.255.0
- Go back to the Wi-Fi network list, tap on the “LaserNetwork” to connect it. You will need to enter the wireless key you have previously setup.

### 1.5 Connecting via VNC

- Start Mocha VNC Lite on the iPad
- Tap “Add a configuration”



## 1. IPAD VNC - CONFIGURATION

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- Input the same IP as configured in Chapter 1 e.g. *192.168.1.50*

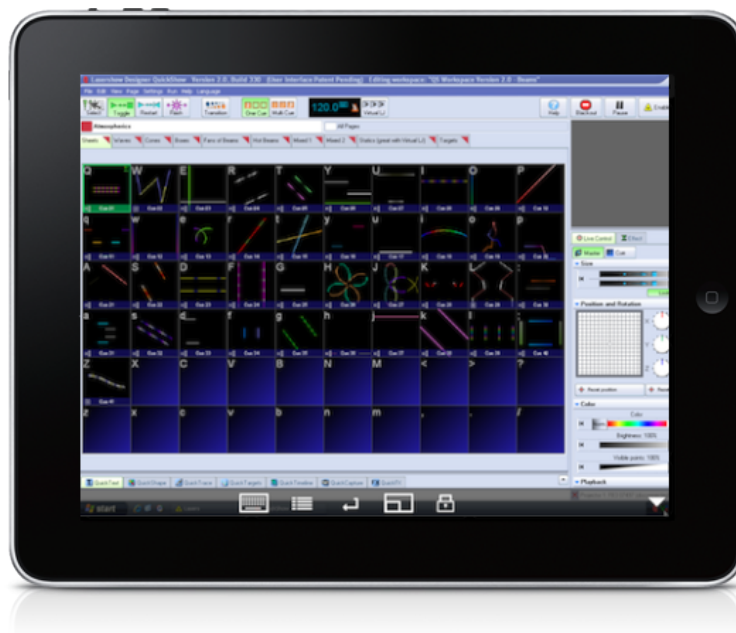


Figure 1.6: VNC working with Quickshow on the iPad

- Input the set password you configured the server with e.g. *laservnc*
- Tap “Back”
- Tap select “Connect” and tap on the computer label you have just added. If all goes well you should now see your computer desktop.
- Load up Beyond or Quickshow and use the iPad to launch cues as you normally would. Have fun!

# Chapter 2

## LivePad Pro - Installation

### 2.1 Prerequisites

- Ensure the iPad and PC are connected on the same wireless network before starting the installation. Preferably this would involve a wireless router; although wireless Ad-Hoc (PC direct to iPad) connections also work.
- Also ensure you have the latest version of Java Runtime installed (Version 6 - Update 27 at time of writing).
- Disable any firewalls during installation and template transfer. Ensure services are not blocked if any firewalls are reenabled.

### 2.2 Install Apple Bonjour

- Download and run Apple Bonjour “Print Services” setup from the website:
  - <http://support.apple.com/kb/d1999>

## 2. LIVEPAD PRO - INSTALLATION

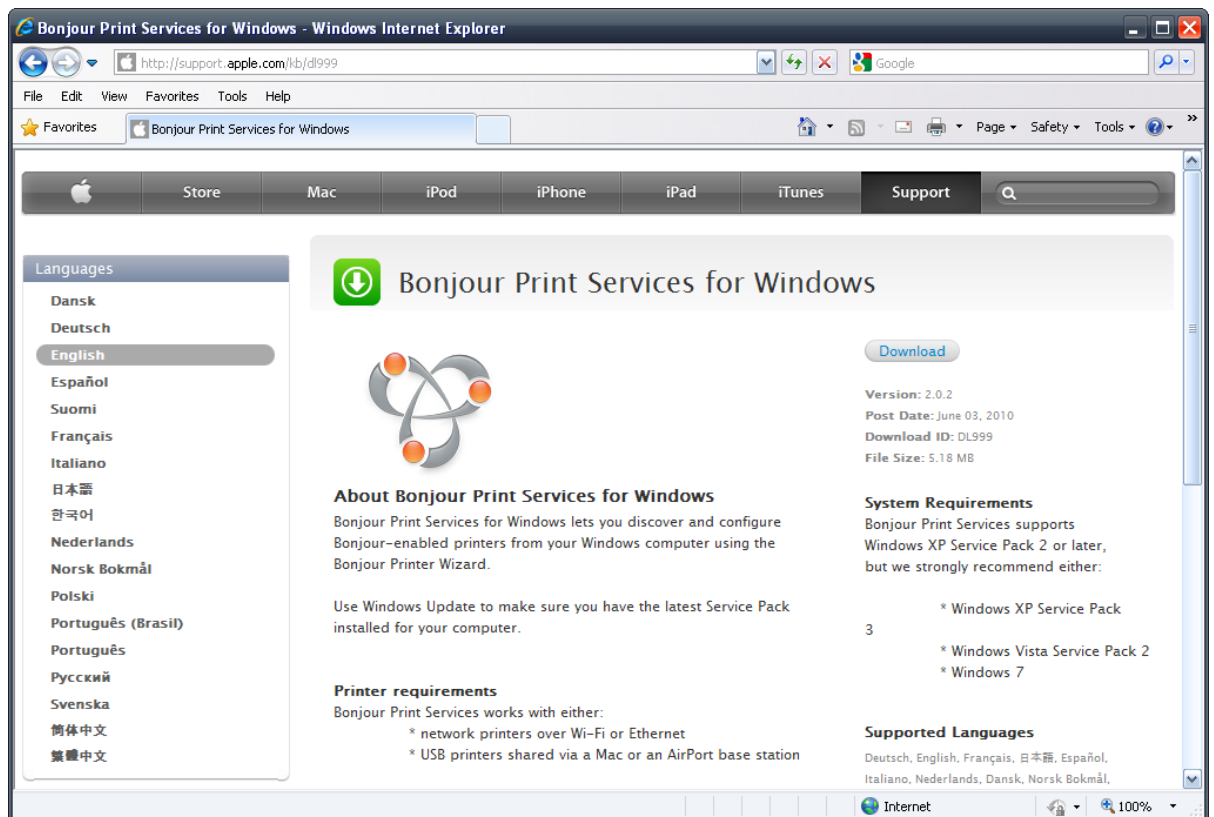


Figure 2.1: Apple Bonjour website.

- Click “Next”.



Figure 2.2: Apple Bonjour website.

- Accept licence agreement, click “Next”.
- Click “Next”.
- Untick “Create Bonjour Printer Wizard desktop shortcut” and “Automatically update”; click “Install”.

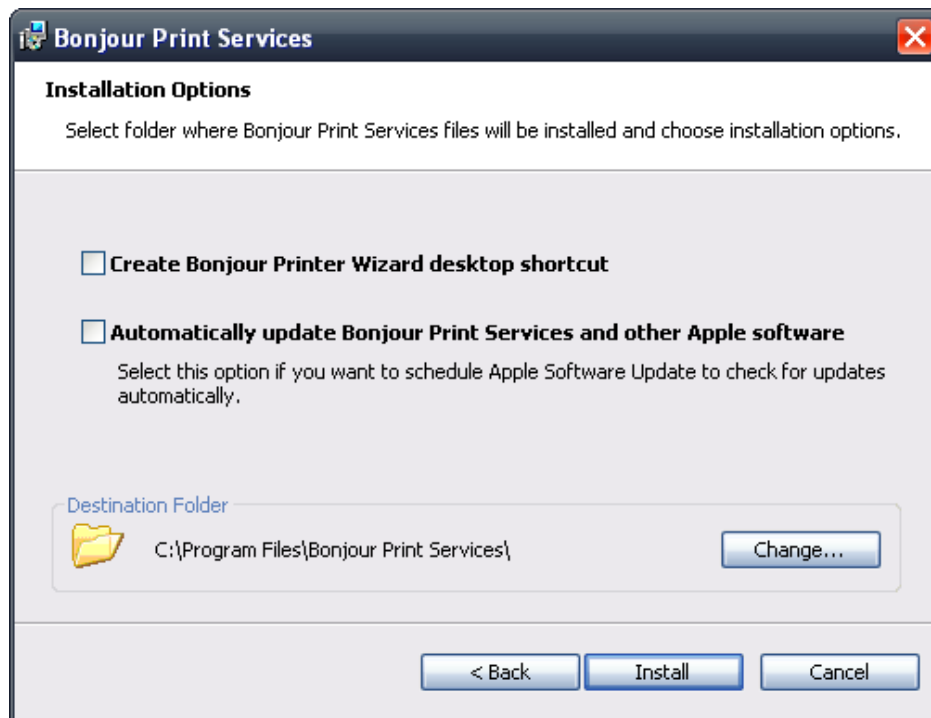


Figure 2.3: Bonjour installation settings.

- Wait for the installation to complete.
- Click “Finish”.

### 2.3 Install rtpMIDI

- Download rtpMIDI from the website:
  - <http://www.tobias-erichsen.de/rtpMIDI.html>
- Extract and run MSI installer.



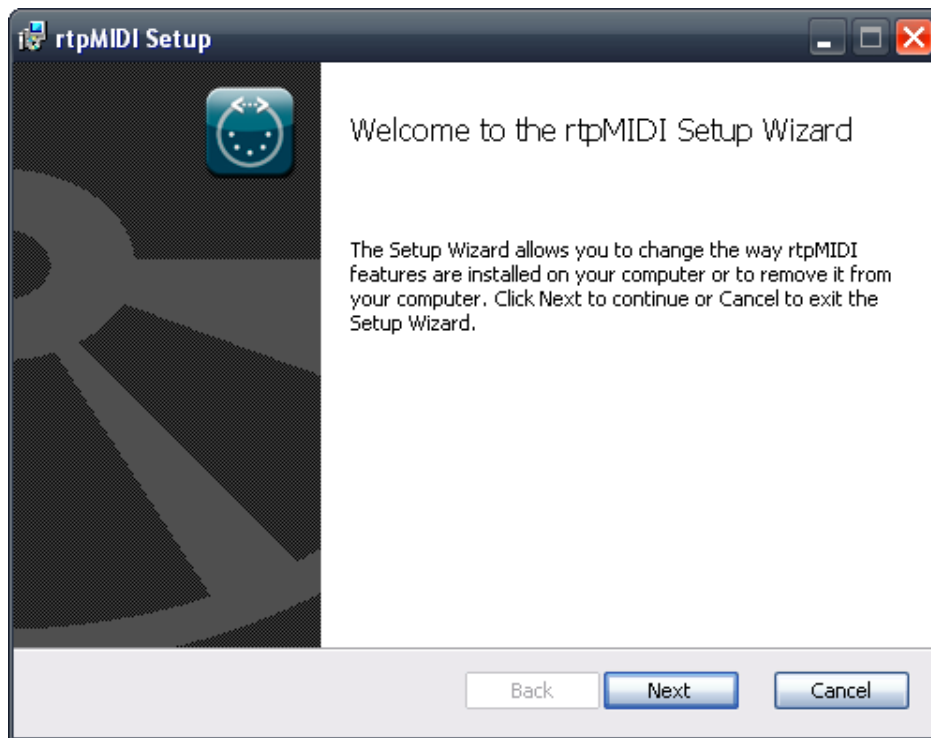


Figure 2.4: rtpMIDI Installation welcome.

- Click “Next”.
- Tick accept; click “Next”.
- Click “Next”.
- Click “Install”.

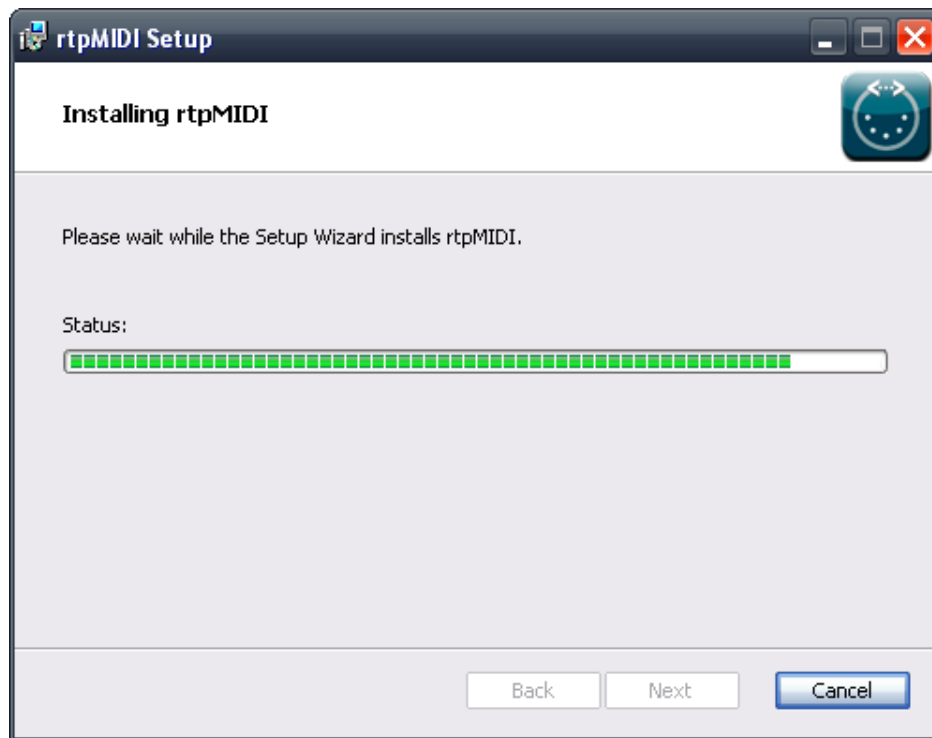


Figure 2.5: rtpMIDI Installation in progress.

- Click “Finish”.

## 2.4 Install TouchOSC on the iPad

- From the Apple App store, purchase and install TouchOSC:
  - <http://itunes.apple.com/app/touchosc/id288120394?mt=8>

## 2. LIVEPAD PRO - INSTALLATION



Figure 2.6: Touch OSC on the App Store.

## 2.5 Install TouchOSC Editor on the PC

- Download the TouchOSC Editor from the website:
  - <http://hexler.net/software/touchosc>

## 2. LIVEPAD PRO - INSTALLATION

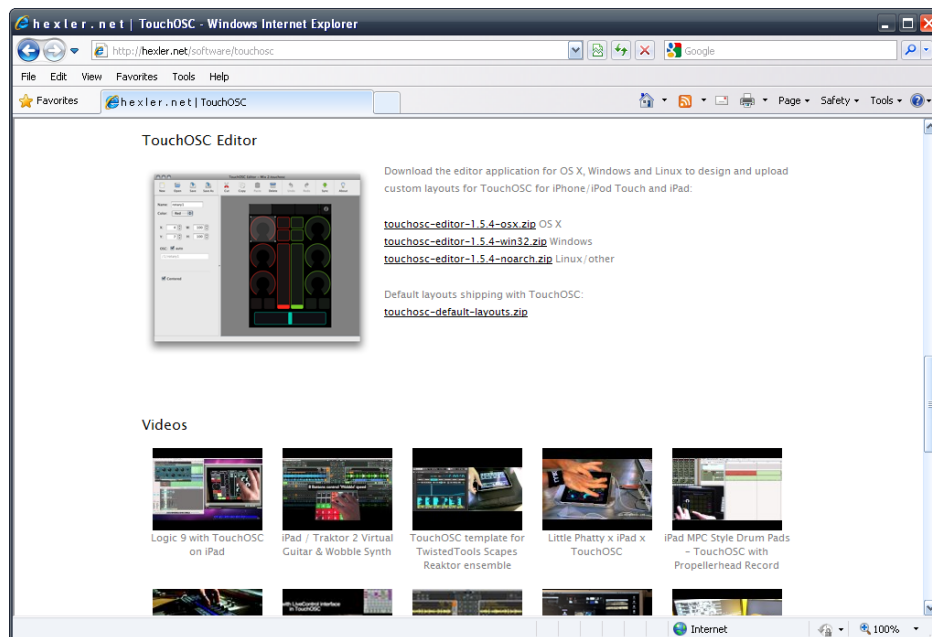


Figure 2.7: TouchOSC Editor download.

- Extract the editor to a known folder.
- Run the application and click “Open”.

## 2. LIVEPAD PRO - INSTALLATION

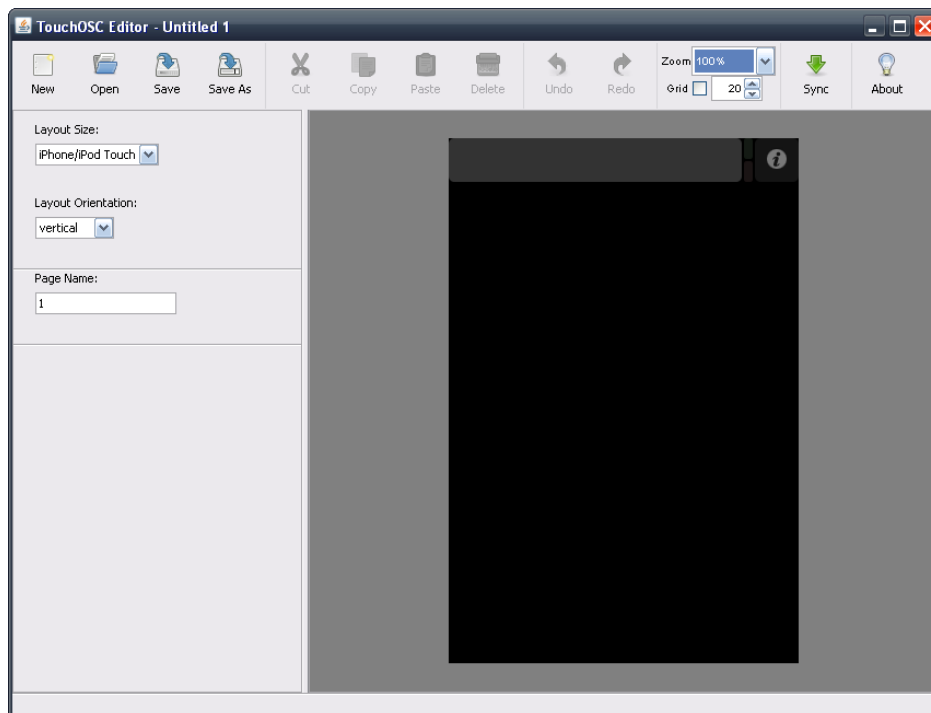


Figure 2.8: TouchOSC Editor download.

- Load up the LivePad Pro template.
- Click “Sync”.
- On the iPad, launch TouchOSC, Under “Layout” click “Add” and select computer name.
- Wait for the transfer to complete.
- Tap “Done” when complete.

## 2.6 Configure rtpMIDI

- Under “My Sessions” click the Plus symbol.
- On the right hand side; type “LivePad Pro” as both the local name and Bonjour name.

## 2. LIVEPAD PRO - INSTALLATION

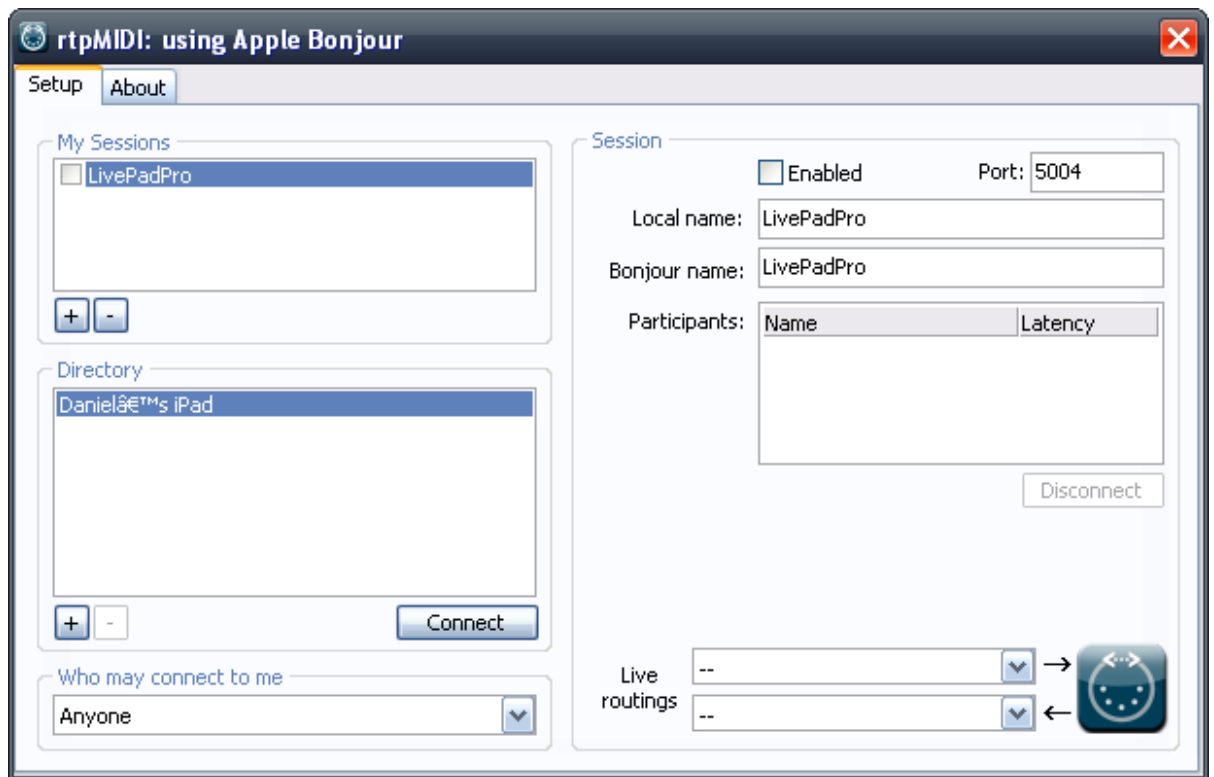


Figure 2.9: Configuring new rtpMIDI session.

- If TouchOSC is running on the iPad, the device name should be present under “Directory”.
- Click on the device name and click “Connect”; the name will move over to the “Participants” section.
- Finally Click “Enabled” under “Session”.

## 2. LIVEPAD PRO - INSTALLATION

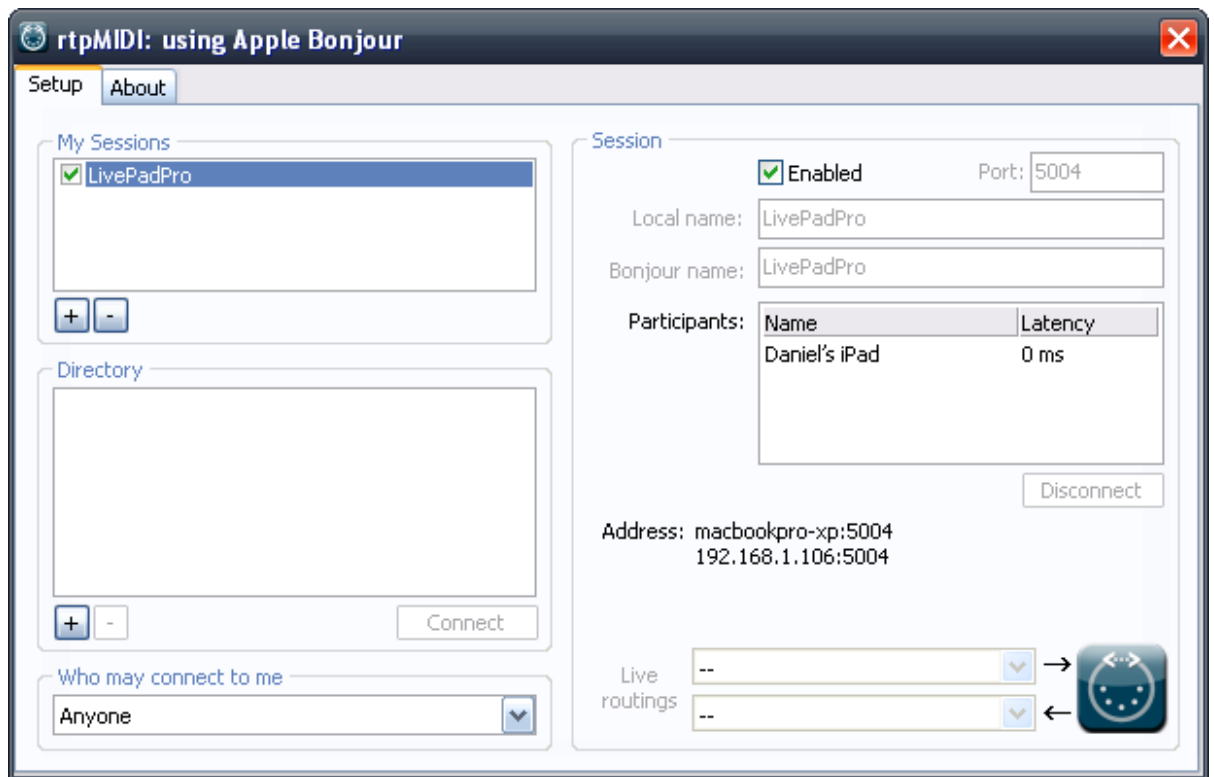


Figure 2.10: Complete and connected rtpMIDI configuration.

- To confirm connection; from the iPad check under “Connections” that CoreMIDI In/Out has (1/1) listed. If it is not “Connected (0/0)” will be displayed.

## 2.7 Configure LivePro

- Click “Environment”, then “MIDI Settings”.
- For MIDI In#1, select “LivePad Pro”.

## 2. LIVEPAD PRO - INSTALLATION

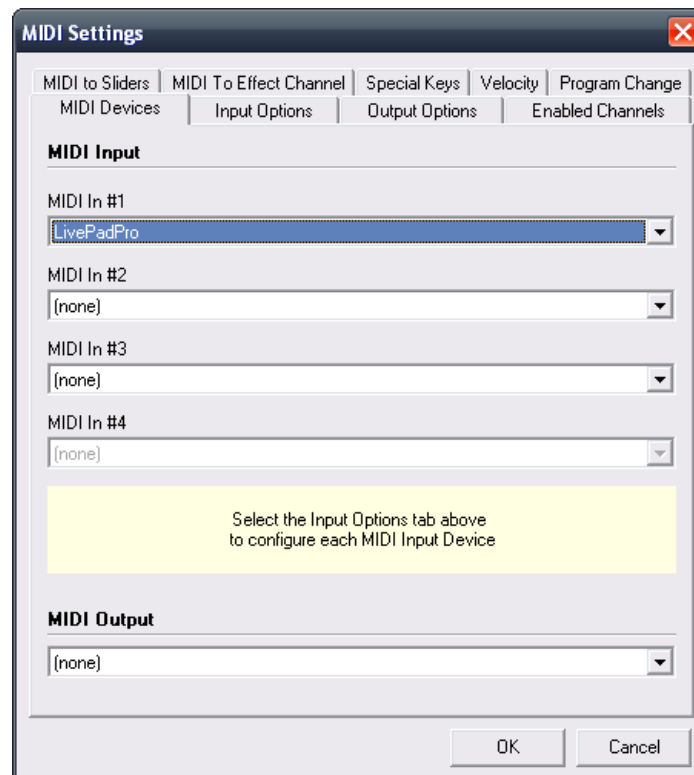


Figure 2.11: Assign new MIDI controller in LivePro.

- Now train each control to the correct heading from the iPad to the Sliders and Special Functions tabs as per the images below.



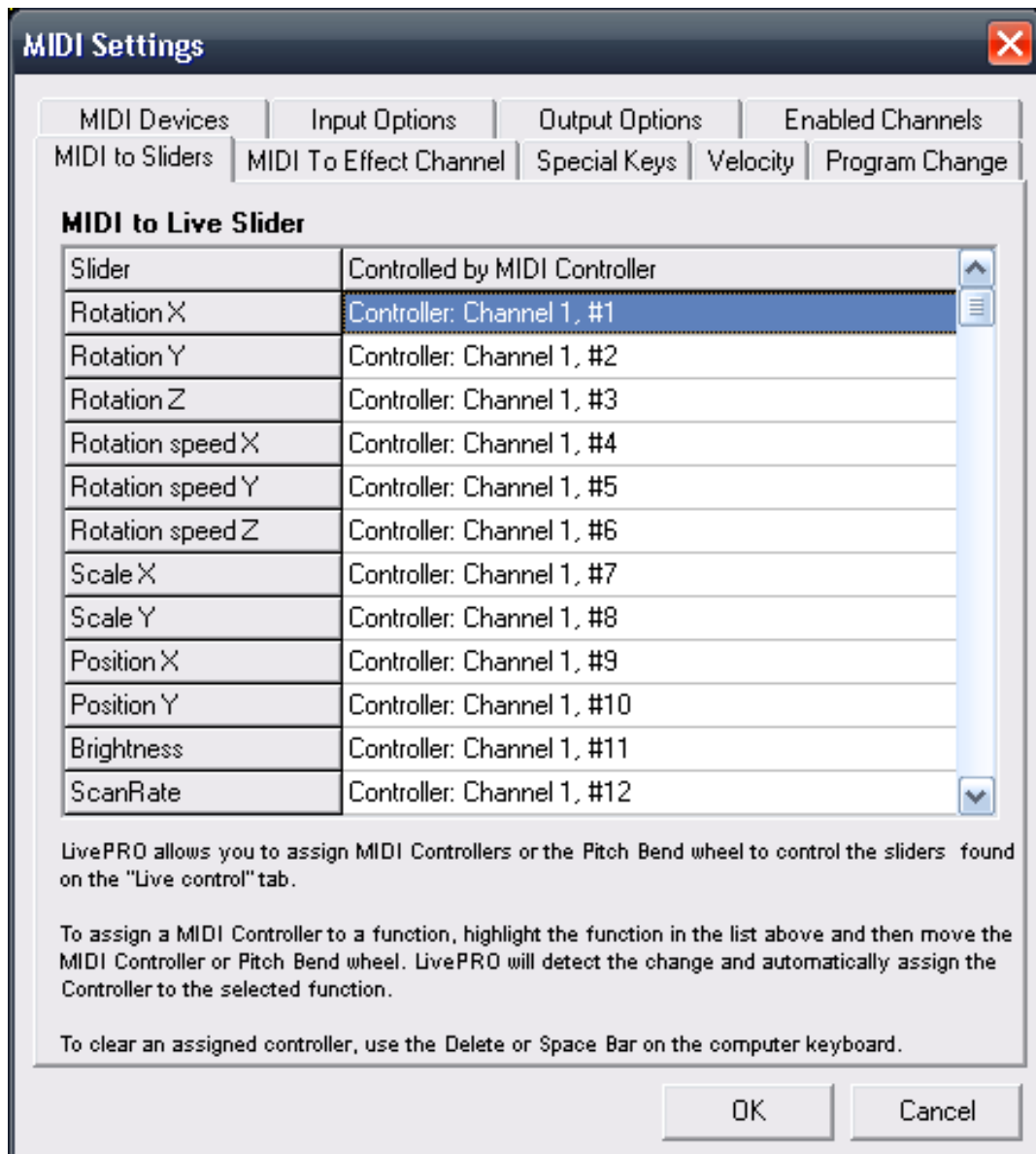


Figure 2.12: LivePro MIDI to Sliders assignments.

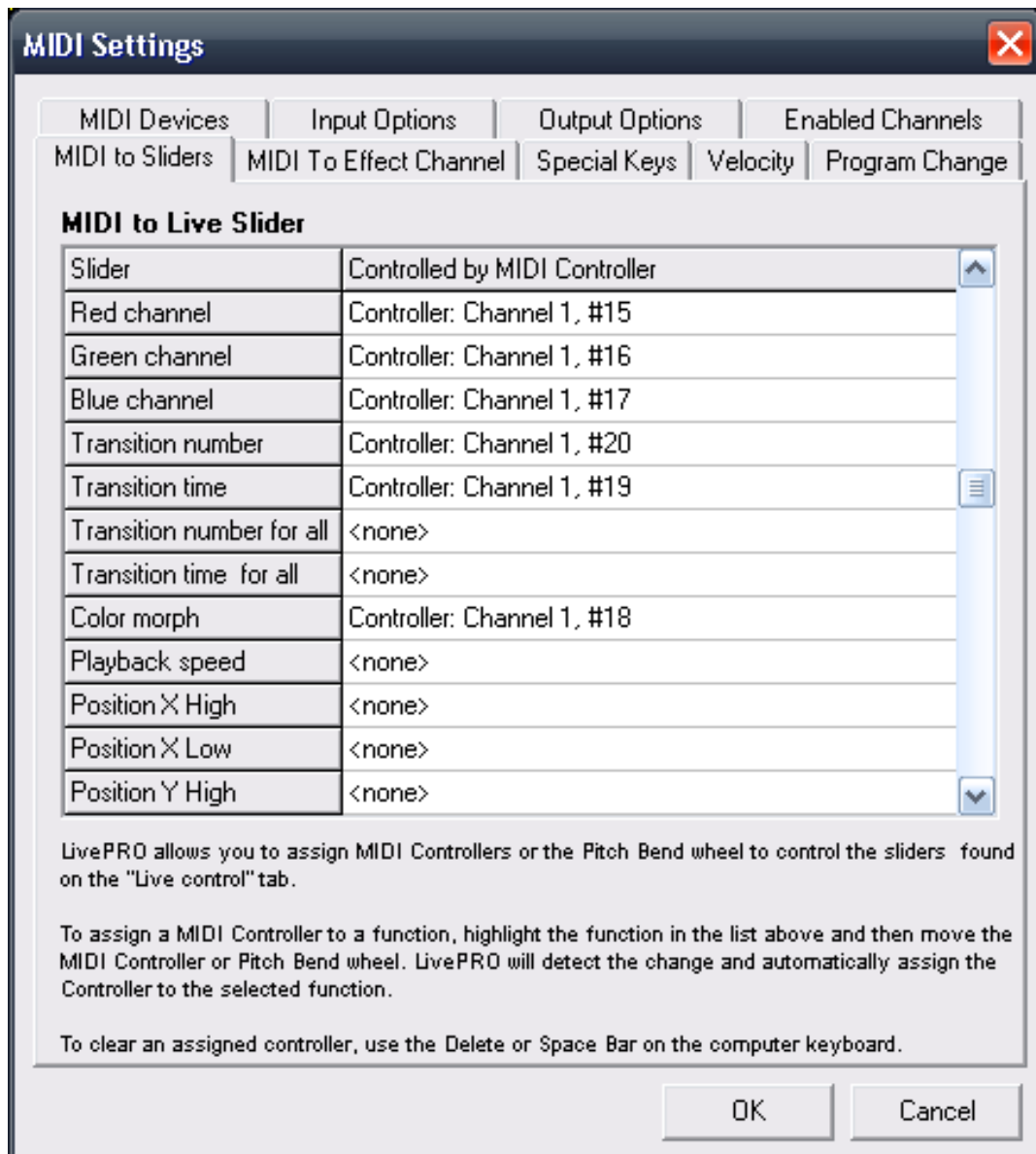


Figure 2.13: LivePro MIDI to Sliders assignments.

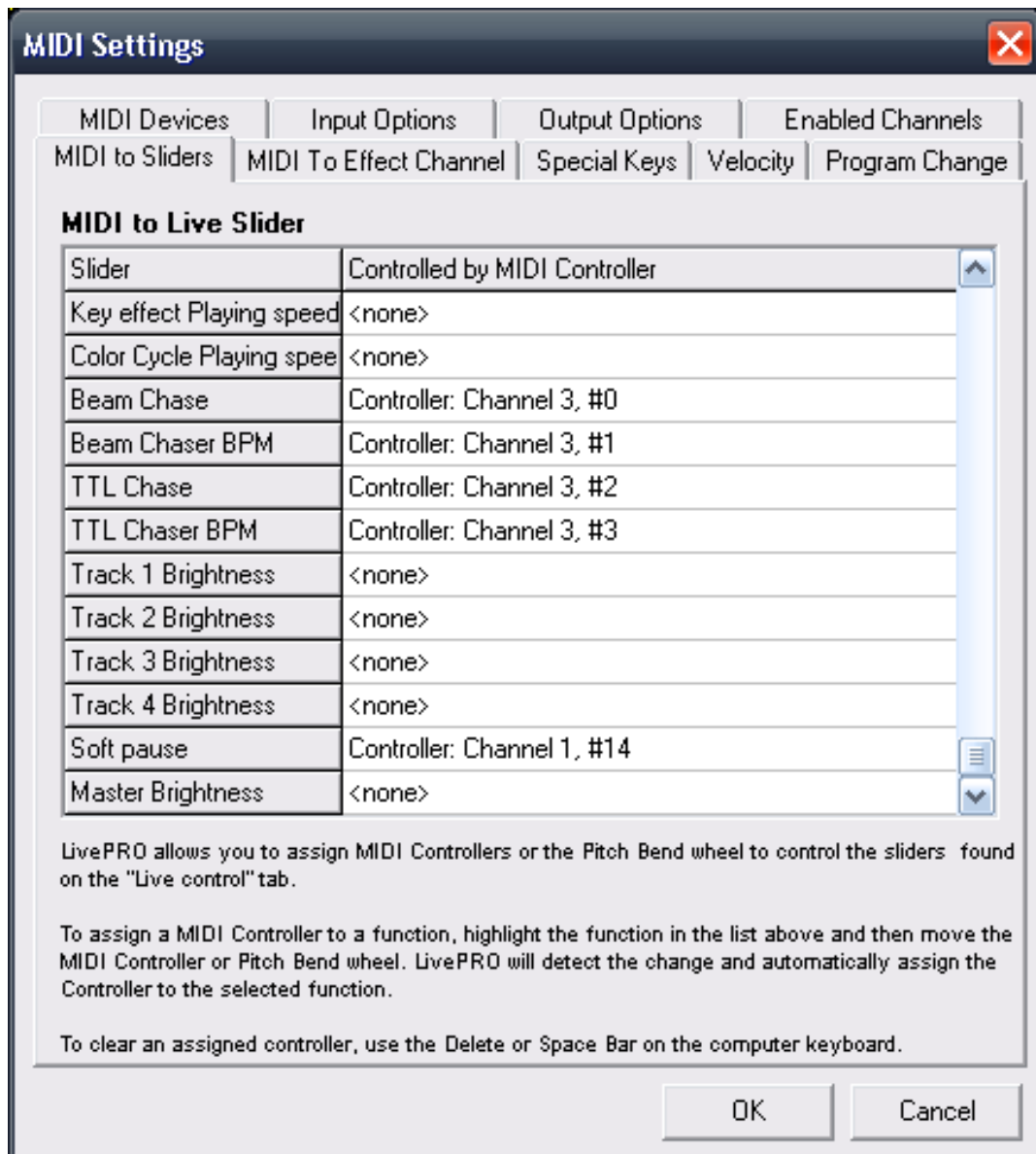


Figure 2.14: LivePro MIDI to Sliders assignments.

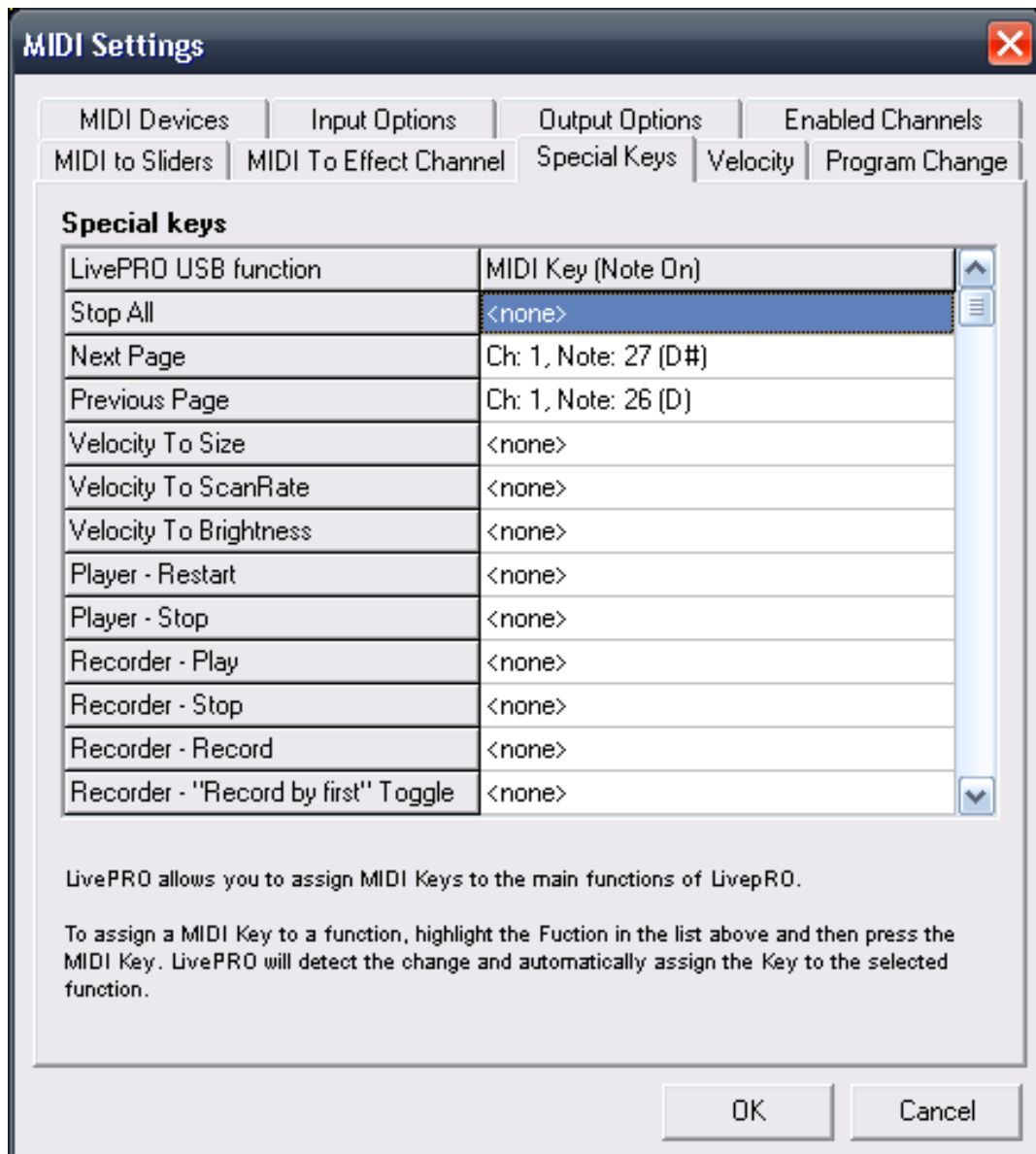


Figure 2.15: LivePro Special Keys assignments.

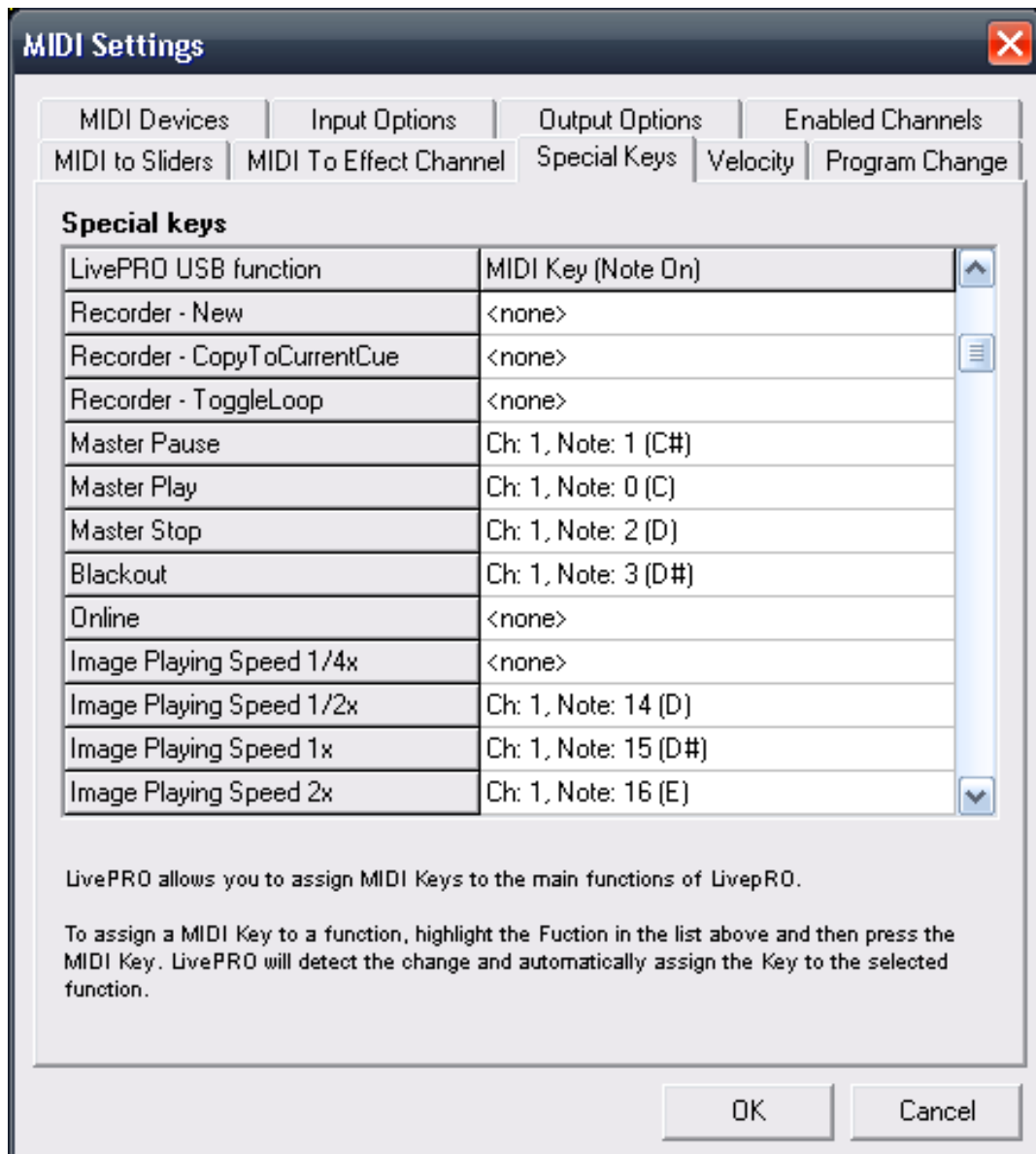


Figure 2.16: LivePro Special Keys assignments.

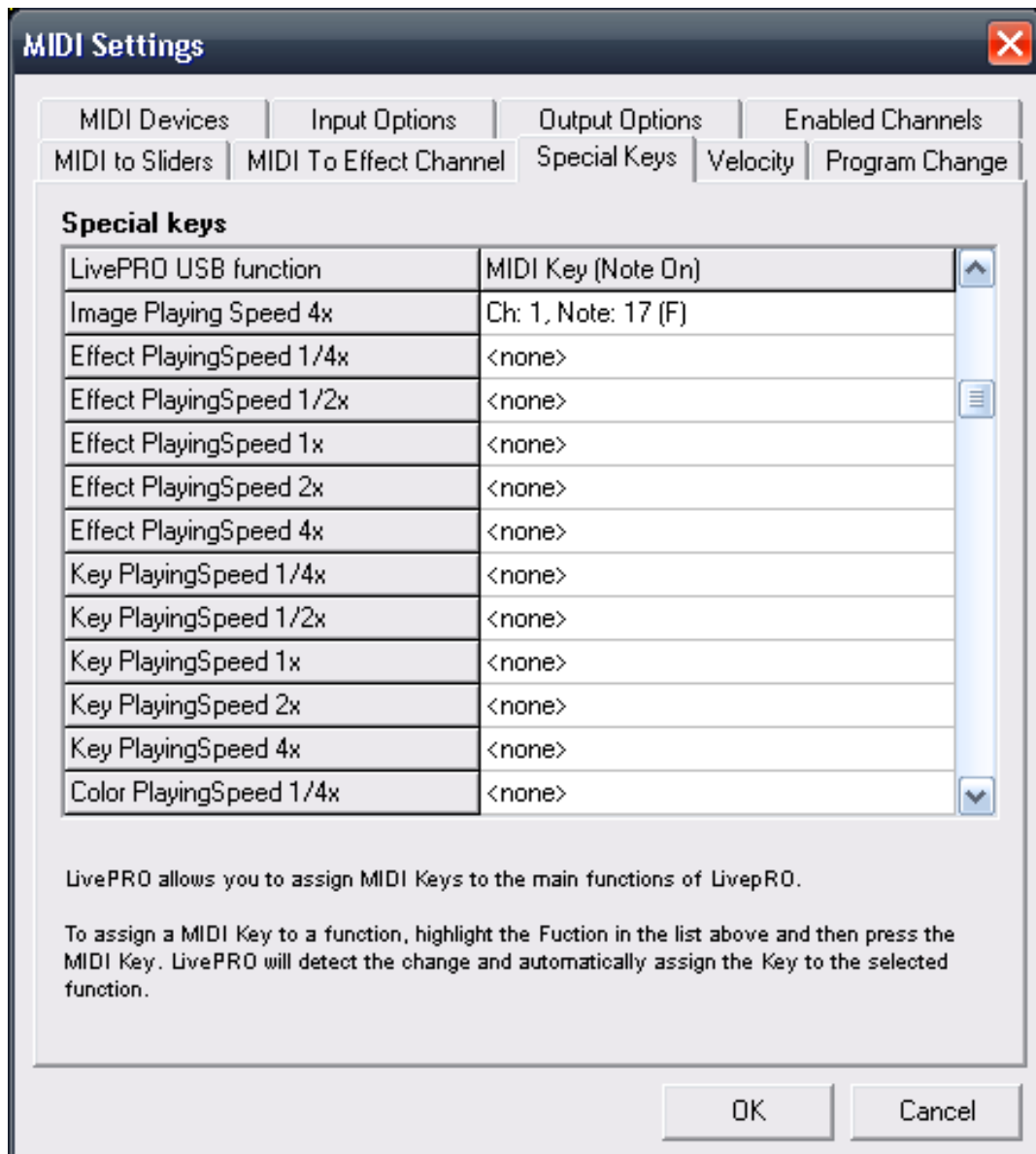


Figure 2.17: LivePro Special Keys assignments.

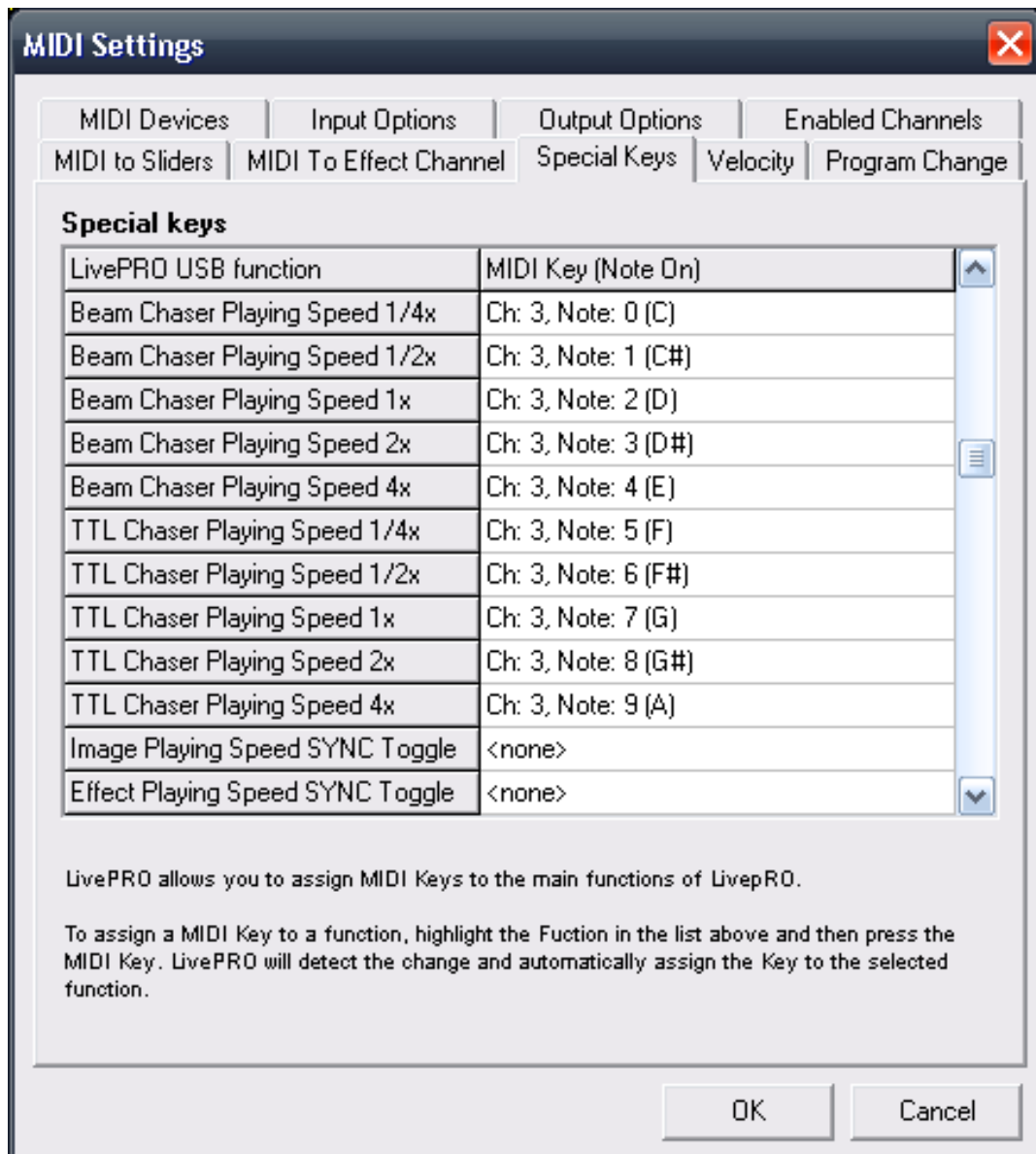


Figure 2.18: LivePro Special Keys assignments.

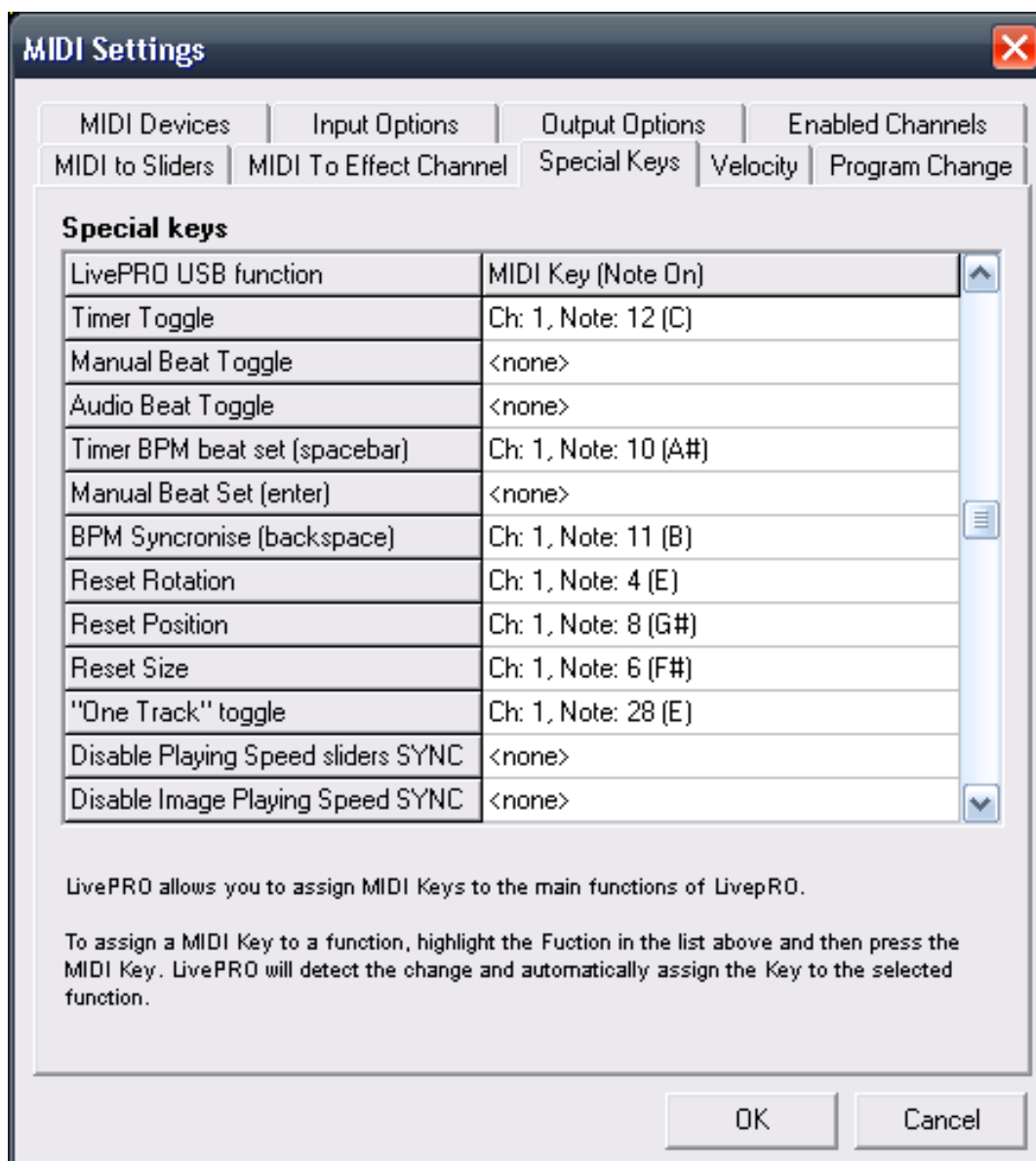


Figure 2.19: LivePro Special Keys assignments.



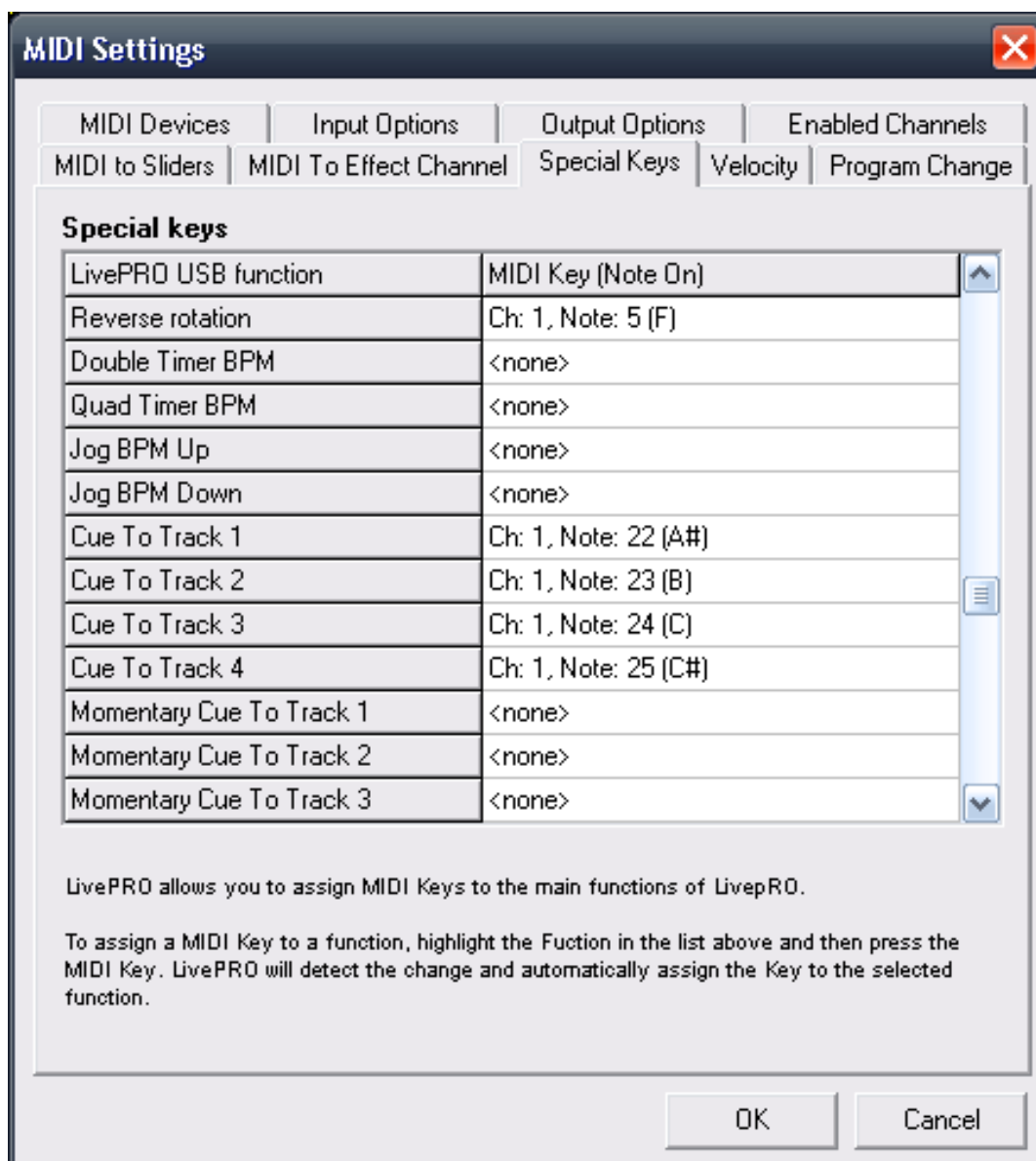


Figure 2.20: LivePro Special Keys assignments.

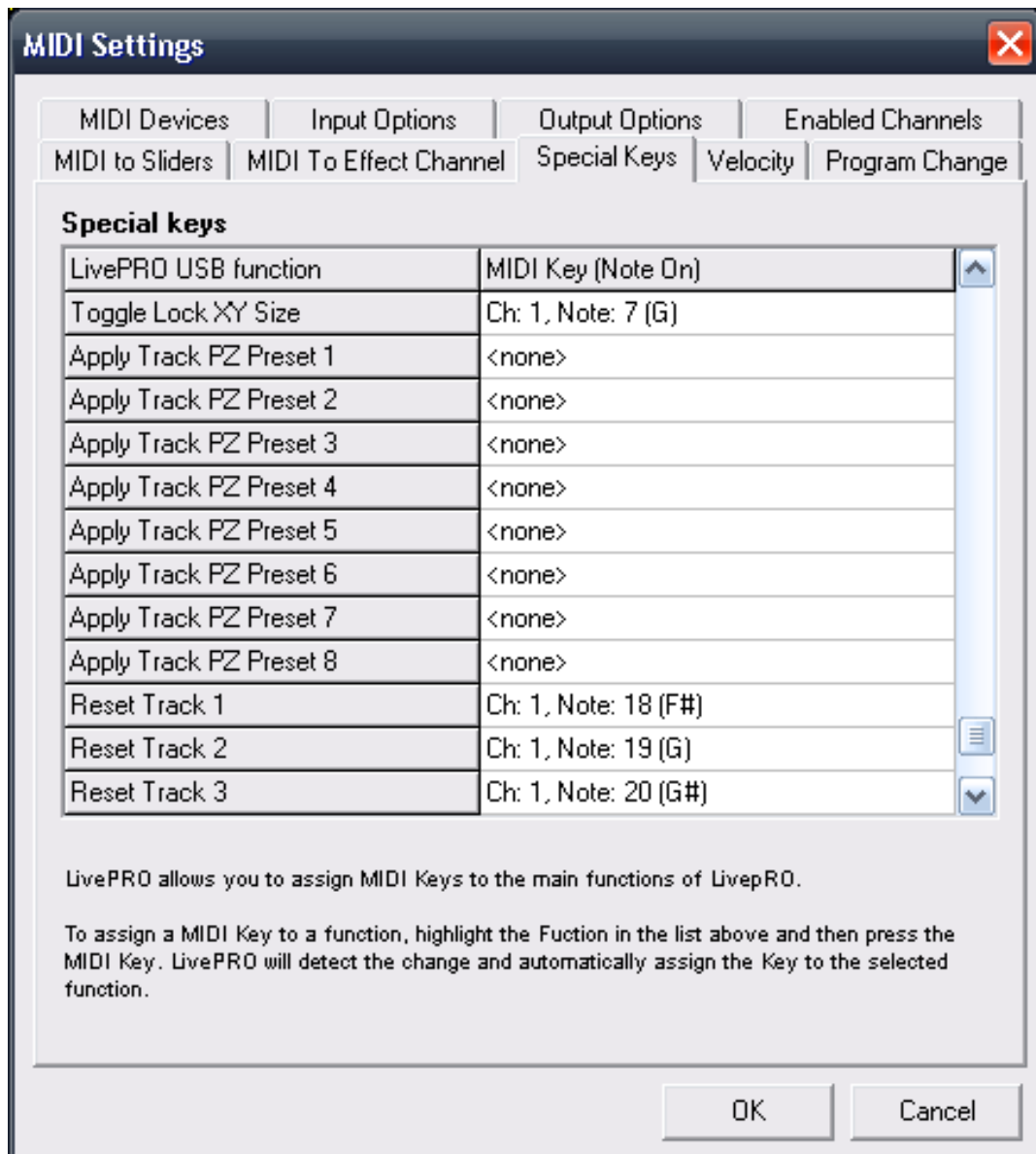


Figure 2.21: LivePro Special Keys assignments.

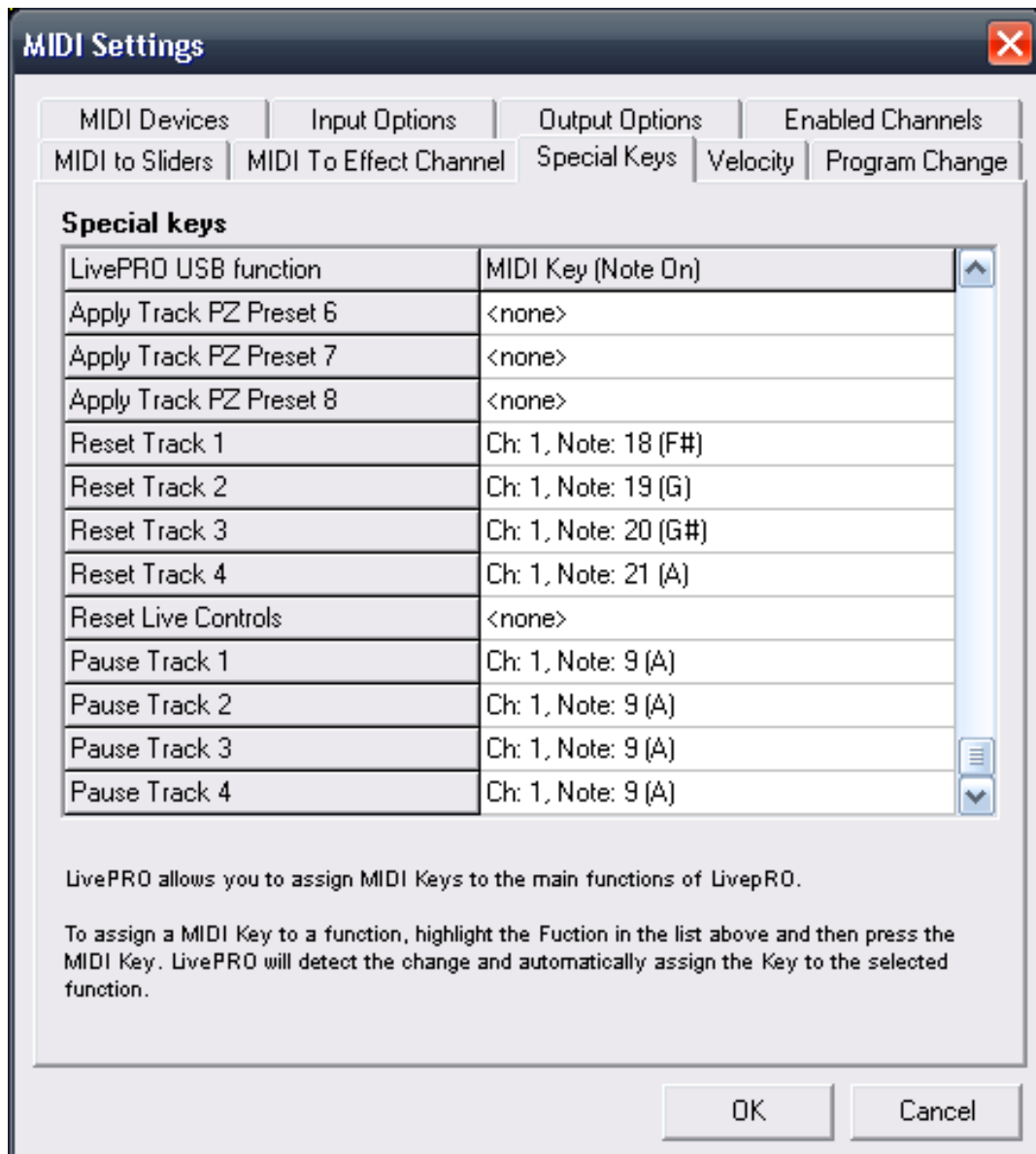


Figure 2.22: LivePro Special Keys assignments.



- To set the cues in the workspace to be launched from the iPad, use “Local Note Assignments” on each cue to trigger the corresponding cue. This can be found on the right side bar, under “Others”, MIDI Note. The workspace must be saved after this MIDI training has been carried out.

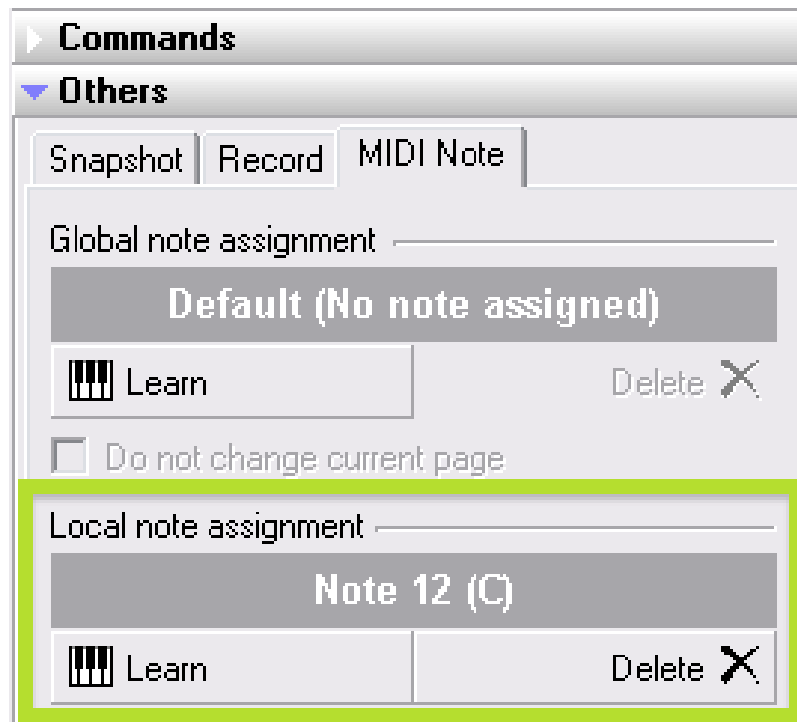


Figure 2.23: Assigning cue MIDI triggers.



## 2.8 Configure Quickshow / BEYOND

This setup works in much the same way as LivePro, with the only different being to ensure the Quickshow template has been uploaded via the TouchOSC Editor. Currently this template is the same for use with both Quickshow and BEYOND. To configure Quickshow and BEYOND:

- Under “Settings”, “MIDI Settings” ensure your virtual MIDI driver is selected.

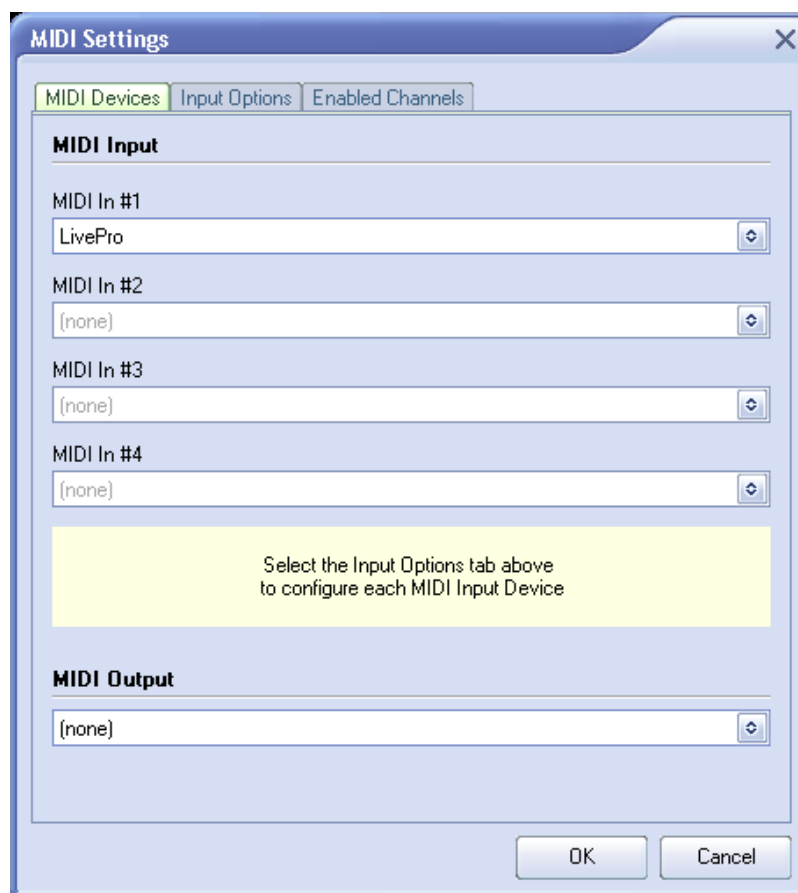


Figure 2.24: Assigning MIDI devices.



- Under “MIDI Shortcuts” learn each function to the corresponding control on the iDevice.

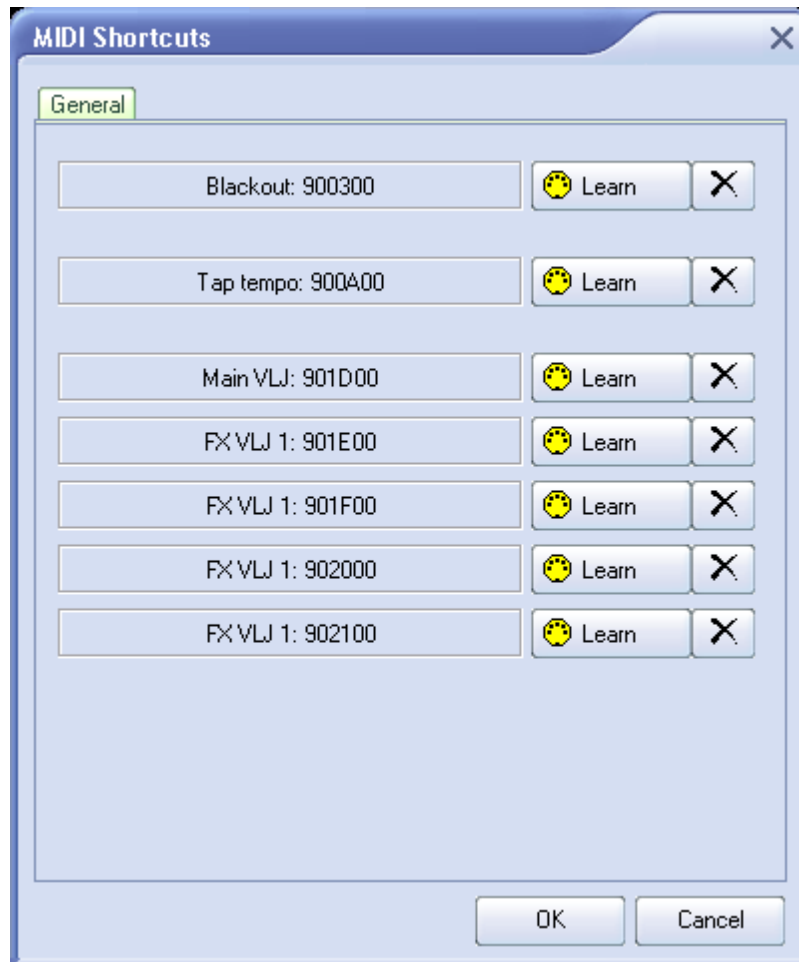


Figure 2.25: Assigning VirtualLJ FX controls.

## 2. LIVEPAD PRO - INSTALLATION



- Under “MIDI to Live Control”, again learn each function to the corresponding control on the iDevice.

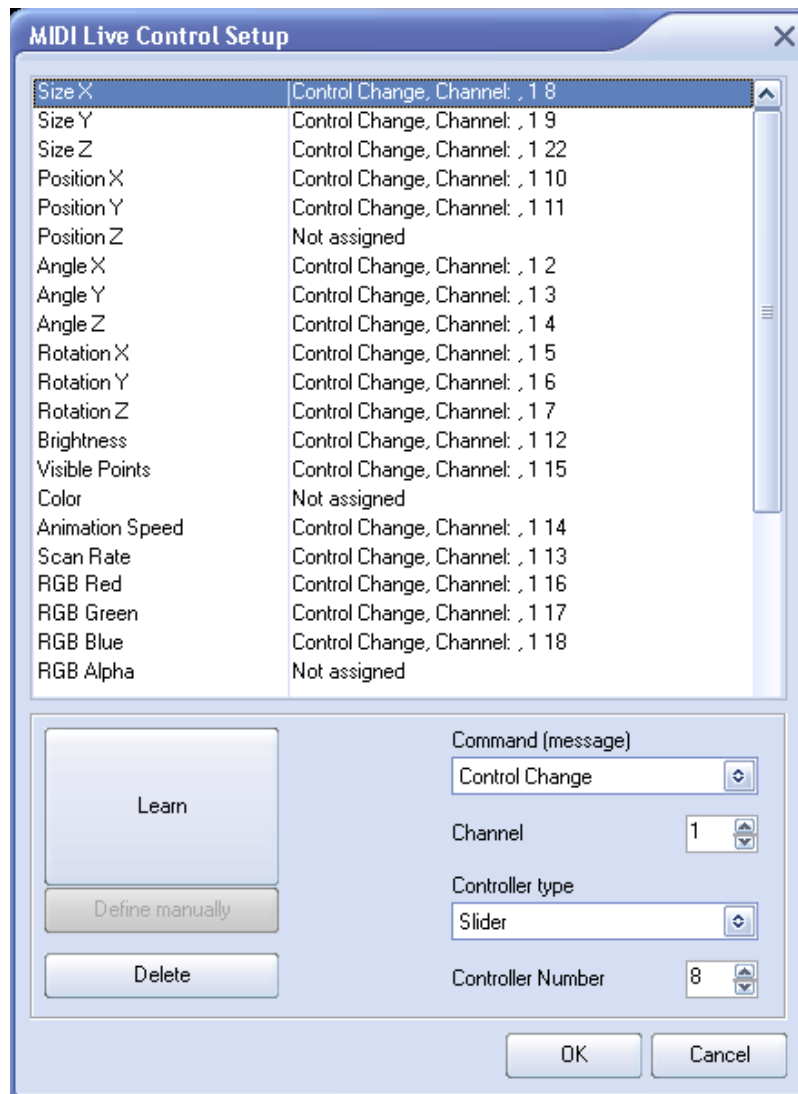


Figure 2.26: Assigning MIDI live controls.



## 2.9 iPhone Layouts

iPhone layouts are also included and can be uploaded in the same way as previously described via the TouchOSC editor. They only need to be uploaded once, and do not require retraining of the LivePro / Quickshow / Beyond, as all templates use the same MIDI commands throughout. It is recommended to train LivePro with the full iPad layout first, as this is more comprehensive than the iPhone counterpart.



Figure 2.27: iPhone layouts for live control of Quickshow.