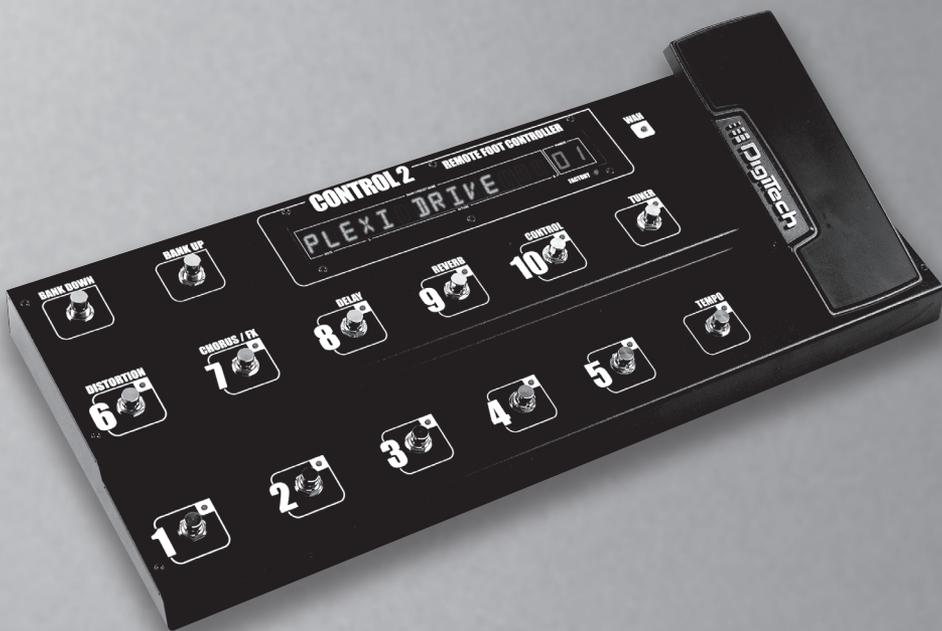


# CONTROL 2

REMOTE FOOT CONTROLLER

# Owner's Manual



 **Digitech**<sup>®</sup>  
The Power to Create

# Warranty

We at DigiTech are very proud of our products and back up each one we sell with the following warranty:

1. The warranty registration card must be mailed within ten days after purchase date to validate this warranty.
2. DigiTech warrants this product, when used solely within the U.S., to be free from defects in materials and workmanship under normal use and service.
3. DigiTech liability under this warranty is limited to repairing or replacing defective materials that show evidence of defect, provided the product is returned to DigiTech WITH RETURN AUTHORIZATION, where all parts and labor will be covered up to a period of one year. A Return Authorization number may be obtained from DigiTech by telephone. The company shall not be liable for any consequential damage as a result of the product's use in any circuit or assembly.
4. Proof-of-purchase is considered to be the burden of the consumer.
5. DigiTech reserves the right to make changes in design, or make additions to, or improvements upon this product without incurring any obligation to install the same on products previously manufactured.
6. The consumer forfeits the benefits of this warranty if the product's main assembly is opened and tampered with by anyone other than a certified DigiTech technician or, if the product is used with AC voltages outside of the range suggested by the manufacturer.
7. The foregoing is in lieu of all other warranties, expressed or implied, and DigiTech neither assumes nor authorizes any person to assume any obligation or liability in connection with the sale of this product. In no event shall DigiTech or its dealers be liable for special or consequential damages or from any delay in the performance of this warranty due to causes beyond their control.

**NOTE:** The information contained in this manual is subject to change at any time without notification. Some information contained in this manual may also be inaccurate due to undocumented changes in the product or operating system since this version of the manual was completed. The information contained in this version of the owner's manual supersedes all previous versions.

## **IMPORTANT! PLEASE READ**

Only connect the Control 2 Remote Foot Controller to the GSPI 101 or other DigiTech products which specify a connection to the Control 2. Do not connect the Control 2 Remote Foot Controller to Ethernet connections as damage will occur.

## **DECLARATION OF CONFORMITY**

Manufacturer's Name: DigiTech  
Manufacturer's Address: 8760 S. Sandy Pkwy.  
Sandy, UT 84070, USA

Declares that the product:

Product name: Control 2  
Note: Product name may be suffixed by the letters-EU.

Product option: None

Conforms to the following Product Specifications:

Safety: IEC 60065 (7th ed. 2001)

EMC: EN 55013 (2001 + A1)  
EN 55020 (1998)

Supplementary Information:

The product herewith complies with the requirements of the Low Voltage Directive 73/23/EEC and the EMC Directive 89/336/EEC as amended by Directive 93/68/EEC.

Vice-President of Engineering-MI  
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Date: November 20, 2007

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## Introduction

Congratulations and thank you for purchasing the Control 2 Remote Foot Controller! The Control 2 will help you get the most out of your GSP, giving you hands-free access to all the tones and effects your GSP has to offer.

Please take a moment to make sure you have everything that's included with your Control 2 Remote Foot Controller purchase:

- Control 2 Remote Foot Controller
- Controller Cable

The Control 2 Remote Foot Controller is extremely easy to use, but we recommend reading this brief manual to familiarize yourself with the Control 2's many features.

## Checking your GSP1101 Software Version

If you're using the Control 2 with a GSP1101, the GSP1101 software must be version 2.0 or later.

To check your GSP1101 software version, follow these steps:

1. From the GSP preset screen, press the Edit/Select knob once to access the menu navigation system.

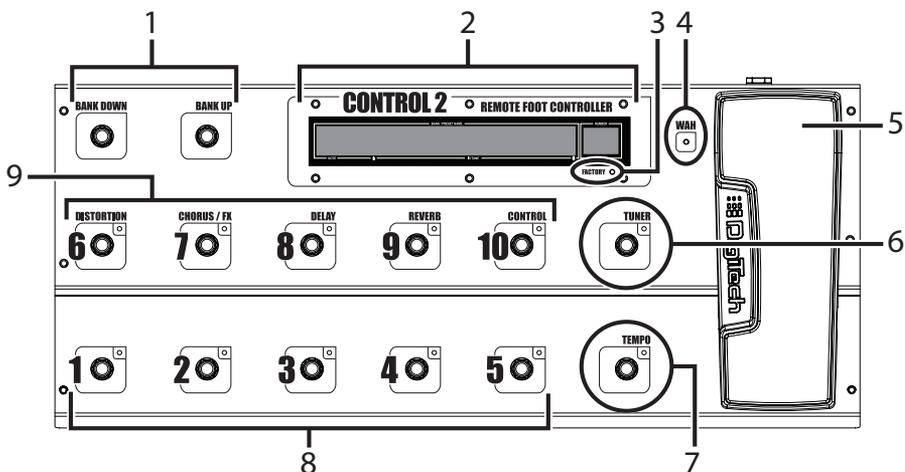


2. Turn the **Edit/Select** knob until the Version option is highlighted. The software version number is shown next to the Version option.



3. If the version number is 2.0 or greater, your GSP1101 is ready to use with your Control 2. If the version number is less than 2.0 (1.2, for example), you must update your GSP1101. Go to [www.digitech.com](http://www.digitech.com) for instructions on how to update your GSP1101.

## Top Panel



### 1. Bank Down / Bank Up

Press either of these footswitches to scroll through banks (groups) of Factory and User presets. When either of these footswitches are pressed, the Display shows the presets contained in each bank, and the preset footswitches will flash (1-5 in 5 Patch mode and 1-10 in 10 Patch mode). Press a footswitch with a flashing LED to select a preset in the bank. If no preset is selected after 5 seconds (or if a footswitch with an unlit LED is pressed), you are returned to your current preset.

### 2. Display

Displays bank names, preset names, effect on/off status, tuner information, and expression pedal calibration information.

### 3. Factory LED

Lights when a Factory preset or bank is selected.

### 4. Wah LED

Lights when the Wah effect is activated.

### 5. Expression Pedal

The built-in Expression Pedal provides real time control over parameters in your presets. You can assign the Expression Pedal to almost any parameter, giving you the option to control how fast a Chorus or Rotary effect oscillates, how much gain your amp model has, how loud the delays are, and many more. See page 11 for more information about how to assign parameters to the Expression Pedal. Refer to your GSP owner's manual for a list of available presets.

The Expression Pedal can alternatively turn on and control the Wah effect by pressing down firmly on the toe switch (this disables control of other parameters assigned to the Expression Pedal). Press down firmly on the toe switch again to turn off the Wah effect and switch the pedal back to controlling the saved expression parameters.

**NOTE:** Rock the Expression Pedal all the way forward and all the way back each time you power up the Control 2.

## 6. Tuner

The TUNER footswitch enables and disables the tuning function in the connected GSP. The TUNER footswitch LED lights when the Tuner is active.

When the tuner is activated, the Display briefly reads *TUNER*. To begin tuning, play a note on your guitar (a harmonic at the 12th fret usually works best). The note being played appears in the Display, and arrows indicates whether the note is sharp or flat. An arrow pointing to the left (  $\acute{\ }$  ) indicates the note is sharp and should be tuned down. An arrow pointing to the right (  $\grave{\ }$  ) indicates the note is flat and should be tuned up. When your note is in tune, ♯ is displayed.

## 7. Tempo

Press the **TEMPO** footswitch 2 or more times to set the time of the current preset's Delay effect. The **TEMPO** LED flashes to indicate the delay time. The Delay effect does not need to be active to set the delay time.

## 8. Footswitches 1-5

These footswitches are used to select presets in the active bank. The LED adjacent to each footswitch lights to indicate which preset is selected.

## 9. Footswitches 6-10

These footswitches are used for turning effects on and off (5 Patch Mode) or for selecting the second group of 5 presets in the active bank (10 Patch Mode). In 5 Patch Mode, Footswitches 6-10 act as effects on/off switches for the effect labeled above each footswitch. When an effect is turned on or off, the LED adjacent to its footswitch will light or darken to indicate the effect's on/off status. The number 10 footswitch is labeled **CONTROL**, and can be assigned a preset-specific parameter (min/max setting or effect on/off). See page 11 for more information about assigning parameters to the **CONTROL** Footswitch.

In 10 Patch Mode, each preset bank has ten presets to select from so each numbered footswitch 1-10 will select a preset. The LED adjacent to the footswitch will light to indicate which preset is selected. Only one of the ten numbered footswitches can be lit at a time in 10 Patch Mode. See page 5 for more information about 5 Patch Mode and 10 Patch Mode.

## Rear Panel



### 1. Processor Jack

Attach one end of the included Controller cable here. Connect the other end to your GSP unit's Foot Controller port.

**WARNING:** Only connect the Control 2 Remote Foot Controller to the GSP1101 or other DigiTech products which specify a connection to the Control 2. Do not connect the Control 2 Remote Foot Controller to Ethernet connections as damage will occur.

### 2. Expression 2 Input

Connect an optional expression pedal here using a 1/4" cable. A passive expression controller or volume pedal is recommended.

# Using the Control 2 Remote Foot Controller

## Modes

The Control 2 operates in one of two modes: **5 Patch Mode** or **10 Patch Mode**.

### 5 Patch Mode

In **5 Patch Mode**, the footswitches numbered 1-5 each select a preset (also known as a “patch”) in the selected bank. There are 20 banks to select from (you can change banks using the **Bank Down/Bank Up** footswitches). The lit footswitch (1-5) indicates the current preset selected in the bank; only one of the 1-5 footswitches can be lit at a given time. From the factory, 5 Patch Mode is the default mode.

Also in 5 Patch Mode, Footswitches 6-9 each turn an effect on or off. You can also configure the **CONTROL** Footswitch to turn an effect on or off, or toggle a parameter between two values (for example, the Delay level can be switched from 20 to 40 and back). Refer to page 9 for instructions on how to configure The **CONTROL** Footswitch.

### 10 Patch Mode

In **10 Patch Mode**, Footswitches 1-10 each select a preset in the selected bank. There are 10 banks to select from. The lit footswitch indicates the current preset selected in the bank; only one of the 1-10 footswitches can be lit at any given time.

## Switching Between 5 Patch and 10 Patch Modes

To change the mode, follow these steps:

1. From the GSP preset screen, press the **Edit/Select** knob once to enter the menu navigation system.
2. Turn the **Edit/Select** knob until the Foot Controller menu is highlighted and press the knob again.
3. In the Foot Controller menu, make sure Switch Mode is highlighted and press the **Edit/Select** knob to select 5 Patch or 10 Patch mode.
4. Press the **Back** button to save this setting.

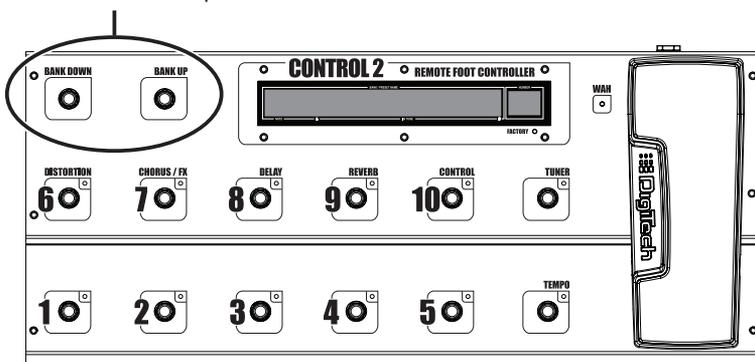
### Selecting Banks

The Control 2 assigns groups of presets (called **banks**) to the numbered footswitches. Each bank is a group of 5 presets (5 Patch Mode) or 10 presets (10 Patch Mode) depending on the foot controller mode selected by the GSP. Hence, there are 20 banks in 5 Patch Mode and 10 banks in 10 Patch Mode.

To select a new bank and a new preset, follow these steps:

1. Press either the **Bank Down** or **Bank Up** footswitch. The name of the newly cued bank appears in the Display and the available preset footswitches flash (1-5 in 5 Patch Mode and 1-10 in 10 Patch Mode).

Bank Down & Bank Up



2. To make the bank shown in the Display active you must load a new preset by pressing one of the flashing preset footswitches. If no footswitch is pressed within 5 seconds, the Control 2 will abort the bank change and return to the preset prior to the bank footswitch being pressed.

Banks are also changed when selecting presets using the **Edit/Select** knob on the GSP. For example, if any of presets 1-5 are selected on the GSP in 5 Patch Mode, the bank titled *PRESETS 1-5* will be the active bank on the Control 2 and numbered Footswitches 1-5 would select presets 1-5. If preset 6 is then selected using the Edit/Select knob on the GSP, *PRESETS 6-10* will now become the active bank and numbered Footswitches 1-5 would then select presets 6-10.

Note that banks titled *PRESETS 96-99* (5 Patch Mode) and *PRESETS 91-99* (10 Patch Mode) contain only 4 and 9 presets respectively. When one of these banks is selected, Footswitch 5 (5 patch mode) and the CONTROL Footswitch (10 patch mode) have no function.

## Selecting Presets

To select a preset in 5 Patch or 10 Patch Mode, follow these steps:

1. Press one of the footswitches numbered 1-5 (footswitches numbered 1-10 in 10 Patch Mode). The associated footswitch LED will light and the preset name and number will appear in the Display.
2. To select another preset, press another of the footswitches numbered 1-5 (footswitches numbered 1-10 in 10 Patch Mode). The previous footswitch LED will turn off and the newly pressed footswitch's LED will now light.

In 5 Patch Mode, as different presets are selected, different effect footswitch LEDs (Footswitches 6-10) will turn on and off based on the status of these effects in the active preset.

## Bypassing Presets

To bypass an active preset, press the active preset footswitch. The Display will read *BYPASS* when the preset is bypassed and the preset footswitch you bypassed from will remain lit (in 5 Patch Mode, the effects footswitches that were on before bypassing will also remain lit). To return to the same preset from bypass, press the lit preset footswitch again and the last preset loaded will become active again.

You can also change to another preset from bypass by pressing any non-lit preset footswitch. In 5 Patch Mode, you can also turn any of the effects (DISTORTION, CHORUS/FX, DELAY, REVERB) on or off when exiting bypass by pressing one of these footswitches instead of a preset footswitch. This will load the last active preset and turn the respective effect on or off as it is loaded.

**NOTE:** Bypassing presets with the footswitches is not available if the Bounce Back feature is enabled. Refer to the **Bounce Back** section on page 8 for more information about the Bounce Back feature.

## Turning Effects On or Off

In 5 Patch Mode, Footswitches 6-9 are programmed to turn on or off the following effects in the active preset:

**Footswitch 6** controls the **Distortion** on/off.

**Footswitch 7** controls the **Chorus/FX** on/off.

**Footswitch 8** controls the **Delay** on/off.

**Footswitch 9** controls the **Reverb** on/off.

**Footswitch 10** can also be programmed to turn on and off effects as well. See page 11 for more information about assigning effect on/off and parameters to the CONTROL footswitch).

When you load a preset, some effects may already be on. Those effects will have a lit LED next to their footswitch(es).

To turn effects on or off using Footswitches 6-10, follow these steps:

1. Make sure the Control 2 is in 5 Patch Mode (see page 5 for instructions on how to switch modes).
2. Press one of the footswitches numbered 6-10. The footswitch's LED turns on to indicate the effect is active, or turns off to indicate the effect is bypassed.

### Bounce Back

Bounce Back allows switching between two presets using a single footswitch in both 5 Patch and 10 Patch modes.

To enable the Bounce Back feature, follow these steps:

1. From the preset screen, press the **Edit/Select** knob once to enter the menu navigation system.
2. Turn the **Edit/Select** knob until the Foot Controller menu is selected and press the knob again.
3. In the Foot Controller menu, select Bounce Back and press the **Edit/Select** knob to turn this feature on or off.
4. Press the **Back** button to save this setting.

Bounce Back only works within each active bank of presets, meaning you cannot select preset 1 in the *PRESETS 1-5* bank, change banks, select preset 51 in the *PRESETS 51-55* bank and then bounce back to preset 1.

**NOTE:** When Bounce Back is enabled, bypassing presets from the Control 2 is no longer available.

To use the Bounce Back feature, follow these steps:

1. Select a preset using an available preset footswitch (for our example, we'll use Footswitch 1 – Preset 1).
2. Select another preset (for our example, Footswitch 4 – Preset 4).
3. Press Footswitch 4 again. Preset 1 is loaded.
4. Subsequent presses of numbered Footswitch 4 will alternately load Preset 4 and Preset 1. Pressing any other preset footswitch will abandon the bounce back between these two presets.

### Volume Update

Volume Update lets you maintain relative volume levels between presets when using the Control 2's expression pedal as a volume controller. Using this feature requires that presets have the Control 2's built-in expression pedal, an external expression pedal connected to the GSP or Control 2, or a MIDI expression pedal linked to the Volume Pre or Volume Post parameters in the GSP's presets. With Volume Update set to ON, the pedal's position is maintained after changing presets thus keeping the relative volume the same even when the volume is backed off. When Volume Update is set to OFF, presets are set to the volume level stored with the preset when they are selected.

To enable or disable the Volume Update option, follow these steps:

1. From the preset screen, press the **Edit/Select** knob once to enter the menu navigation system.
2. Turn the **Edit/Select** knob until the Foot Controller menu is highlighted and press the knob again.
3. In the Foot Controller menu, highlight Volume Update and press the **Edit/Select** knob to turn this option on or off. The default setting is on.
4. Press the **Back** button to save this setting.

### MIDI CC Send

In addition to controlling GSP processor parameters, you can configure the Control 2's Expression Pedal and the CONTROL Footswitch to send MIDI CC (continuous controller) messages on the GSP's MIDI channel to MIDI devices connected to your GSP's MIDI Thru port. The Expression Pedal can act as a continuous control device, and the CONTROL Footswitch can act as a parameter toggle switch.

To enable the MIDI CC send options for the Control 2 Expression Pedal and the CONTROL Footswitch, follow these steps:

1. From the preset screen, press the **Edit/Select** knob once to enter the menu navigation system.
2. Turn the **Edit/Select** knob until the Foot Controller menu is highlighted and press the knob again.
3. In the Foot Controller menu, highlight MIDI CC Send and press the **Edit/Select** knob. The MIDI CC Send menu appears.
4. To enable CC send and assign a MIDI CC that the Control 2's Expression Pedal will transmit, highlight FC PDL and press the **Edit/Select** knob.
5. Turn the **Edit/Select** knob to select the desired MIDI CC and press the

knob to select it.

6. To enable CC send and assign a MIDI CC that the **CONTROL** Footswitch will transmit, highlight FC FSW and press the **Edit/Select** knob.
7. Turn the **Edit/Select** knob to select a MIDI CC and press the knob to select it.

### Expression Pedal Calibration

In order to smoothly control parameters using the Control 2's expression pedal, the pedal needs to be calibrated the first time it is connected to the GSP. This is done using the FC Pedal Calibrate menu in the GSP.

To calibrate the Control 2's Expression Pedal, follow these steps:

1. From the preset screen, press the **Edit/Select** knob once to enter the menu navigation system.
2. Turn the **Edit/Select** knob until the Foot Controller menu is highlighted and press the knob again.
3. In the Foot Controller menu, highlight Pedal Calibrate and press the **Edit/Select** knob to start the calibration procedure.
4. Once started, the Control 2's Display will show *TOE DOWN*. Rock the expression pedal full forward and press the flashing **TUNER** footswitch. Calibration is now complete.

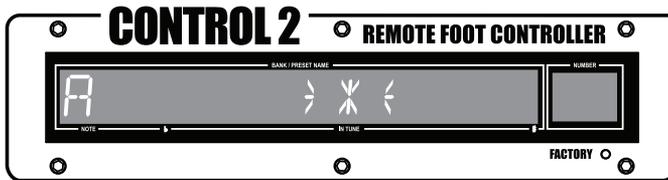
**NOTE:** You need to rock the Expression Pedal all the way forward and all the way back each time you power up the Control 2 to re-establish its Min and Max positions.

## Tuner

The Control 2 provides access to the host GSP's tuner and provides tuner feedback via the Control 2's Display.

To tune your guitar, follow these steps:

1. Press the **TUNER** footswitch. The Control 2's Display will briefly show *TUNER* and the **TUNER** footswitch LED will now be lit. The guitar signal is normally muted when the tuner is accessed. You can rock the **Expression Pedal** forward to hear the note while it is being tuned.
2. Begin playing a note on the guitar. The leftmost characters of the Display will show the note being played. The rest of the Display will show arrows indicating the relative tuning. An arrow pointing to the left (  $\leftarrow$  ) indicates the note is sharp and should be tuned down. An arrow pointing to the right (  $\rightarrow$  ) indicates the note is flat and should be tuned up. When your note is in tune,  $\ast$  is displayed.



3. Press any footswitch (or the **Back** button or the **Edit/Select** knob on the GSP) to return to the preset.

## Assigning Parameters to the CONTROL Footswitch (#10)

You can set up the CONTROL footswitch to control a parameter of your choice, including each effect's On/Off parameter. To assign a parameter to the CONTROL footswitch, follow these steps:

1. From the Preset screen on the GSP, press the **Edit/Select** knob twice.
2. Turn the **Edit/Select** knob to highlight Expression Links and press the **Edit/Select** knob. The Edit Expression Links menu appears.
3. Scroll down and highlight an expression link that is not in use (NO CTRL NO LINK). Press the **Edit/Select** knob to select the expression link. The Linking menu appears.
4. Make sure Assign Controller is highlighted and press the **Edit/Select** knob.

5. Turn the **Edit/Select** knob until <FC FSW> appears.
6. Press the **Edit/Select** knob. The Linking menu appears.
7. Scroll down and highlight LINKED TO NO LINK. Press the **Edit/Select** knob.
8. Turn the **Edit/Select** knob to select a parameter to assign to the **CONTROL** footswitch and press the **Edit/Select** knob.

Pressing the CONTROL footswitch now toggles between the selected parameter's Min and Max values. The Min and Max values are automatically updated with the selected parameter's defaults. You can also edit the Min and Max values to customize the parameter range for your needs using the **Edit/Select** knob.

Changes must be stored using the GSP's Store procedure. Consult your GSP documentation for more information about storing changes to presets.

### Assigning Parameters to the Expression Pedals

The Control 2 features two expression pedal controller options: the built-in Expression Pedal and an optional expression controller which can be connected to the rear panel of the Control 2. Assigning parameters to either expression controller involves the same process. To assign a parameter to either expression pedal controller, follow these steps:

1. From the Preset screen on the GSP, press the **Edit/Select** knob twice.
2. Turn the **Edit/Select** knob to highlight Expression Links and press the **Edit/Select** knob. The Edit Expression Links menu appears.
3. Scroll down and highlight an expression link that is not in use (NO CTRL NO LINK). Press the **Edit/Select** knob to select the expression link. The Linking menu appears.
4. Make sure Assign Controller is highlighted and press the **Edit/Select** knob.
5. To assign a parameter to be controlled by the Control 2's built-in Expression Pedal, turn the **Edit/Select** knob until <FC PDL1> appears.
6. To assign a parameter to be controlled by the Control 2's optional rear panel expression pedal, turn the Edit/Select knob until <FC PDL2> appears.
7. Press the **Edit/Select** knob. The Linking menu appears.
8. Scroll down and highlight LINKED TO NO LINK. Press the **Edit/Select** knob.
9. Turn the **Edit/Select** knob to select a parameter to assign to the **Expression Pedal** and press the **Edit/Select** knob.

The Min and Max values are automatically updated with the selected parameter's defaults. You can also edit the Min and Max values to customize the parameter range for your needs using the **Edit/Select** knob.

Changes must be stored using the GSP's Store procedure. Consult your GSP documentation for more information about storing changes to presets.

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