

# 5CH Bluetooth<sup>®</sup> Looper

User Manual



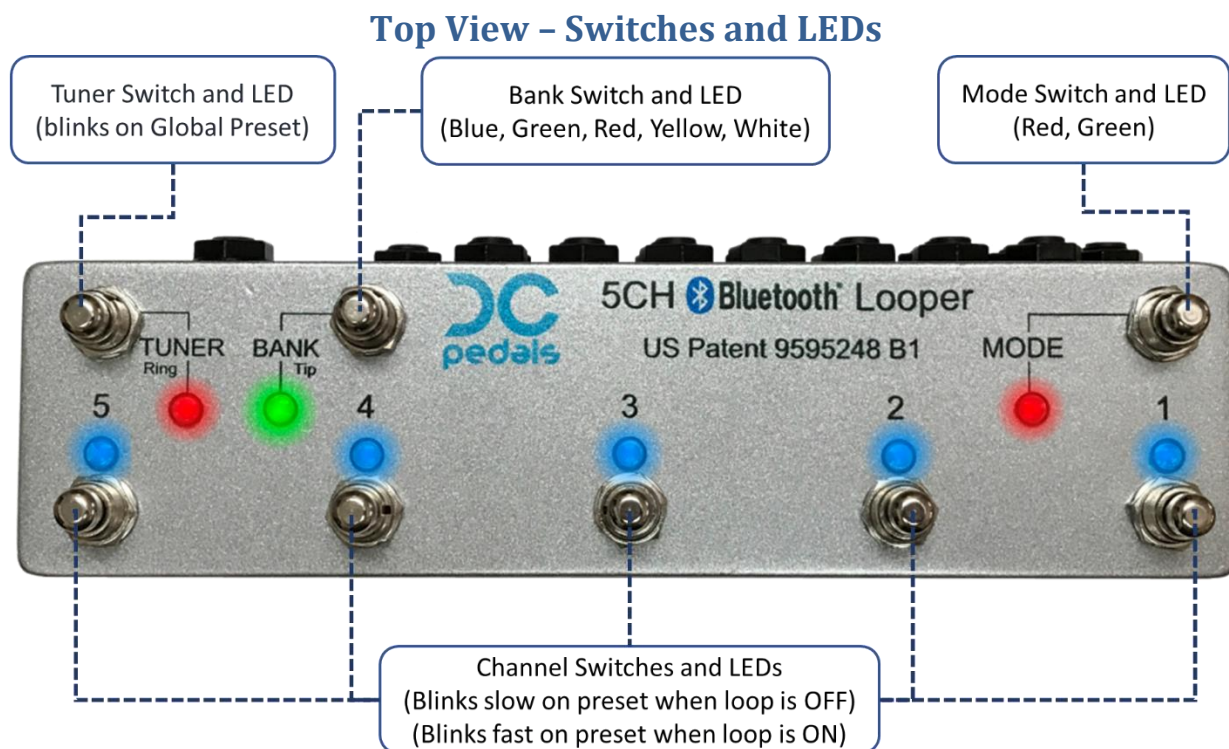
## DC Pedals™ 5-Channel Bluetooth Looper

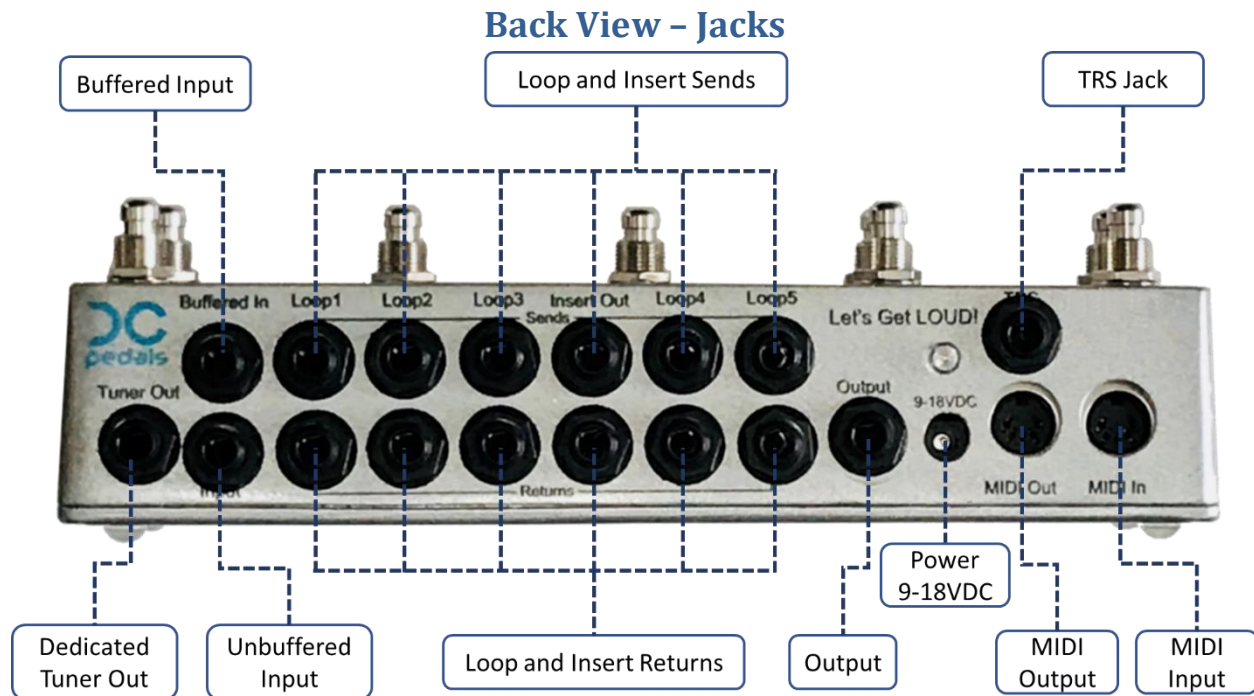
Our 5-Channel Bluetooth Looper is a microcontroller controlled programmable looper effects true-bypass switching system with five loops, 100 direct accessible presets, 100 MIDI accessible presets, MIDI input and MIDI output, and our patented Bluetooth wireless programming and control. Use your iOS or Android mobile device and our VirtualLooper™ app to control and program your looper in real-time. And use the app off-line to create and manage presets, then download to the looper seconds after setup. The Looper supports two operational modes, Live Mode and Preset Mode described in the next section of this document.

### Operation (Version 5.x Software)

The looper operates on 9-18 volts DC. After it completes power-up, it restores itself to how it was set when it last powered off. It operates in either of two modes described below (Live or Preset Mode). It also supports a Programming Mode for creating new presets, a Save Mode to save a preset, and a Configuration Mode. Configuration Mode is used to configure the global preset, MIDI input channel, MIDI output channel, MIDI PC messages, MIDI CC responses, MIDI through, audio mute, and TRS controls. Programming is accomplished using the footswitches and can be completed in seconds using just your feet. Programming and real-time control can also be done through the VirtualLooper™ mobile app available for Android and iOS.

Presets are arranged in banks and banks are arranged in folders. There are five presets accessible in each bank. The Bank switch increments the bank from Bank 1 to Bank 5, then back to Bank 1. Twenty-five presets are quickly accessible via the Bank and Channel switches. There are also four folders that can be used to organize your presets. Hold the Bank switch 2 seconds and the Looper enters a Folder Select state. The Looper will blink the currently selected folder LED and light solid the other LEDs, with LED 5 remaining OFF. Press a Channel switch (switches 1-4) to select a new folder. The Looper will quickly blink the new Folder LED. Now you have another 25 presets accessible via the Bank and Channel switches.





### Mode Switch:

Push and release the Mode switch to toggle the looper between Live and Preset Modes. Hold the Mode switch for 2 seconds to enter Programming Mode. While in Programming Mode hold the Mode switch for 2 seconds to enter Save Mode. See the Programming section to learn how to create and save presets. When switching between Live and Preset modes, the looper retains the current state of the loops and just changes the operation of the footswitches for the new mode. This feature enables you to “play out” of a preset and make real-time adjustments to your tone if the song flow or set changes. Then with a quick press of the Mode switch and a Channel switch and you are right back into the preset. This one-button Live Mode feature is available only in DC Pedals designed loopers.

### Bank Switch:

The Bank switch is active in both Live and Preset Modes but behaves differently in each mode. In Preset Mode, pressing the Bank switch will cycle through the five banks of presets. An RGB LED shows the active Bank. The color indicators are Blue (1), Green (2), Red (3), Yellow (4), and White (5). There are five Presets in each Bank.

To change the current Folder, hold the Bank switch for 2 seconds. Loop LEDs 1-4 will light and the currently selected folder will blink. Press Channel switch 1-4 to select a Folder. The corresponding LED will blink after the Folder is selected. Also, the corresponding Folder LED will blink each time the Looper is powered ON.

In Live Mode, pressing the Bank switch activities the TIP function on the TRS jack. The TRS functions can be latching or momentary.

### The Tuner Switch:

The Tuner switch is similar to the Bank switch in that it behaves differently in Preset and Live Modes. In Preset Mode, pressing the Tuner switch mutes the audio at both the input and output of the loops. This stops any stray audio from getting into your delays and reverbs and keeps your amp quiet. The audio is still sent through a buffer and to the Tuner-Out jack.

In Live Mode, pressing the Tuner switch activates the RING function on the TRS jack. The TRS functions can be latching or momentary.

### Channel Switches:

In Live Mode, the Channel switches toggle the corresponding loop on or off. In Preset Mode, the Channel switches recall the saved preset stored in that preset/bank/folder. In Save Mode the Channel switch will store the current setting (preset) into that preset, bank, and folder.

To access the TRS TIP function in Preset Mode, press switches 1 & 2 at the same time. LED 4 will blink to confirm the TIP action. To access the TRS RING function in Preset Mode, press switches 2 & 3 at the same time. LED 5 will blink to confirm the RING action.

### Live Mode:

When in Live Mode, the looper operates just like a traditional true-bypass looper. Each Channel switch toggles the corresponding loop on/off. The Mode LED is Green when the looper is in Live mode. The Bank switch activates the TRS TIP function and the Tuner switch activates the TRS RING function.

### Preset Mode:

When in Preset Mode, you can use any Channel switch to control any combination of loops. The Channel switches set the looper to a Preset. A Preset is simply a definition of active loops and TRS functions. No presets are created at the factory. It is important to know that the LEDs indicate which preset is active and which loops are active. After selecting a Preset, the LEDs will light solid for the loops that are ON. The LED associated with the selected Preset will blink fast if the loop is ON, or will blink slow if the loop is OFF. Note that the loops are wired in sequential order, meaning loop 1 feeds into loop 2 which feeds into loop 3, etc. Changing the order of the loops in a preset is not supported. We also include an Insert jack between Loops 3 and 4. This insert may be used many different ways, including using it to configure Loops 4 & 5 in amp effects loops.

### Programming Mode – Creating Presets:

Hold the Mode switch for 2 seconds to enter the Programming Mode. When in Programming Mode, the Mode LED will blink slow. The looper will operate like it is in Live Mode with each Channel switch toggling the corresponding loop. The Bank switch is active in Programming Mode and operates the same as in Preset mode except Folder selection. Changing Folders in Programming Mode is not supported so make sure you select the correct Folder prior to entering Programming Mode. Use the Channel switches to set the desired loops. Once you have the desired loops set, press and hold the Mode switch again for 2 seconds. The looper will enter Save Mode. The Mode LED will blink fast and the Channel LEDs will chase. If during Programming Mode you press the Mode switch but don't hold it, the looper will cancel the programming and go back to where it was before you entered Programming Mode.

### Save Mode – Saving Presets:

After the looper is in Programming Mode and you have the looper set to the desired preset, press and hold the Mode switch for 2 seconds to enter Save Mode. In Save Mode, the Mode LED will blink fast and the Channel LEDs will chase. If you want to save the preset to a new bank, press the Bank switch until the desired bank is shown by the Bank LED. (Changing Folders in Save Mode is not supported.) Then press and release any Channel switch to save the loops to that Preset/Bank. The LEDs will blink once to confirm the save, and the looper will return to Preset Mode with the saved preset active. Pressing the Mode switch while in Save Mode will cancel the Programming and the looper will return to the state before programming. The LEDs will blink three times if the save is cancelled.

### MIDI Program Change Messages:

By default, the looper sends a MIDI Program Change on the MIDI Output Channel every time a new preset is selected. The MIDI PC message contains the same preset number as the looper. Presets are sequential through the banks. Preset 1 in Bank 1 sends MIDI PC number 0. Preset 2 in Bank 1 sends MIDI PC number 1, and so on. Preset 1 in Bank 2 sends MIDI PC number 5 ... Preset 5 in Bank 5 in Folder 4 sends MIDI PC number 99. The Global Preset sends MIDI PC number 127. The looper can be configured to NOT send a MIDI PC message on certain presets. To access this option, see the Configuration section.

The looper responds to MIDI PC messages from other devices. Any MIDI PC message received on the MIDI Input Channel with a preset value of 0 through 99 will recall the corresponding looper preset (1-100). The Bank and Folder will be set automatically according to the received preset number. The looper will automatically be set to Preset Mode after receiving a MIDI PC message.

### MIDI Control Change Messages:

The Looper will respond to MIDI CC messages sent on the MIDI Input Channel. The Loops and TRS functions can be controlled as well as remote saving of a preset. See the table below for the CC IDs and responses. Response to MIDI CC messages can be turned off via the MIDI CC Receive configuration parameter in the Looper configuration pages. See the Configuration section for more information.

### Looper Configuration:

There are many configuration options to configure the Looper for your needs. The configuration pages are accessed during power-up. To access the configuration pages, hold the Mode switch during power-up. The Mode LED will toggle while the switch is held. Release the switch and the Looper will enter Configuration Mode. While in Configuration Mode, the Mode LED indicates the active configuration page. There are five configuration pages. Press the Mode switch to cycle through the five configuration pages.

MIDI CC Messages		
MIDI CC ID	Description	Values
70	Control Loop 1	0-63 Loop is OFF 64-127 Loop is ON
71	Control Loop 2	0-63 Loop is OFF 64-127 Loop is ON
72	Control Loop 3	0-63 Loop is OFF 64-127 Loop is ON
73	Control Loop 4	0-63 Loop is OFF 64-127 Loop is ON
74	Control Loop 5	0-63 Loop is OFF 64-127 Loop is ON
75	Control TRS TIP	0-63 TIP is OFF 64-127 TIP is ON
76	Control TRS RING	0-63 RING is OFF 64-127 RING is ON
77	Control Tuner	0-63 Tuner is OFF 64-127 Tuner is ON
78	Remote Save	0-100 Saves current setting to preset

## Configuration Page 1 – MIDI PC Messages



Configuration Page 1 - MIDI PC Flags	
Mode LED	Indicates Config Page - Green
Mode Switch	Press to advance Config Page Hold to save and restart
Bank LED	Indicates Bank
Bank Switch	Press to advance Bank Hold to select Folder
Channel LED 1	MIDI PC Flag for this preset ON = MIDI PC message will be sent OFF = MIDI PC will NOT be sent
Channel SW 1	Toggles MIDI PC Flag for this preset
Channel LED 2	MIDI PC Flag for this preset ON = MIDI PC message will be sent OFF = MIDI PC will NOT be sent
Channel SW 2	Toggles MIDI PC Flag for this preset
Channel LED 3	MIDI PC Flag for this preset ON = MIDI PC message will be sent OFF = MIDI PC will NOT be sent
Channel SW 3	Toggles MIDI PC Flag for this preset
Channel LED 4	MIDI PC Flag for this preset ON = MIDI PC message will be sent OFF = MIDI PC will NOT be sent
Channel SW 4	Toggles MIDI PC Flag for this preset
Channel LED 5	MIDI PC Flag for this preset ON = MIDI PC message will be sent OFF = MIDI PC will NOT be sent
Channel SW 5	Toggles MIDI PC Flag for this preset

## Configuration Page 2 – MIDI Configuration



Configuration Page 2 - TRS Mode, MIDI Through Enable, MIDI CC Receive Enable	
Mode LED	Indicates Config Page - Red
Mode Switch	Press to advance Config Page Hold to save and restart
Bank LED	OFF
Bank Switch	No action
Channel LED 1	TRS TIP function ON = Latching OFF = Momentary (100ms pulse)
Channel SW 1	Toggles TRS TIP function
Channel LED 2	TRS RING function ON = Latching OFF = Momentary (100ms pulse)
Channel SW 2	Toggles TRS RING function
Channel LED 3	Audio mute function ON = Mute ON when switching loops OFF = Mute OFF when switching loops
Channel SW 3	Toggles audio mute
Channel LED 4	MIDI Through Flag ON = MIDI Through enabled OFF = MIDI Through disabled
Channel SW 4	Toggles MIDI Through
Channel LED 5	MIDI CC Receive Flag ON = MIDI CC receive enabled OFF = MIDI CC receive disabled
Channel SW 5	Toggles MIDI CC Receive Flag

## Configuration Page 3 – Global Preset



Configuration Page 3 - Global Preset	
Mode LED	Indicates Config Page - Green + Red
Mode Switch	Press to advance Config Page Hold to save and restart
Bank LED	MIDI PC Flag for global preset ON = MIDI PC message will be sent OFF = MIDI PC will NOT be sent
Bank Switch	Toggles MIDI PC Flag for global preset
Channel LED 1	Loop 1
Channel SW 1	Toggles Loop 1
Channel LED 2	Loop 2
Channel SW 2	Toggles Loop 2
Channel LED 3	Loop 3
Channel SW 3	Toggles Loop 3
Channel LED 4	Loop 4
Channel SW 4	Toggles Loop 4
Channel LED 5	Loop 5
Channel SW 5	Toggles Loop 5



## Configuration Page 4 – MIDI Input Channel



Configuration Page 4 - MID Input Channel																																	
Mode LED	Indicates Config Page - slow blink																																
Mode Switch	Press to advance Config Page Hold to save and restart																																
Bank LED	OFF																																
Bank Switch	No action																																
Channel LED 1 Channel LED 2 Channel LED 3 Channel LED 4 Channel LED 5	<p>Binary MIDI Input Channel</p> <table border="0"> <tr> <td></td> <td>Channel 1</td> <td></td> <td>Channel 9</td> </tr> <tr> <td></td> <td>Channel 2</td> <td></td> <td>Channel 10</td> </tr> <tr> <td></td> <td>Channel 3</td> <td></td> <td>Channel 11</td> </tr> <tr> <td></td> <td>Channel 4</td> <td></td> <td>Channel 12</td> </tr> <tr> <td></td> <td>Channel 5</td> <td></td> <td>Channel 13</td> </tr> <tr> <td></td> <td>Channel 6</td> <td></td> <td>Channel 14</td> </tr> <tr> <td></td> <td>Channel 7</td> <td></td> <td>Channel 15</td> </tr> <tr> <td></td> <td>Channel 8</td> <td></td> <td>Channel 16</td> </tr> </table>		Channel 1		Channel 9		Channel 2		Channel 10		Channel 3		Channel 11		Channel 4		Channel 12		Channel 5		Channel 13		Channel 6		Channel 14		Channel 7		Channel 15		Channel 8		Channel 16
	Channel 1		Channel 9																														
	Channel 2		Channel 10																														
	Channel 3		Channel 11																														
	Channel 4		Channel 12																														
	Channel 5		Channel 13																														
	Channel 6		Channel 14																														
	Channel 7		Channel 15																														
	Channel 8		Channel 16																														
Channel SW 1	Toggles bit 1																																
Channel SW 2	Toggles bit 2																																
Channel SW 3	Toggles bit 3																																
Channel SW 4	Toggles bit 4																																
Channel SW 5	No action																																

# Configuration Page 5 – MIDI Output Channel



Configuration Page 5 - MID Output Channel				
Mode LED	Indicates Config Page - fast blink			
Mode Switch	Press to advance Config Page Hold to save and restart			
Bank LED	OFF			
Bank Switch	No action			
Channel LED 1	Binary MIDI Output Channel Channel 1	Channel 9		
Channel LED 2			Channel 2	Channel 10
Channel LED 3			Channel 3	Channel 11
Channel LED 4			Channel 4	Channel 12
Channel LED 5			Channel 5	Channel 13
Channel SW 1	Toggles bit 1	Channel 6	Channel 14	
Channel SW 2	Toggles bit 2	Channel 7	Channel 15	
Channel SW 3	Toggles bit 3	Channel 8	Channel 16	
Channel SW 4	Toggles bit 4			
Channel SW 5	No action			

### Factory Reset:

To restore the looper to factory settings, power OFF the looper. Then press and hold the Mode switch AND the Channel 1 switch and apply power. Make sure you hold both switches during power-up. The Mode LED will toggle until you release both switches. Release the switches and the Mode LED will toggle faster. Then press the Mode switch again to reset the looper. **WARNING:** All the user memory will be erased and set to factory settings, including the MIDI PC settings. The looper will automatically restart with factory settings. To cancel the factory reset, remove power and restart the looper normally.

**DC Pedals** is located in Florida and can be reached at [www.dcpedals.com](http://www.dcpedals.com). All DC Pedals products are designed and manufactured in the USA! Thanks for your business.