



JOYO PXL LIVE & PRO

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TUNER AND MUTE CONTROLS

When you are not in EDIT mode, step on the **MUTE** switch which will turn on the PXL-Live's **TUNER OUT** connection. Now your signal will be sent to the connected tuner but still go through to the amp and therefore be audible. If you now press **MUTE** again, **LOOP 1 OUT** and **LOOP 2 OUT** will both get muted so that you can silently tune your instrument without bothering anyone. The third time you press the **MUTE** switch the PXL-Live will resume normal function and reactive **LOOP 1 OUT** and **LOOP 2 OUT** again while at the same time cutting off the signal going to the tuner.

An interesting secondary function of this **MUTE** behavior can be its use for **BI-AMPING**. If you use two amplifiers you can use the PXL-Live and all the pedals you have connected to it with your primary amp and use the **TUNER OUT** to go to a secondary amp (maybe with its own pedal and switcher connected). In this case you would play through **AMP 1** when the **MUTE** switch is in neutral position. If you push it once, the signal will go to both amplifiers and you are actively Bi-amping. If you push it a second time, you are only playing through **AMP 2**. (In this case the signal will go DRY to the amp and not run through the effects that are connected to the PXL-Live) If you push **MUTE** a third time you will be back to **AMP 1**. This is a nice side effect of the Mute function which opens up interesting options for a Live setup.

SWITCHING BANKS

When you are not in EDIT mode, stepping on **Bank +/-** will change to the next or previous banks. You have 8 banks with four presets each (A, B, C, D) available. Changing the **BANK** will not immediately change your current preset. Only **AFTER** hitting one of the preset switches (A, B, C, D) will the new preset be in effect. The display will already show you the new bank number. The LEDs on the preset switches begin to flash until you have selected the new preset on the selected bank.

EDITING BANKS

When you are not in **EDIT** mode already and with a preset selected (NOT bypassed), press and hold **MUTE** for more than 1 second to enter **EDIT** mode. This will allow you to edit the preset you have currently selected. You know that you have entered **EDIT** mode when the display shows **EH**, which is the first available menu item.

Use **Bank +/-** to select what you want to edit. The A/B/C/D switches are used to making the changes.

Click **MUTE** shortly to exit EDITING mode without saving.

Hold **MUTE** for more than 1 second to exit EDITING mode and **SAVE** your settings.

When editing MIDI functions you use **Bank +/-** to navigate to the MIDI setup (MA and MB) and then use the **A and B** switches to navigate the sub-menu. Values within this menu will be changed with **C and D**. To exit the value entry within the MIDI menus click the **MUTE** button shortly, this will bring you back to the MIDI menu.

THE MAIN MENU OPTIONS ARE:

- EH** Editing of the HIGH Loops, also known as Loop 2, or, if you are counting from 1-8, EH will edit loops 5-8.
- EL** Editing of the LOW Loops, also known as Loop 1, or, Loops 1-4 (from right to left on the PXL-Live)
- ET** Editing of the behavior of the two trigger outputs when selecting a preset.
- EB** Editing of the behavior of the two trigger outputs when switching the selected preset into BYPASS
- EM** Edits Trigger Mode: Switch between MOMENTARY or LATCH mode. Which one applies to your depends on the equipment you are trying to switch.

Consult the manual of the gear you want to switch.

Or just use the „Try and Error“ method. If one does not work, try the other.

- EP** Selects the polarity of the trigger. Is the light up trigger LED **ON** or is it **OFF**? This also depends on how your connected equipment works. Play around with this setting if your experience problems.
- MA** Under MA you can program two individual MIDI messages that are sent out when the preset is selected. Please consult the MIDI section of this manual for more information.
- MB** Under MB you can program two individual MIDI messages that are sent out when the preset is switched to BYPASS. You might want to send program change message to your amp when putting the PXL-Live into Bypass so that you can play a distorted rhythm sound without any effects and switch to a clean sound with effects ON when engaging the preset again.

EDITING LOOP COMBINATIONS

After entering **EDIT** mode by holding **MUTE** for more an 1 second, use the **Bank +/-** switches to navigate to **EH** if you want to ad an effects from the higher loops (LOOP 2: 1-4 or Loops 5-8 if counted from right to left) or **EL** if you want to add effects from the lower loops (LOOPS 1: 1-4 or Loops 1-4 if counted from right to left).

If in **EL** setup, the A/B/C/D switches will turn ON (or OFF) Loops 4/3/2/1 respectively.
Loop 1

A: L4 B: L3 C:L2 D:L1

If in **EH** setup, the A/B/C/D switches will turn ON (or OFF) Loops 8/7/6/5 respectively.
Loop 2

A: L4 (8) B: L3 (7) C:L2 (6) D:L1 (5)

After you have selected the loops you want, you can **EXIT** Edit mode by holding the **MUTE** switch again for longer than 1 second. If you wish to exit without saving and revert back to your preset as it was before, just click the **MUTE** switch shortly.

EDITING TRIGGERS

When editing triggers it is recommended that you first figure out the correct **POLARITY** and the right **TRIGGER MODE** that works best with your equipment. Only then can you easily assign trigger states to all your presets.

POLARITY and **TRIGGER MODE** are global for the PXL-Live, so you only have to set them up once and they will be the same for all presets.

TRIGGER POLARITY EDITING

Hold **MUTE** for longer than 1 second to enter EDIT mode and use **Bank +/-** to navigate to **EP**.

Now you can use switches **A and B** to change the polarity of Triggers **T1 and T2**.

A: T1 B: T2

The LEDs on the Triggers will indicate their ON/OFF status which corresponds to their polarity. (For example: If your Amplifier has a clean and a distorted channel, TRIGGER ON can be distorted **OR** TRIGGER ON can be the clean channel.) Adjust the polarity depending on your needs.

Use **Bank +/-** to navigate to the next menu item to edit it, hold **MUTE** to save or click **MUTE** to exit without saving.

TRIGGER MODE EDITING

Hold **MUTE** for longer than 1 second to enter EDIT mode and use **Bank +/-** to navigate to **EM**.

Now you can use switches **A and B** to change the mode of Triggers **T1 and T2**.

A: T1 B: T2

LED **ON** represents **Momentary Mode**, which means that the trigger send a short trigger message (like it is telling your gear TURN ON or TURN OFF)

LED **OFF** represents **Latch** mode, which means that the trigger holds the on or off message, like keeping your foot on the switch. (like it is telling your gear STAY ON or STAY OFF)

Which one works best for your switching needs depends on your equipment. Consult the manual of your gear or try both options and see what works best.

Use **Bank +/-** to navigate to the next menu item to edit it, hold **MUTE** to save or click **MUTE** to exit without saving.

TRIGGER ACTIONS

Hold **MUTE** for longer than 1 second to enter EDIT mode and use **Bank +/-** to navigate to **ET** (shown as Et).

Now you can use switches **A and B** to change the state of Triggers **T1 and T2**.

A: T1 B: T2

Pay attention to the Trigger LEDs to keep track of your changes.

This way, you can switch a series of pedals, which are connected to the loops (8 in front of the amp OR 4 in front and 4 in the FX loop), and your amp (or other switchable device, like the Joyo D-Seed Dual Channel Digital Delay) at the same time.

For example: You could have your amp on the clean channel (e.g. Trigger 1 OFF) with an overdrive pedal, chorus and some delay on PRESET A on Bank 1 and then switch to PRESET B, which switches to a phaser and changes your amp to the distorted channel. All this can be accomplished with just one press of a footswitch.

Use **Bank +/-** to navigate to the next menu item to edit it, hold **MUTE** to save or click **MUTE** to exit without saving.

BYPASSED TRIGGER ACTIONS

Hold **MUTE** for longer than 1 second to enter EDIT mode and use **Bank +/-** to navigate to **EB** (shown as Eb).

Now you can use switches **A and B** to change the state of Triggers **T1 and T2**.

A: T1 B: T2

Pay attention to the Trigger LEDs to keep track of your changes.

The use of this mode is to be able to BYPASS all of your pedals (connected to the loops) and at the same time switch your amp (or other switchable device).

For example: You are on PRESET C on Bank 2, which you set up to be a nice clean sound, using the clean channel of your amp, with a compressor, clean boost, chorus and reverb (4 pedals). Now you want to switch easily to an overdriven rhythm sound, using the second channel on your amp, but without any effects. In this case you program a BYPASSED TRIGGER ACTION to the same preset. (preset C on bank 2). Now you just click the switch C on bank 2 **AGAIN**, putting it into bypass and therefore bypassing all your pedals while at the same time switching the channel on your amplifier.

Use **Bank +/-** to navigate to the next menu item to edit it, hold **MUTE** to save or click **MUTE** to exit without saving.

MIDI FUNCTIONS PXL LIVE

A WORD ABOUT MIDI:

The acronym MIDI stands for **MUSICAL INSTRUMENT DIGITAL INTERFACE** and was invented in 1983 to enable synthesizers to communicate with each other. Since then the MIDI language really hasn't changed and is still a very effective way to have devices communicate with each other. MIDI has many more uses than just sending messages between keyboards and guitar gear. Mix Consoles use MIDI to store and control automation. Lighting systems also communicate via MIDI as well as many other devices that have adopted this language.

MIDI is an 8 bit language, which by today's standards is antiquated, but still serves its purpose.

There is a variety of possible MIDI messages and the PXL-Live is capable of sending 2 kinds of those.

PROGRAM CHANGE (PC) and Continuous Controller (CC)

A PROGRAM CHANGE simply lets your receiving device know which program to change to. Since MIDI is using 8 bits and the first bit is used for other information, this leaves 7 bits of possible values which adds up to 0-127.

Many devices count their programs (and other values) from 0-127. **The PXL-Live counts from 1-128**, so be aware of this fact when choosing your program change number, you might have to add one more in order to get the correct patch/program/preset.

BE AWARE:

Numbers higher than 99 get indicated by a dot between the two digits.

So 100 would be 0.0 / 112 would be 1.2 / 128 would be 2.8 !!! Get it, pretty simple, right!

A CONTINUOUS CONTROLLER could control and give values to a number of different things: Every company can define which CC messages their device can receive. You probably know those little joysticks or wheels on keyboards. Those are sending CC messages for PITCH and MODULATION. When you are changing the volume on a synthesizer sound, you are sending a CC message. In our case, you can send a CC message to an amplifier to change the level of a certain channel, as long as the amp is set up to receive and react to that message. You can use it to change the delay time on a MIDI capable delay or even to control the Looper functions (Rec/Overdub, Play, Stop) on delays that have continuous controllers mapped to those functions.

the possibilities are endless and are only limited by the type of gear you have and by how creative you want to get with your PXL-Live.

*A **Program Change** message consists of two words:*

The first MIDI word tells your device a program change is coming and the second word tells it WHICH program to change to. (This is why the n1/n2 parameter is not used for program change messages)

*A **Continuous Controller** message consists of three words:*

The first MIDI word tells your device that a continuous controller is coming, the second one tells it WHICH kind of controller message is coming and the third one gives it the value between 0-127 (PXL-Live shows 1-128)

MIDI SETUP

In the PXL-Live's MIDI setup you have the menu options **MA** and **MB** (showing the display as **NA** and **NB**, the letter n is displayed as a lower case letter, the upper case N is supposed to mean an M).

MA sends 2 separate MIDI messages when engaging the preset.

MB sends 2 separate MIDI messages when putting the preset in BYPASS

For either **MA** or **MB** the menu options E1/A1/C1/n1 are controlling the FIRST message that is being sent, which can be either a program change or a continuous controller. E2/A2/C2/n2 set up the second message which can also be a PC or CC.

MIDI CHANNELS

You could send 2 program changes to 2 separate devices on different channels, for example. MIDI cables can carry up to 16 different MIDI streams on 16 different channels. Simply set your receiving device to the correct channel and it will only react to MIDI messages that are being sent on that channel and ignore everything else that might also be carried on the same cable. This way you can DAISY-CHAIN several devices and each device can be talked to independently.

MA SETUP

(MB is exactly the same, but those messages get sent out when you put the preset into bypass)

Hold **MUTE** for longer than 1 second to enter EDIT mode and use **Bank +/-** to navigate to **MA** (shown as NA).

Now you can use switches **A and B** to change between E1/A1/C1/n1 and E2/A2/C2/n2.

Here is an overview of what those letters stand for:

- E** Changes between OFF/PC/CC
 - OFF sends no MIDI message at all
 - PC sends a PROGRAM CHANGE message
 - CC sends a CONTINUOUS CONTROLLER message
- A** The A parameter simply selects the MIDI Channel on which to send the message. Make sure your receiving device is also set to receive on that channel.
- C** When in PC mode, the C parameter will send the PROGRAM NUMBER. When in CC mode, the C parameter will send the CONTINUOUS CONTROLLER NUMBER

Consult your devices midi implementation chart for a list of controller numbers.

Make sure to add 1 in case your device starts counting at 0.

Remember, the PXL-Live counts 1-128

BE AWARE: Numbers higher than 99 get indicated by a dot between the two digits. So 100 would be 0.0 / 112 would be 1.2 / 128 would be 2.8 !!! Get it, pretty simple, right!

- n** In PC mode this parameter is blank. You don't need it for program changes. In CC mode this parameter sends the CC value.

Make sure to add 1 in case your device starts counting at 0.

Remember, the PXL-Live counts 1-128

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So here is how it works:

PROGRAM CHANGE

Let's say you want to send a program change to your digital delay (which starts counting at 0 and goes to 127).

1. Hold **MUTE** for longer than 1 second
2. Push **Bank +/-** until you get to **MA** (looks like NA)
3. Now use **A and B** to navigate around the MIDI menu. Navigate to **E1**.
4. Use **C and D** to change the **E1** parameter. Change it to **PC**
5. Click **MUTE** to go back one level on the menu
6. Hit **B** to go to the **A1** menu item.
7. Use **C and D** to select the MIDI channel from 1-16, depending on which channel you set on your delay.
8. Click **MUTE** to go back one level on the menu
9. Hit **B** to go to the **C1** menu item.
10. Here you set the desired program change. Look on your delay to find out which program you want. If your delay shows 41, then you use **C and D** to select 42 (because the PXL-Live counts 1-128 and therefore you have to add 1).
11. Hold **MUTE** for longer than 1 second to save your settings.

You do not need to set up the n1 parameter because it is not being used for Program Changes.

If you want to send a second program change to another effect or amp, simply repeat these steps but use the **E2/A2/C2** settings which stand for the second MIDI message.

CONTINUOUS CONTROLLER:

Let's assume in addition to switching your delay to program 41, which we just did, we also want to tell it to change the MIX parameter to 100% so that we only hear the delayed signal.

For this, we have to consult the MIDI IMPLEMENTATION CHART (which could also be called MIDI SPECIFICATION) of the delay's manual.

On that page we have to locate the MIX parameter and see what Continuous Controller Number the manufacturer has assigned to it.

In this example we have a MIX parameter with the CONTINUOUS CONTROLLER number 14. Since our manufacturer counts in values from 0-127 we again have to add 1 in order to adjust for the fact that the PXL-Live counts 1-128.

So our desired CC number is 15 and we want a value of 128 (2.8 on the display) to set it all the way to fully wet with only the delay being audible.

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Let's do it:

1. Hold **MUTE** for longer than 1 second
2. Push **Bank +/-** until you get to **MA** (looks like NA)
3. Now use **A and B** to navigate around the MIDI menu. Navigate to **E2**.
4. Use **C and D** to change the **E2** parameter. Change it to **CC**
5. Click **MUTE** to go back one level on the menu
6. Hit **B** to go to the **A2** menu item.
7. Use **C and D** to select the MIDI channel from 1-16, depending on which channel you set on your delay.
(Since we are sending to the same device that we previously sent the program change to, it should be the same channel as **A1**.)
8. Click **MUTE** to go back one level on the menu
9. Hit **B** to go to the **C2** menu item.
10. Here you set the desired CC number. We already figured out that we need to set it to 15 if we want to control the MIX on the delay. You use **C and D** to select 15
11. Click **MUTE** to go back one level on the menu
12. Hit **B** to go to the **n2** menu item.
13. You use **C and D** to enter the value of 128 to fully set the MIX to wet. The display needs to read 2.8
The decimal point indicates that we are seeing numbers over 100. Instead of going through all the numbers you can just hit **C** and go backwards past 0 to get to 128 faster. Alternatively, by holding down **C** or **D** you can scroll through the values more quickly.
14. Hold **MUTE** for longer than 1 second to save your settings.

NOW...

if you hit your preset, two MIDI messages will be sent:

A Program Change switching your delay to patch 41 (set with E1/A1/C1) and a Continuous Controller going to the same delay changing the Mix parameter to be on its maximum value of 127 (set with E2/A2/C2/n2)

Don't forget to activate the Loop the delay is in or you won't be able to hear it.

This is obviously only one of many many possible things you can do with PC and CC messages. Study the manual of your MIDI controllable devices to see what else you can control remotely and use within a PRESET on the PXL-Live.