Multiverse

Pedal Guide

Version 1.0 - Release

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Revision History

v1.0 - Initial release

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Powering Multiverse and Getting Started

Multiverse can be powered using either the USB port or the DC jack located on the right side of the pedal. When using a USB cable for power, Multiverse can be powered directly from a standard USB port on your computer using the included USB cable, or from a USB charger.

When you power the unit, after a brief delay of a few seconds, the screen will turn on and the first audio Preset loads. Plug in the audio jacks to your audio source (instrument) and output (amp) to begin playing.

Audio Jacks

The pedal has two stereo audio jacks labeled 'In' for Input and 'Out' for Output. The jacks accept ¼ inch audio cables. Both input and output jacks are TRS stereo. For mono operation, use standard TS cables. For Stereo operation, use TRS cables.

Multiverse Controls

Gain and Level knobs

The pedal has two (2) dedicated control knobs for the audio input and output. The **Level** knob is used to adjust the output volume of the pedal. The **Gain** knob is used to adjust the input (or instrument) signal coming into the pedal's digital processing. If the input audio is too loud it may cause the unit to clip. If clipping is detected, the pedal LEDs will begin to blink in unison. Lower the gain to below the level where you begin to experience clipping when playing aggressively.

Pro Tip: you can also monitor your input signal level by looking at the input level meter for the first effect in your signal chain. See the **Multiverse Designer User Guide** for details.

Encoder Knobs

The four (4) **Encoder Knobs** are individually labeled **A**,**B**,**C**, and **D**. Each encoder can be assigned to control effect parameters or help you navigate the pedal's menus. Each encoder

knob can function also as a pushbutton switch by pressing the knob down and can be assigned to control effect switches just like the stomp switches.

Stomp Switches

The two (2) Stomp switches labeled **S1** and **S2** are used to navigate presets when using **Preset Navigation** mode, or are individually assigned to toggle switchable effect parameters in **Effect Control** mode.

Multiverse Modes & Pedal Navigation

Press the **C+D** knob simultaneously to toggle the unit between the two primary operating modes: **Preset Navigation** and **Effect Control**. The OLED screen displays the name of the mode being used at the top of the display.

The default mode of the pedal at power-up is determined by the number of presets in the pedal memory. If there is only one preset, the default mode is **Effect Control**. If there is more than one preset, the default mode is **Preset Navigation**.

Preset Navigation Mode

When using this mode, the OLED screen displays the name of the active audio Preset. Scroll through Presets using the Stomp switches to navigate your preset sounds. Press the S2 Stomp switch (right) to advance down the list of Patches. Press the S1 Stomp switch (left) to return up through the list of Presets. The name of the Preset you are using will appear on the screen when you cycle through the list. In Preset Navigation Mode, the **A** or **D** knob can also be turned to navigate through the list of audio Presets.

Effect Control Mode

Switching to **Effect Control Mode** enables all of the assigned hardware controls (see **Multiverse Designer User Guide for details**) in the Preset you are currently using. As you use pedal controls, the OLED displays the name of the Effect you are changing in the middle of the screen and provides the name of the parameter and its value at the bottom of the screen.

Use the **A**,**B**,**C**,**D Encoder Knobs**, **Encoder Push-Buttons**, **S1**and **S2' Stomp Switches** and **EXP Expression** port to control any effect parameter assigned to hardware controls from the audio effects in your Preset. The function of each control is configured in the **Multiverse Designer** software.

System Menu (press A+B together)

Press the **A**+**B** knob simultaneously to enter/ exit the pedal menu. Navigate the menu by turning either the **A** or **D** knob one click at a time to view options, press the **A** or **D** knob to **select/ advance** in the menu.

Save Preset; If you make changes to a Preset and want to save them, select **Save Preset**, then scroll to select yes/no.

EFX Edit lets you change any effect parameter in any effect, even ones that were not mapped to an encoder or switch. In this menu, use **A** or **D** to navigate the options. Press the encoder pushbutton to make a selection. In order to change an effect control value using this method, use the encoder to first find and select the effect first, then the control, then finally rotate **B** or **C** to change its value.

Scrolling through the System Menu also allows you to

- View memory usage
- View CPU usage
- View Temperature monitoring
- Access Expression Pedal Calibration menu (see next section for details)

Expression Port 'EXP'

The **Dual-Expression** port accepts standard ¼" expression pedals which can be assigned to any effect control. The dual port can accept either expression pedals that place the wiper control on the Tip, or the Ring of the ¼". The tip and ring expressions act independently so you can also use two individual expression pedals with appropriate TRS to dual-TS splitter cable (not included).

Calibrating Your Expression Pedal

Enter the **System Menu** (press **A**+**B**), then scroll through the options rotating **A** or **D** and select (push the encoder button) either **EXP-T Calib** if using the Tip control or **EXP-R Calib** if using the RING**.** The screen will instruct you to "Put HEEL down". Set the minimum value for the expression pedal, then set this value by selecting with **A** or **D**. The pedal will store the value, then instruct you to "Put TOE down" to set the expression maximum value.

LED Indicator Lights

Indicator lights are generally used to indicate whether an effect is on or off (note: the EFX designer determines what state is tied to ON and what is OFF). Each of the two LEDs can be assigned to indicate the status of any effect switch in a given Preset.

Internal Gain Switch

The switch has two settings, 0db and +14 dB. The switch is factory set to +14dB. The 0dB can be used if input clipping is occurring due to line-level sources, very hot pickups, etc.

WARNING: Do not open the Multiverse pedal back plate while power is being supplied. Only use a correctly fitting Philips head screwdriver to open the back plate. Avoid touching the inner electronics of the pedal. Wear an anti-static wristband if available.

The switch is accessed by removing the backplate and is mounted to the circuit board near the top of the unit by the audio jacks.

Software Guides

Available at: aviateaudio.com/pages/multiverse-guides

Multiverse Designer Quickstart Guide, Effect Creator Quickstart Guide,
Multiverse Designer User Guide, Effect Creator User Guide, Multiverse Developers Guide

Pedal Specifications

- Beyond Black with matte finish
- 1.3" OLED Display
- Four programmable rotary encoders w/ switch
- Two programmable stomp switches
- Two assignable LEDs
- 2x Expression inputs via TRS connector
- Dedicated input Gain control and output Volume controls
- MIDI input for control using ⅛" TRS MIDI Type-A cable.
- Power can be provided either by the DC Power Input (5V to 9V) or the USB-C port
- USB C port with programming interface and audio interface
- Stereo 1/4" TRS audio Input & Output
- Stereo CODEC, 48Khz
- Cortex M7 @ 600 MHz
- 1 MByte RAM
- 8 MByte external SRAM

Power Supply Specification

9V output, center-negative polarity, 250 mA minimum current, 2.1mm ID, 5.5mm OD

Appendix

MIDI Input Pinout

The Multiverse uses a ⅛" TRS jack to receive MIDI inputs. The configuration of the jack is compatible with the official MIDI specification, also known as Type-A. Other configurations will not work. Please ensure any MIDI cable or adapter corresponds to the pinout diagram below.