#### EU Directives on the Protection of the Environment

**RoHS** This product is compliant with the EU Directive 2002/95/EG for the Restriction of the use of Certain Hazardous Substances in Electrical and Electronic Equipment. No lead (Pb) cadmium (Cd), mercury (Hg), hexavalent chromium (Cr + 6), PBB or PBDE is intentionally added to this device. Any traces of impurities of these substances contained in the parts are below the RoHS specified threshold levels.

**REACh** This product is compliant with the European Union Directive EC1907/206 and contains none or less than 0.1% of the chemicals listed as hazardous chemicals in the REACh regulation.

**WEEE** As with the disposal of all old electrical and electronic equipment, this product is not to be treated as regular household waste. Instead it shall be handed over to the applicable collection point for recycling of electrical and electronic equipment.

**C** This product complies with the European Union Council Directives and Standards relating to electromagnetic compatibility EMC Directive (2006/95/EC) and the Low Voltage Directive (2004/108/EC). EMC compliance test report: EMC – 130930/1

#### Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference;
- (2) This device must accept any interference received, including interference that may cause undesired operation.

#### Warranty

ONE YEAR LIMITED WARRANTY. PROOF OF PURCHASE REQUIRED.

The manufacturer warrants that the unit will remain free from defects in materials and workmanship for one (1) year from date of purchase. This warranty applies only to the original purchaser and is non-transferable. This warranty does not cover damage resulting from accident, misuse, abuse, alteration, or the use of incorrect current or voltage. Should the unit become defective within warranty period, the manufacturer will repair it or replace it, free of charge. After the warranty period has expired, the manufacturer will repair a defective unit in exchange for a fee. **WARNING:** *Never* operate the Bank dial by foot; it must be operated *by hand only*. Damage to the Bank dial caused by improper use is not covered by the warranty.

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# Analog Modeling MIDI Synthesizer

for bass, guitar, keyboard and other instruments

#### **Quick-Start Guide Version 1.00**

Panda-Audio Ltd Hungary https://panda-audio.com

#### Introduction

The Future Impact V4 (FI4) will let you play amazing and authentic synth lines from your bass, guitar, keyboard or practically any other instrument. It features 99 onboard sounds that you can quickly shape to your taste. (Many more are available via the Editor Suite software.) You can use the pedal to simultaneously control a 1V/Octave analog synthesizer. It also functions as a tuner.

## Setting up the Future Impact V4

Connect your bass/guitar to the INPUT socket; connect the OUTPUT socket to an amplifier. Connect a 9V stabilized, 200mA (minimum), center-negative, Roland/Boss-type power supply to the DC 9V socket. The power supply must match the mains voltage and connector requirements of your country. (A power supply is not included.)

Press the ON/OFF footswitch (right) to turn the FI4 on - the ON LED will light up. Adjust the INPUT LEVEL dial so that the red LED lights up briefly only when your bass/guitar is played at its loudest; adjust the OUTPUT LEVEL dial to your needs.

Note: As the FI4 has true bypass switching, the level display will only work when the effect is ON.

## **Operating and Playing the Future Impact V4**

The FI4 has 99 sounds (programs) distributed across 10 banks: bank 0 has 9 sounds, all other banks have 10. Step up through the banks by pressing the EDIT/BANK UP dial (by hand only). Press and hold this dial and turn it to quickly move up or down to any bank.

Sounds are selected with the PROGRAM footswitch. Press to move up; double-press to move down. Hold down the footswitch after pressing or double-pressing to scroll. Bank borders are ignored when using the PROGRAM footswitch. 99 wraps around to 01 and vice versa.

Although the synthesizer in the FI4 accurately tracks over the entire range of 24-fret, 6-string bass and guitar, in order to function correctly, it requires an input of *cleanly-played <u>monophonic</u>* notes. If you play chords or use slapping or tapping techniques, then this can result in glitching.

Important: Please select the appropriate Instrument Mode in the Global Menu (see below).

To access the Tuner, hold ON/OFF for 0.8 seconds; press it again to exit (see User Guide for details).

## **Editing the Sounds and the Playing Response**

You can edit nine *per-program* sound parameters directly on the pedal. There are also two *global* parameters which affect playing response. Parameters have a maximum adjustment range of -64 to 63 (though occasionally this is smaller) and have a default value of 0. Select a parameter using the PARAMETER dial; turn the EDIT dial to see and edit its value. Edits to the two global parameters are saved automatically. Editing a sound parameter causes an immediate audible change and a blinking decimal point indicates an unsaved edit; press the EDIT dial to save. Unsaved edits will be lost when adjusting a global parameter, selecting a new program, pressing ON/OFF, or powering off.

Note: At startup, the FI4 automatically loads whichever program you last saved using the EDIT dial. You can thus <u>use this function to choose the startup sound.</u>

# **Description of the Parameters**

**NOTE OFF LEVEL (global)**: Volume threshold of the input signal below which the synth stops sounding. Set low to increase sustain. Set high to allow better articulation of staccato notes.

**NOTE ON LEVEL (global)**: Volume threshold of input signal above which the synth sounds. Set low if low-volume notes don't trigger the synth. Set high if double-triggering occurs.

**ATTACK**: Length of the attack stage of the filter AD/ADSR envelope. Set high to make the filter take longer to open after a note is played.

**DECAY:** Length of the decay stage of the filter AD/ADSR envelope. Set high to make the filter take longer to close again after it has opened.

ENVELOPE DEPTH: How much the filter opens in response to the filter AD/ADSR envelope.

DYNAMICS: How much the filter opens in response to playing dynamics.

**CUTOFF:** Cutoff frequency of the filter. Set low for a dark sound; set high for a bright sound.

**RESONANCE:** Boosts the frequencies around the filter cutoff frequency. Set low for a flat, wide peak; set high for a narrow, sharp, "synthy" peak.

BALANCE: Mix control for dry and synth signals. Set to maximum to mute dry signal entirely.

LEVEL: Overall output level of the sound.

**EFFECTS:** Control for the amount of chorus, delay, overdrive or tilt-EQ applied to the sound.

#### Global Menu Settings (abridged – see User Guide for full list)

Press and hold the left footswitch while powering on. Hold until **GLb** disappears. Turn the PARAMETER dial to "Note Off Level" to show the menu item's name; turn the dial to any other position to show its value. Adjust the value by turning the EDIT dial. Press the left footswitch again to move to the next menu item and edit it as before. When you have finished editing, power cycle for the changes to take effect.

**INSTRUMENT MODE ("INS"):** To trigger the FI4's analog modeling synthesizer\* via audio input from any pitched instrument, select **bSS** (Bass) (default) or **Gtr** (Guitar). If your instrument is neither of these, choose whichever option best fits its pitch range. (**SPL** (Split) is a variant of Bass mode and is explained in the User Guide.) To trigger via MIDI, select **Snt** (Synth) or **EUI** (EWI). In any Instrument Mode you can also trigger an external analog synth via the 1V/Octave CV and Gate outputs using an optional adapter cable (see User Guide for details). (\*More synthesizer models and features to come in free future updates.)

**RESET ALL ("rS"):** Change to **1** to *immediately* reset all Global Menu and PARAMETER dial settings to their default values. The startup program will be reset to 01.

For the User Guide, firmware updates and Editor Suite software, please visit https://panda-audio.com/futureimpact/ or www.pandamidi.com/support/