I’m currently rewriting the manual to include the new Beebo modules! If you’re ever confused by anything or need help please contact me. This manual is a compliment to the videos. Please watch the videos at https://www.youtube.com/channel/UCwQ9E6imYd0qFPMEuEZjcdw

Manual is currently a work in progress!
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1 GETTING STARTED

1.1 POWER

The first thing to do is power the pedal. It's 9V center negative and requires 500mA. After that it'll start up. Start up time is currently a bit long, so don't panic if nothing is happening for a few seconds.

Once Digit / Beebo has started up we're at the main screen, with the default preset loaded. From here we can add modules, change the settings of existing modules, connect modules or load a preset. This leads to the question, what is a module?

1.2 MODULES

Modules are the basic blocks you connect. Think of them as individual effect pedals on a pedal board that you place and connect. There are some modules that process audio, and some modules that you can use to control other modules. The ability to control modules is the powerful modular / eurorack style workflow that differentiates Digit / Beebo from many other systems.

1.3 ADD A MODULE

To start, we'll add a delay to the default preset. To do this, tap plus and choose delay.
The new delay will appear on the screen and you can now drag it to a comfortable spot. You can drag any module at any time to move it.

To start I recommend tapping the help button (the ? mark) which will turn on the extra help labels.

**1.4 CONNECT A MODULE**

You'll now want to connect up the delay. Hold input 1, then with another finger tap the delay you've added.
This is just the same as connecting up pedals on a pedal board, but you can split and merge signals easily. You choose a source and then a module to connect to. So now hold delay 1 and then tap output 1 to connect them. If you're connecting things with multiple inputs or outputs a screen will appear where you can select which to use.

1.5 CHANGE SETTINGS

We can now change the settings of the delay. Tap on it to get up the controls. Many modules have extra controls in the side menus.
**1.6 KNOBS**

Once you touch any slider to change it, it automatically maps to the knobs. The right knob changes the value a lot (coarse) and the left by a little (fine).

**1.7 PRESETS**

To save or load a preset tap the floppy disk icon. You'll also see a set list option. This is what order you move through the presets in your set list when pressing both center and right or center and left foot switches together.

**1.8 FOOT SWITCHES**

By default, the right most foot switch is bypass and the two others don't do anything. Foot switches can act as tempo sources or as control sources. To connect a foot switch to something, first tap add (+) and then select foot switch A or B. A is the left one, B is the center, C is the right.
Now tap the foot switch module you’ve added and then tap connect. You can now connect it to things you want to control. There are two outputs, the tap tempo and its value. Value is if it’s up or pressed down. To connect tap tempo from the foot switch, hold the foot switch and tap the delay. Then choose the BPM out.
1.9 LFO / CONTROL SIGNALS

As you saw with foot switches, one module can control another. If we now add a low frequency oscillator (LFO) we can use that to control other settings on the delay. Add the LFO then hold it and tap the delay. Then choose warp in the screen that appears.

Control signals are coloured green.
The effect will be quite strong, so if we want to reduce we can tap on the LFO and reduce the level. A uni polar LFO will only got from 0-1 (positive) but if you set that to zero it’ll go negative and positive.

We can also add other modules in between such as the attenuverter that act on the control signals. We can invert the phase or reduce the level with this as well, in case we want the same LFO to control two different things at different amounts or phase.
The attenuverter attenuates and/or inverts a signal. It has two inputs which can be either be controlled by the sliders or by a control input. You can attenuate / invert one control signal with another allowing you ring mod / AM style control possibilities.

1.10 FIRMWARE UPDATE

If you currently have version 1.something (eg 1.7) firmware installed (check in the setting menu) get all the packages in the 'upgrade_from_1' folder from here and put them on a usb flash drive. Tap upgrade firmware and wait while nothing appears to happen for about 20 minutes. When you press the firmware update button there's no feedback and nothing happens at all, it is working but the early firmware update interface is pretty terrible. Just walk off and come back in a bit. The pedal should automatically restart with the new firmware. If it hasn't restarted after 35 minutes, panic and contact me. It takes quite a while. Updates in the 2 series only take a minute or two.

The text that comes up at the end will have many messages and one of the messages will say: 'Failed to unmount media.' This is okay. Don't turn it off then. It'll will restart itself soon

A full video on how to copy the files and update is available here:
https://youtu.be/5fXnT4UiqGQ

If you have version 2 installed, please grab just the 2 packages in the 'upgrade_from_2' folder from here and put them on a usb flash drive and click upgrade. It should be very quick. It'll restart itself.

The USB flash drive must be formatted FAT32 and have one partition on it. If the update fails, please try pressing export presets in the settings screen. If that also fails then the USB flash drive is unreadable, either due to having no partitions (partitionless drive) or being the wrong format. Please contact me for help. Please use a normal USB flash drive and not an external hard drive. The cheap NXT ones from Staples work well. All Sandisk ones tested also worked well. Verbatim ones tested have failed.
1.11 INPUTS AS EFFECTS LOOPS

You can use the input / outputs of Digit as effect loops. For example, physically connect output 3 to an external phaser pedal, then connect the output of the phaser to input 3. Then on Digit, connect a delay to output 3, and then connect input 3 directly to output 1. The repeats of that delay will now be running through the phaser. Be careful not to create feedback paths, or route dry in parallel where some signal goes through external pedals. The extra latency / phase difference between the direct and effected signals can cause weird effects. So it’s always safer just to effect things like delays / reverb tails.

1.12 RHYTHMIC DELAYS

Tap a delay to see the details.

There are two modes. If you choose beats you can set a BPM and then choose a subdivision in the right drop down menu.
You can also set time in milliseconds, tap the time button and then you can type in a number if you press the milliseconds field, or just slide the slider to an approximate position.

The amount of milliseconds won't follow your tap tempo, so if you have a tempo input plugged in the times here won't be relevant and you should use the beat setting.

1.13 IMPORT REVERBS / CABS

To import new cab or reverb IRs onto Digit, copy them onto a USB flash drive in folders called reverbs and cabs for each. Then go to settings and tap Copy IRs. The files must be 48 kHz wavs.

1.14 IMPORT / EXPORT PRESETS

2 DIGIT MODULES

2.1 AMP BASS SVT40

2.2 ATTENUVERTER

The attenuverter attenuates and/or inverts a control signal. It has two inputs which can be either be controlled by the sliders or by a control input. So you can attenuate / invert one control signal with another giving you ring mod / AM style control possibilities. Parameters: output = multiplicand * multiplier.
2.3 AUTO SWELL

2.4 DELAY

This is a delay with controllable read and write heads. Attach a footswitch module to use tap tempo.

**parameters**

**Tme:** delay time in beats.

**Bpm:** tempo in beats per minute. Connect a footswitch module to this to use tap tempo.

**Feedback:** number of repeats

**Tone:** blends between a tape style and digital style delay

**Level:** level of the repeats

**Warp:** the read head of the delay. Modulate this to get warble.

**Glide:** how slowly a time change occurs. Effects warp and time.

2.5 ENV FOLLOWER

2.6 FILTER

2.7 FOOT SWITCH A / B / C

Connect level out to any control input or BPM out to any BPM input.

2.8 FREEZE

Holds what you're playing when the control level is active (1), creating a drone.
2.9 LFO

Low Frequency Oscillator, this sends a control signal out and can modulate other parameters.

2.10 MIX VCA

2.11 MONO EQ / STEREO EQ

A power parametric EQ, available in mono or stereo versions.

2.12 MONO CAB

Load a cab IR.

2.13 MONO REVERB / STEREO REVERB

Convolution based reverb. The mono version loads a mono IR file, 1 in 1 out. The stereo version loads a stereo IR, 1 in 2 out.

2.14 PAN

2.15 POWER AMP CREAM

2.16 POWER AMP SUPER

2.17 REVERSE

Reverse the incoming sound, by dividing it up into fragments. Try very long or very short fragment lengths.
2.18 SATURATOR

A tape emulating compressor. Push input gain up for more effect and then balance level.

2.19 SLEW LIMITER

Changes how fast a control signal changes. Connect it up to things like foot switches to change them from being instant to slowly swelling.

2.20 QUAD IR CAB / QUAD IR REVERB

Loads a quad channel IR, 2 in 2 out. Most likely not what you want. Don't use this unless you've got the right IR files and you're sure you need it.

2.21 TURNTABLE STOP

Emulates turning off a turntable. Works well connected to a foot switch.

2.22 WARMTH

This blends between tape and tube style warmth/overdrive.

3 REGULATORY / LICENCING

This device complies with Part 15 of FCC rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Digit includes code and art (such as fonts) under a variety of licenses including GPL / LGPL / MIT / BSD / OFL. More details of this are available here: https://github.com/polyeffects/

4 THANKS

A giant collection of people have helped Poly Effects and Digit specifically. These include Helen Davison (my mum), Claire Jeddou, Celeste Reno, Jo Gardiner, David Robillard, Michelle Lam, Bernie Tschirren, Lisa Bryant, Ed Pettersen, Josh Smith, Jordan Rudess, Filipe Coelho and Robin Gareus.