## Cotharman's Multi-Expansion

Multiple Expansion connector box for Little deFormer and future products



User Manual

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#### Introduction

Thank you very much for purchasing/consider to purchase a Gotharman's Multi-Expansion box.

# To avoid malfuntioning caused by wrong handling, please read this manual, before connecting the Multi-Expansion to your Little deFormer.

When using the Multi-Expansion together with your Little deFormer, it will be possible to have 3 expansion boxes connected at the same time. 1 AnaX mkII and 2 filter expansion boxes, like SP box, anAmoNo box or Tube-box. **Please notice** that Multi-Expansion is only compatible with AnaX mkII, **NOT mkI.** Everybody who purchased an AnaX mkI, should by now have received a mkII replacement board. If you have not yet replaced the mkI board, now would be a good time.

With AnaX mkII connected through Multi-Expansion, this will always be active, and work exactly like it works, when connected directly to Little deFormer.

Only one filter expansion box can be active at a time. For each preset you can select which filter expansion should be used, and it is also possible to change filter expansion selection on the fly, using any of Little deFormers modulation sources. Each filter expansion has its own individual set of parameters. Only the Audio BUS select parameter is shared between the two. The parameter settings of filter expansion 1, are the settings that is used, when connecting a filter expansion directly to your Little deFormer.

I hope you will enjoy it.

### **Connecting The Multi-Expansion Box**

For connecting Multi-Expansion to your Little deFormer, you will need the 180 cm long cable, that was supplied together with your Multi-Expansion. For connecting your expansion boxes to Multi-Expansion, you will need the 180 cm long cables, that was supplied with the expansion boxes.



If you should need a longer cable, or if your cable one day gets lost, you can use a 1:1, 9-pin SUBD cable. If you have a Little deFormer 1, just notice, that like on the picture, pin 5 of the male connector must be cutted. This is because, on some Little deFormers, pin 5 on the expansion connector are connected to its audio path, and if this pin on the cable are connected, it will create a lot of noise on the audio. If you have a Little deFormer 2, you can just use the SUB-D cabel as it is.

#### **Connecting**

## Please read this through, and set up your Multi-expansion exactly as described, and ALWAYS turn the Multi-Expansion on BEFORE Little deFormer!

- -Make sure that your Little deFormer 1 or 2 are updated with at least update 547. If it can't register the Multi-Expansion, it will probably need to get updated.
- -Make sure, that both your Little deFormer and your Multi-Expansion is turned off.

-Connect your Expansion boxes to Multi-Expansion. An AnaX mkII should be connected to the connector marked "AnaX" and 2 filter expansion boxes of your choice, should be connected to the connectors marked "Filter 1" and "Filter 2". You don't have to connect expansion boxes to all of the 3 connectors, it will also work with only 1 or 2 expansions connected. If you connect an AnaX to a filter connector or a filter expansion to the AnaX connector, these will not be registrered, and it will not work.



The audio signal sent to the filter expansion boxes, are sent before Little deFormers effects. If you would like to add effects to the filter treated signals, or if you would like to use this setup, with only one pair of outputs, you can connect the audio outputs of the 2 filter boxes to Little deFormers 2 inputs. Please remember that you must turn the input levels of both the inputs up, in Little



Now connect the expansion cable, supplied with Multi-Expansion, from Little deFormer's Expansion connector to Multi-Expansion's "Master" connector.



Connect the power supply that came with your Muti-Expansion.

Turn Multi-Expansion on.

Turn your Little deFormer on.



Little deFormer should now automaticly have detected the Multi-Expansion. You can check this by pushing the "Edit" button one time, to enter the edit group select screen, and then push and hold the "Inc" button, to scroll through the edit groups. One of the the last selectable edit groups should now say: "MultiExpansion BOX". After this edit group, you should find the names of the connected expansion boxes. If they say "No Filter X" or "No AnaX", you have either not connected these, you have not attached the cables properly, or something is wrong.

Push the "Edit" button one more time, to enter the parameters for it.



You are now ready to have fun.

### **Parameters**

With Multi-Expansion connected to your Little deFormer, 4 extra edit groups will appear. These could be, depending on what expansion boxes you have connected to multi-Expansion: "Multi-Expansion BOX", "Tube-box", "anAmoNo BOX" and "AnaX mkII". The expansion boxes will have the set of parameters, as described in their respective manuals. Under the "Multi-Expansion BOX" group, you will find the following 2 parameters. All parameter values are stored within each preset.

**Fsel** - Values: 1 and 2. This parameter selects which of the 2 filter expansion boxes that will be the default selected one, for the current preset.

**Mod** – Values: Any Little deFormer modulation source. Selects the modulation source, that will be used for changing the filter expansion box selection.

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