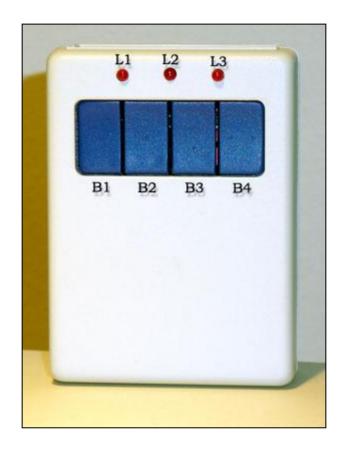
Juzisound Keyboard Enhancer



GENERALLY

The Enhancer is a MIDI device which is used to improve or to add some new features to the MIDI device which you use. The idea is that the Enhancer is a MIDI device which has an intelligent MIDI OS (*Operation System*) which can receive, processing and generate MIDI messages. Now according to the client's requirements we add an extra program which realizes the specifics requirements of the client. In this way in the Enhancer can add one or more different kinds of MIDI effects. These effects can be made according to the client's requirement and/or according to the technical features of the MIDI device which the client will use by the Enhancer. The number of the different MIDI effects which are included together in the box also depends on the requirements of the client. The maximum number of the effects which are included at the same time is also depending by the size of every one of them and the possibility to be assembled in the memory of the Enhancer.

CONNECTION

All of the Enhancer's connectors are showed in the panel in the picture right down.



In the left side of the panel where is written "Analog Input", usually you can connect some kind of analogue source. For example: a breath controller, foot pedal, potentiometer and etc. Polarity of connecting of the input connector is showed in the picture.

In the right side where is written "Power" you can connect power adapter of the Enhancer. You have to use a conventional power adapter. The voltage must be from 9 to 18 volts and must be with the showed polarity. Enhancer's consume can not be more than 10 mA. In some models of the MIDI device, the Enhancer could work without outside power. In this case the Enhancer will be powered by the MIDI-OUT of device which is connected.

For connecting of the Enhancers MIDI cables you can not use standard 5 pin MIDI DIN connector. You have to use USB cable (*for example printer's USB cables*). That is because of their size (*they are not so big*). It is important to know that these USB connectors are not the standard USB connectors. It is used such a connector because of its size. In every one Enhancer's set are offered two special cables. There is a USB bush from the first side of the cable, from the second side the cable ends by standard 5 pin MIDI DIN connector (*they use to make the connection with the standard MIDI device*).

Standard connection is:

Enhancer's MIDI-IN connect to the MIDI-OUT/MIDI-THRU of the MIDI device. Enhancer's MIDI-OUT connect to the MIDI-IN of other MIDI device.

CONTROL

With buttons B1, B2, B3 and B4 you can control the Enhancer. The Enhancer's buttons have two modes of working.

First mode - pushing the button for less than a second.

Second mode - pushing the button for more than a second.

You can push two buttons (*or more*) together. When you push two (*or more*) buttons together, that is a combination which can be use for some more specific function or parameters for effects. When you push the button for less than a second turn on and turn off different kinds of Enhancer's effects. When you push the button for more than a second you enter and exit when you are in mode "User Settings".

INDICATION

There are three LED-L1, L2 and L3 which indicate different modes. Every one of them has five modes of working.

- 1. Turn off.
- 2. Blinking slowly.
- 3. Blinking normal.
- 4. Blinking fast.
- 5. Shine all the time (did not blink).

Combinations of the different modes of different LED indicate different modes of Enhancer's working.

STARTING

When you turn on the Enhancer's power all of the LED must shined for a second. From the one side this confirms that all of the LEDs are able to work properly. From the other side in this moment the device is doing some process like checking power voltage. In this moment, the device is loading saved user settings (if there are users' settings) in the EEPROM memory of the Enhancer, to. Availability and number of these settings depends on the included in the Enhancer effects. Some combinations could have no user' settings. After turning off of the LEDs the Enhancer is ready to work. This status of the device is indicated by short blinks of L2. This status is called base/normal mode of working (usually you will use the Enhancer in this mode). In this mode with pushing different buttons for less than a second (in future I will called "pushing the button for less than a second" just "click") you turn on and turn off different effects. The status of every one effect is indicated by the corresponding LED. When the Enhancer is in base mode but there is no turn on effect (this means that all of the LEDs must not be working) L2 starts to make shot blinks. This shows you that the Enhancer is working properly.

INDICATING OF SYSTEM ERRORS

When the Enhancer is working, it does not matter what is the kind and what is the number of the turn on effects, the OS which control the Enhancer is searching for appearing of three different types of errors. They could influence of Enhancer's working they must not be invisible for the user.

When one of the three kinds of errors appeared the OS "take" the control of the buttons. Then all of the LEDs start to blink. One of them is blinking faster then the other. The LED which is blinking faster shows you what is error the.

Three kinds of errors are:

- Ü MIDI-IN buffer overflow- (that is a situation when the Enhancer is "busy" to work with the incoming MIDI information for a long time). It is indicated by fast blinking of L1. Solution-to check the device's (the device which is connected to the Enhancer) settings for wrong parameters.
- Ü Lack of power voltage (for the cases when the Enhancer work without external power adapter) It is indicated by fast blinking of L2. Solution- to be added external power to the Enhancer because the power of the MIDI-OUT of the device which is connected the Enhancer is not enough for properly working.
- Ü Full output MIDI buffer (that is a situation when the Enhancer have to wait for dispensation of free space) It is indicated by fast blinking of L3. Solution-you do not have to do anything because this kind of "error" is only to give information to the user.

When one of the errors appeared the device did not stop working. In this case the device continues working properly in the mode which it was working before the error. You can remove this error by a click (*it does not matter which of the buttons*). After that the OS "gives" you the control. The aim of this is to inform the user for possible eventually problems.

GUARANTEES

The device is offered with eternal guarantee of the electronics and one-year guarantee of the mechanics. What means this:

Eternal guarantee of the electronics means that every one broken electronic component will be change from the producer gratis. In this guarantee are not included-connectors and cables, breath sensor for blowing and power adapter (*if there is power adapter*). In the guarantee are not included electronic elements which seems that are not of order because of mechanic or another reason which is different from the normal working of the product.

ATTENTION!

All of the transport charges (when the producer is execute the guarantee) have to be paid from the client!

FOR CONTACT

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