

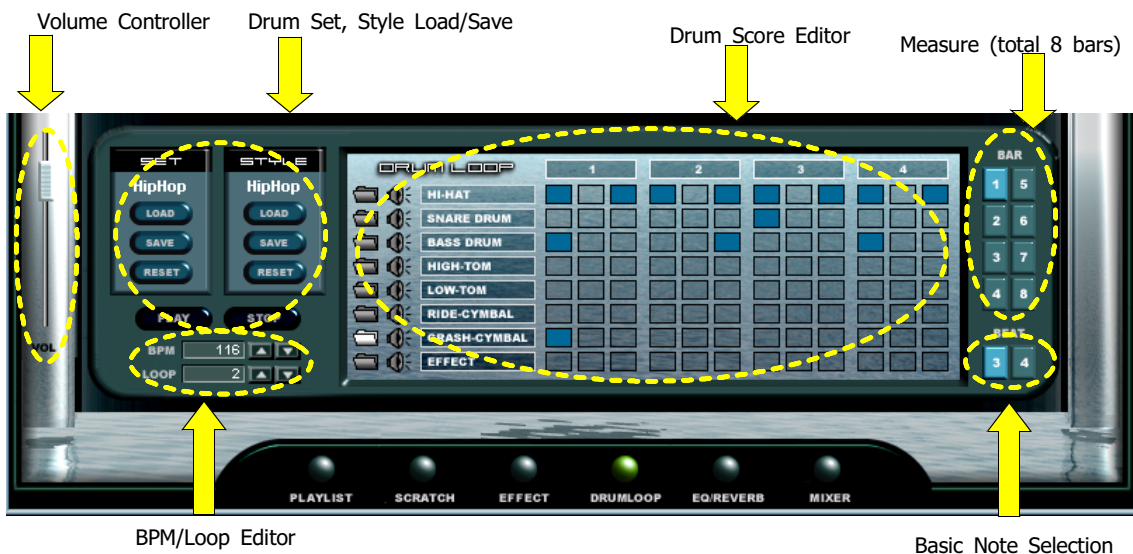
sound.

Once you change the data in Editor box, file name in Effect Set box will be changed to "NOT saved". So, after you finish the change in Editor box, you have to click the "SAVE" button below the the virtual Effect Pad to save the changed data.

As we mentioned before, when you use the Effect Pad, you have to change to Absolute mode. But in this Effect Set box, you do not have to change the mode to hear the effect sound. You can just play the wave sample in Effect Set box under Relative Mode one by one. Users can assign up to the 3 wave samples into one block with the pre-set time delay. So user can arrange the series of wave samples with the exact time delay.

For example, user can assign a long sample to the one block and short samples to the other blocks, so users can make their own groovy phrase easily. DJs use this method at the intro of the music or during the interval of the two songs. Users also can make their own phrase by editing the sound samples and save as a effect sound list using <LOAD>, <SAVE> and <EDIT> buttons. There is a preset effect set named drum, the drum set contains the drum sounds into the pad blocks, so you can play a virtual drum just with DJPAD2020.

### 6.4 Drum Loop



(Fig. 20) Drum Loop Generator



There is a Drum Loop in DJPAD2020. If you click "Drum Loop", you will see the function window like Fig.20 as above. Drum loop generator works like an expensive H/W drum machine, and there are lots of drum sound presets. User can use the preset drum style (techno, hip-hop, old-fashioned and industrial). Of course, user can edit the drum pattern also like the Techno style with Techno set or Techno style with Hip-Hop set.

In this function window, you will see one Drum Loop box and 2 boxes of SET and STYLE containing LOAD, SAVE and RESET in each box.

#### ● Drum Loop Box

In this box, there is a drum score editor to edit and composite the drum loop. At the right hand side of Drum Loop box, there are 8 buttons from 1 to 8 which means 8 bars. And the number "3", "4" means that the basic note with triplet or sixteenth. As you see in Fig.20, Drum Score Editor is divided largely to 4 parts which means one bar is composed four beat and this each measure is divided to another 3 small squares. So, one small square means the eight triplet, so that users can composite with details of the eight triplet note.

Drum Loop box contains 8 different areas for drum set ; Hi-Hat, Snare Drum, Bass Drum, High-Tom, Low-Tom, Ride Cymbal, Crash Cymbal, Effect. In preset of drum set file, the basic drum sounds for the each part are already saved. However, users edit the drum sound and composite drum pattern in DJPAD2020 S/W.

#### ● Audition of Each drum part (Hi-Hat, Snare drum...)

Drum loop has each audition button, and that is looks like speaker. Then, you can check the sound when you click the audition button. And if you want to change the sound of the drum part, you can click the folder shape button and just open it.

In this same way, you can change all other drum parts and make your own drum set with your modification of each sound. If you want to save this drum set, you can save this drum set in the SET box of right side of the Drum Loop function window. Please see description how to save drum set below.

#### ● Composition of Drum Pattern

As you see, there are small squares and 8 buttons at the right side of function window. So, each one of 8 buttons means 1 bar. If you choose button "1", you can work in

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the first bar. So in the case of sixteenth notes, each drum part has a row of 16 small squares which means four-four measure composed of the sixteenth note. So, users can compose with details of the sixteenth notes.

If you click a square, its color will be changed. Now, you just did write down this sixteenth note in Drum Loop editor. So, the saved sound of this drum part will be active and make a sound on this position. Like this way, you will fill out the squares for the each drum part with your pattern. After, you finish the other drum parts, you can finish the composition for the 1st bar and go to the 2nd bar. In the 2nd bar, it is just same to compose the drum pattern. In this same way, you can compose your own drum loop up to 8bars. If you click again the chosen square with the changed color, you will see the square will be blanked. Then, it becomes inactive.

You can hear your drum composition by clicking play button under the SET box. Then you can hear and check whole your composition. If you want to just stop this playing, you can click stop button under the STYLE box.

### ● SET Box

In this box, you will load, save and reset the set of drum sound for the Drum Loop Generator.

1. LOAD : If you click "LOAD", you will see the small window containing preset files of drum set sound and your files if you save before. In this window, you can choose the file and click "OK". Then, the chosen file will be loaded and you will see the file name in the SET box. In the small window, also you can delete the saved file by "DELETE" button and cancel the load by "CANCEL".

2. SAVE : "SAVE" is to save the each wave sound in Drum Loop like Hi-Hat, Snare Drum, Base Drum and etc. First, users will read out the each sound sample form the directory from your hard disk or outside in Drum Loop box, then save the all set of drum sound in this SET box by "SAVE". So, if you click "SAVE", you will see small window with "OK" and "Cancel" button. Into the window, you can type the name of drum set and click "OK" to save it. "CANCEL" is to cancel the save action.

3. RESET : If you click "RESET", all the sample sounds in the Drum Loop box (Hi-Hat, Snare Drum, Base Drum and etc.) will be deleted. And you will see "NOT saved" in the SET box instead of file name you load.

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### ● STYLE Box

In this box, you will load, save and reset the composition of drum pattern in the Drum Loop Box. So, after you compose your own drum pattern up to 8 bars, you can save, load, and reset your work in STYLE box.

1. LOAD : If you click "LOAD", you will see the small window containing preset files of drum style and your files if you save before. In this window, you can choose the file and click "OK". Then, the chosen file will be loaded and you will see the file name in the STYLE box. Also, in Drum Loop box, you will see composition of drum pattern is loaded. In the small window, also you can delete the saved file by "DELETE" button and cancel the load by "CANCEL".

2. SAVE : "SAVE" is to save all the composition work of drum pattern in Drum Loop box. First, users will compose their own drum pattern up to 8 bars in Drum Loop box, then save the all your composition work of drum pattern in this STYLE box by "SAVE". So, if you click "SAVE", you will see small window with "OK" and "Cancel" button. Into the window, you can type the name of drum pattern and click "OK" to save it. "CANCEL" is to cancel the save action.

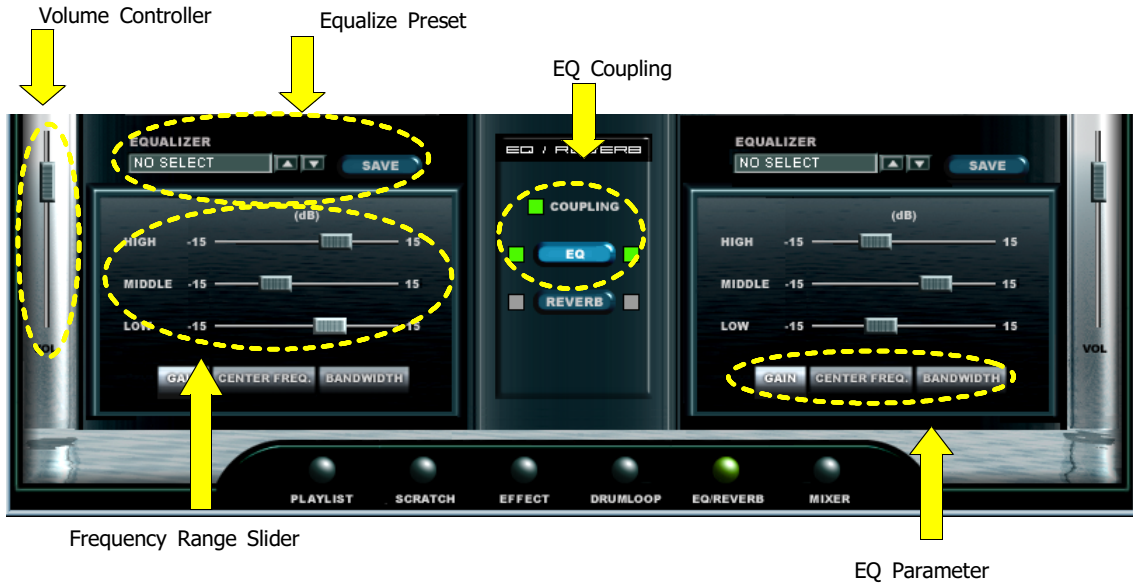
3. RESET : If you click "RESET", all the notes you wrote will be deleted. And you will see "NOT saved" in the SET box instead of file name you load.

### ● BPM and Loop

Under the PLAY and STOP button, there are a small BPM box and a Loop box. Thanks to the BPM adjustment, user can synchronize the drum sounds according to the BPM of the song. You can change BPM by clicking "▲,▼" buttons. Then, in the small box, you will see the change of actual value of BPM. If user wants to insert effect sample sounds according to the BPM, user can use the sample sound instead of the drum sound.

Also, in the Loop box, you can change the Loop times of the composed 8bars by clicking "▲,▼" buttons. For example, if you set loop as "4" in the small box, the composed 8bars will be played 4 times.

### 6.5 EQ/Reverb



(Fig. 21) EQ Control Window

If you click EQ/Reverb button in the control window, you will see the function window like Fig.21 as above. Under the each virtual turn table, there are 1 EQ/Reverb selection box in the middle of the function window and 2 detail parameter control windows of EQ/Reverb. This EQ/Reverb control function is offered from the Microsoft DirectX 8.0 and it can control the characteristics of the digital audio-mp3, CD, wave.

- EQ/Reverb selection Box

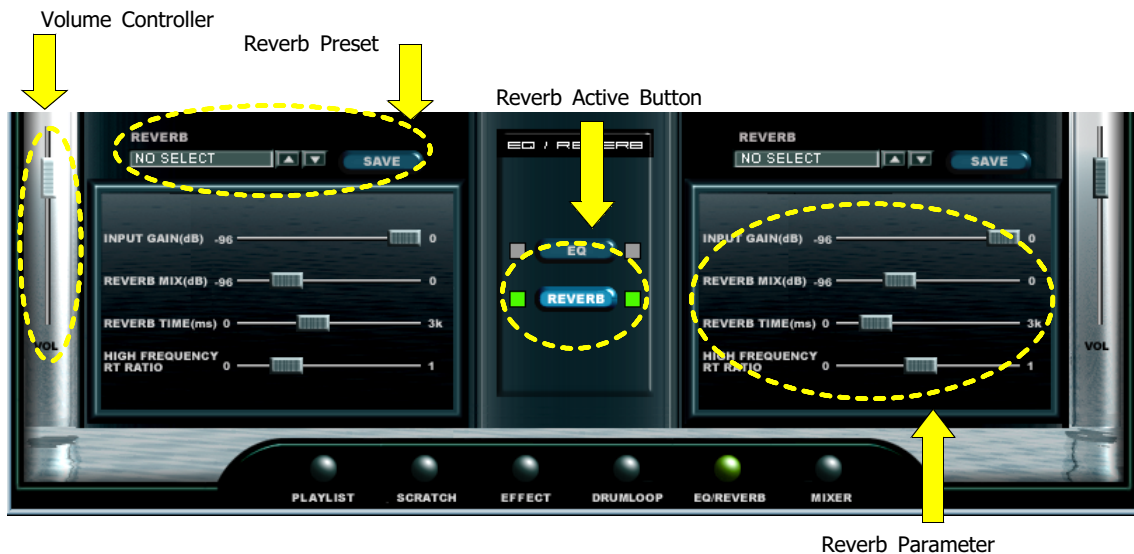
This box can select the EQ or Reverb control function of two virtual turntables, and also enable the control of parameters of each virtual turntable. If you click the EQ button you can see the parameters of the EQ control function. And if you click the "Reverb" button and you can see the parameters of the reverb control function. Reverb button works as like EQ button, and you can control the parameters of reverb.

- EQ Control

You can select the EQ control window by selecting the EQ selection box, but you cannot insert the EQ control to your song without checking the box beside the EQ button. You can also control both side of two virtual turntables at the same time-that is possible when checking the coupling box- and coupling mode is more useful to DJs. Coupling mode means that one side gain value is more higher with the other side gain value is more lower. It makes it possible that you can mix the high frequency part-like vocal- of one song with low frequency part-like rhythm section of another song.

● Parameters of EQ Control

The control parameters of EQ part are mainly composed of three important factors - gain, center frequency, bandwidth. The gain parameter means that the amplitude of the EQ filter, and so you can amplify or attenuate signals of a given frequency. The center frequency is the central frequency that you want to control. There are 3 regions in DJPAD2020 EQ control window, high, middle, low and you can choose the exact frequency range. The last parameter of EQ control window is the bandwidth, and bandwidth means that the bandwidth of the designed EQ filter. You can control each of the three factors in the three frequency range-high, middle, low, and will get the satisfactory results.



(Fig. 22) Reverb Control Window

● Reverb Control

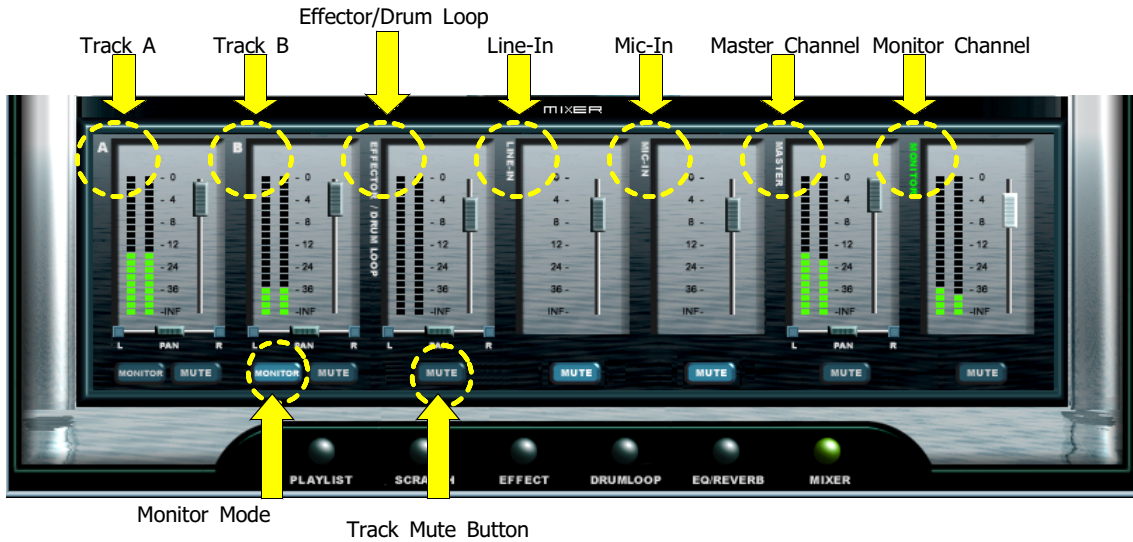
You can select the reverb control window by selecting the reverb selection box, but you cannot insert the reverb control to your song without checking the box beside the "Reverb" button.

● Parameters of Reverb Control

The control parameters of Reverb are mainly composed of four important factors - input gains, reverb mix, reverb time, high frequency RT ratio. So you can make reverb effect into your songs separately..

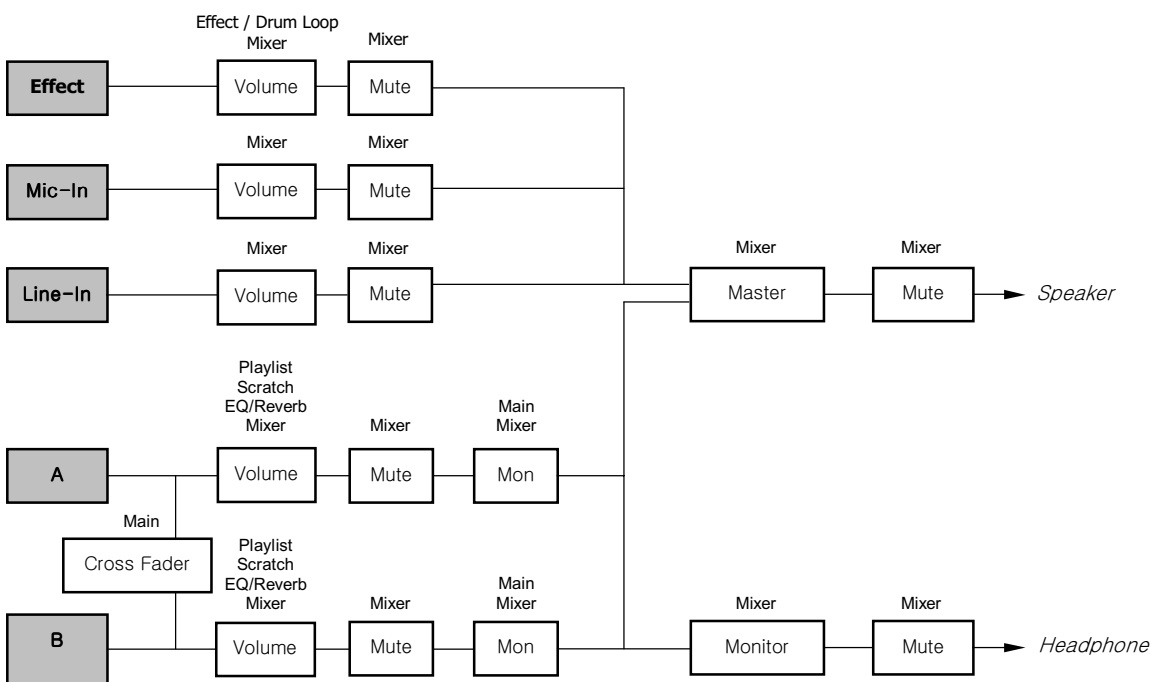
There are several pre-sets in the EQ/Reverb function, and you can save your own pre-sets according to your song.

## 6.6 Mixer



(Fig. 23) Mixer

DJPAD2020 S/W has the mixer console, which can control the various parameters (volume, pan, mute and route of the digital audio sound) and the signal bus is like belows. And you can check the output level peak of each channels.



(Fig. 24) Audio Signal Bus of DJPAD2020



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As in the signal bus flow, you can control the parameters of the two virtual tracks, effect, drum loop, line-in Mic-in channels in the same window-mixer. Also you can switch on track to the built-in virtual monitor channel like the monitor channel in the analog DJing mixer.

Actually, in the usual PC there is only one soundcard, so you cannot make route one song to the monitor while the other song played in the master speaker out. You need another soundcard and one additional mixer in order to mix and monitor. But DJPAD2020 S/W uses the rear channel of the 3D soundcard as a monitor route, which is not used in the stereo music. If users want to listen to the sounds from a track or effect pad and drum loop generator, just click the monitor button. Then, users can hear the monitor sound (this sound will be heard only to the users) through the headphone. The detail connection method between the soundcard and speaker, headphone is explained in the chapter 4.8 Channel Routing (Master/Monitor Out)





## Appendix

### 1. When Using DJPAD2020 H/W as a mouse

DJPAD2020 H/W supports all the function of mouse, and even has a strong function working as a mouse.

DJPAD2020 H/W has Left/Right button of a mouse at the bottom(see Fig.1). If you want to scroll, you can use the slider in H/W and it is possible to scroll more with the different speed by the combination of the slider and touch pad(see 4.7 Volume Slider)

Using Forward/Backward buttons(see Fig.1), you can surf the web site forward and backward(see 4.5 Forward/Backward Button).

You might feel that it is not convenient as a usual mouse at first time, but we are sure that DJAPD2020 H/W is better than a mouse once you are accustomed to its use.

### 2. System Requirement

DJPAD2020 works well under the following system environments.

- 1.1 CPU : Intel Pentium III 400MHz processor or higher
- 1.2 System memory : 128M system memory or higher
- 1.3 Microsoft DirectX 8.0 or higher (8.0 is the recent version of DirectX)
- 1.4 Sound card and Graphic card which can support the Microsoft DirectX

### 3. Registration

We thank you for the purchase of DJPAD2020. You will be able to get the free upgrade S/W from our web site after you register as a member in our homepage - <http://www.soundgraph.com>. Please exchange and share a lot of information through DJPAD2020 user community in our home page and inform us your advice for the better change of DJPAD2020 and the small bugs in S/W.

We promise you that we will supply the upgrade of DJPAD2020 continuously.



## 4. INFORMATION TO THE USER

### 4.1 INFORMATION TO THE USER

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

### 4.2 WARNING

Changes or modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment.

**4.3** This device complies with Part 15 of the 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 operations.

## 5. For Use with UL Listed I.T.E. Computer

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