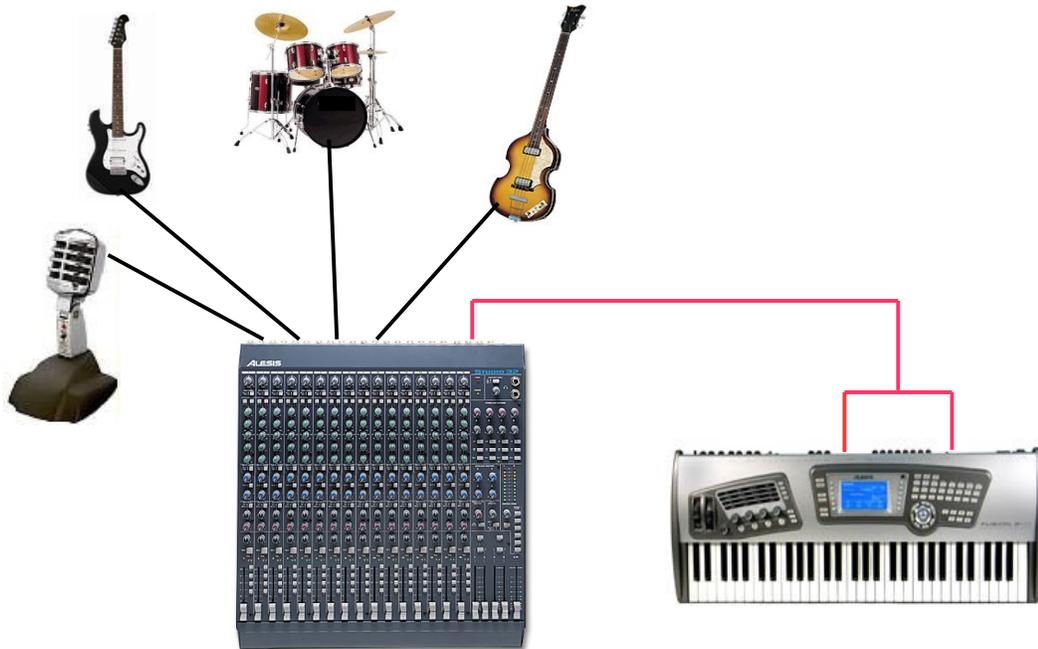


1. Recording Audio

Once you have created your song using MIDI and the internal sounds of the Fusion, you can now add vocals, guitar or sax as audio tracks. In order to accomplish this, you'll need an external mic preamp or mixing console and a microphone.



Believe it or not, you can even use the Fusion as a stand alone digital 8 track recorder. Using a mixing console with 8 direct outs/busses or a dedicated 8 channel mic pre, you can record your entire band live. Those tracks can then be exported as .wav files to your computer for further editing or mixing!



For the time being, we'll keep it simple and just record several vocal tracks. Let's use the 24 track template we created in the Sequencing tutorial and record audio on designated audio tracks 17-24. Multitrack Audio Input 1 will be assigned or patched to track 17, Multitrack Audio Input 2 would be patched to track 18 and so on. So, plug the output of your mic pre or mixer into input 1 and let's get a good recording level for our first vocal track.

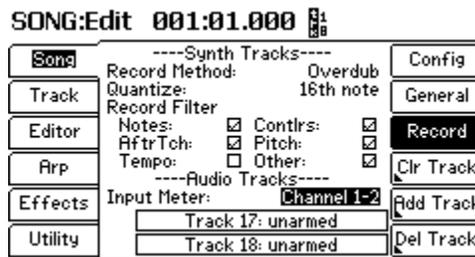
Press **SONG/EDIT/TRACK/GENERAL**

Using the jog wheel, dial in Audio Track 1 (track 17) in the *EDIT track* field.



Since our *Record Arm* parameter is set to Auto, we must actually select the audio track we are recording to on the Track page to arm it. If this parameter was set to ON, the track would not have to be selected. It would be record ready from any menu.

Press **SONG/RECORD**



The Fusion will only show input metering for 2 channels at a time. The *Input Meter* field shows that we are viewing levels for inputs 1 and 2 (song tracks 17 and 18). From your mic pre amp or mixing console, adjust your mic gain to a reasonable signal below clipping. If your signal is too hot, the clip indicator will flash at the top of the screen. Ok, let's record a take. While holding the Record button, press Play and start singing.

Alright, let's record a second vocal track.

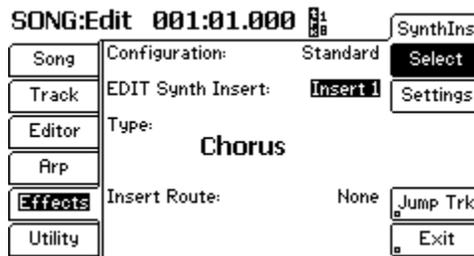
The Fusion does not internally patch inputs to tracks. So, you must physically repatch the output of your mic pre amp or mixer into Multitrack Audio Input 2 (track 18) and repeat the recording procedure above.

### 2. Setting Up Effects

The Fusion allows 2 buss effects and 4 insert effects. Buss effects are a mixture of dry signal and the effected signal. Your buss effects can be applied globally to all tracks of your song. Good choices for buss effects would be reverb or delay. Insert effects work a little differently. The entire audio signal passes through the insert effect and are only assignable on a track by track basis. Providing you are not chaining inserts together, only 1 track at a time can use each of the 4 inserts. Chaining all 4 insert effects together will essentially leave you with 1 big insert effect. Again, this configuration should only be applied to 1 track. Be aware that sending more than 1 track through a single insert effect will cause the output of that insert effect to sum all signals passing through it. Remember, once you have your effects set to your liking, you can save those as part of your template so you won't have to configure them again.

Ok, let's set up our busses and inserts with some typical effects.

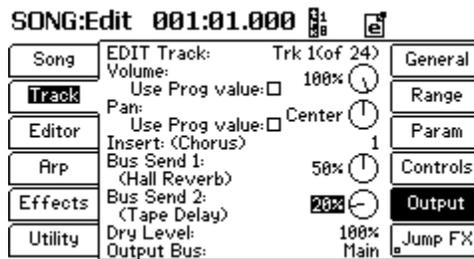
Press **SONG/EDIT/EFFECTS/SYNTHINS/SELECT**



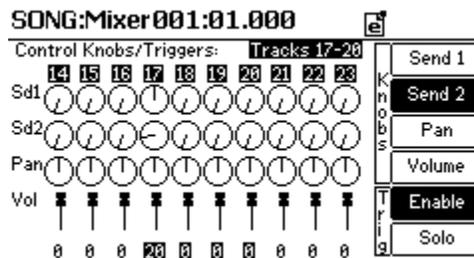
Make sure *Configuration* is set to *Standard*. This will use each of the 4 insert effects individually and not chained together. Parameters for each insert effect can be accessed by pressing the **SETTINGS** soft button. If you cursor down to *EDIT Synth Insert*, you can scroll through each of the 4 inserts. Cursor down to *Type* to choose your insert effect.

Now that we have the effects assigned, let's take a look at the output parameters on a track. This is the best page for adjusting effects levels of each track.

Press **SONG/EDIT/TRACK/OUTPUT**



For track 1, we have Insert 1 set for Chorus, a 50% send to Bus 1 Hall Reverb and a 20% send to Bus 2 Tape Delay. Remember, you should only assign each insert to 1 track. You can also use Mixer mode to view effects, pan and volume parameters. However, you can only view send settings for the bus effects. No insert parameters are available in Mixer mode.

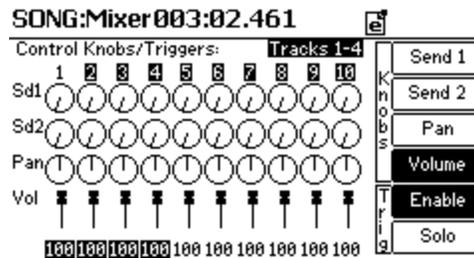


*Note: It is possible to record MIDI and audio tracks simultaneously. To do this, the Record Arm parameter must be turned ON for each track, not set to AUTO.*

### 3. AUTOMATION

OK, here's where the fun begins, mixing with automation. The concept is actually rather simple. Select a knob or button that is assigned to a controller such as volume, pan or mute and record your changes in real time. Let's do a simple automation mix muting and unmuting a track.

Assuming you already have at least one MIDI or audio track recorded in your song, let's record muting automation to track 1. Muting a track is essentially disabling it. That being said, our first step is to ensure the *Enable* button highlighted.

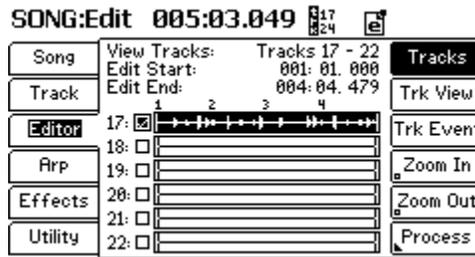


In the example above, track 1 is muted or “disabled” denoted by the fact it is not highlighted. Muting and unmuting can be accomplished using the T1-4 buttons which directly correspond to tracks you have selected in the *Control Knobs/Triggers* field. Simply start recording and mute and unmute at will. The sequencer will save all the button presses.

### 4. Audio Editing

In general, audio editing is pretty straight forward. It simply involves selecting a track for editing, the length of the track to edit and choosing a DSP (digital signal processing) function you want to apply. In this example, we'll copy and paste a section of an audio track. This same procedure applies to MIDI track as well.

Press **SONG/EDIT/EDITOR/TRACKS**



Here, on the *Track Editor* page, the Fusion will only allow you to view 6 tracks at once. So, since we cannot view all tracks simultaneously, you would need to dial in the track you wish to edit in the *View Tracks* field. Select the track or tracks you'll be processing with a check mark in the box next to each track. If you want to view waveform data for a single track, press **Trk View** and dial it up in the *Edit Track* field. For this example we'll just concentrate on one track.



Next, set the *Edit Start* and *Edit End* points for the track or tracks to be edited. In this example, we'll be processing measures 1 through 4.

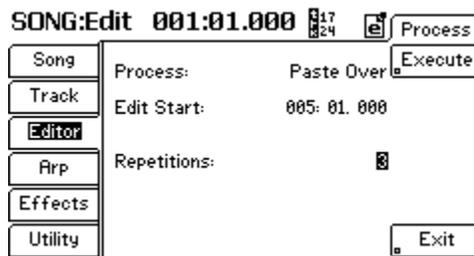
Press **PROCESS**

We can select which DSP to apply. Using the jog wheel, dial in the Copy function in the *Process* field and press **Execute**.



The audio data for measures 1 through 4 of track 17 is now copied to a buffer and is ready to be pasted to another location of the track.

Press **PROCESS** again



Now, dial in the *Paste Over* function in the *Process* field. *Paste Over* will overwrite any material in the destination measures! In the screenshot above, we are pasting measures 1 through 4 starting at measure 5 and repeating it 3 times. This will give us a total track length of 12 measures. Press **EXECUTE**.

5. EXPORTING AUDIO TO YOUR COMPUTER

In this section, we'll move audio tracks back and forth from a computer for external editing or mixing purposes. Let's start by exporting audio from the Fusion to the computer.

Press **SONG/EDIT/UTILITY/TRACK UTILITY**



We might as well export ALL the audio tracks. Pressing **Exp Trks** will bring you to the device list for the Fusion.



Selecting the Hard Drive icon will export your Fusion audio tracks to the Fusion hard drive's root directory. Finally, press **EXPORT**. Voila! Your tracks have been exported to the Fusion hard drive as 24 bit 44k MONO .wav files. Pretty sweet,eh?

OK, let's copy them to your computer. Connect to the Fusion via USB. Double click on the My Computer icon on your computer desktop. Double click on the Fusion HD icon. You should now see the exported files on the Fusion hard drive root directory. Drag and drop the exported .wav files onto the hard drive of your computer, perhaps to your desktop, the My Documents folder or a folder you've created. Once on your computer, you can import these .wav files into the digital audio recording software of your choice to edit or mix. At this point, you may want to delete the .wav files on your Fusion hard drive to conserve space.

**6. IMPORTING AUDIO FROM YOUR COMPUTER**

Connect to the Fusion via USB. Double clicking on My Computer will show all drives (including the Fusion hard drive and compact flash card) connected to your computer. Now, Locate the .wav files on your computer you wish to import into the Fusion. Remember, these files will strictly be used for audio tracks of a Fusion song and must be MONO files. Drag and drop those files to the Fusion hard drive. I would drop them to the root directory so they will be easy to find. Release the USB connection between the computer and the Fusion. Next, select the Fusion song we'll be importing these files to.

Press **SONG/EDIT/TRACK/GENERAL**



Unlike the exportation of Fusion audio tracks, we can only import 1 .wav file at a time to a Fusion audio track. Go ahead and dial in the audio track we'll be importing to. Let's add the vocal .wav file to track 17.

Press **UTILITY/TRACKUTIL**



Press ImpTrk



You should see the Fusion Hard Drive. Make sure it is highlighted and press **OPEN**.



You should now see the files we moved from your computer. Using the jog wheel or INC/DEC buttons to select the VOCAL.WAV file and press **OPEN**. You have now imported a .wav file to audio track 17 of your Fusion song.

*Note: If you are importing any .wav files from your computer that are to be used for creating multisamples and programs, they must be converted with the Fusion Converter software available at <http://www.alesis.com/index.php?id=58,59,0,0,1,0>*

This tutorial should get you on your way to some basic recording, editing and mixing. Have fun!