Basic concept

The GT Player application is a software-based effect processor specially designed for guitar players for live performance.

GT Player has one main rack unit (window) that functions as an Effect processor and two optional rack units, Track Player and ReWire Player, that act as players.

The Effect processor comes with essential guitar effects and a couple of designed sound setups that can be used right away. In addition, there is the GT Player VST* Plug-In that can be useful for sound engineers and composers when used with other applications.

Effect processor usage is based on user-editable programs saved under specific number. Each program can contain any combination of supported VST effects and VSTi instruments.

Every GT Player program contains its name and information about included effects and their settings (selected preset, parameter values, position of editors, effect status) together with MIDI parameter mapping and program input/output levels. You can quickly browse through prepared programs and load them when necessary.

Thanks to real-time processing with low latency, the results may sound similar to hardware guitar effect processors. With the use of optional players, MIDI automation and other program features, this application offers a wide spectrum of possible setups and arrangements.

*VST: Virtual Studio Technology, a flexible system of software based audio effects and musical instruments developed by Steinberg Media A.G.

About this version

GT Player Express is a special streamlined version for M-Audio users. It features effects and a number of programs, tracks and more.

You can upgrade to full version of GT/RT Player, featuring more effects, programs, and tracks.

For more information please visit:

http://www.DSound1.com web or contact your distributor.

Before you start

Even though it's quite easy to get started with GT Player, we recommend that you setup your audio and MIDI first, and ensure that you have all necessary.

To learn about the basic functionality of each control, simply allow your mouse cursor to hover above each control; a description will soon appear.

Many of features and properties can be set in Program Preferences. To open the Preferences dialog, click the Options button and select Preferences from the menu.

NOTE: The Mac and PC versions of GT Player Express are almost identical. The most important differences are mentioned in the text next to the system logos.

Requirements

Software and hardware requirements:

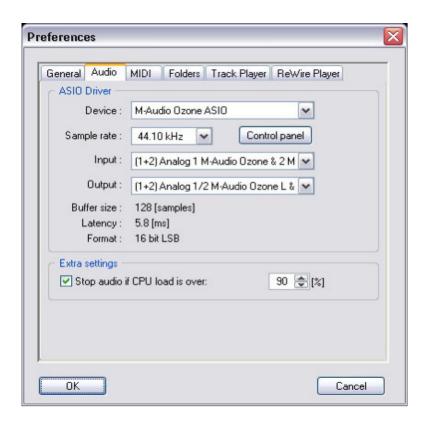
- Computer running Windows XP or Mac OS X operating system or newer
- Audio card with low latency ASIO (Windows XP) or Core Audio-compatible driver (Mac OS X)
- Headphones or amplifier with speakers
- MIDI foot/remote controller and/or MIDI keyboard
- Electric or acoustic guitar, microphone or another source of audio signal

NOTE: For a guitar without active electronics, the best sound is achieved when using high impedance inputs (also called hi-Z or instrument inputs). Please, consult the User's Manual for your audio card to find how to connect various types of audio signal.

Audio setup

Once you have the audio card properly installed, there are a few settings you need to become familiar with. The most important parameter is buffer size. Its value is proportional to latency, which is a time delay due to the computer processing the sound. The time is not dependent on the complexity of the algorithm, but rather on the size of buffers and sampling rate. However, if you have a lot of effects and the processor load is very high, a small buffer size may not work. In this case, increase the buffer size to the maximum acceptable value. If you play a chord on a guitar connected to computer, and the output sounds delayed, the size of buffers should be decreased.

Open the Preferences dialog and set up the audio:



Windows:

- 1. Select the device driver of your audio card from the Device selector (e.a. M-Audio JamLab).
- 2. Then select the required Sample rate (frequency) from the list of supported rates. For most cases, a sample rate of 44.1kHz or 48kHz is recommended. Lower rates decrease sound quality while higher rates increase processor load.
- 3. Select stereo Input and Output connections from the available channels. For the Input, select where your guitar is connected; for the Output, select where your amplifier is connected.
- For additional settings, launch your sound card's Control Panel. This will generally allow you to set buffer size. (You may need to restart
 the application before the changes take effect.)
- 5. Check the Latency information. For the best experience, it should be less than 20 ms.

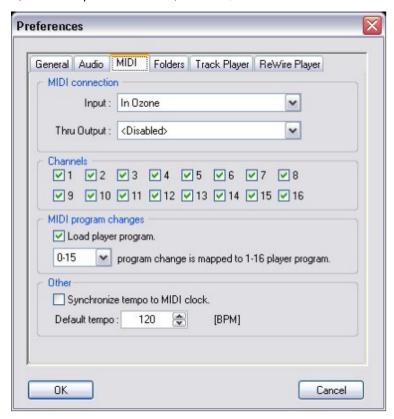
NOTE: Sample rates selected here affect the selection of files that can be played back by Track Player.

Macintosh:

- 1. Select devices for Input and Output from the Device boxes (e.g. M-Audio JamLab).
- 2. Select required Format.
- 3. Select channel pairs for Input and Output.
- 4. Select required Buffer size.

MIDI setup

One of GT Player Express' strongest features is its ability to control almost everything via MIDI. The MIDI pane in the Preferences window allows you to set options for MIDI control, (e.g. MIDI Input, Output for MIDI Thru, MIDI Channels on which you want to receive control data, what to do if MIDI program changes are received, Default tempo for instruments, and more).



Effect processor (main GT Player Express rack)



GT Player effect unit can operate in two modes: Program mode or Effect mode.

- In the Program mode, the user can browse thru existing programs and load, save and edit them, or create a new program.
- In the Effect mode, user can browse through effects and their parameters within the active (loaded) program.

While most of the effects have their own graphic interfaces (editors), allowing you to change their parameters, GT Player Express offers two additional ways to change effect parameters:

- You can switch to Effect mode for browsing and changing parameters, just as on a hardware effect processor.
- You can assign a MIDI controller to selected parameters and then change their values via an external MIDI device.

GT Player Express Buttons:

- **POWER** Signal processing is started or stopped.
- ASSIGN Last received controller is assigned to selected parameter. (See: MIDI control of parameters)
- SAVE Active program with all settings is saved under selected program number.
- LOAD Selected program is loaded and all saved effects settings are restored.
- **BYPASS** Loaded program is bypassed.
- MODE Toggles between Program and Effect mode.

The function of some controls and display differs between the Program and Edit modes:

Control	Program Mode	Effect Mode
DISPLAY	Prepram same: Rock 001 001:Rock loaded. OPU 0% Player: Stopped	OO1 1: D5ound NG1 - Noise Gate Parameter: 3: Attack: 5 [ms] OPU 0% Parameter change.
DISPLAY first line	Shows name of selected program.	Shows name of selected effect.
DISPLAY second line	Shows number and name of active (loaded) program.	Shows selected parameter or program and actual value.
DISPLAY third line	Shows status text telling you what has just happened.	Shows status text telling you what has just happened.
DISPLAY other		BYPASS or SOLO lights when effect is in such a state.
EDIT button	Opens or closes Program Edit window for program editing	Opens or closes selected effect's editor.
LEFT/RIGHT arrow	Has no function	Selects parameter for editing.
UP/DOWN arrow	Selects Program for further action.	Increases/decreases selected parameter value or effect preset.
DATA ENTRY wheel	Selects Program for further action.	Change selected parameter value or effect preset.

To get started with GT Player Express, select any prepared program by pressing the UP/DOWN arrows or turning the data wheel in the Program mode and pressing the LOAD button.

The Program can also be quickly loaded by pressing the shortcut key (see Keyboard control), or when MIDI Program Change is received. Back to contents

Creating your program

Switch to Program mode using the MODE button. Start editing the selected program by pressing the EDIT button. Create a chain of effects which suits your production. Click the desired chain position of your effect and select an effect from drop-down menu. Select Required Chain Input mode. Fill in a name for your program.

Pressing the "E" button will show/hide effect's user interface (editor). Pressing "B" or "S" allows you to bypass or solo the effect.

The Program is ready, but you will probably want to save it using the STORE button. You can overwrite the original program you started with, or you can select another Program number before you press STORE in order to copy programs from one position to another.

Using music instruments in GT Player Express:

The only difference between using effects (VST's) and music instruments (VST's) is that effects usually process the audio signal from input to output while music instruments process MIDI data and generate an audio signal. MIDI data for instruments is received from MIDI devices selected in Preferences on all MIDI channels.

You can use the built-in MIDI keyboard (see Keyboard control) to generate MIDI notes for testing and playing of music instruments.

NOTE: You can further process output from music instruments through effects. Some instruments don't pass audio signal from input to output.



Windows:

Click the "R" button to remove all effects from the chain.

Mac:

- For effect editors, you may utilize the Mac OS X dock by clicking the DOCK button.
- GT Player Express can show the level of the input and output signal in dock, which is useful when it is in the background and processing.

MIDI control of parameters

GT Player Express allows you to control effect parameters and rack controls via an external MIDI controller.

Effect parameter mapping is saved into the GT Player Express Program in such a way that every Program can have different mapping. In contrast, rack control mapping (e.g. Input level, Output level, Track Speed, etc.) is shared among all programs.

Effect parameters can be assigned to MIDI controllers by using the ASSIGN button, or via the MIDI Mapping window. Rack controls can be assigned to MIDI controllers only in the Mapping window.

Press the MODE button to select Effect mode. Now you can see the parameters of your effects on the GT Player Express display, (effect name, parameter name and parameter value). Changing a parameter in GT Player's Effect Editor display always keeps a track on the selected parameter. You can simply assign the currently displayed parameter to a MIDI controller. If a MIDI device is connected, move the controller and press the ASSIGN button. This assigns the displayed effect parameter to the last-touched controller.

You can use the MIDI mapping window to assign controllers to parameters.

Press the OPTIONS button and select MIDI Mapping from the menu. Here you can see, add, delete and change which controller is assigned to which effect parameter.

You can also assign mapping for rack controls here.

■ Mapping of some the Track Player and ReWire* Player parameters is more complex. Transport functions (Play/Pause/Stop), seek functions (Fast forward/backward) are mapped to one continuous controller in a manner similar to the jog-dial wheel on some video recorders. With such a controller, different actions are taken based on the controller value.

*ReWire: Audio streaming technology developed by Propellerhead Software AB.

In the MIDI pane of GT Player Express' Preferences menu you can also:

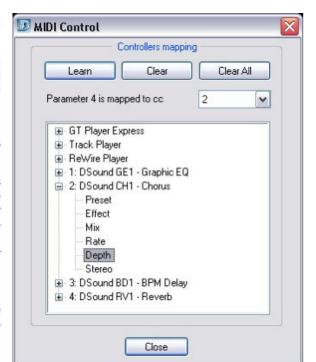
- Select the MIDI channels on which you want to control effect parameters and rack controls.
- Allow the external selection and loading of GT Player Express programs when MIDI Program Changes are received.

Windows:

- To automatically assign an incoming controller to a selected parameter, activate learn mode by clicking the LEARN button or pressing the Insert key.
- To clear mapping for selected parameter, press the Delete key.

Macintosh:

Click the ASSIGN button to assign last received controller to selected parameter.



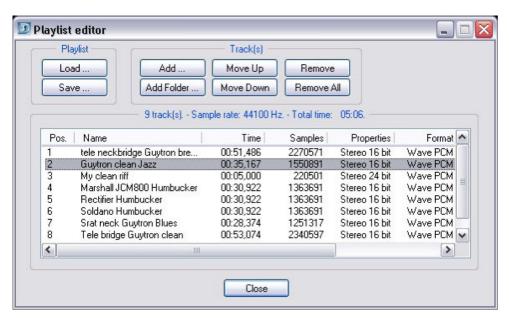
Track Player

Track Player is audio file player and recorder. You can create playlist of your favorite tracks that can be played along with your live performance. With integrated time-stretching, it is also a great tool for training.



Click the PLAYLIST button on the Track Player to open Playlist editor. Click ADD to add files to the playlist. To change the order of audio files in the playlist, select one or more tracks and press the MOVE UP or MOVE DOWN button. Files can be removed from the playlist by selecting them and pressing REMOVE button. By clicking REMOVE ALL you can start creating a new playlist.

Playlists can be also stored and retrieved with the use of the LOAD and SAVE buttons.



After the creation of your playlist, you can:

- Turn the DATA wheel to select a track for playback. To control playback, you can use the standard STOP, PLAY, and PAUSE buttons. To seek within the track. click or hold the "<<" (REW) or ">>" (FF) button.
- To record your live performance (including effects), press the REC button. When recording is stopped, the recorded track is automatically added to the playlist and selected so you can play back what you have recorded.

There are several options regarding playback:

MODE button - toggles between playing each track separately and playing all the tracks continuously.

REPEAT button - switches between repeating of one track or all tracks, depending on Mode setting.

TIME button - toggles between the remaining and elapsed time of the track on the display

DISPLAY - shows information about:

- Selected track
- Playing track
- Elapsed, remaining or recorded track time
- Transport status
- Playback mode

You can loop playback inside a track and jump to the beginning of the loop by using special Loop Keys (see Keyboard control).

Track Player also offers the possibility of slowing down or speeding up the track without changing the pitch. Playback speed can be controlled with SPEED knob. For example, this feature can be useful when learning the guitar solo from your favorite song.

Windows:

- Only mono and stereo WAV files are supported.
- To add files to a playlist you can drag & drop supported files to the Track Player window or Playlist editor.
- To delete selected files from a playlist, press the Delete key.

Macintosh:

- Track Player supports many media types such as AIFF, MP3, CD tracks, WAV, MIDI files and others.
- The output from Track Player goes to the system output, which may differ from the output for processed audio; it can be selected in GT Player Preferences.
- GT Player can crossfade tracks; the fade out time is adjustable in Preferences.

ReWire Player



ReWire Player is a player that can mix and control audio from ReWire-compatible slave programs.

ReWire-compatible programs can work as any of the following:

- Master (mixer) accesses audio hardware and provides audio mixing (e.g. Digidesign Pro Tools, Steinberg Cubase, and more)
- Slave (device) sends audio outputs to ReWire master (e.g. Propellerhead ReBirth and Reason)
- Master or slave depending on whether or not any ReWire master is running (e.g. Ableton Live)

GT Player Express ReWire Player works as a ReWire master so it mixes audio from ReWire slaves with your live performance.

To use ReWire Player you need a ReWire-compatible slave application installed on your system.

- Start GT Player as the first application with ReWire Player activated in the preferences.
- Start processing. (POWER button must be turned on!)
- Then start your favorite ReWire slave application and load a song or arrangement to it.

NOTE: Only if the ReWire system is available and ready will the ReWire Player rack show up. Before you can exit GT Player, you must first close all ReWire slave applications.

There are standard controls available on the ReWire Player rack with these functions:

PLAY button - starts or pauses song or arrangement playback

STOP button - stops the playback and jumps to loop start position

<< (FB) and >> (FF) buttons or DATA wheel - seeks through the arrangement

REPEAT button - toggles looping between L and R position On/Off

TEMPO knob - controls the tempo of the playing ReWire device and its arrangement

OUTPUT knob - controls the amount of audio signal mixed with you production

DISPLAY - shows information about:

- Current song or arrangement position
- Loop start (L) and end (R) positions
- Current tempo
- Transport status

Macintosh users:

If no ReWire slave application is running, ReWire can be turned On/Off using the POWER button to decrease processor load.

Keyboard control

Many of the rack control functions and other special actions are accessible via your computer keyboard.

Here are some important shortcuts that are not listed in the menus:

Keys and modifiers	Active rack unit	Action
Numpad /	Any	Activate next rack unit
Q,W,E,R,T,Y,U,I,O,P	Any	Generate MIDI notes c2-e3
2,3,5,6,7,9,0	Any	Generate MIDI half notes #c2-#d3
Numpad *	Main (GT Player - in any mode)	Toggle between Program and Effect mode
Numpad 0-9	Main (GT Player - in any mode)	Enter a Program number to select
Numpad Enter	Main (GT Player - in any mode)	Load selected Program
Numpad +	Main (GT Player - in any mode)	Select next Program
Numpad -	Main (GT Player - in any mode)	Select previous Program
F1-F12	Main (GT Player - in Program mode)	Select and load Program 1-12
Shift + F1-F12	Main (GT Player - in Program mode)	Select and load Program 13-24
F1 - F12	Main (GT Player - in Effect mode)	Show editor of effect 1-12
Shift + F1-F12	Main (GT Player - in Effect mode)	Show editor of effect 13-24
Numpad 0-9	Track Player	Enter a track number to select
Numpad Enter	Track Player	Play selected track
Х	Track Player	Start recording
С	Track Player	Stop playback (recording)
V	Track Player	Play/Pause playback (recording)
В	Track Player	Jump to Loop start
N	Track Player	Set Loop start
Shift+N	Track Player	Clear Loop start
M	Track Player	Set Loop end
Shift+M	Track Player	Clear Loop end
<	Track Player	Seek Backward
>	Track Player	Seek Forward

Windows:

■ For many controls you can use Ctrl + <the first letter of control> shortcuts.

Macintosh:

- Space key Play/Pause
- Esc key Stop
- Left/Right arrow key Set focus to previous/next control

For more information or detailed help please visit http://www.DSound1.com.