

Editor: Yamaha TG500

This *Galaxy Plus Editors* module adds support for the Yamaha TG500. This manual describes only features specific to the TG500 Editor. See your *Galaxy* manual for information on:

- Installing Editor and Librarian modules;
- Loading/sending Bundles, Banks, and Patches;
- Using common editing features such as graphic envelopes, pop-up menus, and numericals.

You should also read the “device specific” online Help, which is available from the Apple **Help** menu when a Bank, Bundle, or Edit Window is active.

TG500

The Yamaha TG500 is a sample-playback synthesizer with PCM waveforms, digital resonant filtering, and digital effects processing. The TG500 Editor module lets you make alterations to the sounds and settings with intuitive, full-size graphic windows.

ABOUT THIS DOCUMENT

This manual does not attempt to teach programming for the TG500 and it does not discuss each parameter in detail. Often, the effect of one parameter depends on the settings of other parameters. If you alter a parameter and don't hear any change in sound, examine how other parameters may affect the desired outcome. Refer to your Yamaha manual to learn how various parameters interact and affect the overall sound.

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CH 1: INTRODUCTION

INSTRUMENT SETUP

Before using the Yamaha TG500 with Galaxy Plus Editors make sure:

- The instrument's MIDI input *and* output are connected to your MIDI interface; if using a multiport interface, connect both MIDI cables to the same port number;
- The TG500's **DevNo** (Device number) matches the Device ID setting in your OMS Studio Setup;
- The TG500's **BulkPr** (Bulk receive protect) setting is "OFF."

For more details on configuring the TG500, please consult your Yamaha manual.

☆ See also Galaxy's "device specific" online Help, available from the Apple **Help** menu when a Bank, Bundle, or Edit Window is active.

CREATING A NEW BUNDLE

To open a new Bundle for the Yamaha TG500:

- ① Make sure your *Current* OMS Studio Setup contains a TG500, then launch Galaxy Plus Editors.
When launching Galaxy for the first time, Librarian modules for devices contained in your OMS Studio Setup are automatically installed.
- ② Choose **File>New Bundle**.
A dialog box listing all installed Librarian modules appears.
- ③ Select the TG500 device and click **OK**.
The default TG500 Bank types are placed in a new "Untitled" Bundle.
When opening or a creating a Bundle, a Bundle menu becomes available in Galaxy; to retrieve all Banks from your instrument, choose **Bundle>Get All Banks in Bundle**.

BANK TYPES

Below is a brief description of each TG500 Bank type:

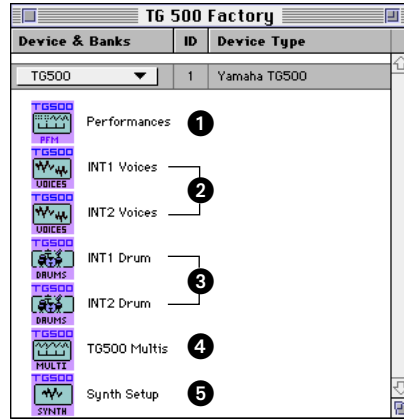


Figure 1: TG500 Bundle

- ① **Performances:** Bank of 64 Performances, each composed of up to 4 layers assigned to Voices (with Effects settings).
- ② **Voices, Int1/2:** Two Banks (Internal 1 and Internal 2) of 63 Voices. Voices consist of a single waveform along with settings for amplitude, filter, pitch, and LFO. Voices also have their own Effects settings.
- ③ **Drum, Int1/2:** Two Drum Voices (Internal 1 and Internal 2), each with drum/percussion sounds assigned to keys within a 61-note range (C1-C5).
- ④ **Multis:** Bank of 16 Multis, each composed of up to 16 parts assigned to Voices, Performances, and Drum Voices.
- ⑤ **Synth Setup:** Specifies global settings for note shift, tuning, and MIDI parameters.

CH 2: VOICES

To edit a TG500 Voice:

- ① Open a Bank of Voices

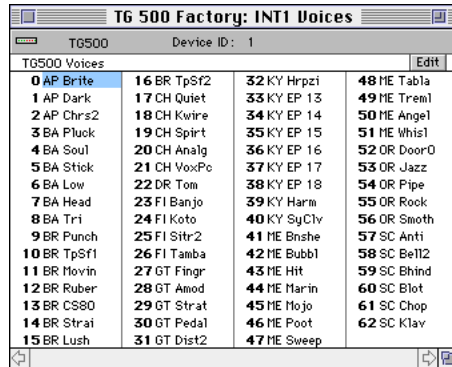


Figure 2: Voice Bank

- ② Highlight the desired Patch and click the **Edit** button.

The selected Voice is sent to the TG500's edit buffer and the Voice Edit Window opens as shown in [Figure 3](#).

VOICE EDIT WINDOW

A Voice is the most basic Patch type for the TG500. It consists of a single oscillator assigned to a waveform, along with settings for filter, amplitude, pitch and LFO.

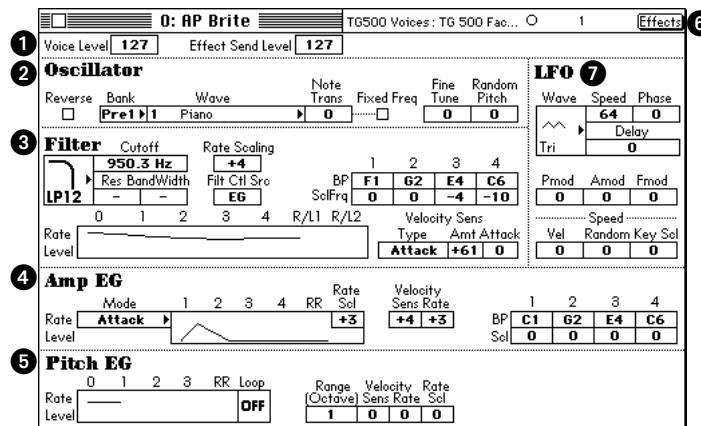


Figure 3: Voice Edit Window

Following is a brief description of Voice Edit Window components:

- ① **Voice Level, Effect Send Level:** Sets the Voice level and Effects send level.
- ② **Oscillator:** Assigns waveform and tuning for the Voice.
- ③ **Filter:** Determines filter type along with settings for cutoff frequency and resonance, which can be modulated by an envelope generator, velocity sensitivity, and key scaling.
- ④ **Amp EG:** Sets parameters affecting amplitude, which include an envelope generator, velocity sensitivity, and key scaling.
- ⑤ **Pitch EG:** Sets parameters affecting pitch, which include an envelope generator and velocity sensitivity.
- ⑥ **Effects:** Click this button to open the Effects Edit Window.
- ⑦ **LFO:** Determines LFO waveform and related parameters (speed, phase, and delay). There are also settings for LFO destinations and LFO modulators (control sources affecting LFO parameters).

COPYING VOICE COMPONENTS

Specific components of a Voice can be copied/pasted from the Voice Edit Window. Simply click on the text heading for **Oscillator**, **Filter**, **Amp EG**, **Pitch EG**, or **LFO** to highlight the desired component and its parameters.

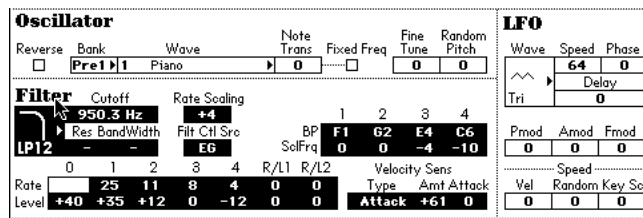


Figure 4: Filter parameters selected

WORKING WITH ENVELOPE GENERATORS

The Voice Edit Window contains small graphic envelope displays for filter, amplitude, and pitch. Clicking on any of these small graphic envelopes opens a larger, editable envelope display.

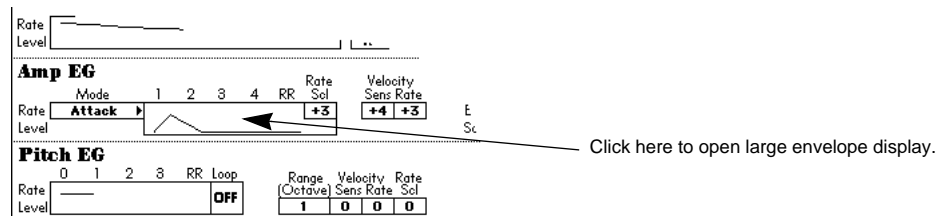


Figure 5: Amplitude Envelope Generator, Small Display

In the large display, envelopes can easily be edited by dragging envelope points with the mouse; envelope **rates** and **levels** may also be edited by changing their numeric displays.

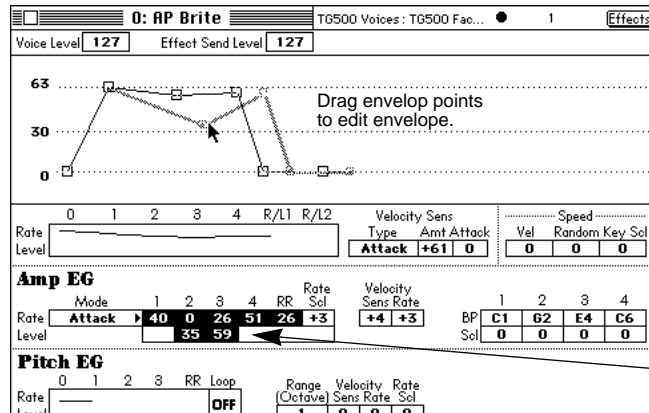


Figure 6: Amplitude Envelope Generator, Large Display

Consult your Galaxy Plus Editors manual for more information on working with envelope generators.

MIDIBAR

With the Voice Edit Window active, choose **Edit>MIDI Bar** to open the MIDI Bar Window. The MIDI Bar allows you to make quick, single-click edits to commonly “tweaked” parameters (such as envelopes, filter cutoff, key velocity, and octave range). Click on the “MIDI Bar” text to get a help screen explaining each icon.

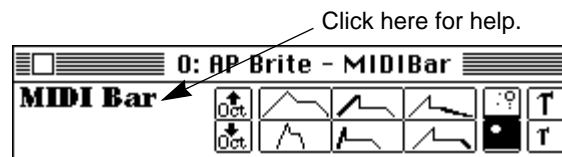
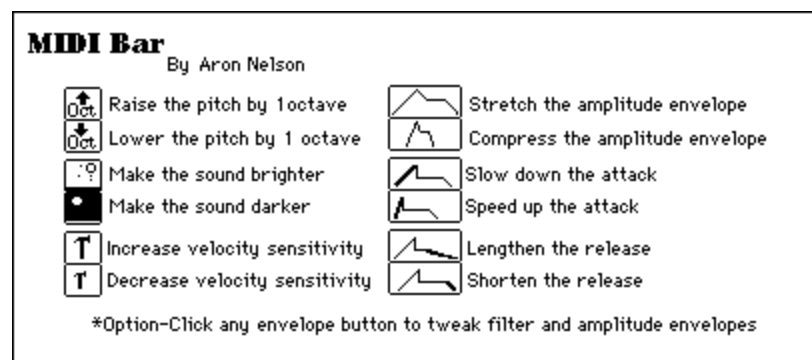


Figure 7: MIDI Bar Window

Click anywhere in the MIDI Bar help screen to close it.



CONTROLS EDIT WINDOW

With the Voice Edit Window active, choose **Edit>Controls** to edit how a Voice responds to continuous controller information.

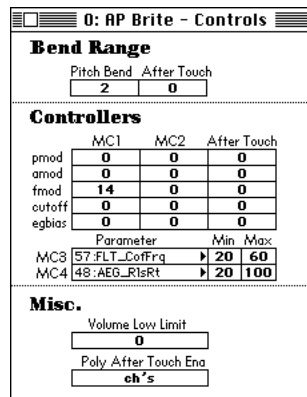


Figure 8: Controls Edit Window

Bend range can be specified for both pitch wheel and After Touch. **Controller** sources (After Touch, MC1, MC2) can be routed to destinations (pitch, amplitude, frequency modulation, cutoff frequency, and EG bias) with individual depth settings. MC3 and MC4 can be routed to an even wider variety of Voice parameters.

☆ MC1-5 are defined in the TG500 Synth Setup. See [Synth Setup Edit Window \(pg. 14\)](#).

EFFECTS EDIT WINDOW

With the Voice Edit Window active, choose **Edit>Edit Effects** to edit Voice Effects settings.

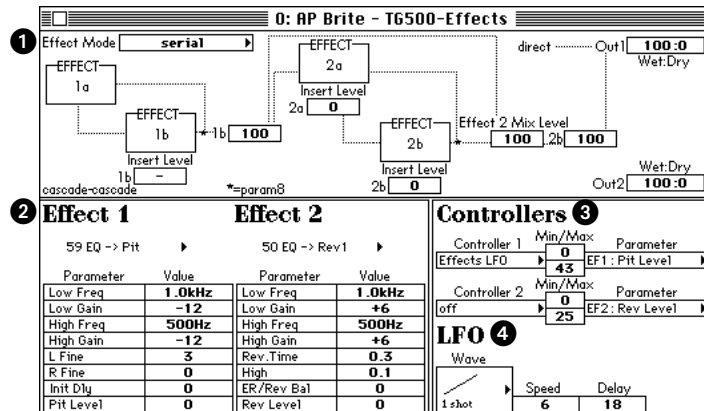


Figure 9: Effects Edit Window

Following is a description of the Effects Edit Window components:

- ① **Effect Mode:** The Effect Mode pop-up determines the configuration (serial, parallel, or off) of the effects processors. The configuration and display of the routing (complete with level settings) will vary depending on the Effect Mode and effect types used.
- ② **Effect 1/2:** Specifies any of 90 effect types (including some dual effects) for both Effect 1 and Effect 2. The parameters and values displayed will vary depending on the chosen effect.
- ③ **Controllers:** Routes controllers to the specified effect parameters.
- ④ **LFO:** Configures LFO parameters, which are used in conjunction with certain modulation-type effects (chorus, flange, etc.).

CH 3: DRUM VOICES

To edit a TG500 Drum Voice:

- ① Open a TG500 Drum Bank.

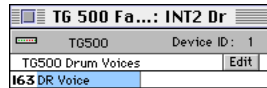


Figure 10: Drum Bank

- ② Click the **Edit** button to open the Drum Voice Edit Window.

DRUM VOICE EDIT WINDOW

A Drum Voice consists of a collection of drum and percussion sounds assigned to MIDI notes (drum keys) ranging from C1-C5. Each drum key may be independently routed to Effects 1 and 2.

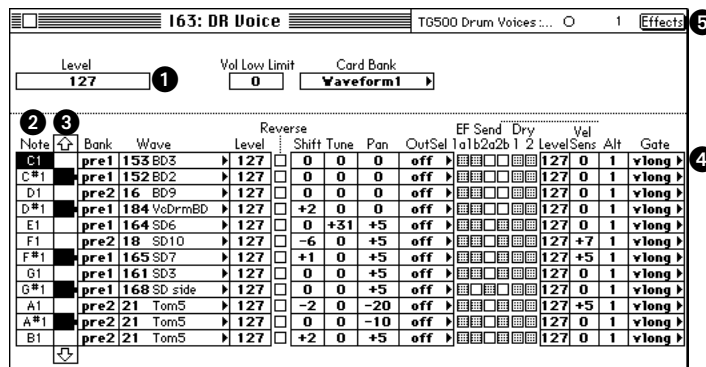


Figure 11: Drum Voice Window

Following is a brief description of the components that make up the Drum Voice Edit Window:

- ① **Level:** Sets the overall volume level for the Drum Voice.
- ② **Note Column:** Indicates the MIDI note for the edited drum key. Drum Voices span a range of 61 notes (C1-C5). Clicking a note name selects the entire line for copying or pasting.

- ③ **Keyboard:** The column to the right of the note names is a scrollable keyboard for auditioning sounds. Clicking any note on the keyboard triggers the corresponding sound.

Clicking the up/down arrows scrolls the display an octave at a time. Option-clicking an arrow, scrolls one note at a time. The velocity of the MIDI note played is set with the Mac KV setting in the MouseKeys Window.

- ④ **Drum key parameters:** Assigns to each drum key a waveform along with settings for level, pan, shift, tune, output select and effect sends.

When receiving a note from your MIDI keyboard controller, Galaxy automatically scrolls to the corresponding drum key.

- ⑤ **Effects:** Click this button to open the Effects Edit Window for the Drum Voice.

Consult the TG500 manual for a complete description of Drum Voice parameters.

DRUM VOICE EFFECTS

With the Drum Voice Edit Window active, choose **Edit>Edit Effects** to edit its Effects settings. The Effects Edit Window for Drum Voices is identical to that for Voices. For more information see [Effects Edit Window \(pg. 6\)](#).

Whether a particular drum key is processed is determined by the Effects Send check boxes in the Drum Voice Edit Window.

CH 4: PERFORMANCES

To edit a TG500 Performance:

- ① Open a Performance Bank.

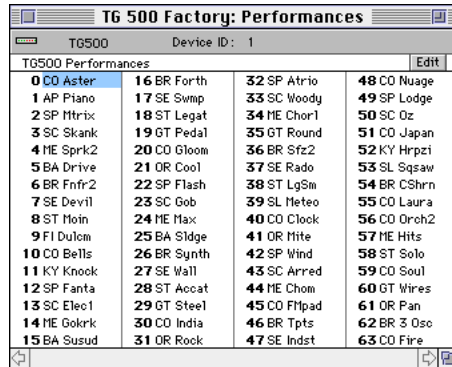


Figure 12: Performance Bank

- ② Highlight the desired Patch and click the **Edit** button.

Galaxy sends the Performance to the TG500's edit buffer and opens the Performance Edit Window as shown in [Figure 13](#).

PERFORMANCE EDIT WINDOW

The Performance Edit Window displays the *layers* (which are assigned to Voices) that make up a TG500 Performance. Performances are used to create keyboard splits and layers.

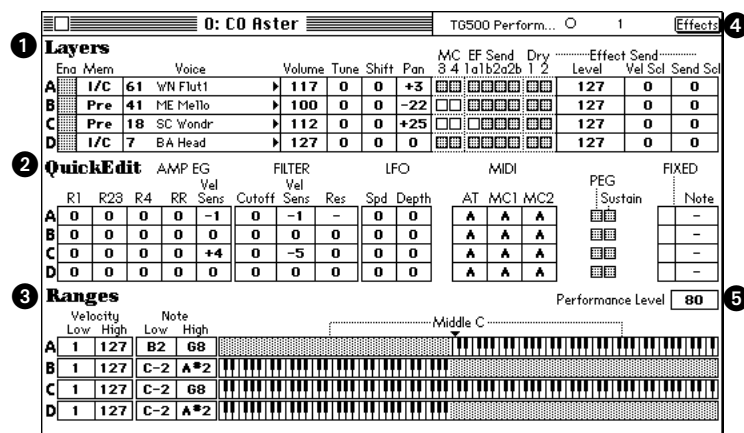


Figure 13: Performance Edit Window

Following is a brief description of each component in the Performance Edit Window:

- ① **Layers:** Up to 4 Voices are assigned to layers, along with settings for volume, pan, tune, shift, and effects sends.
- ② **Quick Edit:** Provides easy access to editing Voice parameters, which include amplitude, filter, and LFO settings.
- ③ **Ranges:** Determines velocity and key ranges for each layer. Key ranges can be set graphically by dragging over the keyboard displays.
- ④ **Effects:** This button opens the Effects Edit Window for the current Performance.
- ⑤ **Performance Level:** Sets the overall volume level for the Performance.

For detailed a explanation of all Performance parameters, please consult your TG500 manual.

COPYING LAYERS

To select a layer for copying/pasting, simply click its letter (A, B, C, or D). Layer parameters can be copied to another layer (within the same Performance) or to a different Performance.

Layers	End Mem	Voice	Volume	Tune	Shift	Pan	MC	EF	Send	Dry	Effect	Send
							3	4	1a	1b	2a	2b
			Level	Vel	Sol	Send	Sol					
A	I/C	61	WN Flutt	117	0	0	+3					
B	Pre	41	ME Mello	100	0	0	-22					
C	Pre	18	SC Wondr	112	0	0	+25					
D	I/C	7	BA Head	127	0	0	0					

Figure 14: Select layer by clicking it letter

PERFORMANCE EFFECTS

With the Performance Edit Window active, choose **Edit>Edit Effects** to edit a Performance's Effects settings. The Effects Edit Window for Performances is identical to that for Voices. For more information see [Effects Edit Window \(pg. 6\)](#).

☆ **NOTE:** When a Voice is used within a Performance, the Voice's original Effects settings are ignored. Whether a layer (Voice) is processed is determined by the Effects Send check boxes in the Performance Edit Window.

CH 5: MULTIS

To edit a TG500 Multi:

- ① Open a Bank of Multis.

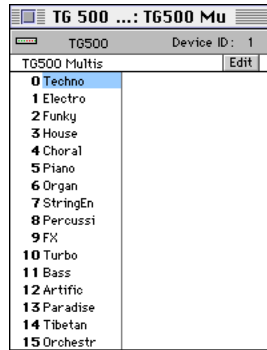


Figure 15: Multi Bank

- ② Highlight the desired Patch and click the **Edit** button to open the Multi Edit Window.

MULTI EDIT WINDOW

Multis can have up to 16 parts, which are assigned Performances, Voices, and Drum Voices. Multis are extremely useful when utilizing the TG500 as a multi-timbral sound module.

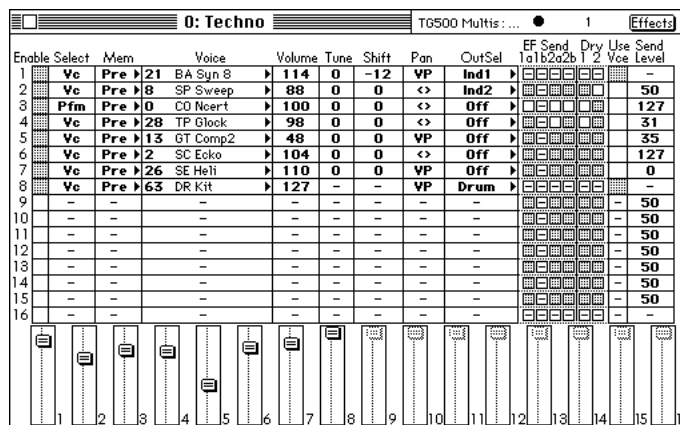


Figure 16: Multi Edit Window

The parts within a Multi can be assigned settings for volume, pan, tune, octave shift, output and effects sends. Graphic faders, located at the bottom of the Multi Edit Window, provide an easy way of settings levels for the 16 parts.

☆ *IMPORTANT: If desired, Effects and output settings for a part can use the settings of the original Performance, Voice, or Drum Voice.*

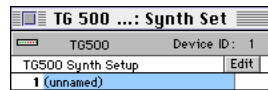
COPYING PARTS To select a part for copying/pasting, simply click its number (1-16). Part parameters can be copied to another part (within the same Multi) or to a different Multi.

MULTI EFFECTS With the Multi Edit Window active, choose **Edit>Edit Effects** to edit a Multi's Effects settings. The Effects Edit Window for Multis is identical to that for Voices. For more information see [Effects Edit Window \(pg. 6\)](#).

CH 6: SYNTH SETUP

To edit Synth Setup for the TG500:

- ① Open the Synth Setup Bank.



- ② Click the **Edit** button to open the Synth Setup Edit Window.

SYNTH SETUP EDIT WINDOW

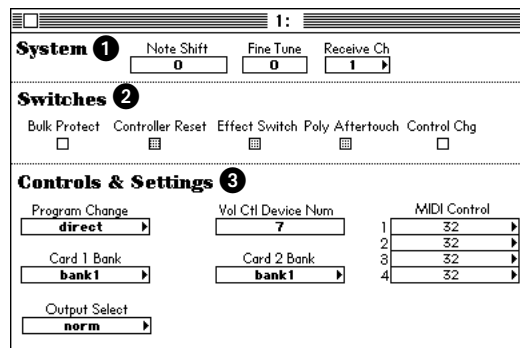


Figure 17: Synth Setup Edit Window

The Synth Setup includes the following global parameters:

- ① **Systems**: Configures global settings for octave shift, fine tuning, and receive channel.
- ② **Switches**: Determines whether the TG500 responds to the specified messages.
- ③ **Controls & Settings**: Sets how the TG500 responds to program change and bank select messages. Additionally, a set of four global control sources (MIDI Control 1-4) are defined.

Refer to the TG500 manual for a more detailed description of the Synth Setup parameters.