FRETBOARD (ZONES) MENU

Up	Softkey#1	Softkey#2	Softkey#3	Softkey#4
Down	ZONE# 1:	KEYS :Fret	LOW: i: 0	HIGH: vi: 24
	TUNING/ TRANS	MIDI	SCAN-MODE	AFTERPRESS
EDIT	Softkey#5	Softkey#6	Softkey#7	Softkey#8

Every Song-Preset must have at least one active zone.

Keys: (Off/ Tap) A Fretboard Zone may be set up in several ways.

> *Off:* The Zone is disabled entirely.

> *Tap***:** Notes are played by simply tapping the keys on the fingerboard.
> This is the only note output Mode available on the ZBoard.

Low/High Zone boundaries: The area of a Fretboard Zone is defined by diagonal cor-ner points like a window on a computer screen.

Low: Select this and press a note on the fingerboard to select the lowest note for the zone that you are creating. The string and fret numbers will appear on the screen. Ex-ample: "i:0" denotes String#1, Fret#0 (open-string). "iv:6" would denote String#4, Fret #6.

High: Select this and press a note on the fingerboard to select the highest note for the zone that you are creating. The string and fret numbers will appear on the screen.

Key/Trans: selects a menu for zone transposition, Unison tuning select and fixed-velocity/touch-sensing for the current zone.

MIDI: selects the MIDI setup menu. This is where you select the channel and patch number.

Scan-mode: This selects the Scan-Mode menu where you can setup how notes are played from the fingerboard.

Afterpress: Selects the Fretboard Afterpressure menu.

Usually a Zone is set up to play notes but not always. A Zone may be silenced but still have Program Change messages and Volume messages assigned as well as all of the other settings. For example, you might want to send patch changes to your rack-EFX boxes, lighting controller, or other hardware that has no knowledge of Notes. When the Song is selected the Program Changes will be sent.

TO CREATE A ZONE:

Select the **ZONE** menu with the soft-key. Select a zone number. (Keep the numbers in sequence for clarity's sake.) Using the soft-keys, select the **"Low"** and **"High"** fields and use the fingerboard to enter the note boundaries for the zone. Make sure the "Low" note is lower than the "High" note. To assign a zone to just string six alone, the low note and high note would be "vi-0" and "vi-24". Experiment with this feature to discover its versatility.

As a convenience, after entering a LOW zone boundary, the cursor will advance to the HIGH boundary automatically.

If you want to play notes from this zone turn the **"Notes" ON**. If you wish to send only patch change information from this zone, turn the **"Notes" OFF**. By sending only patch changes from a zone you can setup effects units or other devices that do not receive note data at the time this Song is selected.

Select the **KEY/TRANS** menu and the **MIDI** menu to complete the zone setup and don't forget to save your changes when you're finished by **"WRITE"**ing this Song to a USER location (Songs 17-Max-Song#).

Up	Softkey#1	Softkey#2	Softkey#3	Softkey#4
	ZONE# 1	MAP: 1	TUNINGS	
Down				
	Curve:1	VELOC: TOUCH	INVERT: Off	MORE>
EDIT	Softkey#5	Softkey#6	Softkey#7	Softkey#8

ZONE#: Softkey#1 selects the Zone you wish to edit

MAP #: Each Zone may be assigned a "Keymap" that contains a Note-number for every key on the Fretboard. Ordinarily, the Map would simply reflect a Guitar-tuning, however it could be edited in many ways for any other tuning, (including tunings adjacent frets for other than ½ step relationships.) Also multiple maps may be layered to play Chords from individual keys. Refer to the Multi-Harp instructions for more information on this.

Curve#: Set the number for a velocity-response curve assigned for this Zone. There are 16 edit-able curves in the global pool of curves for the Ztar.

Key velocity [TOUCH or FIXED]: Selects fixed-velocity or touch-sensing for the selected zone. You may not have more than one non-fixed velocity curve active in a song; however, you may mix up fixed and non-fixed zones in one song.

Invert [On/Off]: When Touch-Sensing is active you may choose to **"INVERT"** the velocity response for this zone. Velocity crossfades between voices may be created by layering one zone with a normal velocity response and a Zone playing the same pitch on a different channel/voice with an inverted response. A heavy touch will play one voice. A soft touch will play the other. A medium touch plays both. Use the response curves in your sound module to fine-tune this effect.

MORE> : Selects the Tuning/ Transposition Menu #2

FRETBOARD> TUNING/TRANSPOISTION SCREEN#2

Up	Softkey#1	Softkey#2	Softkey#3	Softkey#4
Down	ZONE# 1	Solo:Off	Unison:Off	Transp: 0
				MORE>
EDIT	Softkey#5	Softkey#6	Softkey#7	Softkey#8

Solo[On/Off]: When SOLO is ON in a multi-Zone setup, only the selected Zone will play while the others are muted. This allows you to easily audition changes to single Zones.

Unison[On/Off]: When **ON**, sets all of the keys in the selected zone to the same MIDI note-number or pitch value. Use this to create drum roll effects. This will let you pick a single drum from a master drum patch. (Use the joystick here for an interesting effect.) When Unison is **OFF**, the fingerboard-zone responds normally, using the assigned Tuning. When Unison=On, "UniNote#:__" appears at the upper-right to allow setting the fixed pitch for this UnisonZone.

Transpose: Use this parameter to alter the base pitch of this zone by half-steps. With this field selected, use the Data buttons or the joystick to change the value and hear the results of your transposition. "TRANSP" appears when UNISON is **OFF**.

FRETBOARD>TUNING/TRANS menu #2

MORE> : Selects the Tuning/ Transposition Menu #1

This menu allows several ways for programming the fingerboard notes.

Map[1-8]: The fingerboard uses *keymaps* to store tunings. We provide eight available maps for each Song-preset, although in most cases you will only need one map to hold just a single tuning. Set the Map# here that you wish to edit, or the base-map # if you are creating chords.

Presets: Selects the Tuning-Preset screen

Edit: Selects the Keymap-Edit screen.

FRETBOARD>TUNING/TRANS> TUNINGS menu

Up	Softkey#1	Softkey#2	Softkey#3	Softkey#4
Down	MAP: 1	TUNING>	PRESETS	EDIT
		CHORDS	GENERATE	EDIT
EDIT	Softkey#5	Softkey#6	Softkey#7	Softkey#8

Map#[1-8] Select the Map#

EDIT Preset: Softkey#2 opens the Keymap-Edit screen which allows programming of individual keys.

Preset [Off/Guitar/LowD/ DADGAD:/ Fourths/ 6-string(bass) / Fifths/ Open E Major/ Open A9/ Octaves]: Press Softkey#3 to scroll through the list of pre-programmed tunings.

RIGHT/LEFT:
Press this button to change the instrument's tuning for Right-hand or Left-hand players.

The Bottom Line shows the Open-String Notes.

To change an open-string tuning:

Press the soft-key nearest the String number you want to change. Soft-keys #6 and #7 each control two string numbers. Alternate between the two strings by pressing the key twice. Alternatively, you can tap the fingerboard string in the TRIGGERS-OFF modes and the menu-cursor will 'chase' to the string you're touching. Or, in the TRIGGERS-ON modes, you can pluck a Trigger to select the string.

Now simply use the Data Up/Down keys or the joystick to adjust the open-string note anywhere within the entire MIDI note-range. If you hold a note while you're doing this you can hear it change.

Up	**Softkey#1**	**Softkey#2**	**Softkey#3**	**Softkey#4**
Down	MAP: 1	EDIT Preset:	Preset Off	RT/LEFT
	E2 /	A2 / D3 / G3 / B3 / E4		
EDIT	**Softkey#5**	**Softkey#6**	**Softkey#7**	**Softkey#8**

The Zboard uses both Zones and Keymaps to give the ability to set up an area of the keyboard with a standard tuning or your own tuning.

- ♦ Use the ZONE features to set up a zone with your desired dimensions.
  Then set the Zone with the Keymap that will hold the tuning you desire.

- ♦ The Keymap has a map of note assignments for the entire keyboard. The Zone is a window within that keymap.

A keymap is a table that assigns a MIDI note number to each key on the fretboard

Each Ztar Song preset has 8 keymaps available to it, though for most situations, like playing a guitar tuning, you will only need one keymap.

KEYMAPS

The Chords-Mode in the Ztar uses 6 keymaps on the fretboard. Each key holds a chord with up to 6 notes, and when you strum the String Triggers, each Trigger plays the note from just one of the maps. When you generate a chord, all 6 maps are programmed for the keys you selected.

A Keymap is assigned to a Zone. It is possible to have each map hold a different guitar tuning, and you can then switch tunings by enabling/disabling Zones.

Keymaps are great for programming Drums!

EDIT-KEYMAP Screen

Up	Softkey#1	Softkey#2	Softkey#3	Softkey#4
	MAP:1	i: 41 / F2	ii: 46 / A2	iii: 51 / D3
Down				
	FRET 1	iv: 56 / G#3	v: 60 / C4	vi: 65 / F4
EDIT	Softkey#5	Softkey#6	Softkey#7	Softkey#8

You can edit the note-assignments for one keymap at a time.

The display shows one fret at a time for all six strings. The fret-number is shown in the bottom-left corner of the screen. The string numbers are in Roman numerals

Use softkey#5 and the UP/DN keys to select frets 0 (Open-string) through 24.

Use the softkeys to select a string-number for this fret so that you can set the MIDI channel and note-number. Press the softkey to toggle between the Channel and Note fields.

Touch a key and you will see the cursor highlight that note on the screen. You can then change the note-number (0-127).

When you have the map created as you like it, press "WRITE" to save the KeyMap back to its current Song-location.

Using the fingerboard as a DJ/VJ tool for triggering a lots o' samples!

fl you want to program 144 unique notes on the fingerboard, you will create a second Zone and set it to a second MIDI channel to reach the notes beyond #128. You can still use just one keymap if you like.

If you want to program the maximum number of notes per Song-preset, you can program all eight Maps with 128 unique Note-numbers. Each keymap is then assigned to a different Zone with a different MIDI channel. Select the different Zones to pull up the different keymaps. One way to select the individual Zones is to assign a group of eight separate keys, each key to eight new Zones, say 9-16, with MIDI channels matching the first eight Zones. While holding one of the new single-key Zones, press the SOLO hotkey and desired Zone and Map will expand to fill the fingerboard. Press SOLO again to revert the fingerboard.

FRETBOARD> AFTERPRESSURE menu

This menu sets the After Pressure parameters for the fingerboard. When Afterpressure is enabled you can press the fingerboard keys with increased pressure to activate either PolyKeyAfterpressure or Channel Afterpressure.

Up	Softkey#1	Softkey#2	Softkey#3	Softkey#4
Down	FRETBOARD	AFTERTOUCH		Pressure: Off
	ChPrs	Threshold: 0	Sensitivity: 0	Curve: 1
EDIT	**Softkey#5**	**Softkey#6**	**Softkey#7**	**Softkey#8**

Pressure-Enable: softkey #4 toggles pressure On/off for the selected zone.

Pressure-Type: softkey#5 toggles between *PolyKey* pressure and *Channel* Pressure for the selected Zone.

Threshold: set the lowest pressure level that will initiate an Afterpressure response. By setting the Threshold value to a point above your normal firm key-strike-force you can then press in harder to initiate the aftertouch. If the Threshold is too low, the pressure will be applied when you first hit the key.

Sensitivity: increase this number to make the aftertouch more responsive.

Curve: the fingerboard afterpressure may have a response curve independent of velocity. By setting up a curve that begins the lowest MIDI-pressure value at the Threshold-force, you can scale the Afterpressure above the MIDI velocity of the Key-strike.

Up	Softkey#1	Softkey#2	Softkey#3	Softkey#4
Dn	ZONE#: 1	P&V SEND: N	Channel 1:L	SEND
	Patch: 1	CC#0: 0	CC#32: 0	
EDIT	Softkey#5	Softkey#6	Softkey#7	Softkey#8

Patch and Volume Send Enable: You may choose to enable Patch and Volume changes sent to the MIDI channel for the selected Zone by using the PAT +/-hotkeys. Or, disable the P/V sends when you're controlling all of your Program Changes from an external sequencer or controller and don't want to disturb the settings when pressing the onboard PAT+/- keys or selecting the saved SONG. The menu's SEND function will operate regardless of this setting.

Note: You may decide to send a single program change from a separate zone that has notes disabled. This could go out to an external MIDI mapper or to a separate program change receive channel in a synth module that would then assert a group of program changes in a multi-channel setup.

Channel: You may set the Zone's MIDI channel to #1-16 for the Left, Right, or Both MIDI output ports. IF you have a second MIDI Output Port installed on your instrument, this is the Right-side MIDI Port and becomes your channels 17-32. Press the softkey #3 to toggle between the Channel# and the Port-select fields. You may also set the Port assignment to NONE to disable all MIDI output from this Zone.

Note: Either the Right or Left channel (or both) must be selected. If NONE is selected there will be no output and the Program Change will not be sent on Song-select nor will you hear any notes. If you select "R" and do not have a second MIDI Output port installed, the instrument may lockup when you play a few notes.

SEND: Press this to send out your programmed Patch, Bank, and Volume settings.

Patch: Sets the Program Change number 1-127 for the selected Zone. This number is sent when the saved SONG is selected.

CC#0: Sets the Bank-number Most Significant byte or MSB. Refer to your synth documentation for the proper settings.

CC#32: Sets the Bank-number Least Significant byte or LSB. Refer to your synth documentation for the proper settings.

Volume: Sets the base volume for this Zone when the saved Song is selected.

Pre-setting and sending a Program Change with Bank Select

Modern synthesizers are commonly filled with more than 128 patches or programs, the limit that can be addressed with a single ProgramChange command. In order to access these higher-numbered patches MIDI provides two Bank Select messages, ContinuousController #0 (Most Significant byte or MSB) and CC#32 (Least Significant Byte or LSB). You need to enter data values for CC0 and CC32 which you will find by looking in the back of your synthesizer manual. Every manufacturer uses a different set of numbers to select their bank-system.

For instance in the Korg Wavestation SR, if you wanted Patch 21/ Rom Bank5, you would send these three bytes from the FRETBOARD/MIDI menu: "PGM: 21, CC0: 0, CC32: 3" .

Yamaha DB50 note: When setting a Program Change number, the setting in the Ztar will be one less than the number called out in the Yamaha manual.

To program the same Program and Bank select messages to issue from a Pad or Sensor just by striking the Pad, in the SENSOR/ EVENTS menu do this:
set the Sensor Mode = EVENTS
Set the Play-function= ALL
Set Event1 = ControlChange, CC0, 0.
Set Event2 = ControlChange, CC32, 3
Set Event3 = ProgramChange, 21

Refer to SENSOR-MENU for more information.