04 MOD WHEEL

Related Functions
VOICE—14

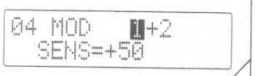
Parameters		O/S	EDIT—PAGE—CURSOR—VALUE

SENSITIVITY
(NORMAL, MULTI-CHANNEL) = 0 ~ 99
(COMBINATION) = −99 ~ +99
VIB DEPTH = ON/OFF
VIB RATE = ON/OFF
PITCH = +ON/−ON/OFF
PORTM TIME = ON/OFF
TREM DEPTH = ON/OFF
TREM RATE = ON/OFF
A ENV BIAS = ON/OFF

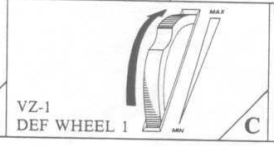
Domain

Mode	Normal	Combination 4 mix/split	Combination 8 mix	Multi channel
K	GLOBAL	PATCH	COUPLE*1	AREA
G		PATCH	COUPLE*2	
W		PATCH	COUPLE*2	

A



B



C

The parameters in this function are used to specify the effects that will be controlled by a modulation wheel or MIDI control change No. 1 message (see accompanying MIDI implementation chart) (or when connecting to VZ-1, DEFINABLE WHEEL 1 message).

These parameters are exactly the same as those set in EFFECT-03 (AFTER TOUCH) — the only difference being that the effects are controlled during performance by MIDI control change No. 1 message using a modulation wheel, instead of After Touch (both can be used...).

For details on these parameters, see "EFFECT-03 AFTER TOUCH".

Note that TREM DEPTH, TREM RATE and AMP ENV BIAS levels can be set for each module (M1 ~ M8) independently, in VOICE-14 (AMP SENS). As with after touch, these independent settings also affect MIDI control change No. 1 message control of the above parameters.

*1 In COMBI "K" mode, ON/OFF and SENSITIVITY of only the PITCH and A ENV BIAS parameters affect to the patches in couples. (1&5, 2&6, 3&7, 4&8)
*2 In COMBI "G" or "W" mode, ON/OFF and SENSITIVITY of only the PORTAMENTO TIME parameter affect the patches (1 ~ 8) globally.

DEF CONTROL

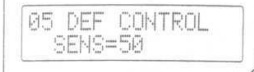
Related Functions
VOICE—14

Parameters	O/S	EDIT—PAGE—CURSOR—VALUE

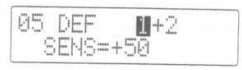
SENSITIVITY
(NORMAL, MULTI-CHANNEL) = 0 ~ 99
(COMBINATION) = −99 ~ +99
VIB DEPTH = ON/OFF
VIB RATE = ON/OFF
PITCH = +ON/−ON/OFF
PORTM TIME = ON/OFF
TREM DEPTH = ON/OFF
TREM RATE = ON/OFF
A ENV BIAS = ON/OFF

Domain

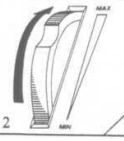
Mode	Normal	Combination 4 mix/split	Combination 8 mix	Multi channel
K	GLOBAL	PATCH	COUPLE*1	AREA
G		PATCH	COUPLE*2	
W		PATCH	COUPLE*2	



A



B



VZ-1
DEF WHEEL 2

C

The parameters in this function are used to specify the effects that will be controlled by MIDI Control change No. 12 ~ 31 messages (for details see accompanying MIDI implementation chart), or when connecting to VZ-1, DEFINABLE WHEEL 2 message.

These parameters are exactly the same as those set in EFFECT-03 (AFTER TOUCH) — the only difference being that the effects are controlled during performance by using MIDI Control change No. 12 ~ 31 messages, instead of After Touch message or modulation wheel message.

For details on these parameters, see "EFFECT-03 AFTER TOUCH".

Note that TREM DEPTH, TREM RATE and AMP ENV BIAS levels can be set for each module (M1 ~ M8) independently, in VOICE-14 (AMP SENS). As with after touch, these independent settings also affect MIDI Control change No. 12 ~ 31 message control of the above parameters. (The MIDI control change number can be using TOTAL-05, the MIDI DATA function.)

*1 In COMBI "K" mode, ON/OFF and SENSITIVITY of only the PITCH and A ENV BIAS parameters affect to the patches in couples. (1&5, 2&6, 3&7, 4&8)
*2 In COMBI "G" or "W" mode, ON/OFF and SENSITIVITY of only the PORTAMENTO TIME parameter affect the patches (1 ~ 8) globally.

06 FOOT VR

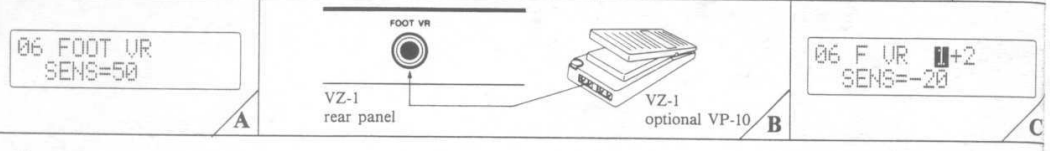
Related Functions
VOICE — 14

Parameters	O/S	EDIT — PAGE — CURSOR — VALUE

SENSITIVITY
(NORMAL, MULTI-CHANNEL) = 0 ~ 99
(COMBINATION) = −99 ~ +99
VIB DEPTH = ON / OFF
VIB RATE = ON / OFF
PITCH = +ON / −ON / OFF
PORTM TIME = ON / OFF
TREM DEPTH = ON / OFF
TREM RATE = ON / OFF
A ENV BIAS = ON / OFF

Domain

Mode	Normal	Combination 4 mix/split	Combination 8 mix	Multi channel
K	GLOBAL	PATCH	COUPLE*1	AREA
G		PATCH	COUPLE*2	
W		PATCH	COUPLE*2	



The parameters in this function are used to specify the effects that will be controlled by MIDI Control change No. 4 message (see accompanying MIDI implementation chart), or when connecting to VZ-1, Foot Control ("foot variable resistor" — Foot VR) message.

These parameters are exactly the same as those set in EFFECT-03 (AFTER TOUCH) — the only difference being that the effects are controlled by MIDI Control change No. 4 messages, instead of After Touch messages.

For details on these parameters, see "EFFECT-03 AFTER TOUCH".

Note that TREM DEPTH, TREM RATE and AMP ENV BIAS levels can be set for each module (M1 ~ M8) independently, in VOICE-14 (AMP SENS). As with after touch, these independent settings also affect MIDI Control change No. 4 message control of the above parameters.

*1 In COMBI "K" mode, ON/OFF and SENSITIVITY of only the PITCH and A ENV BIAS parameters affect to the patches in couples. (1&5, 2&6, 3&7, 4&8)
*2 In COMBI "G" or "W" mode, ON/OFF and SENSITIVITY of only the PORTAMENTO TIME parameter affect the patches (1 ~ 8) globally.

07 FOOT SW

Related Functions

Parameters	O/S	EDIT—PAGE—CURSOR—VALUE

FOOT SW = SUSTAIN
SOSTENUTO
DISABLE

Domain

Mode	Normal	Combination 4 mix/split	Combination 8 mix	Multi channel
K	GLOBAL	PATCH	GLOBAL	AREA
G		PATCH	GLOBAL	
W		PATCH	GLOBAL	

A

B

C

The parameters in this function are used to specify the effects that will be controlled by MIDI control change message number 64 (refer to accompanying MIDI implementation chart). They are also used when sending sustain-pedal messages to a connected Casio MIDI keyboard.
The following chart lists what FOOT SW messages can be utilized;

SUSTAIN: Sound is sustained before or after receiving the FOOT SW ON message until OFF message is received.
SOSTENUTO: Sound is sustained only until FOOT SW ON data is received.
DISABLE: FOOT SW ON data cannot be received.

08 VEL TABLE SELECT

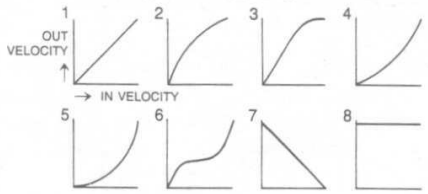
Related Functions

Parameters	O/S	EDIT—PAGE—CURSOR—VALUE

TABLE No. = 1 ~ 8	Domain			
	Mode	Normal	Combination 4 mix/split 8 mix	Multi channel
	K	GLOBAL	GLOBAL	AREA
	G		GLOBAL	
	W		GLOBAL	

The parameter in this function is used to specify the velocity at which MIDI IN data is received. This is accomplished by selecting one of 8 built-in "tables" (curves), using the VALUE keys.
By altering the MIDI IN velocity data, it is possible to actually "correct" or "modify" the velocity curve of the transmitting MIDI device, for use with the VZ-8M. Selection can be made from the following 8 Velocity Tables;

[VEL TABLES]



NOTE;
4. With this table, you must play with a hard attack in order to produce sound.
7. Reversed curve
8. Velocity totally OFF (For use with "W" performance mode).

PAN

Parameters	O/S	EDIT—PAGE—CURSOR—VALUE

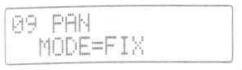
MODE = FIX / CONTROL / AUTO

FIX: PANPOT 1/2 = −15 ~ 0 ~ +15
CONTROL:
CONTROL 1/2 (CONTROLLER) = AFTER / FT VR / MOD / DEF / PAN
RANGE 1/2 = L/R / C→L/R / C

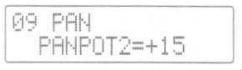
AUTO:
PAN 1/2 = ON / OFF
RATE = 0 ~ 63
DEPTH = 0 ~ 31
CONTROL (CONTROLLER) = AFTER / FOOT VR / MOD / DEF / OFF

Domain

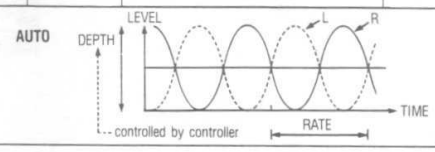
Mode	Normal	Combination 4 mix/split	Combination 8 mix	Multi channel
K	GLOBAL	GLOBAL		AREA
G		GLOBAL		
W		GLOBAL		



A



B



C

The parameters in the PAN function are used to specify the "panning mode", as well as specify the actual L/R panning position for VZ-8M sound source outputs 1 and 2.

Output Channels

Depending on the mode selected, sounds are output through channel 1 or channel 2, as shown in the chart below;

MODES	CHANNEL 1	CHANNEL 2
NORMAL K	Switched between 1 and 2 according to order of MIDI IN NOTE ON messages.	
G*1	MIDI CH + 2 / + 4	MIDI CH + 1 / + 3 / + 5
W	Switched between 1 and 2 according to order of MIDI IN NOTE ON messages.	
COMBINATION 1 + 2	1	2
3 + 4	3	4
1 + 2 + 3 + 4	1, 2	3, 4
1/3	1	3
1/3 + 4	1	3, 4
1 + 2/3	1, 2	3
1 + 2/3 + 4	1, 2	3, 4
1/2/3/4	1, 2	3, 4
1 + 2 + 3 + 4 + 5 + 6 + 7 + 8	1, 2, 3, 4	5, 6, 7, 8
MULTI CHANNEL*2	AREA 1 ~ 4	AREA 5 ~ 8

*1 Reception in "G" performance mode is limited to six channels between MIDI CH and MIDI CH + 5.

*2 Sounds are output through channel 1 and 2 separately if areas 1 ~ 4 and areas 5 ~ 8 are set for 4-poly performance, respectively.

Initially, you must select one of three PAN "modes" — FIX, CONTROL or AUTO.

In the FIX mode, the PAN function acts as a two-channel mixer, fixing the position of the "panpot" for each channel.

In the CONTROL mode, each of the two panpots can be controlled by an independent external controller, such as a modulation wheel, foot VR, etc. This allows actual "manual" panning during performance. In the AUTO mode, both panpots can be programmed to "pan" the sound of each channel over time — automatically.

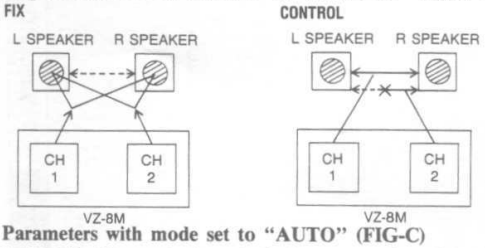
Parameters with mode set to "FIX"

PANPOT 1/2: Used to specify localization from OUTPUT 1 or 2. Note that "0" is equivalent to a "center" setting, with negative values (up to -15) panning the sound to the left, and positive values (up to +15) panning sounds to the right.

Parameters with mode set to "CONTROL"

CONTROL 1/2: Allows selection of the external control device to be assigned to PANPOT1 (channel 1 sounds) with the VALUE keys. There are 5 possible choices, AFTER (aftertouch), FT VR, MOD (modulation wheel), DEF (definable control) or PAN.

RANGE 1/2: Establishes the "range" within which the controller will be able to pan the sound, as well as the panning direction. Note that the "C" stands for "center".



Parameters with mode set to "AUTO" (FIG-C)

PAN 1/2: Allows selection of whether or not selected PANPOT will pan automatically. This is a toggle switch which simply turns the function ON or OFF for the selected PANPOT (channel).

RATE: Universal for both PANPOT channels. This parameter is used to set panning "speed" — the higher the value, the faster panning is performed.

DEPTH: Universal for both channels. This parameter is used to set panning "depth" — the higher the value, the deeper the panning effect.

CONTROL: Establishes the external controller which can be used to manually adjust AUTO PAN depth.

In order to utilize and external controller to control panning in the MULTI CH mode or to control auto-panning depth, the MIDI channel of the controller must be the same as that set in TOTAL-04.

10 LEVEL

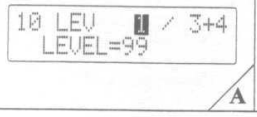
Related Functions
VOICE—15

Parameters	**O/S**	EDIT—PAGE—CURSOR—VALUE

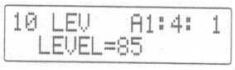
Domain

Mode	**Normal**	**Combination** 4 mix/split	8 mix	**Multi channel**
K	—	PATCH		AREA
G		PATCH		
W		PATCH		

LEVEL = 0 ~ 99



A



B

The parameters in this function are used to set relative volume levels of the patches "combined" in the Combination Mode. Naturally, this function can only be accessed after entering this Mode.

Up to 8 "levels" are set in this function, depending on the number of patches which are combined (according to KEY ASSIGN specifications).

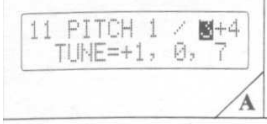
If minimum value of "0" is assigned, the corresponding patch will not sound, while a value of "99" indicates a maximum volume level. These settings can be used to "mix" the relative volume levels of all patches making up the combined sound.

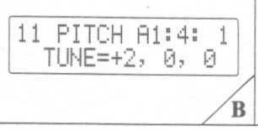
11 PITCH

Related Functions

Parameters	O/S	EDIT—PAGE—CURSOR—VALUE

Domain			
Mode	**Normal**	**Combination** 4 mix/split 8 mix	**Multi channel**
K	—	PATCH	AREA
G		PATCH	
W		PATCH	





The parameters in this function are used to raise or lower the pitch of all patches used to create a "combined sound" in the Combination Mode. Naturally, this function can only be accessed after entering this mode.

The POLARITY parameter is used to specify whether pitch will be raised (+) or lowered (−).

The OCTAVE parameter is used to raise or lower the combined pitch by a maximum of 5 octaves, in 1-octave increments.

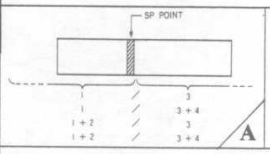
The NOTE parameter is used to raise or lower the combined pitch by a maximum of 1100 cents, in 100-cent increments.

The FINE parameter is used to make "fine tuning" adjustments in 1.6-cent increments (approximate). By making "fine" tuning adjustments, a "thick" ensemble sound can be created.

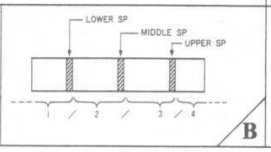
12 SPLIT POINT

Related Functions

Parameters	O/S	EDIT—PAGE—CURSOR—VALUE			
	Domain				
	Mode	Normal	Combination 4 mix/split	Combination 8 mix	Multi channel
POINT = C0 ~ C9	K	—	PATCH(Split)	—	—
	G		PATCH(Split)	—	
	W		PATCH(Split)	—	



A



B

C

D

The parameters in this function are used to specify "keyboard split" points in the Combination Mode.

Depending on KEY ASSIGN specifications, either one or three keyboard split points are assigned using this function.

When only one split point is used, as in the KEY ASSIGN configurations in FIG-A, this function contains only one parameter — the SP POINT parameter.

When the KEY ASSIGN configuration in FIG-B is selected, the display appears as in FIG-C. In this case, there are three split points. Notice that area numbers 1 and 2 are highlighted. This indicates that the "POINT" parameter is to be set for the "LOWER" split point. For the MIDDLE split point, move the cursor so that "2" and "3" are highlighted. Likewise, when 3 & 4 are highlighted, the UPPER split point can be set.

Key split ranges for these split points are as shown below;

UPPER SPLIT POINT = D0 ~ C9 (chromatic)
MIDDLE SPLIT POINT = C♯0 ~ B8
LOWER SPLIT POINT = C0 ~ B♭ 8

If the parameters in this function are accessed when a KEY ASSIGN configuration has been selected which does not contain any keyboard split point — when patches are "layered" without being split — the display appears as in FIG-D.

To input a split point, you must first exit this function (SPLIT POINT) by pressing the COMBINATION key or the EDIT key. Next, choose a KEY ASSIGN configuration which contains a keyboard split point by pressing the VALUE keys.

13 VEL SPLIT

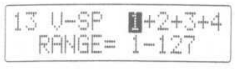
Related Functions

Parameters	O/S	EDIT—PAGE—CURSOR—VALUE

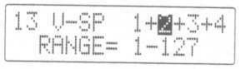
Domain

Mode	Normal	Combination 4 mix/split	Combination 8 mix	Multi channel
K	—	PATCH(Layered)	COUPLE	—
G		PATCH(Layered)	COUPLE	
W		PATCH(Layered)	COUPLE	

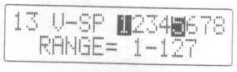
RANGE = 1 ~ 127



A



B



C

D

The parameters in this function are used to specify VZ-8M "velocity split" characteristics in the Combination Mode. Depending on KEY ASSIGN specifications, between one and four velocity split "ranges" are assigned using these parameters.

By assigning maximum and minimum "velocity" values (1 ~ 127) to each patch in a combined sound, you can create a "velocity range" wherein the specified patch will sound. If velocity message is transmitted at a velocity level that is outside this range, the specified patch will not sound.

Note that this function differs from the "KEYBOARD SPLIT" function, as VEL SPLIT can only be used with KEY ASSIGN configurations containing "layered" (+) patches (such as "1 + 2" or "1/3 + 4), as opposed to KEY ASSIGN configurations containing only "split" points (such as "1/3" or "1/2/3/4").

If the parameters in this function are accessed when a KEY ASSIGN configuration has been selected which contains only keyboard split points — without any "layered" patches, the display appears as in FIG-D.

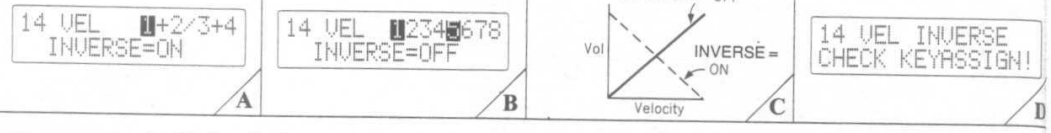
If you want to use velocity split and no layered patches are specified in the present KEY ASSIGN configuration, you must first exit this function (VEL SPLIT) by pressing the COMBINATION key or the EDIT key. Next, choose a KEY ASSIGN configuration which contains layered patches (for example, "1 + 2") by pressing the VALUE keys.

14 VEL INVERSE

Related Functions
VOICE—12

Parameters	O/S	EDIT—PAGE—CURSOR—VALUE
INVERSE = ON / OFF	Domain	

Mode	Normal	Combination 4 mix/split	Combination 8 mix	Multi channel
K	—	PATCH(Layered)	COUPLE	—
G		PATCH(Layered)	COUPLE	
W		PATCH(Layered)	COUPLE	



The parameters in this function let you choose whether you want to literally "invert" the velocity level curves created in VOICE-12 for each patch in a combined sound. Depending on KEY ASSIGN specifications, between two and four toggles are contained in this function, which turn the INVERSE function On or Off for each patch in the combined sound.

By "inverting" the VELOCITY LEVEL curve for any given patch, the velocity characteristics are actually "inverted" so that modules in a patch previously "triggered" only by receiving a fairly high velocity rate message (strong external keyboard attack) are turned OFF by a high velocity rate. In other words, the velocity characteristics for the selected patch is virtually reversed, as illustrated in FIG-C.

Note that this function is similar to the VEL SPLIT function, as it can only be used with KEY ASSIGN configurations containing "layered" (+) patches (such as "1+2" or "1/3+4"), as opposed to KEY ASSIGN configurations containing only "split" points (such as "1/3" or "1/2/3/4").

If the parameters in this function are accessed when a KEY ASSIGN configuration has been selected which contains only keyboard split points — without any "layered" patches, the display appears as in FIG-D.

If you want to use the VEL INVERSE function, you must first exit this function (VEL INVERSE) by pressing the COMBINATION key or the EDIT key. Next, choose a KEY ASSIGN configuration which contains layered patches by pressing the VALUE keys.

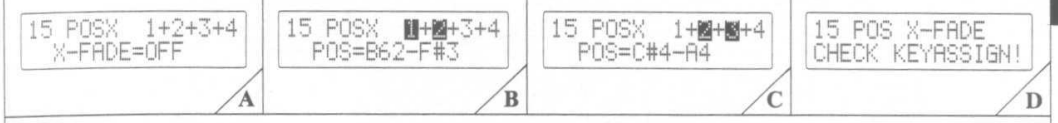
NOTE: In the cases listed below, velocity curves of each module are not inverted — even when the INVERSE function is set to ON;
— When the INT LINE is set to PHASE for any particular LINE.
— When EXT PHASE is specified for a particular LINE.

15 POS CROSSFADE

Related Functions

Parameters	O/S	EDIT — PAGE — CURSOR — VALUE

Parameters	Domain			
	Mode	**Normal**	**Combination** 4 mix/split	**Combination** 8 mix	**Multi** channel
X-FADE = ON / OFF POS = C0 ~ C9	K	—	PATCH(Layered)	—	—
	G		PATCH(Layered)	—	
	W		PATCH(Layered)	—	



The POS CROSSFADE function can only be utilized in the Combination Mode, when a KEY ASSIGN configuration containing only "layered" patches is selected (such as "1+2", "3+4" and "1+2+3+4").

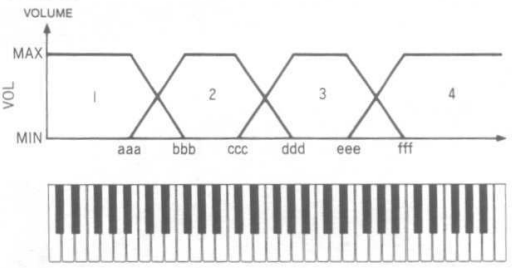
This function is used to "fade" together patches at a certain point on the scale (known as the "cross point"), by determining the range on the external keyboard that wherein the patches will fade together (known as the "cross position" or "POS").

As FIG-E illustrates, in the cross position range (aaa-bbb), one patch becomes progressively more audible, as the other becomes softer and gradually fades out entirely. This creates a "fading" effect, so that there is no audible cutoff point — one patch simply fades into the other as you move up or down the external keyboard.

This function, then, features two basic types of parameters — an EFFECT toggle, which is used to turn the CROSSFADE effect ON or OFF, and POS range settings for each CROSS POSITION. Depending on KEY ASSIGN specifications, either one or three POS ranges are set (FIG-B).

Initially, you must set the X-FADE ON/OFF toggle. Once you've set this toggle, press the cursor [▶] key to move to the actually POS settings. When a KEY ASSIGN configuration featuring only layered patches (1+2+3+4, for example) is selected, the display appears as in FIG-B. In this case, there are three cross points. Notice that area numbers 1 and 2 are highlighted. This indicates that the "POINT" parameter is to be set for the "LOWER" cross point. For the MIDDLE cross point, move the cursor so that "2" and "3" are highlighted. Likewise, when 3 & 4 are highlighted, the UPPER cross point can be set.
Notice that when the cursor [▶] is first pressed, the cursor flashes below the lower limit of the cross range for the selected position ([1] + [2]). After setting this position, press it again to set the upper limit of cross range.
Next, simply press the cursor [▶] key once again to move to the next cross position.

FIG-E



If the parameters in this function are accessed when a KEY ASSIGN configuration has been selected which contains keyboard split points or 8 patches mix — as opposed to only "layered" patches, the display appears as in FIG-D.

If you want to use the POSITIONAL CROSSFADE function and a split KEY ASSIGN configuration is selected, you must first exit this function (POSITIONAL CROSSFADE) by pressing the COMBINATION key or the EDIT key. Next, choose a KEY ASSIGN configuration which contains only layered patches by pressing the VALUE keys.

16 DELAY TRIGGER

Related Functions

Parameters	O/S	EDIT—PAGE—CURSOR—VALUE			
DELAY TRIG = 0 ~ 99	Domain				
	Mode	Normal	Combination 4 mix/split	Combination 8 mix	Multi channel
	K	—	PATCH(Layered)	—	—
	G		PATCH(Layered)	—	
	W		PATCH(Layered)	—	

A

B

The delay trigger function can be used to "delay" the NOTE ON message for any layered patch(es) in a combined sound. Delay time is increased as the DELAY parameter value is raised. At a value of "0", the patch is sounded immediately after Note On message received, while at a value of "99", there is a long delay before the patch sounds.

Note that this function can only be used with KEY ASSIGN configurations containing "layered" (+) patches (such as "1+2" or "1/3+4"), as opposed to KEY ASSIGN configurations containing only "split" points (such as "1/3" or "1/2/3/4") and 8 patch-mix ("1 2 3 4 5 6 7 8").

If the parameters in this function are accessed when a KEY ASSIGN configuration has been selected which contains only keyboard split points — without any "layered" patches, the display appears as in FIG-B.

If you want to use the DELAY TRIGGER function and a KEY assign function is selected which contains only split patches (such as 1/3), or when an 8-patch mix is selected, you must first exit this function by pressing the COMBINATION key or the EDIT key. Next, choose a KEY ASSIGN configuration which contains layered patches by pressing the VALUE keys.

17 TOTAL VIBRATO

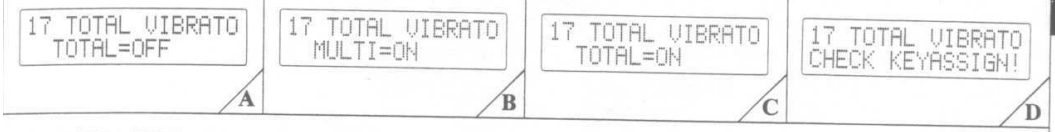
Related Functions
VOICE—07

Parameters	O/S	EDIT—PAGE—CURSOR—VALUE

Domain

Mode	Normal	Combination 4 mix/split	Combination 8 mix	Multi channel
K	—	PATCH(Layered)	GLOBAL	—
G		PATCH(Layered)	GLOBAL	
W		PATCH(Layered)	GLOBAL	

TOTAL = ON / OFF



The TOTAL VIBRATO function is a toggle switch which can be used to turn the TOTAL VIBRATO function ON or OFF, and contains parameters related to total-vibrato control.
When this function is turned OFF, patches are affected by the data programmed individually in VOICE-07 (VIBRATO function). When set to ON, COMBI sounds are affected globally — regardless of independent VOICE-07 settings.

There are five basic parameters within this function — WAVE, DEPTH, RATE, DELAY and MULTI. These correspond to the parameters in VOICE-07 (VIBRATO function). For details on operations, see page 32.

Note that when an 8-patch MIX is selected with the KEY ASSIGN function, the TOTAL parameter is automatically turned ON.

If the parameters in this function are accessed when a KEY ASSIGN configuration has been selected which contains only keyboard split points — without any "layered" patches, the display appears as in FIG-D.

If you want to use the TOTAL VIBRATO function when this display appears, you must first exit this function (TOTAL VIBRATO) by pressing the COMBINATION key or the EDIT key. Next, choose a KEY ASSIGN configuration which contains layered patches ("1 + 2", for example) by pressing the VALUE key.

18 VIBRATO INVERSE

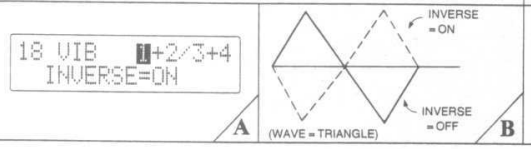
Related Functions
VOICE—07

Parameters	O/S	EDIT—PAGE—CURSOR—VALUE

INVERSE = ON / OFF

Domain

Mode	Normal	Combination 4 mix/split	Combination 8 mix	Multi channel
K	—	PATCH(Layered)	PATCH	—
G		PATCH(Layered)	PATCH	
W		PATCH(Layered)	PATCH	



The parameters in this function let you choose whether you want to literally "invert" the phase of the vibrato effect for each patch in a combined sound. Depending on KEY ASSIGN specifications, between two, four and eight toggles are contained in this function, which turn the INVERSE function On or Off for each patch in the combined sound.

By "inverting" the vibrato phase for any given patch, the vibrato characteristics are actually reversed, so the vibrato "cycle" becomes "inverted." In other words, by inverting the vibrato phase, the pitch will rise in the part of the vibrato cycle where it would normally fall, and fall where it would normally rise, as illustrated in FIG-B.

As with the DELAY TRIGGER function, this function can only be used with KEY ASSIGN configurations containing "layered" (+) patches (such as "1+2" or "1/3+4"), as opposed to KEY ASSIGN configurations containing only "split" points (such as "1/3" or "1/2/3/4").

Note that this function can, however, be used when an 8-patch mix configuration (1+2+3+4+5+6+7+8) is selected. (FIG-C)

If the parameters in this function are accessed when a KEY ASSIGN configuration has been selected which contains only keyboard split points — without any "layered" patches, the display appears as in FIG-D.

If you want to use the VIB INVERSE function when this display appears, you must first exit this function (VIB INVERSE) by pressing the COMBINATION key or the EDIT key. Next, choose a KEY ASSIGN configuration which contains layered patches ("1+2", for example) by pressing the VALUE keys.

19 TOTAL TREMOLO

Related Functions
VOICE—13

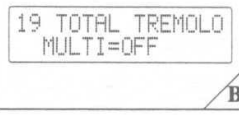
Parameters	O/S	EDIT—PAGE—CURSOR—VALUE

Domain

Mode	Normal	Combination 4 mix/split	Combination 8 mix	Multi channel
K	—	PATCH(Layered)	GLOBAL	—
G		PATCH(Layered)	GLOBAL	
W		PATCH(Layered)	GLOBAL	

TOTAL = ON / OFF

A



B

C

The TOTAL TREMOLO function is a toggle switch which can be used to turn the TOTAL TREMOLO function ON or OFF, and contains parameters related to total-vibrato control.
When this function is turned OFF, patches are affected by the data programmed individually in VOICE-13 (TREMOLO function). When set to ON, COMBI sounds are affected globally — regardless of independent VOICE-13 settings.

There are five basic parameters within this function — WAVE, DEPTH, RATE, DELAY and MULTI. These correspond to the parameters in VOICE-13 (TREMOLO function). For details on operations, see page 38.

Note that when an 8-patch MIX is selected with the KEY ASSIGN function, the TOTAL parameter is automatically turned ON.

If the parameters in this function are accessed when a KEY ASSIGN configuration has been selected which contains only keyboard split points — without any "layered" patches, the display appears as in FIG-C.

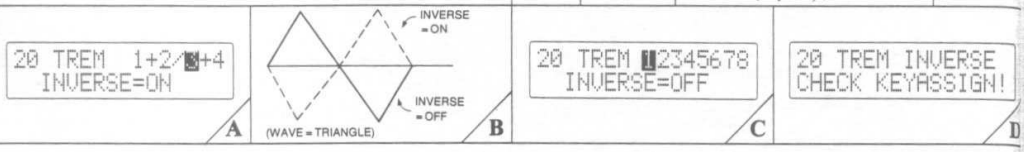
If you want to use the TOTAL TREMOLO function when this display appears, you must first exit this function (TOTAL TREMOLO) by pressing the COMBINATION key or the EDIT key. Next, choose a KEY ASSIGN configuration which contains layered patches ("1 + 2", for example) by pressing the VALUE key.

20 TREMOLO INVERSE

Related Functions
VOICE—13

Parameters	O/S	EDIT—PAGE—CURSOR—VALUE

	Domain				
	Mode	**Normal**	**Combination** 4 mix/split	8 mix	**Multi channel**
INVERSE = ON / OFF	K	—	PATCH(Layered)	PATCH	—
	G		PATCH(Layered)	PATCH	
	W		PATCH(Layered)	PATCH	



The parameters in this function let you choose whether you want to literally "invert" the phase of the tremolo effect for each patch in a combined sound. Depending on KEY ASSIGN specifications, between two, four and eight toggles are contained in this function, which turn the INVERSE function On or Off for each patch in the combined sound.

By "inverting" the tremolo phase for any given patch, the tremolo characteristics are actually reversed, so the tremolo "cycle" becomes "inverted." In other words, by inverting the tremolo phase, the volume will rise in the part of the tremolo cycle where it would normally fall, and fall where it would normally rise, as illustrated in FIG-B.

Note that this function is similar to the VIB INVERSE function, as it can only be used with KEY ASSIGN configurations containing "layered" (+) patches (such as "1+2" or "1/3+4"), as opposed to KEY ASSIGN configurations containing only "split" points (such as "1/3" or "1/2/3/4"). Note that this function can, however, be used when an 8-patch mix configuration (1+2+3+4+5+6+7+8) is selected. (FIG-C)

If the parameters in this function are accessed when a KEY ASSIGN configuration has been selected which contains only keyboard split points — without any "layered" patches, the display appears as in FIG-D.

If you want to use the TREMOLO INVERSE function and this display appears, you must first exit this function by pressing the COMBINATION key or the EDIT key. Next, choose a KEY ASSIGN configuration which contains layered patches by pressing the VALUE keys.

21 COMBI COPY

Related Functions
EFFECT—01~07, 10, 11, 13, 14, 16, 18, 20

Parameters	O/S	EDIT—PAGE—CURSOR—VALUE			
		Domain			
	Mode	**Normal**	**Combination** 4 mix/split	8 mix	**Multi channel**
COPY=1~8→1~8	K	—	PATCH		—
	G		PATCH		
	W		PATCH		

The COMBI COPY function can be used to "copy" the EFFECT menu data of one patch in a combination to another patch position.

For example, the patch number and effect data (EFFECT-01~20) assigned to the Patch 1 position can be copied into any of the 3 or 7 remaining positions by using this function.

Copying can be executed by simply specifying the "source" patch number (FIG-A), and the patch number of the "destination" patch by moving the cursor to the right and pressing a PROG NO key (A1~H8) (FIG-B). After this, just press the YES key (FIG-C).

Data which is copied includes the source patch timbre, and all effect data specified using EFFECT menu functions 01 through 20, with the exception of 8, 9, 12, 15, 17 and 19.

The following data is copied using COMBI COPY function (universal for K, G and W performance modes).

MENU \ KEY ASSIGN	1~4	including 5~8
00 MIDI CH	—	—
01 PORTAMENTO/SOLO	○	—
02 PITCH BEND	○	—
03 AFTER TOUCH	○	○
04 DEF CONTROL	○	—
05 MOD WHEEL	○	—
06 FOOT VR	○	—
07 FOOT SW	○	—
08 VEL TABLE SELECT	—	—
09 PAN	—	—
10 LEVEL	○	○
11 PITCH	○	○
12 SPLIT POINT	—	—
13 VEL SPLIT	○	—
14 VEL INV	○	—
15 POS X FADE	—	—
16 DELAY TRIG	○	—
17 TOTAL VIBRATO	—	—
18 VIB INV	○	○
19 TOTAL TREMOLO	—	—
20 TREMOLO INV	○	○
Program number	○	○

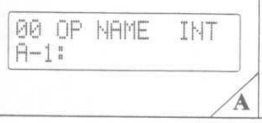
Setting example
1 → 3
4 → 2
2 → 8
5 → 7
5 → 4

"○" indicates that data is copied.

00 OPERATION NAME

Related Functions

Parameters	**O/S**	EDIT—PAGE—CURSOR—VALUE
Alphabet = A ~ Z Numeral = 0 ~ 9 Marks = ". ", "–", "/"	**Domain**	
	Mode	**Operation memory**
	Keyboard	1 Set-up
	Guitar	
	Wind	



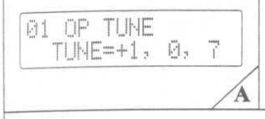
This function is used to assign a name to the VZ-8M's Operation Memories.
The names you choose may contain both letters and numbers, and may be up to 12 characters in length.
Character input is carried out using the VALUE keys, with alphanumeric characters and marks being displayed cyclically by holding either VALUE key down. The procedure is the same as for VOICE-20 ("VOICE NAME").

Note that this function can only be accessed when OPERATION MEMORY is selected.

01 OPERATION TUNE

Related Functions
TOTAL—00

Parameters	O/S	EDIT—PAGE—CURSOR—VALUE	
		Domain	
		Mode	**Operation memory**
TUNE = +/− (POLARITY), 0~5 (OCTAVE), 0~11 (NOTE), 0~63 (FINE)		Keyboard	1 Set-up
		Guitar	
		Wind	



The parameters in this function can be used to set or alter the pitch of each operation memory.
Naturally, this function can only be accessed after entering the OPERATION MEMORY Mode.

By setting this parameter, it becomes possible to perform using the pitch set for the selected operation memory.

The TUNE parameter consists of 4 basic data items. First of all, the cursor flashes under the POLARITY parameter. To set the other parameters, simply move the cursor.

The POLARITY parameter is used to specify whether pitch will be raised (+) or lowered (−).

The OCTAVE parameter is used to raise or lower the pitch by a maximum of 5 octaves, in 1-octave increments.

The NOTE parameter is used to raise or lower the pitch of the selected AREA by a maximum of 1100 cents, in 100-cent increments.

The FINE parameter is used to make "fine tuning" adjustments in 1.6-cent increments (approximate).

The actual pitch used in performance is raised or lowered according to the values set using this function, using the pitch set in the MASTER TUNE function (TOTAL CONTROL-00) as a basis.

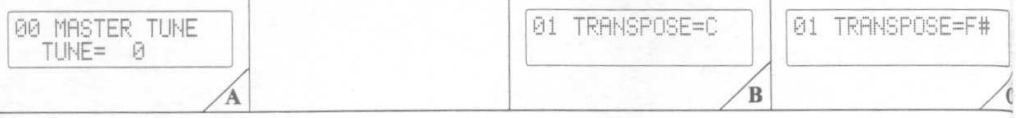
00, 01 MASTER TUNE/TRANSPOSE

Related Functions

Parameters	O/S	EDIT—PAGE—CURSOR—VALUE

Domain				
Mode	Normal	Combination 4 mix/split 8 mix	Operation memory	Multi channe
K	GLOBAL			
G				
W				

TUNE = −64 ~ 0 ~ +64
TRANSPOSE = G ~ F♯



The parameters in this function can be used to set the overall "tuning", as well as alter the standard key by using a built-in TRANSPOSE function.

The TUNE parameter allows you to set the standard A4 tuning within a range of 417.2 and 468.3 Hz (+/−100 cents from standard), in approximately 1.6-cent increments. (This setting is approximate — use it only as a guide.) The initialized value for this parameter is "0". (FIG-A)

The TUNE parameter can be reset to its initialized value ("0") by pressing both VALUE keys simultaneously.

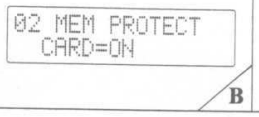
The TRANSPOSE parameter lets you "transpose" the standard pitch frequency to other key positions. In other words, the pitch that would normally correspond to C can be "shifted" chromatically to another key, within a range of G to F♯. This effectually transposes the overall performance key.

02 MEMORY PROTECT

Related Functions
· TOTAL—03, 06

Parameters	O/S	EDIT—PAGE—CURSOR—VALUE

	Domain				
	Mode	Normal	Combination 4 mix/split 8 mix	Operation memory	Multi channel
INTERNAL = ON / OFF CARD = ON / OFF	K	GLOBAL			
	G				
	W				



The parameters in this function can be used to protect the memory, so that data cannot be altered or erased.

The INTERNAL parameter features a toggle which can be turned ON or OFF. When set to ON, the contents of the internal and operation memories will be protected.

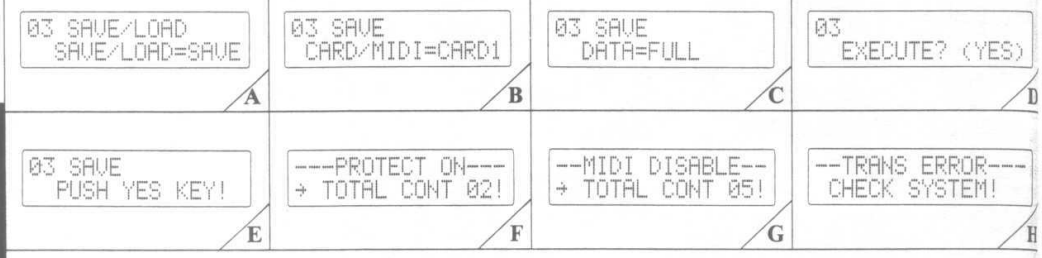
The CARD parameter also features a toggle which can be turned ON or OFF. When set to ON, the contents of sound and operation memories on the RAM cards will be protected.

Both parameters are automatically set to "ON" each time the unit's power is turned ON.

03 SAVE/LOAD

Related Functions

Parameters	O/S	EDIT—PAGE—CURSOR—VALUE				
	Domain					
SAVE/LOAD = SAVE/LOAD CARD/MIDI = CARD 1/CARD 2/MIDI DATA = VOICE/OPMEM/VC+OP/FULL	Mode	Normal	Combination 4 mix/split 8 mix		Operation memory	Multi channel
	K	GLOBAL				
	G					
	W					



This function is essentially a "utility" function, which is used to control data SAVE and LOAD operations.

The SAVE/LOAD parameter is used to specify the type of operation you want to perform. When SAVE is selected, the onboard memory data will be "saved" to an external memory medium, while when LOAD is selected, external data will be "loaded" into the onboard memory.

The CARD 1/CARD 2/MIDI parameter lets you choose the medium to/from which you will SAVE or LOAD data.

When CARD is selected, data will either be saved to, or loaded from a RAM/ROM card inserted in the card slot. If you want to SAVE the data, be sure to also set the CARD parameter to "CARD 1". When MIDI is selected, data will be transferred to or from another VZ series synthesizer.
When using a new RAM card, you must first format it (see TOTAL-06).

The DATA parameter lets you choose the type or combination of data which will be saved or loaded. You can choose from three different settings — VOICE, OP MEM or VC+OP. Note, however, that when using two VZ units connected by MIDI, this setting must be the same for both units (except when executing SAVE or LOAD).

When "VOICE" is selected, all 64 internal sounds can be transferred to or from the internal memory. When "OP MEM" is selected, only data from the 64 operation memories can be transferred to or from the unit.

When "VC+OP" is selected, data from both the 64 internal sounds and the 64 operation memories can be transferred.

When "FULL" is selected, data from the "VC+OP" parameter and TOTAL CONTROL menu functions 00, 01, 04 and 05 can be transferred to or from the unit.

Once you've specified the operation you want to perform, press the YES key. Respond to the menu prompt by pressing the YES key once again.

If you want to abort data transmission, simply press the cursor or NO (VALUE ▼) key of the transmitting or receiving device.

Note that when an Operation Memory featuring INTERNAL sounds is SAVED to a card, the sound specification on the display automatically changes to "CARD" for the formerly INTERNAL sounds.

Note that if the memory protect is set to ON (TOTAL-02), it will be impossible to LOAD data. (FIG-F)

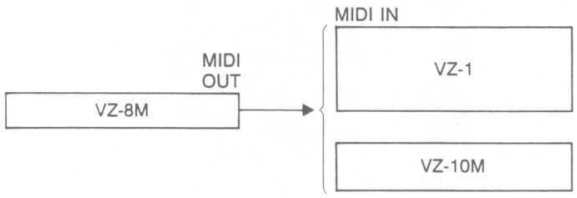
Note that if MIDI Exclusive is disabled (TOTAL-04) or basic channels do not match, MIDI SAVE/LOAD will be impossible.

If data is not transferred successfully for some reason, MIDI SAVE/LOAD will be impossible and display appears as in FIG-H.

If an ERROR message appears, operations can be reset by pressing the MODE, PAGE or CURSOR keys.

VZ-8M Compatibility with VZ-1/VZ-10M

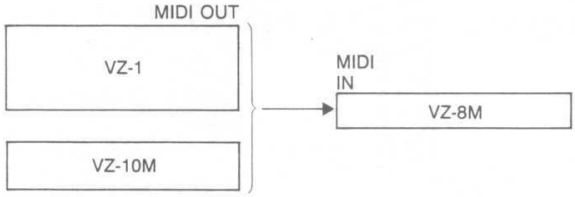
When transferring data between the VZ-8M and the VZ-1 or VZ-10M with the VZ-8M as MASTER, data compatibility is as follows;



DATA — VOICE: Totally compatible operation
OP MEM: Compatible within limits of VZ-1 and VZ-10M menu functions.
VC + OP: Treated separately, as listed above.

NOTE: Never attempt to transfer operation memory data which has been sent to the VZ-1 back to the VZ-10M.

When transferring data between the VZ-8M and the VZ-1 or VZ-10M with the VZ-8M as SLAVE, data compatibility is as follows;



DATA — VOICE: Totally compatible operation
OP MEM: Compatible within limits of VZ-1 and VZ-10M menu functions. Functions only available on VZ-8M are set at initialized values.
VC + OP: Treated separately, as listed above.

NOTE: The above is true for data saved/loaded using RAM cards as well.