

Casio FZ Editor and Librarian Manual

Casio FZ Librarian

File: casio001.fzf Num banks: 5 Overall size: 1032 kB
 File type: full Num voices: 17 PCM size: 1022 kB

Voices	Bank 1 BRTPIANO LOW	Bank 2 BRTPIANO HI	Bank 3 DRKPIANO LOW	Bank 4 DRKPIANO HI	Bank 5 PNO OCT BASS					
s	Voice	Name	kHz	Low	Orig	High	Tune	Samples	m	
>	01	PG1	36	-	C02	G02	#D03	-38	90196	c x s
>	02	PE2	36	-	E03	E03	B03	-38	88154	c x s
>	03	PC3	36	-	C04	C04	#G04	-38	111761	c x s
>	04	PA 3	36	-	A04	A04	#F05	-38	75965	c x s
>	05	PG4	36	-	G05	G05	B05	-38	54529	c x s
>	06	PC5	36	-	C06	C06	#F06	-38	38633	c x s
>	07	PG6	36	-	G06	G06	C07	-33	32352	c x s
>	08	P G7	36	-	#C06	G06	C07	12	31399	c x s
>	09	PG1	36	-	C02	G03	#D03	-38	90196	c x s

DCA:	Rate	Level	-	+	DCF:	Rate	Level	-	+	LFO:	Sin Sync ON
#1	127	255			#1	127	90			Delay:	0
#2	9	0			#2	21	0			Rate:	64
#3	15	0			#3	4	0		END	OSC Depth:	0
#4	50	0		END						Resonance:	0

LevelKF: LevelKF:
 LevelVF: LevelVF:
 RateKF: RateKF:
 RateVF: RateVF:
 Cutoff Freq:
 Resonance:
 Res. Velo.:

Voice Number:
 Voice Name:

Peak: -2.70 dB

Hello, and welcome. Thank you for your interest in the Casio FZ Editor and Librarian. The user interface is divided up in to tabs, and so the manual will mirror this.

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Manual

1. Installation and Requirements

For the "Editor and Librarian" program, a computer running Windows XP is required.

For the "File transfer" program, a computer running Windows XP with a 25 pin parallel port is required.

If a computer can run Windows XP but doesn't have a built in parallel port, it can possibly be upgraded to work via PCI, PCI Express, PCI Expresscard or PCMCIA parallel port adapters.

Choose a directory to store the program in, and copy the two .exe files and the security key to that directory.

2. Concepts

2.1 Banks, Voices

A Voice is an uncompressed audio sample, with some settings to determine how it sounds when triggered by keyboard input on the FZ.

A Bank is a collection of Voices.

Each Voice in a Bank has settings to determine what keyboard notes the Voices respond to in that specific Bank. A Voice in a Bank is sometimes referred to as an Area.

The remaining Voice settings are inherited from the Voice's normal settings.

2.2 Max Voices, Max Banks, Max Memory

An FZ can store a maximum of 8 Banks, and a maximum of 64 Voices. The "Editor and Librarian" enforces this limitation too.

Each Bank can refer to all 64 Voices.

Each reference in the Bank to a Voice is called an Area.

An FZ1 can have 1MB of memory, or be upgraded to 2MB. The FZ-10m and FZ-20m have 2MB of memory and cannot be upgraded.

2.3 File types

WAV file

A file format for storing uncompressed audio. The Casio FZ only plays Mono samples. The Editor will use the left channel of Stereo samples to be compatible.

FZF file

A full dump format for storing the full memory contents of an FZ.

FZB file

A Bank dump format for storing the one Bank and its Voices.

FZV file

A Voice dump format for storing the one Voice.

2.4 Sample rate

A value in kHz(kilohertz), the number of thousands of samples per second a Voice was sampled at.

2.5 Area mode

An important setting for playing the Casio FZ multitimbrally (with many sounds). It allows you to use Voices in a Bank on separate MIDI channels.

That allows you to send the same notes on different MIDI channels, giving greater range to the Voices.

You can make whole tracks on the FZ with this setting turned on. You can make whole tracks without it turned on too, but it is harder.

Location in FZ Menu: MAIN MENU -> EFFECT/MIDI -> MIDI FUNCTION -> RECEIVE = AREA. (Default is BASIC which is only meant for playing a small number of sounds at a time).

2.6 Polyphony

The maximum polyphony of an FZ is 8. It is a hard physical limit because it has 8 outputs and 8 filters. That means it can play 8 Voices at the same time.

An FZ user can mix Voices: e.g. a snare and a kick drum, while playing 7 other Voices, to trick people into thinking it's playing more than it actually is.

Another example would be to sample a "chord" of three notes. That way only one Voice is used to play that chord, and it can be transposed too.

2.7 Displayed values, FZ values

The FZ displays many of its parameters as numbers from 0-99. This is presumably to save on pixels on the FZ's display.

The full range of all parameters can be set by the "Editor and Librarian" and the FZ will display them in the range 0-99.

By doing it this way there's a marginal increase in the control over parameters in the "Editor and Librarian" than can be achieved on the FZ alone.

2.8 Call/Set Menu



This is a great feature on the FZ. When in the "Modify" menu system it allows you to set a bookmark. You can then go elsewhere in the "Modify" menu system to look at a parameter or load another file.

Then when you are back in the "Play" menu, you can press the button again to jump to that bookmark.

Not only that, but if press it in a "Voice" part of the "Modify" menu, for example "Velocity Sens", you can change Voice in the "Play" menu.

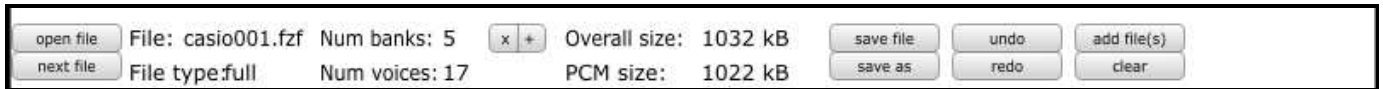
When you press the "Call/Set Menu" button within the "Play" menu you will now jump to "Velocity Sens" for the new Voice you have selected.

This saves you having to go into "Modify" and changing the selected Voice with "Define Voice".

This allows you to change the same parameter for a lot of Voices on the FZ quickly.

If you press "Call/Set Menu" again in the "Modify" menu it will overwrite the last bookmark with the current page.

3. Front Panel



3.1 Front Panel Buttons



3.1.1 Open File

Open an FZF, FZB or FZV file.

3.1.2 Next File

Open the next file adjacent to the current one in a directory.

3.1.3 Num Banks x

If a Bank tab is selected, delete that Bank. This does not delete the associated Voice data or WAV data.

3.1.4 Num Banks +

Increase the number of Banks by one.

3.1.5 Save File

Save changes to the file that is open.

3.1.6 Save As

Save the file as a different type.

When the "Save file as" dialog box pops up, type the filename and extension that you want.

The formats you can save depend on the number of Banks and Voices.

If you have only 1 Voice loaded, you can save an FZV.

If you have only 1 Bank loaded, you can save an FZB.

3.1.7 Undo

Undoes the previous action.

3.1.8 Redo

If you have undone something, redo "redoes" the previous action.

3.1.9 Add File(s)

Adds WAV, FZF, FZB and FZV files. You can select multiple files to add more than one.

The program will not let you add more than 64 Voices/WAVs.

The program will not let you add more than 8 Banks.

3.1.10 Clear

Clears the loaded file and all changes - this cannot be undone, upon clicking a warning dialog will popup to that effect.

3.2 Front Panel Labels

File: casio001.fzf	Num banks: 5	Overall size: 1032 kB
File type:full	Num voices: 17	PCM size: 1022 kB

3.2.1 File

This tells you the name of the file that is open.

3.2.2 File Type

This tells you the type of file that it is, Full, Bank and Voice are possible values. This is not determined by the extension but by the filetype byte within the file.

3.2.3 Num Banks

The number of Banks in the file.

3.2.4 Num Voices

The number of Voices in the file.

3.2.5 Overall Size

The overall size of the file.

3.2.6 PCM Size

The size in KB (kilobytes) of the (Pulse Code Modulated) audio data in the file.

4. Upper Tab Row, Voices Tab

Voices										
s	Voice	Name	kHz	Low	Orig	High	Tune	Samples	m	
>	01	PG1	36	-	C02	G02	#D03	-38	90196	c x s
>	02	PE2	36	-	E03	E03	B03	-38	88154	c x s
>	03	PC3	36	-	C04	C04	#G04	-38	111761	c x s
>	04	PA 3	36	-	A04	A04	#F05	-38	75965	c x s
>	05	PG4	36	-	G05	G05	B05	-38	54529	c x s
>	06	PC5	36	-	C06	C06	#F06	-38	38633	c x s
>	07	PG6	36	-	G06	G06	C07	-33	32352	c x s
>	08	P G7	36	-	#C06	G06	C07	12	31399	c x s
>	09	PG1	36	-	C02	G03	#D03	-38	90196	c x s

This tab lists all the Voices in the file, of which there's a maximum of 64.

4.1 Voices Tab Buttons

4.1.1 Top row S button

Save all Voices as WAVs.

4.1.2 Top row M button

Maximize the peak volume of all the Voices.

4.1.3 Voice row > button

Play the sound and select it in the lower row of tabs.

4.1.4 Voice row - button

Reduce the sample rate of the sound so that it will sound more low fi or to reduce the amount of space it occupies.

Values can be 36kHz, 18kHz or 9kHz, if you save a reduced sample rate - it cannot be restored, so be sure to "Save As".

4.1.5 Voice row c button

Clear the Voice in this slot so that it doesn't occupy any memory. This action maintains an empty slot.

This action will clear it from all Banks too.

4.1.6 Voice row x button

Delete the Voice in this slot so that it doesn't occupy any memory. This action removes the slot and renumbers subsequent Voices.

This action will delete it from all Banks too.

4.1.7 Voice row s button

Save the Voice on this row as a WAV.

4.2 Voice Text Boxes

Name	kHz	Low	Orig	High	Tune	
PG1	36	-	C02	G02	#D03	-38

4.2.1 Name

Name of the Voice, can be edited. Maximum number of characters that can fit is 12.

Location in FZ Menu: MODIFY->VOICE EDIT->DEFINE VOICE->VOICE NAME

4.2.2 Low

Lowest MIDI note of the Voice. The pitch of this note will depend on the number of semitones between "Low" and "Orig". It can be set higher or lower than "Orig".

Minimum value is "C-1". Maximum value is "G09".

Location in FZ Menu: MODIFY->VOICE EDIT->KEYBOARD SET

4.2.3 Orig

This note determines which MIDI note would trigger the original sample without it being pitched.

This note does not necessarily have lie within the range of "Low -> High".

The FZ cannot pitch a sample further than 3 octaves either side of "Orig" and the auditioning keyboards in the Editor imitate that behaviour.

Minimum value is "C-1". Maximum value is "G09".

Location in FZ Menu: MODIFY->VOICE EDIT->KEYBOARD SET

4.2.4 High

Highest MIDI note of the Voice. The pitch of this note will depend on the number of semitones between "High" and "Orig". It can be set higher or lower than "Orig".

Minimum value is "C-1". Maximum value is "G09".

Location in FZ Menu: MODIFY->VOICE EDIT->KEYBOARD SET

4.2.5 Tune

Cent tuning for the Voice, can be positive or negative.

In the Editor: Minimum value is -255. Maximum value is 255.

Corresponding values shown on the FZ: Minimum value is -100. Maximum value is +100.

Location in FZ Menu: MODIFY->VOICE EDIT->CREATE VOICE->TUNE/MEM READ

4.3 Samples Label

Number of samples used in the Voice. All Voices are 16bit, using 2 bytes per sample, this is independent of the samplerate.

5. Upper Tab Row, Bank Tabs

		Bank 1 BRTPIANO LOW									
+ Area	V#	Voice	Low	Orig	High	MaxT	MinT	Vol	MidiCh	OutputCh	
> 01	01	PG1	C02	G02	#D03	127	1	127	1	✓✓✓✓✓✓✓✓✓✓	x
> 02	02	PE2	E03	E03	B03	127	1	127	1	✓✓✓✓✓✓✓✓✓✓	x
> 03	03	PC3	C04	C04	#G04	127	1	127	1	✓✓✓✓✓✓✓✓✓✓	x
> 04	04	PA 3	A04	A04	#F05	127	1	127	1	✓✓✓✓✓✓✓✓✓✓	x
> 05	05	PG4	G05	G05	B05	127	1	127	1	✓✓✓✓✓✓✓✓✓✓	x
> 06	06	PC5	C06	C06	#F06	127	1	127	1	✓✓✓✓✓✓✓✓✓✓	x
> 07	07	PG6	G06	G06	C07	127	1	127	1	✓✓✓✓✓✓✓✓✓✓	x

Each Bank tab lists the Voices it uses. Banks are merely arrangements of Voices in the file - they don't "own" any of the Voices, they are just associated with them.

Each Bank can use any of the Voices in the file.

Each reference in the Bank to a Voice is called an Area.

5.1 Bank Tab Buttons

5.1.1 Bank Top row + button (Add Voices to Bank)

Add Voices to this Bank tab. When you click the button the window below pops up.

Add Voice(s) to this Bank ✖

start voice:	1	add voice(s)
end voice:	17	
notes per voice:	1	cancel
starting note:	C02	

new voices use unused midi channels
 remap 1st channel with new voices
 map after 1st channel voices
 map from starting note

5.1.1.1 Add Voice To Bank Window

5.1.1.1.1 Start Voice

The first Voice in a range of Voices to add, when the "Add Voices" button is clicked.

5.1.1.1.2 End Voice

The last Voice in a range of Voices to add, when the "Add Voices" button is clicked.

5.1.1.1.3 Notes per Voice

The number of keyboard notes to spread the Voice over.

5.1.1.1.4 Starting note

The starting note to assign to the first Voice in the range of Voices being added.

The note for next Voice will be determined by the "Notes per Voice" text box.

5.1.1.2 Add Voice To Bank Tick Boxes

These tickboxes are mutually exclusive. That means only one of them can be selected at a time.

5.1.1.2.1 New Voices use unused MIDI channels

Each Voice in the range of Voices added, will be set to use a different MIDI channel.

5.1.1.2.2 Remap 1st channel with new Voices

All Voices already on MIDI channel 1 in the Bank, will be remapped to start from "starting note"

Each Voice in the range of Voices added, will be added after the last Voice already remapped in the Bank on MIDI channel 1.

5.1.1.2.3 Map after 1st channel Voices

Each Voice in the range of Voices added, will be added after the last Voice already in the Bank on MIDI channel 1.

5.1.1.2.4 Map from starting note

Each Voice in the range of Voices added, will be remapped to start from "starting note".

5.1.1.3 Add Voice To Bank Buttons

Here you can add Voices to the current Bank. Note that you can add the same Voice up to 64 times, if you want to.

5.1.1.3.1 Add Voice(s)

Add the Voices in the fashion determined by the settings chosen in the Text Boxes and Tick Boxes.

5.1.1.3.2 Cancel

Equivalent to clicking the "x" button on the top right of this sub window, with the mouse.

5.1.2 Bank Voice row > button

Play the sound and select it in the lower row of tabs.

5.1.3 Bank Voice row x button

Remove the Voice from this slot.

5.2 Bank Text Boxes

Low	Orig	High	MaxT	MinT	Vol	MidiCh
C02	G02	#D03	127	1	127	1

5.2.1 Low

Lowest MIDI note of the Bank Voice, overriding the Voice tab setting. The pitch of this note will depend on the number of semitones between "Low" and "Orig". It can be set higher or lower than "Orig".

Minimum value is "C-1". Maximum value is "G09".

Location in FZ Menu: MODIFY->BANK EDIT->CREATE BANK

5.2.2 Orig

This note determines which MIDI note triggers the original sample without it being pitched.

This note does not necessarily have lie within the range of "Low -> High".

The FZ cannot pitch a sample further than 3 octaves either side of "Orig" and the auditioning keyboards in the Editor imitate that behaviour.

Minimum value is "C-1". Maximum value is "G09".

Location in FZ Menu: MODIFY->BANK EDIT->CREATE BANK

5.2.3 High

Highest MIDI note of the Bank Voice, overriding the Voice tab setting.

The pitch of this note will depend on the number of semitones between "High" and "Orig".

It can be set higher or lower than "Orig".

Minimum value is "C-1". Maximum value is "G09".

Location in FZ Menu: MODIFY->BANK EDIT->CREATE BANK

5.2.4 MaxT

Maximum MIDI note velocity this Voice will trigger at. Used to setup > 1 Voices on the same note chosen by velocity.

Minimum and maximum values in the Editor are the same as on the FZ, 0 - 127.

Location in FZ Menu: MODIFY->BANK EDIT->CREATE BANK

5.2.5 MinT

Minimum MIDI note velocity this Voice will trigger at. Used to setup > 1 Voices on the same note chosen by velocity.

Minimum and maximum values in the Editor are the same as on the FZ, 0 - 127.

Location in FZ Menu: MODIFY->BANK EDIT->CREATE BANK

5.2.6 Vol

Volume of this Voice when used in this Bank.

Minimum and maximum values in the Editor are the same as on the FZ, 0 - 127.

Location in FZ Menu: MODIFY->BANK EDIT->CREATE BANK (AREA LEVEL)

5.2.7 MidiCh

Midi Channel of this Voice in the Bank, to use set FZ to AREA MODE.

Minimum and maximum values in the Editor are the same as on the FZ, 1 - 16.

Location in FZ Menu: MODIFY->BANK EDIT->CREATE BANK

5.3 Output Ch

Each tick box represents the outputs at the back of the FZ. Only once Voice can be active on one output at any one time. If you set an open hat and a closed hat to only use the same output you can simulate how a real hi-hats work.

Location in FZ Menu: MODIFY->BANK EDIT->CREATE BANK

6. Lower Tab Row, Voice Details

Voice Details										
DCA:	Rate	Level	- +	DCF:	Rate	Level	- +	LFO:	Sin Sync ON	+
#1	127	255		#1	127	90		Delay:	0	
#2	9	0		#2	21	0		Rate:	64	
#3	15	0		#3	4	0	END	OSC Depth:	0	
#4	50	0	END					Resonance:	0	
								DCA Depth:	0	
								DCF Depth:	0	
								Attack:	0	
LevelKF:	0			LevelKF:	0			Voice Number:	01	
LevelVF:	55			LevelVF:	93			Voice Name:	PG1	
RateKF:	0			RateKF:	0					
RateVF:	0			RateVF:	111					
				Cutoff Freq:	82					
				Resonance:	0					
				Res. Velo.:	0					

Peak: -2.70 dB m

6.1 Voice Details Buttons

6.1.1 DCA -/+

Add or remove a stage from the DCA Envelope. There can be a maximum of 8 stages.

6.1.2 DCF -/+

Add or remove a stage from the DCF Envelope. There can be a maximum of 8 stages.

6.1.3 DCA/DCF Stage Blank Grey Button

Toggle sustain on or off on each stage. Only one stage can be set to sustain.

The best way to visualise what sustain does to an envelope is to go to the menu for it on the FZ. Once there, select LEVEL and set it to 80.

Then press the DISPLAY button. Press the UP ARROW two times, and enter in 0 to indicate SUSTAIN. Enter 1 or some other number to revert.

You will see the envelope becoming less triangular and more trapezoid like.

Location in FZ Menu: MODIFY->VOICE EDIT->CREATE VOICE->DC* ENVELOPE

6.2 Voice Details Text Boxes

6.2.1 DCA/DCF Columns

DCA:	Rate	Level	-	+	DCF:	Rate	Level	-	+
#1	127	255			#1	127	90		
#2	9	0			#2	21	0		
#3	15	0			#3	4	0	END	
#4	50	0	END						

LevelKF:	<input type="text" value="0"/>	LevelKF:	<input type="text" value="0"/>
LevelVF:	<input type="text" value="55"/>	LevelVF:	<input type="text" value="93"/>
RateKF:	<input type="text" value="0"/>	RateKF:	<input type="text" value="0"/>
RateVF:	<input type="text" value="0"/>	RateVF:	<input type="text" value="111"/>
		Cutoff Freq:	<input type="text" value="82"/>
		Resonance:	<input type="text" value="0"/>
		Res. Velo.:	<input type="text" value="0"/>

This part of the UI is in two columns, right and left.

The left one is for DCA, the right one is for DCF.

6.2.1.1 Stage Number label

The number of the stage, 1 to 8.

6.2.1.2 Stage Rate

The rate at which the stage progresses towards its level. Higher is faster.

Minimum and maximum in the Editor: 0 - 127.

Minimum and maximum on the FZ: 0 - 99.

Location in FZ Menu: MODIFY->VOICE EDIT->CREATE VOICE->DC* ENVELOPE

6.2.1.3 Stage Level

The level of the DCA or amount the DCF is open at the end of the stage.

Minimum and maximum in the Editor: 0 - 255.

Minimum and maximum on the FZ: 0 - 99.

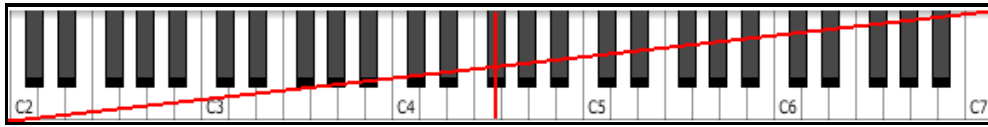
Location in FZ Menu: MODIFY->VOICE EDIT->CREATE VOICE->DC* ENVELOPE

6.2.1.4 Level KF

The amount the keytracking affects the Level.

Positive values assign progressively higher levels for higher keys, and lower levels for lower keys.

This is what it does with a Positive value, where F#4 is the "Orig" note:



Negative values assign progressively lower levels for higher keys, and higher levels for lower keys.

This is what it does with a Negative value, where F#4 is the "Orig" note:



The "Orig" key is the midpoint and so is unaffected by this setting.

Minimum and maximum in the Editor: -127 to +127.

Minimum and maximum on the FZ: -15 to +15.

Location in FZ Menu: MODIFY->VOICE EDIT->CREATE VOICE->DC* ENVELOPE

6.2.1.5 Level VF

The amount the MIDI note velocity affects the Level.

Minimum and maximum values in the Editor are the same as on the FZ, -127 to +127.

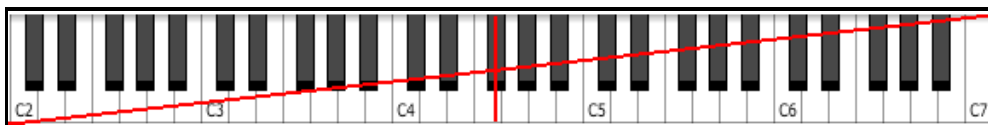
Location in FZ Menu: MODIFY->VOICE EDIT->CREATE VOICE->VELOCITY SENS

6.2.1.6 Rate KF

The amount the keytracking affects the Rate.

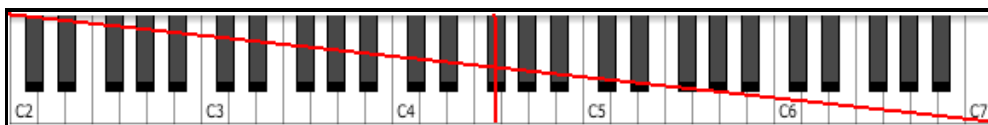
Positive values assign progressively faster rates for higher keys, and slower rates for lower keys.

This is what it does with a positive value, where F#4 is the "Orig" note:



Negative values assign progressively slower rates for higher keys, and faster rates for lower keys.

This is what it does a negative value, where F#4 is the "Orig" note:



The "Orig" key is the midpoint and so is unaffected by this setting.

Minimum and maximum in the Editor: -127 to +127.

Minimum and maximum on the FZ: -15 to +15.

Location in FZ Menu: MODIFY->VOICE EDIT->CREATE VOICE->DC* ENVELOPE

6.2.1.7 Rate VF

The amount the MIDI note velocity affects the Rate. The left one is for DCA, the right one is for DCF.

Minimum and maximum values in the Editor are the same as on the FZ, -127 to +127.

Location in FZ Menu: MODIFY->VOICE EDIT->CREATE VOICE->VELOCITY SENS

6.2.1.8 DCF Cutoff Freq

The maximum amount to open the DCF's Cutoff Frequency.

The filter is a Low Pass Filter. To hear the unfiltered Voice, put this to 127.

Minimum and maximum values in the Editor are the same as on the FZ, 0 - 127.

Location in FZ Menu: MODIFY->VOICE EDIT->CREATE VOICE->DCF ENVELOPE

6.2.1.9 DCF Resonance

The Resonance or Q of the DCF.

Minimum and maximum values in the Editor are the same as on the FZ, 0 - 127.

Location in FZ Menu: MODIFY->VOICE EDIT->CREATE VOICE->DCF ENVELOPE

6.2.1.10 DCF Resonance Velocity

How much MIDI note velocity affects Resonance of the DCF.

Minimum and maximum values in the Editor are the same as on the FZ, 0 - 127.

Location in FZ Menu: MODIFY->VOICE EDIT->CREATE VOICE->VELOCITY SENS

6.2.2 LFO Columns

LFO:	Sin Sync ON
Delay:	0
Rate:	64
OSC Depth:	0
Resonance KF:	0
DCA Depth:	0
DCF Depth:	0
Attack:	0

6.2.2.1 LFO Combo box

Choose LFO type

Sin, AscSaw, Rand, DecSaw, Tri, Square

Sync ON or OFF decides if the LFO is free running or starts at note on.

Location in FZ Menu: MODIFY->VOICE EDIT->CREATE VOICE->LFO SET

6.2.2.2 Delay

Determines how long the note must held before the LFO starts to take effect.

Minimum and maximum in the Editor: 0 to 999.

Minimum and maximum on the FZ: 0 to 127.

Location in FZ Menu: MODIFY->VOICE EDIT->CREATE VOICE->LFO SET

6.2.2.3 Rate

Sets the rate of the LFO.

Minimum and maximum values in the Editor are the same as on the FZ, 0 - 127.

Location in FZ Menu: MODIFY->VOICE EDIT->CREATE VOICE->LFO SET

6.2.2.4 OSC Depth

Sets the amount the LFO affects the pitch.

Minimum and maximum values in the Editor are the same as on the FZ, 0 - 127.

Location in FZ Menu: MODIFY->VOICE EDIT->CREATE VOICE->LFO SET

6.2.2.5 DCA Depth

Sets the amount the LFO affects the DCA.

Minimum and maximum values in the Editor are the same as on the FZ, 0 - 127.

Location in FZ Menu: MODIFY->VOICE EDIT->CREATE VOICE->LFO SET

6.2.2.6 DCF Depth

Sets the amount the LFO affects the DCF.

Minimum and maximum values in the Editor are the same as on the FZ, 0 - 127.

Location in FZ Menu: MODIFY->VOICE EDIT->CREATE VOICE->LFO SET

6.2.2.7 Resonance

Denotes a depth of LFO effect on the resonance and takes a number among 0 - 127.

This description is copied from the Programmers Manual. Not visible on the FZ and not mentioned in the Owners Manual.

In testing no effect could be heard, possibly not implemented by Casio.

6.2.2.8 Attack

Denotes a rising envelope rate for the LFO effect and takes a number from 0 - 127.

A smaller number denotes slower and a bigger note denotes faster.

This description is copied from the Programmers Manual. Not visible on the FZ and not mentioned in the Owners Manual.

As above, in testing no effect could be heard, possibly not implemented by Casio.

Left parameter in, in case it works for somebody.

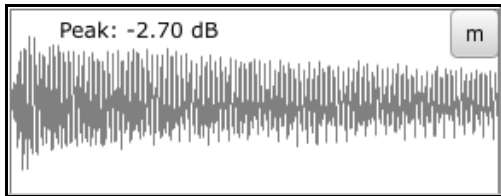
6.3 Voice Name

The text name of the Voice.

6.4 Voice Number

The Voice number.

6.5 Waveform box



6.5.1 Peak label

The peak volume of the Voice in decibels.

6.5.2 Waveform M button

Maximize the volume of the samples in the Voice so the peak is 0dB.

7. Lower Tab Row, Voice Loop Details

Voice Loop Details						
Sound:	NORMAL		Samples:	90196	Generator:	0..90196
Loops:	-		Tune:	-38	Wave:	0.:90196
#1	Start:	89472	End:	90194	[0087;0384;000..0088;0082]	
	Cross Time:	0	Loop Time:	1023	Next: TRACE	
#2	Start:	90196	End:	90196	[0088;0084;000..0088;0084]	
	Cross Time:	0	Loop Time:	1023	Next: TRACE	
#3	Start:	90196	End:	90196	[0088;0084;000..0088;0084]	
	Cross Time:	0	Loop Time:	1023	Next: TRACE	
#4	Start:	90196	End:	90196	[0088;0084;000..0088;0084]	
	Cross Time:	0	Loop Time:	1023	Next: TRACE	
#5	Start:	90196	End:	90196	[0088;0084;000..0088;0084]	
	Cross Time:	0	Loop Time:	1023	Next: TRACE	
#6	Start:	90196	End:	90196	[0088;0084;000..0088;0084]	
	Cross Time:	0	Loop Time:	1023	Next: TRACE	
#7	Start:	90196	End:	90196	[0088;0084;000..0088;0084]	
	Cross Time:	0	Loop Time:	1023	Next: TRACE	
#8	Start:	90196	End:	90196	[0088;0084;000..0088;0084]	
	Cross Time:	0	Loop Time:	END	Next: TRACE	

7.1 Voice Loop Details Labels

7.1.1 Samples Label

Number of samples used in the Voice. All Voices are 16bit, using 2 bits per sample, this is independent of the samplerate.

7.1.2 Tune Label

Cent tuning for the Voice, can be positive or negative.

7.1.3 Generator Label

Start and end offset of the Voice sample data. Takes precedence over the Wave offset values

7.1.4 Wave Label

Start and end offset of the Voice sample data.

7.2 Sound Combo box

Possible values:

"No sound" No Voice - MIDI Note on can't do anything.

The user cannot set this value, it's just to indicate that a Voice slot is empty.

"Reverse" MIDI Note on plays the Voice backwards. Looping features are disabled.

"Normal" MIDI Note on plays the Voice forwards.

"Cue" Mod wheel determines backwards/forwards. Note on plays the Voice, Looping features are enabled.

"Synth" MIDI Note on loops the Voice forever. Looping features are disabled.

For some reason when a Voice is set to "Synth" the pitch is off by -6 semitones when played back on the FZ.

This can be corrected by tuning "Orig" for the Voice 6 semitones in the opposite direction.

Location in FZ Menu: MODIFY->VOICE EDIT->CREATE VOICE->TUNE/MEM READ

7.3 Loop Stage +/- Buttons

Add or subtract a Loop Stage.

7.4 Loop Stages

#1	Start:	89472	End:	90194	[0087;0384;000..0088;0082]
	Cross Time:	0	Loop Time:	1023	Next: TRACE ↕

7.4.1 Stage Number Label

Number of the LOOP stage, 1 to 8.

7.4.2 Next Combo Box

TRACE or SKIP.

TRACE play all samples between this stage end and the next stage start.

SKIP skip all samples between this stage end and the next stage start.

Location in FZ Menu: MODIFY->VOICE EDIT->CREATE VOICE->LOOP SET

7.4.3 Bracketed Display

How Start and End appear on the FZ.

[0001;0002;003..0001;0002]

First group of three figures are START: COARSE, FINE and EX FINE.

Second group of two figures are END: COARSE and FINE.

Location in FZ Menu: MODIFY->VOICE EDIT->CREATE VOICE->LOOP SET

7.4.4 Loop Stage Text Boxes

Location in FZ Menu: MODIFY->VOICE EDIT->CREATE VOICE->LOOP SET

Press the Right and Left arrows on the FZ to view the next/prev stage if END is not set.

7.4.4.1 Start

Offset in samples of loop stage start.

Location in FZ Menu: MODIFY->VOICE EDIT->CREATE VOICE->LOOP SET

7.4.4.2 End

Offset in samples of loop stage end.

Location in FZ Menu: MODIFY->VOICE EDIT->CREATE VOICE->LOOP SET

7.4.4.3 Cross Time

In the Owner's Manual this setting is compared to DELAY TIME in the FZ "Cross-Mix" feature.

However "Cross-Mix" is usually a mix of two different samples. This can only apply to one sample.

The Programmer's manual states that this value:

"Shows a timing duration for Cross Fade Loop and takes a number among 0-1023. The number 0 designates a minimal distorted sound from artificial data in between samples. Place a figure 0 for non-cross fade looping."

Location in FZ Menu: MODIFY->VOICE EDIT->CREATE VOICE->LOOP SET

7.4.4.4 Loop Time Label

0 is displayed as SUS.

1024 is displayed as END, it can be used to cut the number of stages.

Can set values using a number from 0-1024 or by entering SUS or END.

Cannot set more than one stage to be SUS.

Unsure what values do. There's no explanation in the Owner's Manual. The Programmer's Manual says:


"Denotes a timing duration for Multi Loop and takes a number among 1-1022. The duration can be set by 16 milliseconds from 16 milliseconds up to 16 seconds".

Location in FZ Menu: MODIFY->VOICE EDIT->CREATE VOICE->LOOP SET


8. Lower Tab Row, Keyboards

Keyboards

Voice Name: PG1 Voice Num: 1 Voice Range: C02 -> #D03



Bank Name: BRTPIANO LOW Bank Num: 1 Bank Range: C02 -> C07



You can click the keyboards with a mouse to get an idea of how the "Low", "Orig" and "High" values set, will affect the pitch of samples.

8.1 Upper Keyboard for Voices

The Voice opened to play on the keyboard is the one selected in the "Voice Details" tab.

8.1.1 Keyboard Voice Labels

8.1.1.1 Voice Name

Self explanatory.

8.1.1.2 Voice Num

Self explanatory.

8.1.1.3 Voice Range

MIDI note range for Voice "Low" -> "High"

8.2 Lower Keyboard for Banks

The Bank opened to play on the keyboard is the one in the most recently clicked Bank tab.

8.2.1 Keyboard Bank Labels

8.2.1.1 Bank Name

Self explanatory.

8.2.1.2 Bank Num

Self explanatory.

8.2.1.3 Bank Range

MIDI note range for all Voices in Bank "Low" -> "High"

9. Lower Tab Row, Global Effect

		Global Effect			
Bender Depth	3	Mod Wheel:		Foot VR:	
		LFO OSC	64	LFO OSC	0
		LFO DCA	0	LFO DCA	0
		LFO DCF	0	LFO DCF	0
		LFO DCF Q	0	LFO DCF Q	0
		DCA Level	0	DCA Level	64
		DCF Level	0	DCF Level	0
		DCF Q	0	DCF Q	0
				After Touch:	
				LFO OSC	0
				LFO DCA	0
				LFO DCF	0
				LFO DCF Q	0
				DCA Level	0
				DCF Level	0
				DCF Q	0

9.1 Bender Depth Text Box

The range of the pitch bend wheel in semitones.

9.2 Columns for ModWheel/FootVR/AfterTouch

Note that the FZ-1 is the only model that supports the "Casio VP-2" foot pedal and the sustain pedal.

The FZ 19" rack samplers only support the sustain pedal. Therefore Foot VR is useless if you have the rack version.

Minimum and maximum values in the Editor are the same as on the FZ, 0 - 127.

Location in FZ Menu: MODIFY->EFFECT/MIDI->(BEND RANGE/MOD WHEEL/AFTER TOUCH)

9.2.1 LFO OSC

How much the MW/FVR/AT affects the LFO modulation on pitch.

9.2.2 LFO DCA

How much the MW/FVR/AT affects the LFO modulation on volume.

9.2.3 LFO DCF

How much the MW/FVR/AT affects the LFO modulation on DCF cutoff.

9.2.4 LFO DCF Q

How much the MW/FVR/AT affects the LFO modulation on DCF resonance.

9.2.5 DCA LEVEL

How much the MW/FVR/AT affects the DCA Level.

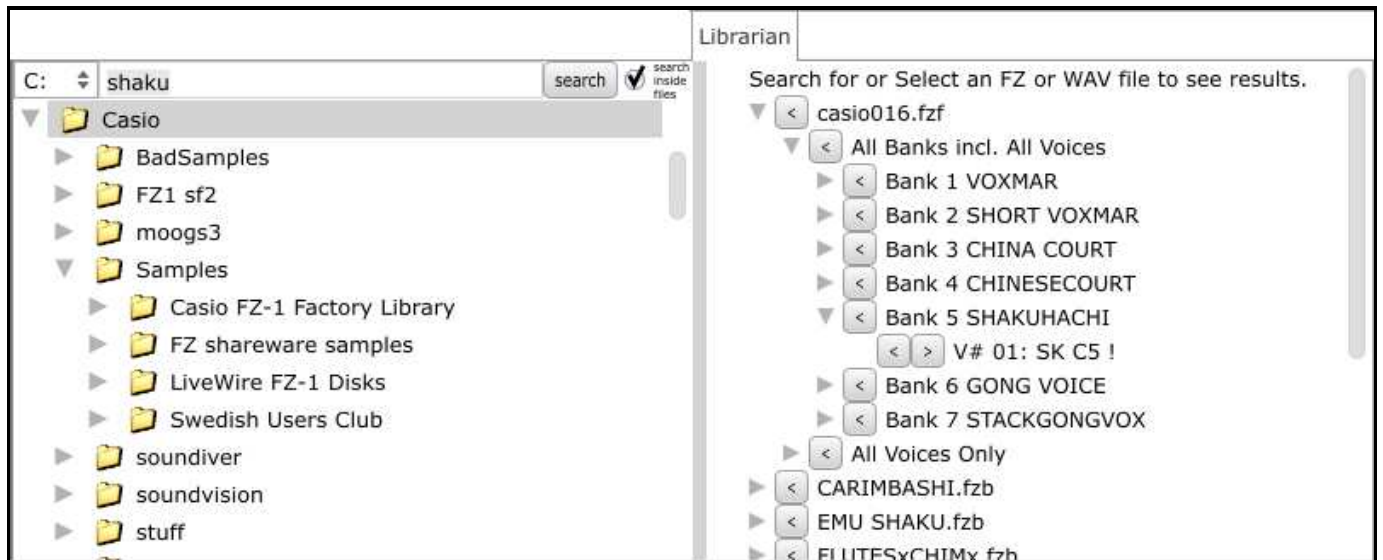
9.2.6 DCF LEVEL

How much the MW/FVR/AT affects the DCF Level.

9.2.7 DCF Q

How much the MW/FVR/AT affects the DCF Resonance.

10. Lower Tab Row, Librarian



10.1 Left Panel, File Browser

10.1.2 Drive Selector Combo Box

Select the drive to show files from.

10.1.3 Search Text Box

Type in the string to search for here. Enter key will trigger search.

10.1.4 Search Button

Trigger or restart search with this button.

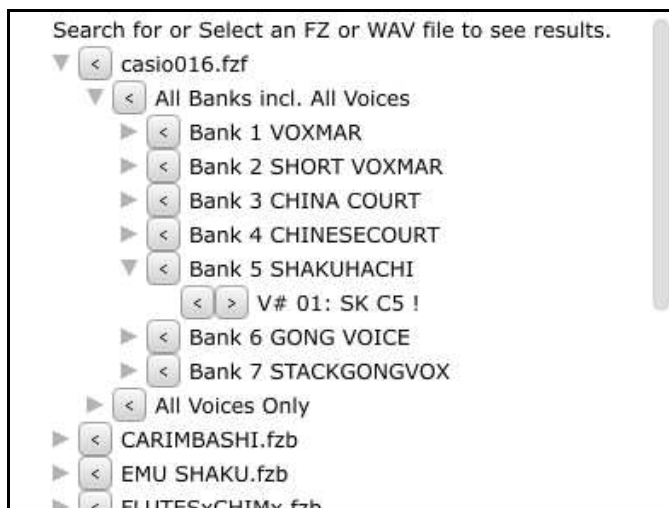
10.1.5 Search Inside Files Tickbox

Tick indicates user wishes to search inside FZF, FZB and FZV files for string.

10.1.6 File Tree Display

Tree view display of files, triangle can be clicked to open or close tree. Selected folder determines top level of search.

10.2 Right Panel, Results Browser



10.2.1 Triangle

Triangle can be clicked to open or close parts of the results tree.

10.2.2 Results Browser Buttons

10.2.2.1 File Left < Button

Click to open file in main window.

10.2.2.2 Results Browser Bank Buttons



10.2.2.2.1 All Banks incl. All Voices Left < Button

Click to add all Banks and their Voices to main window.

10.2.2.2.2 Bank 1-n Left < Button

Click to add individual Bank and associated Voices to main window.

10.2.2.2.3 Bank Voice Left < Button

Click to add individual Voice to main window. It will be added as a Voice with the Voice's "Low", "Orig", "High" settings, not the ones it has within the Bank.

10.2.2.2.4 Bank Voice Right > Button

Click to audition individual Voice.

10.2.2.3 Results Browser Voice Buttons



10.2.2.3.1 All Voices Only Left < Button

Click to add all Voices to main window.

10.2.2.3.2 Voice Left < Button

Click to add individual Voice to main window.

10.2.2.3.3 Voice Right > Button

Click to audition individual Voice.