aFrame

electrorganic percussion

EN

JA

Reference Guide

Instrument and effect parameters

Editing the parameters

Here's how to edit the parameters of the currently selected instrument or effect.

1. Simultaneously press the following buttons to enter the edit screen.

EDIT	BUTTON
Instrument	[1 PITCH] button and [2 DECAY] button
Effect	[3 BEND] button and [4 VOLUME] button

2. Press the [1 PITCH] button or [2 DECAY] button to select the parameter that you want to edit.
   For a list of instrument parameters that you can edit, refer to Instrument edit parameters.
   For the effect parameters, refer to Effect edit parameters.

Memo

- Use the [3 BEND] button or [4 VOLUME] button to move between chapters (the first item in each chapter) of parameters.
- To fast-forward through parameters, hold down a [1 PITCH]—[4 VOLUME] button.

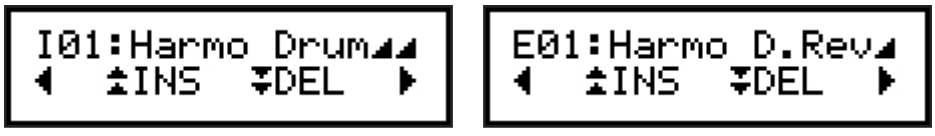
3. Turn the encoder to edit the value of the parameter.
   When you edit a parameter, the ":" (colon) following the instrument or effect number changes to an "*" (asterisk), and the FNC button lights.

   If you turn the encoder while pressing it, the value changes as follows.
   Frequency parameters: 1 Hz steps
   Other parameters:
   Values up to 100: 10x units
   Values above 100: 1/100 units

Renaming

Here's how to rename an instrument or effect.

1. Hold down the [1 PITCH] button or [2 DECAY] button until the following display appears.



2. Use the ◀/▶ buttons to move the cursor to the character that you want to edit.

Turn the encoder to change the character.
To insert a character, press the [3 BEND] button; to delete a character, press the [4 VOLUME] button.
Characters are shown up to the "◢" character. If you enter a "◢" character, that character and subsequent characters are not shown.

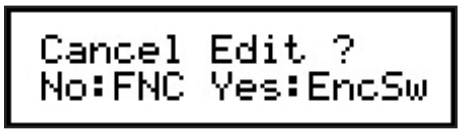
3. When you've finished editing the name, press the [1 PITCH] button or [2 DECAY] to return to the parameter select screen.

Comparing with the unedited sound

Here's how to compare the edited sound with the unedited sound.

1. Edit an instrument or effect.
   Once you edit a parameter, the FNC button lights.

2. Press the FNC button.
   The FNC button and the encoder blink; your edits are temporarily cancelled, and you can hear the unedited sound.
   During this time, the display shows the following.



3. If you want to continue editing, press the FNC button, you'll return to the sound as it was before you pressed the FNC button in step 2.
   If you want to cancel editing and return to the unedited sound, press the encoder.

Auditioning the sound of each timbre (instruments only)

Here's how you can listen to the individual timbres within an instrument.

An instrument consists of four components called "timbres."
One timbre is assigned to each of the [A]—[D] buttons.

Button	Timbre
A	Main timbre
B	Sub timbre
C	Extra timbre
D	Dry timbre

While in Instrument edit mode, each time you press one of the [A]—[D] buttons, the corresponding timbre turns on (lit green; the timbre is heard) or off (lit red; the timbre is not heard).
This lets you hear the sound of each timbre individually, or mute only the sound of specific timbres.

These on/off settings are ignored in Play mode. In Play mode, all timbres are always on.

Saving an edited sound

Here's how to save the parameters you've edited.

1. Press the [5 EFFECT] button. The encoder blinks red.
2. Use the ◀/▶ buttons to select the save-destination number.
3. Press the encoder. The changes are saved to the number that you selected in step 2, and you return to Play mode.

If you want to continue editing :
In step 3, hold down the [5 EFFECT] button and press the encoder; you'll return to the parameter edit screen instead of returning to Play mode. This is convenient when you want to continue editing.

Cancelling your edits

If you decide to stop editing without saving your changes, long-press the [5 EFFECT] button.
The sound returns to the unedited state, and you'll be back in Play mode.

Group parameters

Changing the tone (the combination of instrument and effect)

Here's how to change the combination of instrument and effect.

1. Press the [2 DECAY] button and [3 BEND] button simultaneously. You'll enter the edit screen; the upper line of the display shows the instrument, and the lower line shows the effect number and name.

2. Use the [1 PITCH] or [2 DECAY] button to select the instrument, and the [3 BEND] or [4 VOLUME] button to select the effect.

Saving your edits

Here's how to save the tone you've edited.

1. Press the [5 EFFECT] button. The encoder and the [3 BEND] and [4 VOLUME] buttons blink red, and the display shows a screen where you can select the save-destination.

2. Select the save-destination.
   Use the [A]—[D] buttons and the FNC button to select the group, and use the ◀ / ▶ buttons to select the tone number. To change the maximum number of tones for a group, turn the encoder.

3. Press the encoder. The tone is saved in the number that you selected in step 2.
   To insert a tone, press the [3 BEND] button; to delete a tone, press the [4 VOLUME] button.

Memo

- While the encoder is blinking red, you can press the [5 EFFECT] button to audition the selected instrument and effect.
- If you want to continue editing, hold down the [5 EFFECT] button in step 3 and press the encoder. The tone is saved, and instead of returning to Play mode, you return to the screen where you can select the instrument and effect.
  At this time, the tone number automatically increments by 1.

Cancelling your edits

If you decide to stop editing without saving your changes, long-press the [5 EFFECT] button.
The sound returns to the unedited state, and you return to Play mode.

Level meter

Displaying the level meters

1. When you press the following buttons simultaneously, a level meter appears in the display.

Display	Buttons
Input level meter	[1 PITCH] button and [3 BEND] button
Output level meter	[2 DECAY] button and [4 VOLUME] button

Even while the level meter is displayed, you can switch between the input level meter and the output level meter.

2. To return to Play mode, press the [5 EFFECT] button.

System parameters

System edit

Here you can edit system-related settings.

1. Simultaneously press the [1 PITCH] button and [4 VOLUME] button.
   The system edit page appears.

2. Use the [1 PITCH] button and [2 DECAY] button to select the parameter that you want to edit.

SYS : Save Project

Here's how to save an aFrame project.
A project is a set containing the instrument and effect parameters, group and tone numbers, and the combinations of instruments and effects.

1. Turn the encoder to select the save-destination.

Display indication	Explanation
INT:Memory1	aFrame internal memory
INT:Memory2	aFrame internal memory
SDC:aFramePD***	SD card. Up to 256 projects can be saved.

*** indicates a three-digit number.

2. Press the encoder. The project is saved.
   If no SD card is inserted in the aFrame, you can't select the SD card as the save-destination.
   If you select the SD card as the save-destination, the file numbers start from 001, and are subsequently assigned consecutively.

SYS:Load Project

Here's how to load an aFrame project.

1. Turn the encoder to select the memory that you want to load.

Display indication	Explanation
INT:Memory1	aFrame internal memory
INT:Memory2	aFrame internal memory
SDC:aFramePD***	SD card

*** indicates a three-digit number.

Memo

- If no SD card is inserted in the aFrame, you can't select the SD card as the load-source.

2. Press the encoder. The project is loaded.
   The current aFrame project changes to the project that was loaded, and the aFrame returns to Play mode.

SYS: Init Project

Here's how to return to the factory-set project.

1. Press the encoder.
   The aFrame's project changes to the factory-set data, and the aFrame returns to Play mode.

SYS: Export TONE

This operation exports the tone data (the combination of an instrument and an effect) of the currently selected group to an SD card.

Display indication	Explanation
SDC.aFrameIE***	File name on the SD card
No Mount SDCard!	No SD card is inserted. Insert an SD card
Not Open SDCard!	The SD card is locked. Unlock it.

*** indicates a three-digit number.

1. Press the encoder. The data is exported.
   When export is completed, the aFrame returns to Play mode.

Memo

- Up to 256 tones can be exported to an SD card.
- The file numbers in the export-destination start with number 001, and are subsequently assigned consecutively.

SYS: Import TONE

This operation imports tone data from an SD card, overwriting the currently selected tone.

1. Insert an SD card that contains aFrame tone data into the aFrame.

Display indication	Explanation
SDC.aFrameIE***	Name of tone on the SD card.
No File Exist	No tone data is saved on the SD card.
No Mount SDCard!	No SD card is inserted. Insert an SD card.
Not Open SDCard!	The SD card is locked. Unlock it.

*** indicates a three-digit number.

2. Turn the encoder to select the tone that you want to import.

3. Press the encoder to import the tone data.
   The data is imported, and the aFrame returns to Play mode.

Important

- If the same tone (combination of an instrument and an effect) exists in the aFrame, the instrument and effect parameters of that tone are also overwritten by the imported data.

MEMO

- If you create a group such as D' 10 (I80/E80) that is not used elsewhere, the tone data is imported into I80/E80.

SYS:SDCardFormat

This operation formats (initializes) the SD card.

1. Into the aFrame, insert the SD card that you want to format.

Display indication	Explanation
1 Files Exist	aFrame data files exist on the card. Check whether you really want to delete them.
No Mount SDCard!	No SD card is inserted. Insert an SD card.
Not Open SDCard!	The SD card is locked. Unlock it.

2. A confirmation message appears in the display.
   If you want to format the card, press ▶ (Yes). If you decide not to format the card, press ◀ (No).

SYS:AutoPowerOFF

This setting specifies the time after which the aFrame automatically powers-off.

1. Turn the encoder to specify the time after which the power turns off automatically.
   The choices are 30 mins, 1hour, 2hours, 4hours, and DISABLE.
   If you choose DISABLE, auto power-off is disabled; the power won't turn off automatically.

2. Press the [5 EFFECT] button to return to Play mode.

SYS:LCD Contrast

This setting adjusts the contrast of the display.

1. Turn the encoder to adjust the value.
   The range is 0 — 255. The brightest setting is 255, and the darkest is 0.

2. Press the [5 EFFECT] button to return to Play mode.

SYS:Audio Output

This setting switches the audio output between stereo and monaural.
This setting applies both to line output and to headphone output.

1. Turn the encoder to select STEREO or MONO.
   Use the MONO setting if you need mono output, such as for a wireless device.

2. Press the [5 EFFECT] button to return to Play mode.

SYS:SWAP SW L/R

This setting exchanges the functions of the buttons on the left and right of the aFrame.

1. Turn the encoder.

Value	Function
0	The left side is Tone Edit, and the right side is Group Select. This is the same configuration as printed on the aFrame.
1	The left side is Group Select, and the right side is Tone Edit. This is the opposite configuration from what is printed on the aFrame.

2. Press the [5 EFFECT] button to return to Play mode.

SYS:APP info

Here you can view information about the aFrame.

1. Turn the encoder. Information is displayed.

Display indication	Explanation
VER.1.00-BLD.001	aFrame firmware version
2017/01/01 12:34	Date on which the aFrame firmware was updated
POT:0d 12:34:56	Power On Time (time since the power was turned on)
POC:14times	Power On Count (number of times that the power was turned on)
CHC:123456times	Center Hitting Count (number of times that the center was struck more strongly than the prescribed level)
EHC:133333times	Edge Hitting Count (number of times that the edge was struck more strongly than the prescribed level)
PST:0d 00:02:50	Pressure Sens Time (cumulative time that the pressure sensor was pressed more strongly than the prescribed level)

*The values in the above table are examples. The values actually displayed will differ depending on the conditions of use.

Items other than the firmware version are saved when the aFrame is correctly shut down.

2. Press the [5 EFFECT] button to return to Play mode.

SYS:Test LED (for servicing)

This operation tests the LEDs.

1. Press the encoder. The test begins.

2. Press the [5 EFFECT] button to return to Play mode.

SYS:Test EEPROM (for servicing)

This operation tests the EEPROM.

1. Press the encoder. The test begins.

2. Press the [5 EFFECT] button to return to Play mode.

SYS:Test INTRAM (for servicing)

This operation tests the internal RAM.

1. Press the encoder. The test begins.

2. Press the [5 EFFECT] button to return to Play mode.

SYS:Adj Cnt.Sens (Freq, Gain, Q)

This setting adjusts the sensitivity of the center sensor.
The frequency (Freq), gain (Gain), and Q value (Q) can each be adjusted.

1. Turn the encoder to adjust the value.

2. Press the [5 EFFECT] button to return to Play mode.

SYS:Adj EdgeSens (Freq, Gain, Q)

This setting adjusts the sensitivity of the edge sensor.
The frequency (Freq), gain (Gain), and Q value (Q) can each be adjusted.

1. Turn the encoder to adjust the value.

2. Press the [5 EFFECT] button to return to Play mode.

SYS:Set PressMax

This setting adjusts the maximum value of the pressure sensor.

1. While watching the right-most value shown in the display, press the pressure sensor.

2. While continuing to press the pressure sensor, press the encoder. The pressure sensor value at that moment is set as the maximum value.

3. Press the [5 EFFECT] button to return to Play mode.

SYS:Chk Pressure (for servicing)

This is the hardware adjustment screen for the pressure sensor's minimum value.

1. Press the pressure sensor. You'll see the pressure value at that moment.

2. Press the [5 EFFECT] button to return to Play mode.

Parameters List

Tone List

Tone Group No	Instruments	Effect (Algorithm)
GRP A-01/10	I01:Harmo Drum	E01:Harmo D.Rev (REV)
GRP A-02/10	I02:Hyper Pot	E02:Hyper P.Rev (REV)
GRP A-03/10	I03:Psyco Skin	E03:Psyco S.Rev (REV)
GRP A-04/10	I04:Spanky	E04:Spanky.Rev (REV)
GRP A-05/10	I05:Bessel Clone	E05:Bess.DlyP.S (DLY)
GRP A-06/10	I06:Stereo Skin	E06:S.Skin.Ambie (REV)
GRP A-07/10	I07:Incantation	E07:Incant.PhsPM (PHS)
GRP A-08/10	I08:BassOnBoard	E08:BassOnB.Rev (REV)
GRP A-09/10	I09:BalaPhonic	E09:BalaPh.DlyPM (DLY)
GRP A-10/10	I10:HarmoVoice	E10:HarmoV.Rev (REV)
GRP B-01/10	11:Quajon	E11:Quajon Rev (REV)
GRP B-02/10	I12:Taikology	E12:TaikologyRev (REV)
GRP B-03/10	I13:Bamboo Drum	E13:Bamboo Rev (REV)
GRP B-04/10	I14:Tunnel Drum	E14:Tunnel Rev (REV)
GRP B-05/10	I15:Framey	E15:Framey Rev (REV)
GRP B-06/10	I16:Goblet Drum	E16:GobletD.Rev (REV)
GRP B-07/10	I17:Candeiro	E17:Candeiro.Rev (REV)
GRP B-08/10	I18:Snappin'Kit	E18:Snappy Rev (REV)
GRP B-09/10	I19:MetalSurface	E19:MetalS.Rev (REV)
GRP B-10/10	I20:Paper Drum	E20:Paper D.Rev (REV)
GRP C-01/10	I21:NeoHarmoDrum	E21:NeoHarmD.Rev (REV)
GRP C-02/10	I22:DwarfOnGiant	E22:Dwarf.DlyP.S (DLY)
GRP C-03/10	I23:ParticleDrum	E23:ParD.PresRev (REV)
GRP C-04/10	I24:DrumDroid	E24:DrmDroid.Cho (CHO)
GRP C-05/10	I25:CrazyMetal	E25:CrazyM.Rev (REV)
GRP C-06/10	I26:Fragile	E26:Frgi.DlyP.S (DLY)
GRP C-07/10	I27:OverDriven	E27:OverDriveRev (REV)
GRP C-08/10	I28:SpankEchoDrm	E28:SpED.PresRev (REV)
GRP C-09/10	I29:Micro Chat	E29:MiC.PresFlg (FLG)
GRP C-10/10	I30:WowWah!	E30:WohWah!Wah (WAH)
GRP D-01/10	I31:CtrlRev-/SD	E31:CtrlRevLevl- (REV)
GRP D-02/10	I32:CtrlRev+/BD	E32:CtrlRevLevl+ (REV)
GRP D-03/10	I33:CtrlDlyS/SD	E33:CtrlDlySend+ (DLY)
GRP D-04/10	I34:CtrlDly-/SD	E34:CtrlDlyTime- (DLY)
GRP D-05/10	I35:CtrlDly+/SD	E35:CtrlDlyTime+ (DLY)
GRP D-06/10	I36:CtrlPhsM/SD	E36:CtrlPhsManu+ (PHS)
GRP D-07/10	I37:CtrlFlgM/SD	E37:CtrlFlgManu+ (FLG)
GRP D-08/10	I38:CtrlWah/SD	E38:CtrlWah (WAH)
GRP D-09/10	I39:Chorus/Vib	E39:Chorus (CHO)
GRP D-10/10	I40:Naked	E40:Delay Zero (DLY)

Tone Group No	Instruments	Effect (Algorithm)	
GRP A'01/10	I41:Harmo Drum	E41:Harmo D.Rev	(REV)
GRP A'02/10	I42:Hyper Pot	E42:Hyper P.Rev	(REV)
GRP A'03/10	I43:Psyco Skin	E43:Psyco S.Rev	(REV)
GRP A'04/10	I44:Spanky	E44:Spanky.Rev	(REV)
GRP A'05/10	I45:Bessel Clone	E45:Bess.DlyP.S	(DLY)
GRP A'06/10	I46:Stereo Skin	E46:S.Skin.Ambie	(REV)
GRP A'07/10	I47:Incantation	E47:Incant.PhsPM	(PHS)
GRP A'08/10	I48:BassOnBoard	E48:BassOnB.Rev	(REV)
GRP A'09/10	I49:BalaPhonic	E49:BalaPh.DlyPM	(DLY)
GRP A'10/10	I50:HarmoVoice	E50:HarmoV.Rev	(REV)
GRP B'01/10	I51:Quajon	E51:Quajon Rev	(REV)
GRP B'02/10	I52:Taikology	E52:TaikologyRev	(REV)
GRP B'03/10	I53:Bamboo Drum	E53:Bamboo Rev	(REV)
GRP B'04/10	I54:Tunnel Drum	E54:Tunnel Rev	(REV)
GRP B'05/10	I55:Framey	E55:Framey Rev	(REV)
GRP B'06/10	I56:Goblet Drum	E56:GobletD.Rev	(REV)
GRP B'07/10	I57:Candeiro	E57:Candeiro.Rev	(REV)
GRP B'08/10	I58:Snappin'Kit	E58:Snappy Rev	(REV)
GRP B'09/10	I59:MetalSurface	E59:MetalS.Rev	(REV)
GRP B'10/10	I60:Paper Drum	E60:Paper D.Rev	(REV)
GRP C'01/10	I61:NeoHarmoDrum	E61:NeoHarmD.Rev	(REV)
GRP C'02/10	I62:DwarfOnGiant	E62:Dwarf.DlyP.S	(DLY)
GRP C'03/10	I63:ParticleDrum	E63:ParD.PresRev	(REV)
GRP C'04/10	I64:DrumDroid	E64:DrmDroid.Cho	(CHO)
GRP C'05/10	I65:CrazyMetal	E65:CrazyM.Rev	(REV)
GRP C'06/10	I66:Fragile	E66:Frgi.DlyP.S	(DLY)
GRP C'07/10	I67:OverDriven	E67:OverDriveRev	(REV)
GRP C'08/10	I68:SpankEchoDrm	E68:SpED.PresRev	(REV)
GRP C'09/10	I69:Micro Chat	E69:MiC.PresFlg	(FLG)
GRP C'10/10	I70:WowWah!	E70:WohWah!Wah	(WAH)
GRP D'01/10	I71:CtrlRev-/SD	E71:CtrlRevLevl-	(REV)
GRP D'02/10	I72:CtrlRev+/BD	E72:CtrlRevLevl+	(REV)
GRP D'03/10	I73:CtrlDlyS/SD	E73:CtrlDlySend+	(DLY)
GRP D'04/10	I74:CtrlDly-/SD	E74:CtrlDlyTime-	(DLY)
GRP D'05/10	I75:CtrlDly+/SD	E75:CtrlDlyTime+	(DLY)
GRP D'06/10	I76:CtrlPhsM/SD	E76:CtrlPhsManu+	(PHS)
GRP D'07/10	I77:CtrlFlgM/SD	E77:CtrlFlgManu+	(FLG)
GRP D'08/10	I78:CtrlWah/SD	E78:CtrlWah	(WAH)
GRP D'09/10	I79:Chorus/Vib	E79:Chorus	(CHO)
GRP D'10/10	I80:Naked	E80:Delay Zero	(DLY)

- When the aFrame is shipped from the factory, 40 instruments and 40 effects are assigned to I01—I40 and to E01—E40 respectively. The same instruments and effects as assigned to I01—I40 and E01—E40 are also assigned to I41—I80 and E41—E80.
- When the aFrame is shipped from the factory, the maximum number of tones in each group is set to 10.
- The algorithm shown beside the effect name indicates the Effect edit parameters that you should use when editing the effect.

A Neo-acoustic	Sounds that illustrate the electrorganic character of the aFrame
Harmo Drum	This sound is created by stacking the natural overtones of a single timbre. This is the basic sound of the aFrame. A wide variety of sounds can be created using this sound as a starting point.
Hyper Pot	This sound utilizes a timbre balance that responds to both the center and edge sensor, providing different characters depending on the location of the strike. With these settings, pressure mutes only the low-frequency sound.
Psycho Skin	While this is a sound that does not exist in the acoustic world, you can obtain a nuanced performance by scratching and pressing the instrument. Although it only uses two timbres, it has a good deal of variation.
Spanky	This sound is based mainly on the third extra timbre, which handles special sounds such as noise. Further sound-design potential is available by editing the main and sub-timbre parameters.
Bessel Clone	This sound was created using an overtone structure that reproduces the tonal quality of a Japanese drum. This sound is a great one to use as a starting point for creating new sounds. Since pressure triggers a one-second delay, it's perfect to use for creating loops.
Stereo Skin	Here, two timbres are deliberately set to very similar sounds and are stereo-panned to left and right, creating a unique chorus effect.
Incantation	In this sound, pressure controls the pitch and the phaser depth separately for each timbre, producing an effect reminiscent of a jaw harp.
BassOnBoard	This is a bass sound in which pressure bends the octave up. The sub-timbre is used to produce a subtle attack. Its simple parameter settings leave room to create more complex sounds.
BalaPhonic	This is a variation of a xylophone-like sound. In addition to two stacked pitches, it uses a noise component to add an ethnic feel. Pressure changes the pitch in stair-step fashion by second, fourth, fifth, and octave intervals.
HarmoVoice	This is an Asian-type effect sound. Pressure changes the pitch through a minor scale, and an interesting world-view opens up when you simply stroke the instrument while varying the pressure.

B Acoustic	Sounds that simulate the characteristics of various acoustic sounds
Quajon	Three timbres are used to create the low-pitch, attack, and snare components in this sound. You can also create a wide variety of sounds by using this as the starting point for editing. This is a very acoustic sounding instrument.
Taikology	This sound envisions a Japanese drum, with the combination of low sound together with the high sound of the frame. Ambience adds body resonance and a sense of presence.
Bamboo Drum	This is a Japanese-type sound is inspired by the aFrame's bamboo frame. It is distinctive for a slight change in pitch with different strike strengths. Since it consists of only a single timbre, you can create original sounds by adding other timbres.
Tunnel Drum	This sound is based on the contrast of an ultra-low sound and a high-pitched woody sound, with spatial depth added by a high-quality, ultra-long reverb. This sound consists of a combination of instrument and effect.
Framey	This sound simulates the vibration of a simple frame drum. Pressure provides muting and subtle pitch change, giving a realistic performance feel.
Goblet Drum	This sound creates visions of a vase-shaped drum of the middle east. Its features are the contrast between the low sound of the center, the high sound of the edge, and the subtle timbral changes produced by pressure on the playing surface.
Candeiro	This sound has the qualities of a tambourine. The extra timbre creates the jingles and their complex overtones. The extra timbre is ideal for spicing-up a sound.
Snappin'Kit	This adds the sound of a kick to a snare drum. When pressure is applied, the sound of the kick is muted, letting you combine a brush snare with a kick.
MetalSurface	This simulates a metallic sound. Subtle touches and scrapes will give you the same feel as actual metal. Since this sound consists of just a single timbre, you can create even more complex sounds.
PaperDrum	This snare rattle sound subtly changes in response to the strike location and strength of your strikes. The sound design relies heavily on the extra timbre.

C Electronic	Sounds that, while electronic, provide the same performance experience as an acoustic instrument
NeoHarmoDrum	Based on the most basic HarmDrum, this is an electronic sound that expands the expressive potential by using multiple timbres, as well as muting and pitch controlled by pressure.
DwarfOnGiant	Overdrive adds expression to the low sound of the main timbre, while the extreme high sound changes dramatically in response to dynamics and pressure. Delay effect is applied only to the high sound.
ParticleDrum	A low sound with a distinctively metallic overtone structure is assigned to the main timbre, and pressure controls the reverb send level for only the high sound. While playing this instrument, you can selectively apply the reverb.
DrumDroid	This is a unique sound based on the extra timbre, producing an electro sound that's like nothing you've ever heard. It has limitless sound-design potential.
CrazyMetal	This consists only of a metallic overtone structure, with an extremely high Q value that's just short of oscillation. It's a richly expressive sound that uses pressure to vary the timbre and pitch.
Fragile	This assigns similar sounds to two timbres and pans them to the left and right to create a chorus effect. For even more expression, use pressure to expand the stereo position of the panning delay.
OverDriven	In addition to an ultra-low sound with overdrive applied by dynamics, a clap sound is assigned to the edge, giving you a powerful EDM sound. You'll enjoy this new type of performance feel.
SpankEchoDrm	With a low sound assigned to the center and a noise-type sound assigned to the rim, you can use pressure to apply a reverb effect only to the noise-type sound. This enables expressive possibilities that were until now unavailable.
Micro Chat	By using pressure to control the manual parameter of the phaser, you can transform a normal Japanese drum sound into an enjoyable, expressive, and humorus "talking" sound.
WowWah!	Pressure applies a touch-wah effect to an electric guitar-like interval of a fifth. This is an extremely sensitive sound that changes dynamically when you scrape the instrument.

D Effect	Sample-type sounds where pressure controls the effect
CtrlRev-/SD	Pressure controls the level of the infinite reverb. You can mute the reverb by pressing. Try exchanging the snare sound of the instrument with another instrument to create new sounds.
CtrlRev+/BD	Pressure controls the reverb level. Since this sound applies reverb only while you are pressing, you can also control it like gated reverb or reverse reverb.
CtrlDlyS/SD	Pressure controls the delay level. Delay is applied only while you press the striking surface. It is possible to perform complex rhythms by controlling the delay.
CtrlDly-/SD	Pressure controls the delay time. Pressing the striking surface makes the delay time slower. You can produce a variety of effects by pressing after you strike, or by pressing, then striking and releasing.
CtrlDly+/SD	Pressure controls the delay time. Pressing the striking surface makes the delay time shorter. Delay settings can help create some unique sounds.
CtrlPhsM/SD	Pressure controls the manual parameter of the phaser. By using this to add expression to phrases, you can enjoy an even wider range of sound-shaping potential. This can be applied to a variety of instruments.
CtrlFlgM/SD	Pressure controls the manual parameter of the flanger. This adds expressiveness to phrases, expanding the sound-shaping potential. This can be applied to a variety of instruments.
CtrlWah/SD	Pressure produces a touch-wah effect. Wah played as a percussion instrument has distinctive expressive power, and allows an extremely dynamic performance.
Chorus/Vib	Several types of extremely high-quality chorus are built-in, expanding the sound-creation possibilities. Although this is a vibe-type sound, try it with a variety of instruments.
Naked	This is the sound of the striking surface itself. All sounds are created from here. By using EQ and skillful mixing, you can create even more rawness.

Instrument edit parameters

Main Parameter		
Main In	C0/E100 — C50/E50 — C100/E0	Main Input Balance
MainOvt	Natural — Organ (*1)	Main Overtone
MainHrmNo.	1 — 32	Main Harmonics Number
MainTune	20 — 10000Hz	Main Tuning
MainDcay	0.1 — 10.0sec	Main Decay Time
Main HFD	-1.00 — +1.00	Main High Frequency Damping
Main DQM	0 — 100	Main Dynamics Q Modulation
Main DFM	0 — 100	Main Dynamics Frequency Modulation
Main PFM	0 — 100	Main Pressure Frequency Modulation
Main PSC	OFF, MTriad — Sus(*P)	Main Pressure Pitch Scale Control
MainMute	OFF, ON	Main Pressure Mute Switch
Main OD	-100 — +100	Main Over Drive
Main In	C0/E100 — C50/E50 — C100/E0	Main Input Balance
MainOvt	Natural — Organ (*1)	Main Overtone
Sub Parameter		
Sub In	C0/E100 — C50/E50 — C100/E0	Sub Input Balance
Sub Ovt	Natural — Organ (*1)	Sub Overtone
Sub HrmNo.	1 — 32	Sub Harmonics Number
Sub Tune	20 — 10000Hz	Sub Tuning
Sub Dcay	1 — 3000ms	Sub Decay Time
Sub HFD	-1.00 — +1.00	Sub High Frequency Damping
Sub DQM	0 — 100	Sub Dynamics Q Modulation
Sub DFM	0 — 100	Sub Dynamics Frequency Modulation
Sub PFM	0 — 100	Sub Pressure Frequency Modulation
Sub PSC	OFF, MTriad — Sus (*P)	Sub Pressure Pitch Scale Control
Sub Mute	OFF, ON	Sub Pressure Mute Switch
Sub OD	-100 — +100	Sub Over Drive
Sub Delay	0 — 200ms	Sub Delay Time
Sub D.Tap	0 — 8	Sub Delay Tap Number

Extra Parameter		
Xtra In	C0/E100 — C50/E50 — C100/E0	Extra Input Balance
XtraType	WhiteNz — Click2 (*2)	Extra Type
XtraTune	20 — 10000Hz	Extra Tuning
XtraDcay	1 — 3000ms	Extra Decay Time
XtraHold	0 — 500ms	Extra Hold Time
XtraFltQ	0.5 — 16.0	Extra Filter Q
Xtra DQM	0 — 100	Extra Dynamics Q Modulation
Xtra DFM	0 — 100	Extra Dynamics Frequency Modulation
Xtra PFM	0 — 100	Extra Pressure Frequency Modulation
XtraMute	OFF, ON	Extra Pressure Mute Switch
XtraDelay	0 — 200ms	Extra Decay Time
XtraD.Tap	0 — 8	Extra Delay Tap Number
Dry Signal Parameter		
DryC.EqF	20 — 20000Hz	Dry Center Signal EQ Frequency
DryC.EqG	-18.0 — +18.0	Dry Center Signal EQ Gain
DryC.EqQ	0.5 — 16.0	Dry Center Signal EQ Q
DryE.EqF	20 — 20000Hz	Dry Edge Signal EQ Frequency
DryE.EqG	-18.0 — +18.0	Dry Edge Signal EQ Gain
DryE.EqQ	0.5 — 16.0	Dry Edge Signal EQ Q
CentrLPF	20 — 20000Hz	Center Input LPF Frequency
Edge HPF	20 — 20000Hz	Edge Input HPF Frequency
Pressure Parameter		
Mute Sens	0 — 100	Pressure Mute Sens
Mute Mask	0 — 500ms	Pressure Mute Mask
Mute Dcay	0 — 100	Pressure Mute Dcay
Bend Curve	A0 — A8	Pressure Bend Curve
Mixer Parameter		
Mix Main Pan	L63 — C00 — R63	Mixer Main Pan
Mix Sub Pan	L63 — C00 — R63	Mixer Sub Pan

Mix Xtra Pan	L63 — C00 — R63	Mixer Extra Pan
Mix DryC Pan	L63 — C00 — R63	Mixer Dry Center Pan
Mix DryE Pan	L63 — C00 — R63	Mixer Dry Edge Pan
Mix Main Lev	0 — 127 (100:0dB, 127:+6dB)	Mixer Main Level
Mix Sub Lev	0 — 127 (100:0dB, 127:+6dB)	Mixer Sub Level
Mix Xtra Lev	0 — 127 (100:0dB, 127:+6dB)	Mixer Extra Level
Mix DryC Lev	0 — 127 (100:0dB, 127:+6dB)	Mixer Dry Center Level
Mix DryE Lev	0 — 127 (100:0dB, 127:+6dB)	Mixer Dry Edge Level
Mix Main Snd	0 — 127 (100:0dB, 127:+6dB)	Mixer Main Effect Send Level
Mix Sub Snd	0 — 127 (100:0dB, 127:+6dB)	Mixer Sub Effect Send Level
Mix Xtra Snd	0 — 127 (100:0dB, 127:+6dB)	Mixer Extra Effect Send Level
Mix DryC Snd	0 — 127 (100:0dB, 127:+6dB)	Mixer Dry Center Effect Send Level
Mix DryE Snd	0 — 127 (100:0dB, 127:+6dB)	Mixer Dry Edge Effect Send Level
MixMasterLev	0 — 127 (100:0dB, 127:+6dB)	Mixer Master Level
MixMasterBal	L63 — C00 — R63	Mixer Master Balance

***1 Overtone List**

Tone	Description
Natural	Natural Number 1,2,3,4,5,,,,,
Odd No.	Odd Number 1,3,5,7,9,,,,,
PrimeNo.	Prime Number 1,3,5,7,11,13,,,,
BesselM0	Bessel Function Zero MODE(0)
BesselM1	Bessel Function Zero MODE(1)
BesselM2	Bessel Function Zero MODE(2)
BesselM3	Bessel Function Zero MODE(3)
BesselM4	Bessel Function Zero MODE(4)
BesselM5	Bessel Function Zero MODE(5)
BesselM6	Bessel Function Zero MODE(6)
BesselM7	Bessel Function Zero MODE(7)
Membran	Vibrations of Membranes Basic
MembrnH1	Vibrations of Membranes High1
MembrnH2	Vibrations of Membranes High2
MembrnH3	Vibrations of Membranes High3
MembrnH4	Vibrations of Membranes High4

Tone	Description
Taiko	Taiko (Japanese Drum)
KettleD	Kettle Drum
BassDrm	Bass Drum
Tom	Tom Tom
T.Head	Snare Drum Top Head
B.Head	Snare Drum Bottom Head
T+B Head	Snare Drum Top & Bottom Head
FryPan	Frypan
Cymbal	Cymbal
VibeLow	Vibraphone Low
VibeMid	Vibraphone Mid
VibeHigh	Vibraphone High
Glocken	Glockenspiel
Marimba	Marimba
Organ	Organ

***2 Extra Type**

Type	Description
WhiteNz	White Noise
LPF Nz	White Noise with LPF
HPF Nz	White Noise with HPF
BPF Nz	White Noise with BPF
Jingle1	Jingle1 with BPF
Jingle2	Jingle2 with BPF
Jingle3	Jingle3 with BPF
Click1	Click1 Single Sine Wave
Click2	Click2 Dual Sine Wave (1 + 1.5)

***3 Pressure Pitch Scale Control Parameter**

Value	Description
OFF	OFF
MTriad	Major Triad
mTriad	minor Triad
MPenta	Major Penatatonic
mPenta	minor Penatatonic
MScale	Major Scale
mScale	minor Scale
Sus	Suspended

Effect edit parameters

REV

Parameter	Value	Description
Time	0.1 — 100.0sec	Reverb Time
Pre Delay	0 — 200ms	Pre Delay
ER Dens	0 — 100	Early Reflection Density
Rev Dens	0 — 100	Reverb Density
HF Damp	0.05 — 1.00	High Frequency Damping
Pan Spread	0 — 100	Pan Spread
ER Level	0 — 100	Early Reflection Level
Rev Level	0 — 100	Reverb Level
Wet Level	0 — 100	Wet Level
Dry Level	0 — 100	Dry Level
PressMode	OFF, MUTE, LEVEL, SEND, SPREAD	Pressure Control Mode
PressSens	0 — 100	Pressure Sens
PressAtck	0 — 1000ms	Pressure Attack Time
PressRele	0 — 3000ms	Pressure Release Time
Reverb Sw	OFF, ON	Reverb Effcet Switch

DLY

Parameter	Value	Description
Type	Stereo In, Mono In, Panning LR, PanningRL	Delay Type
Time L	0.1 — 1000.0ms	Delay Time Lch
Time R	0.1 — 1000.0ms	Delay Time Rch
Feedback	0 — 100	Feedback Level
HF Damp	0.05 — 1.00	High Frequency Damping
Pan Spread	0 — 100	Pan Spread
Wet Level	0 — 100	Wet Level
Dry Level	0 — 100	Dry Level
Mod Rate	0.1 — 10.0Hz	Modulation Rate
Mod Depth	0 — 100	Modulation Depth
Mod Phase	0 — 180deg	Modulation Phase
Press Mode	OFF, MUTE, LEVEL, SEND, SPREAD, TIME++, TIME--	Pressure Control Mode
Press Sens	0 — 100	Pressure Sens
PressAtck	0 — 1000ms	Pressure Attack Time
PressRele	0 — 3000ms	Pressure Release Time
Delay Sw	OFF, ON	Delay Effect Switch

CHO

Parameter	Value	Description
Type	2PHASE NORM, 2PHASE XMIX, 3PHASE NORM, 3PHASE XMIX, 6PHASE NORM, 6PHASE XMIX	Chorus Type
Mod Rate	0.1 — 10.0Hz	Modulation Rate
Mod Depth	0 — 100	Modulation Depth
Mod Phase	0 — 180deg	Modulation Phase
Wet HPF	20 — 500Hz	Wet HPF Frequency
Wet LPF	1000 — 20000Hz	Wet LPF Frequency
Wet Level	0 — 100	Wet Level
Dry Level	0 — 100	Dry Level
Chorus Sw	OFF, ON	Chorus Effect Switch

FLG

Parameter	Value	Description
RATE	0 — 100	Modulation Rate
DEPTH	0 — 100	Modulation Depth
MANUAL	0 — 100	Manual
RESO	-100 — +100	Resonance
XFB	-100 — +100	Cross Feedback Level
MOD PH	0 — 180deg	Modulation Phase
Press Mode	OFF, DEPTH, MANU++, MANU--, RATE++, RATE--	Pressure Control Mode
Press Sens	0 — 100	Pressure Sens
PressAtck	0 — 1000ms	Pressure Attack Time
PressRele	0 — 3000ms	Pressure Release Time
Flanger Sw	OFF, ON	Flanger Effect Switch

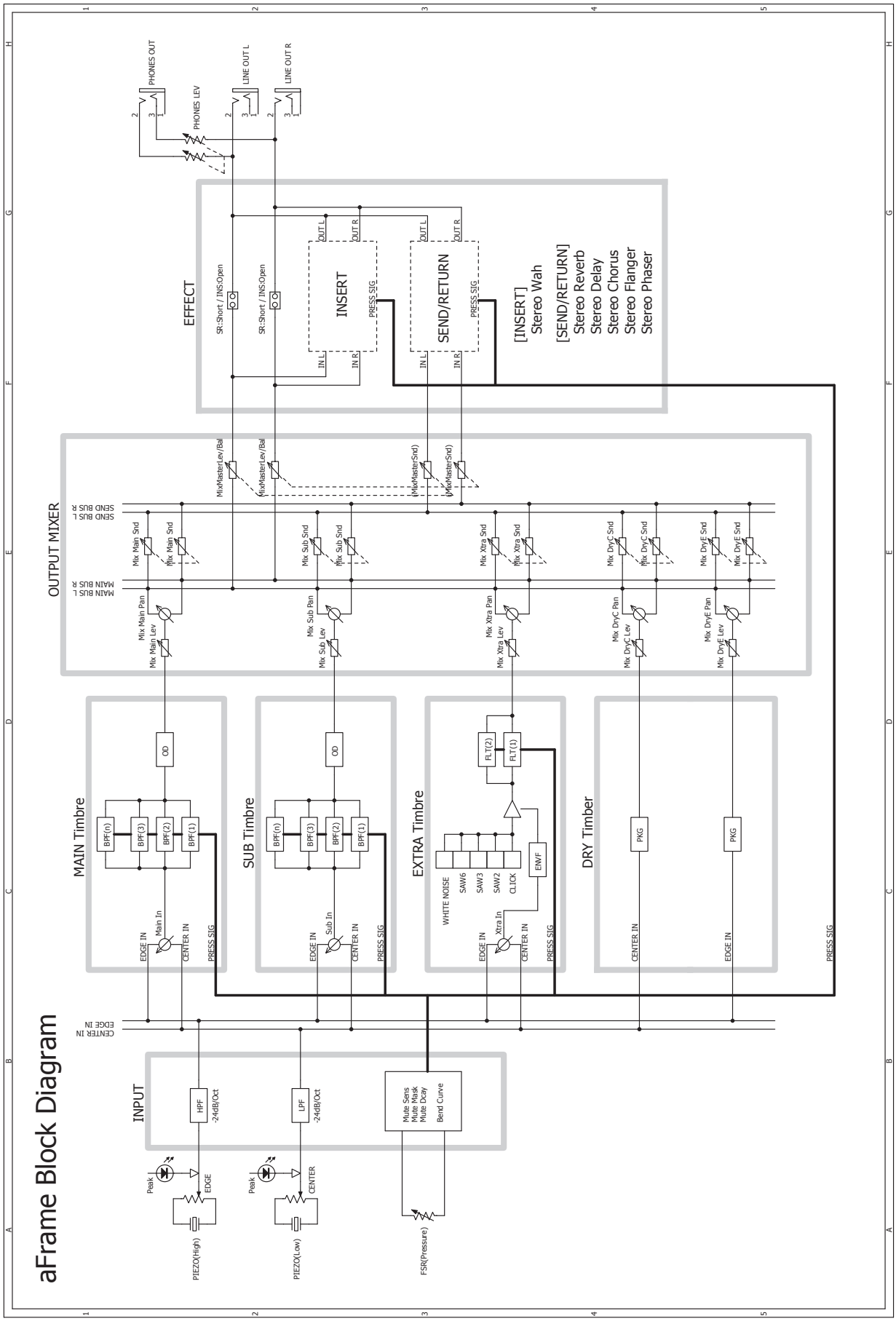
PHS

Parameter	Value	Description
RATE	0 — 100	Modulation Rate
DEPTH	0 — 100	Modulation Depth
MANUAL	0 — 100	Manual
RESO	-100 — +100	Resonance
XFB	-100 — +100	Cross Feedback Level
MOD PH	0 — 180deg	Modulation Phase
SATGE	1 — 32	Shift Stage Number
Press Mode	OFF, DEPTH, MANU++, MANU--, RATE++, RATE--	Pressure Control Mode
Press Sens	0 — 100	Pressure Sens
PressAtck	0 — 1000ms	Pressure Attack Time
PressRele	0 — 3000ms	Pressure Release Time
Phaser Sw	OFF, ON	Phaser Effect Switch

WAH

Parameter	Value	Description
Type	CRYBABY, BPF, LPF, HPF, PEAKING	Wah Type
Manual Freq	0 — 100	Manual Frequency
Freq Min	100 — 1000Hz	Frequency Minimum
Freq Max	1000 — 5000Hz	Frequency Maximum
Filter Q	1.0 — 30.0	Filter Q
PressSw	OFF, ON	Pressure Control Mode
PressSens	0 — 100	Pressure Sens
PressAtck	0 — 1000ms	Pressure Attack Time
PressRele	0 — 3000ms	Pressure Release Time
Wah Sw	OFF, ON	Wah Effect Switch

Block Diagram



Music and Video RE-IMAGINED

www.atvcorporation.com

2017 Rev.01