

# **Juzisound**

## **Accordion MIDI System 2**

**For Operation System  
Version 6.4  
or higher**



# PRECAUTION

Juzisound Accordion MIDI system 2 is absolutely new MIDI system, designed and optimized to work together with Juzisound Accordion Sampler. Main idea is to have most need function for complete work with solo and bass side of accordion. With this MIDI system, and with combination with Juzisound Accordion Sampler and Juzisound Wireless MIDI System, you have complete solution for play MIDI accordion.

This MIDI system is visually similar with previous model, but control panel and software are very different. There has some new conception, and we need first look about this, to possible to understand complete idea.

## Organization / PARTS

This MIDI system, introduce some new conception for playing MIDI accordion. There have 3 main separate parts, very similar to parts of **real acoustic accordions**. They are named: **SOLO**, **F.BASS** and **CHORD**.

**SOLO** part, is designed to play right/melodic side of acoustic accordion. There is possible to play 3 complete independent sounds together. They are named **S1**, **S2** and **S3**. **SOLO** part play **SCALE** and **TERCA** too. There are **1000 SOLO** parts with numbers from **000** to **999**. These parts are changed with **SOLO REGISTERS BUTTONS** of RIGHT SIDE of MIDI SYSTEM!  
*(When SOLO button is selected in control panel of MIDI system)*

**F.BASS** part is designed to play fundamental bass notes, when press fundamental bass buttons of MIDI accordion. Fundamental bass is created from 3 independent sounds, named **B1**, **B2** and **B3**. Sometimes, one or two of them is used to play percussion sounds like Drum Kick, Tambourine or another drum sound. There are **1000 F.BASS** parts with numbers from **000** to **999**.

**CHORD** part, is designed to play CHORDS, when play chord buttons of bass side of MIDI accordion. CHORD part is created from 3 independent sounds, named **C1**, **C2** and **C3**. There is possible to play Drums or percussive sounds too. Like in Fundamental Bass part. There are **1000 CHORD** parts with numbers from **000** to **999**.

Additional organization parts:

Parts **F.BASS** and **CHORD** are combined to new part, named **ACOMP**.

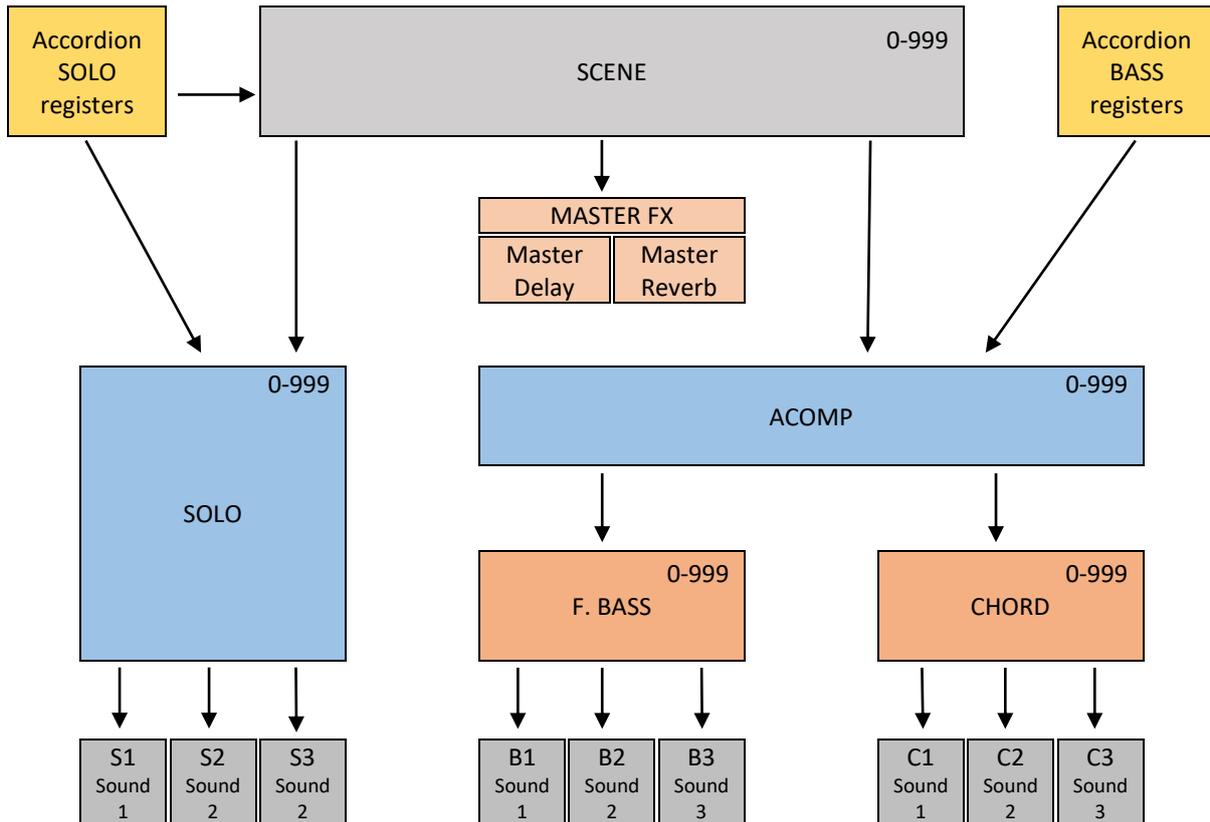
**ACOMP** part is designed for organization purposes, and is used for simultaneous change of **F.BASS** and **CHORD** together, like bass register of acoustic accordion change fundamental bass and chord tone together. **ACOMP** part have self-number, and every **ACOMP** number know why **F.BASS** and **CHORD** part need to be loaded, when select this **ACOMP** number. There are **1000 ACOMP** parts with numbers from **000** to **999**. These parts are changed with **BASS REGISTERS BUTTONS** of BASS SIDE of MIDI SYSTEM!

**SCENE** is additional part, why change **EVERYTHING together**. With everything, we mean all another parts + master effects, and all another setting. This is most **HI-LEVEL** organization part. Idea is to have way, to change everything together, with only one pressing of button. Only **SCENE** part remember and change **master effect** parameter and settings. There are **1000 SCENE** parts with numbers from **000** to **999**. **SCENE** parts are changed with **SOLO REGISTERS BUTTONS** of RIGHT SIDE of MIDI SYSTEM!  
*(When SCENE button is selected in control panel of MIDI system)*

# PARTS TREE / MEMORY ORGANIZATION

Parts are organized in multilevel tree structure. Top parts memorized some info about low parts, and when we change these parameters in low level parts, this will mark up level parts like editable, and to keep changes, need to save top level parts too. Try to explain:

For example, part ACOMP keep info only about numbers of used F.BASS and CHORD parts. If you edit used CHORD number, this will mark ACOMP part like EDITABLE, and to keep changes in future, you need to save ACOMP part. The same is valid for all parts, and all parts have EDIT marker on sampler display. When you change top level part, and under this part have same edited and not saved low level parts, these parts will be changed, and all changes in these parts are lost.



## Very important to understand!

Sounds are base component of Accordion Sampler Device. Sounds are common for all parts, SOLO, F.BASS and CHORD. Every part is created from 3 sounds – 3 layers.

Sampler device have 10 000 sound positions (from 0 to 9 999) and every sound number is possible to be loaded in every of accordion parts. No problem to load solo sound to F.BASS, and opposite way.

When you edit and save one sounds, changes will affect only this sound cell, where is loaded this sound. If on another parts, have loaded the same sound, changes will be applied when sound will be preloaded again.

When you edit and save one sounds, then all parts who use this sound in future, will be affected, and will be load new saved version of the sound.

## About Editing dependencies logic: Examples:

*If you change number of one of solo sounds, loaded on cell S1, S2 or S3, this will mark cell SOLO like EDITED.*

*If you change numbers in cell SOLO or ACOMP, this will mark SCENE like EDITED.*

*If you change F.BASS or CHORD number, this will mark cell ACOMP like EDITED, but this not automatically mark cell SCENE like edited, because SCENE continue to use the same ACOMP number, instead of this is EDITED or not edited.*

# CONTROL PANEL

One big difference with previous model of MIDI system is new control panel. Control panel is created to be fully integrated with new accordion sampler, and to be available to control most important function of new accordion sampler.

First we have rotation encoder, instead of buttons [+] and [-] in previous model. This encoder is used for easy change and set parameters. The same encoder is used for control of MASTER VOLUME. No need to install additional analog potentiometer, but this functionality still available, if you need it. There have 3 digit display, and one LED for every button. MIDI System have complicated multi-level menu and many parameters, and we explain this in next pages. Because each parameter is consistent with Juzisound Accordion Sampler, we will show how every parameter of MIDI system affect parameters in accordion sampler.

## MASTER VOLUME

When MIDI system is in top level of menu or not enter in some advanced function, moving of rotation encoder direct control master volume of accordion sampler. When Master Volume is changed, on display of MIDI system we see new master volume level for 2 seconds. Range is from 0 to 127 and right dot LED on display blinking fast. If accordion sampler is on main page, change of master volume from MIDI system, immediate move sampler page selection to master volume parameter, and immediate change master volume value. Master volume value in sampler is with range from 0 to 100 percent. When master value is set to 0, on sampler display we see "Mute". When master volume on accordion is 127, on sampler display we see "Max". When power on MIDI system, master volume is automatically set to 100 (78.4% on sampler).



When you prefer to use analog potentiometer for Master Volume control, then need to activate id on advanced menu mode.

When analog potentiometer for master volume is activated, then Master Volume function of ENCODER is disabled, and encoder no any function in top level of menu. Of course, encoder still be used for change parameters and all another purposes. Only Master Volume function is disabled.

# CHANGE SCENE

Juzisound MIDI accordion system have **160 SCENE** position, available for direct choice by pressing of register button. Instead of this, Accordion Sampler have **1000** internally **SCENE** position, but only first **160** of them are addressable from accordion MIDI system with registers. This is **SCENE** from 000 to 159 inclusive. Higher SCENE numbers are available for selecting from MIDI system, only with direct choice by number.

## Accordion MIDI System SCENE organization

From Accordion MIDI System looking point, **SCENE** are organized in **10 banks** by **16 SCENE** in every bank. When scene mode is active, banks are selected by number buttons of control panel. Current selected bank is indicated with LED light on number button, and first digit on accordion display. Current SCENE in current bank is selected through register buttons of solo side of accordion. MIDI system read up to 16 solo register buttons max, and because this, we have only 16 SCENE positions for every bank. Current selected scene in current bank, is show on last 2 digits on display. For example, if current selected bank is 2 and current selected scene is 13, on display will show "2.13". If digit 13 is blinking, this means that current selected register button is not equal to last send SCENE number. This situation is available, if you return to SCENE mode from SOLO mode, and in SOLO you press another register, but when return to SCENE, already pressed register key is not equal to previously selected SCENE. After pressing of new register button, SCENE will be change, and last 2 digit of scene stop blinking.

## How to change SCENE

To change **SCENE**, button [**SCENE**] of control panel need to be activated (LED is ON).

When this button is activated, all another digit buttons are work like **BANKS** for SCENE. Led of every digit button indicate current selected bank. With register button, you will change current scene in current bank.

On display you see "B.NN", where B is current bank and NN is current SCENE number in this bank.

If accordion sampler is in main page, when SCENE is changed, display selection is also changed to SCENE, for easy understanding what is changed. For first 160 SCENE position, sampler will be display not only SCENE number, but scene bank and register number, in accordion MIDI system format.



If you **don't have installed 16 registers buttons** of your MIDI accordion, have another way to access to all 16 SCENE position. How:

**Press and hold button [SCENE]** and use **rotation encoder** to change current **SCENE** number. If the selection goes outside the current bank, this method will change current bank too.

### NOTE:

SCENE keep and memorize info about:

Scene name, SOLO number, ACOMP number, Master effects common parameters, Master DELAY status and all parameters and Master REVERB status and all parameters.

### Important:

Only **SCENE** memorize info for Master Effects!!! Change of master effects together with sounds, are possible only when change SCENE! Really SCENE change EVERYTHING together. It is possible to set the sampler to delay changing the current preset while there are notes pressed. Real change will be executed, in moment when no any note pressed!

**Any change in this parameter, mark SCENE as EDITED.**

# CHANGE SOLO

Juzisound MIDI accordion system have **160 SOLO** position, available for direct choice by pressing of register button. Instead of this, Accordion Sampler have **1000** internally **SOLO** position, but only first **160** of them are addressable from accordion MIDI system with registers. This is **SOLO** from 000 to 159 inclusive. Higher SOLO numbers are available for selecting from MIDI system, only with direct choice by number.

## Accordion MIDI System SOLO organization

From Accordion MIDI System looking point, **SOLO** are organized in **10 banks** by **16 SOLO** in every bank. When solo mode is active, banks are selected by number buttons of control panel. Current selected bank is indicated with LED light on number button, and first digit on accordion display. This is absolutely the same organization like in SCENE mode

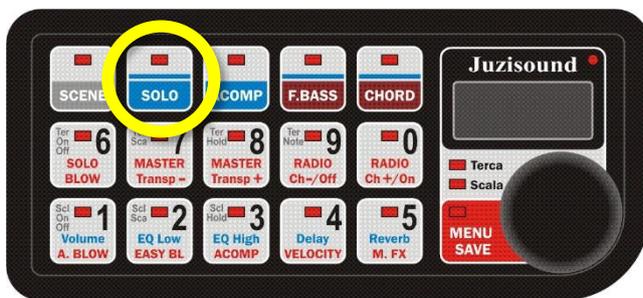
## How to change SOLO

To change **SOLO**, button **[SOLO]** of control panel need to be activated (LED is ON).

When this button is activated, all another digit buttons are BANK for SOLO. Led of button indicates current selected bank. With register button, you will change solo.

On display you see "B.NN", where B is current bank and NN is current SOLO number.

If accordion sampler is in main page, display selection is changed to SOLO to easy understand what is changed. For first 160 SOLO position of sampler display will be displayed not only SOLO number, but solo bank and register number, in accordion MIDI system format.



If you **don't have installed 16 registers buttons** of your MIDI accordion, have another way to access to all 16 SOLO position. How:

**Press and hold button [SOLO]** and use **rotation encoder** to change current **SOLO** number. If the selection goes outside the current bank, this method will change current bank too.

## Change SOLO indication

When SCENE or SOLO mode is NOT selected, and if you press right hand button register, MIDI system will change SOLO, and indicate this event on display with string "r.XX" where XX is number of new SOLO register. After 1 second, display will return to previous indication.

## NOTE:

SOLO keep and memorize info about:

### Common parameters:

Solo name, Insert 1, 2 and 3 placement, status, plugins and all plugins parameters, all **TERCA** parameters and all **SCALA** parameters, ALL MIDI offset parameters: volume, EQ High, EQ Low, Delay Send and Reverb Send offsets.

### For all SOLO sounds S1, S2 and S3:

SOUND On/Off status, SOUND number, Volume, 3band EQ status and settings, Pan, Bellows Dynamic (Status, Curve and Depth), Aux to Delay, Aux to Reverb, Transpose, Note Range (HI and Low), PB ranges, AT On/Off status, Sustain On/Off status, Note Velocity Interpretation (From MIDI, Fixed 1-127, From Bellows).

## Important:

Only **SOLO** memorize info for **SCALA** and **TERCA**!!!

**About SCALA:** SCALA is implemented only in SOLO parts. Another PARTS not play SCALA, because they are accompaniment in nature. Part S1 always play SCALA, S2 and S3 are independent configurable in SCALA page.

**About TERCA:** TERCA is implemented only in SOLO parts. Another parts don't play TERCA, because they are

accompaniment in nature. Part S1 always play main voice. S2 and S3 have individual parameters in TERCA page, to select who voice need to play, main or terca, and what is happened when TERCA is switched ON or OFF.

**Any change in this parameters, mark SOLO as EDITED!**

## CHANGE ACOMP

Juzisound MIDI accordion system have **120 ACOMP** position, available for direct choice by pressing of bass register button. Instead of this, Accordion Sampler have **1000** internally **ACOMP** position, but only first **120** of them are addressable from accordion MIDI system with registers. This is **ACOMP** from 000 to 119 inclusive. Higher ACOMP numbers are available for selecting from MIDI system, only with direct choice by number.

### Accordion MIDI System ACOMP organization

From Accordion MIDI System looking point, **ACOMP** are organized in **10 banks** by **12 ACOMP** in every bank. When **ACOMP** mode is active, banks are selected by number buttons of control panel. Current selected bank is indicated with LED light on number button, and first digit on accordion display. Accordion BASS register buttons, select current ACOMP number on current ACOMP bank.

### How to change ACOMP

To change **ACOMP**, button **[ACOMP]** of control panel need to be activated (LED is ON).

When this button is activated, all another digit buttons are BANK for ACOMP. Led of button indicates current selected bank. With BASS register button, you will change ACOMP number. On display you see "B.NN", where B is current ACOMP bank and NN is current ACOMP number.

If accordion sampler is in main page, display selection is changed to ACOMP, to easy understand what is changed. For first 120 ACOMP position of sampler display will be displayed not only ACOMP number, but ACOMP bank and register number, in accordion MIDI system format.



If you **don't have installed 12 BASS registers buttons** of your MIDI accordion, have another way to access to all 12 ACOMP position. How:

**Press and hold button [ACOMP]** and use **rotation encoder** to change current ACOMP number. If the selection goes outside the current bank, this method will change current bank too.

### NOTE:

ACOMP keep and memorize info about:

ACOMP name, Fundamental BASS number and CHORD number. Only this!

**Any change in this parameters, mark ACOMP as EDITED!**

All another parameters for F.BASS and CHORDS, like volume, mixing, inserts, sound numbers and e.t., are memorized INSIDE F.BASS and CHORD parts!

### Change ACOMP indication

When ACOMP mode is NOT selected on MIDI system, and you press BASS button register, MIDI system will change **ACOMP**, and indicate this event on display with string "A.XX" where XX is number of new ACOMP register. After 1 second, display will return to previous indication.

With another words:

If MIDI system is not in ACOMP mode, every change of BASS register on accordion, will be indicated for one second on display, to inform about bass register change event!

# CHANGE F.BASS

Juzisound Accordion Sampler have **1000 Fundamental BASS** position, and all is accessible to choice from accordion MIDI system.

## Accordion MIDI System F.BASS organization

From Accordion MIDI System looking point, **fundamental basses** not have special organization. In most cases, MIDI system don't know what is current fundamental bass number, because this dependent from selected ACOMP number. However, you have the option to change F.BASS number direct from MIDI system, by entering the new F.BASS number.

## How to change F.BASS

To change **F.BASS**, button **[F.BASS]** of control panel need to be activated (LED is ON).

When you activate this button, and MIDI system don't know current F.BASS number, because F.BASS number dependent from current selected ACOMP number, on display will be show: "-- --".

Now MIDI system is ready, to accept new F.BASS number. This is made with digit buttons. Every button put one digit to display.

If you enter 3 digits (complete number), this F.BASS will be called and display still show new F.BASS number.

If you enter only one or two digits, then possible to complete entering with press F.BASS button again. This will complete entering, and new F.BASS number will be selected.

Example:

If you press button **[2]** and then press **[F.BASS]**, this will choice F.BASS number 002.

If you press button **[8]** then **[4]** and then press **[F.BASS]**, this will choice F.BASS number 084.

If you press button **[1]** then **[2]** and then press **[3]**, this will choice F.BASS number 123.

Possible to change F.BASS with one position Up or Down with rotation encoder. To do this, you need to press and hold button **[F.BASS]**, and then rotate encoder up or down. This change F.BASS number with +/- 1.



## NOTE:

F.BASS keep and memorize info about:

### Common parameters:

F.BASS name, F.BASS Insert (placement, status, plugin and all plugins parameters), ALL MIDI offset parameters: volume, EQ High, EQ Low, Delay Send and Reverb Send offsets.

### For all F.BASS sounds B1, B2 and B3:

SOUND On/Off status, SOUND number, Volume, 3band EQ status and settings, Pan, Bellows Dynamic (Status, Curve and Depth), Aux to Delay, Aux to Reverb, Transpose, Note Range (HI and Low), PB ranges, AT On/Off status, Sustain On/Off status, Note Velocity Interpretation (From MIDI, Fixed 1-127, From Bellows).

**Any change in this parameters, mark F.BASS as EDITED!**

# CHANGE CHORD

Juzisound Accordion Sampler have **1000 CHORD** position, and all is accessible to choice from accordion MIDI system.

## Accordion MIDI System CHORD organization

From Accordion MIDI System looking point, **chords** not have special organization. In most cases, MIDI system don't know what is current chord number, because this dependent from selected ACOMP number. However, you have the option to change **CHORD** number direct from MIDI system, by entering the new **CHORD** number.

## How to change CHORD

To change **CHORD**, button **[CHORD]** of control panel need to be activated (LED is ON).

When you activate this button, and MIDI system don't know current **CHORD** number, because **CHORD** number dependent from current selected ACOMP number, on display will be show: "-- --".

Now MIDI system is ready, to accept new **CHORD** number. This is made with digit buttons. Every button put one digit to display.

If you enter **3** digits (complete number), this **CHORD** will be called and display still show new **CHORD** number.

If you enter only **one** or **two** digits, then possible to complete entering with press **CHORD** button again. This will complete entering, and new **CHORD** number will be selected.

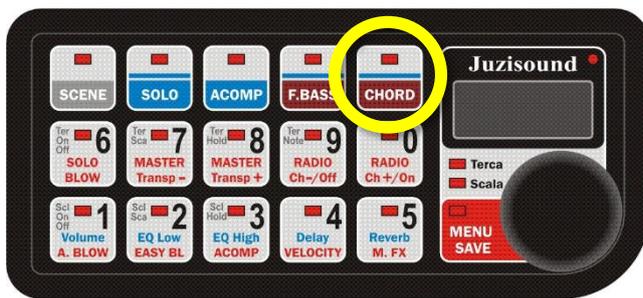
Example:

If you press button **[2]** and then press **[CHORD]**, this will choice **CHORD** number 002.

If you press button **[8]** then **[4]** and then press **[CHORD]**, this will choice **CHORD** number 084.

If you press button **[1]** then **[2]** and then press **[3]**, this will choice **CHORD** number 123.

Possible to change **CHORD** with one position Up or Down with rotation encoder. To do this, you need to press and hold button **[CHORD]**, and then rotate encoder up or down. This change **F.BASS** number with +/- 1.



## NOTE:

CHORD keep and memorize info about:

### Common parameters:

CHORD name, CHORD Insert (placement, status, plugin and all plugins parameters), ALL MIDI offset parameters: volume, EQ High, EQ Low, Delay Send and Reverb Send offsets.

### For all CHORD sounds C1, C2 and C3:

SOUND On/Off status, SOUND number, Volume, 3band EQ status and settings, Pan, Bellows Dynamic (Status, Curve and Depth), Aux to Delay, Aux to Reverb, Transpose, Note Range (HI and Low), PB ranges, AT On/Off status, Sustain On/Off status, Note Velocity Interpretation (From MIDI, Fixed 1-127, From Bellows).

**Any change in this parameters, mark CHORD as EDITED!**

# FAST MENU

Anytime when the midi system is in normal mode, short pressing of button **[MENU/SAVE]** activate FAST MENU. When FAST MENU is active, LED on button **[MENU/SAVE]** are ON, and on display have string "Fun"!

In this mode, all digit buttons have different function, marked with RED text. Most of buttons work like On/Off SWITCH. LED of buttons, indicate current function status. Only buttons [9] and [0] work like +/- for changing wireless AIR channel.



In FAST menu have most common usable parameter, and user need to have fast access to this parameter at any time, by simple pressing one button. Every pressing of button (changing parameter status) will be indicated on display with two consecutive strings. Every strings are show for 1 second. After this, display will be return to string "Fun", to indicate MIDI system current mode.

Available functions (and buttons) are:

## DYNAMIC / BLOWING CONTROL

**[6] SOLO BLOW** - this button activates blow dynamic for SOLO part. On sampler display, small button in left marker have the same function and show the same status. On display of MIDI system will be show: "SbL" and "oFF" or "On".

**[2] ACOMP BLOW**- this button activates blow dynamic for ACOMP part. On sampler display, small button in right marker have the same function and show the same status. On MIDI system display will show: "AbL" and "oFF" or "On".



**[1] EASY BLOW**- this button activates EASY BLOW function.

On display of MIDI system will be show: "Ebl" and "oFF" or "On".

If these function is active, accordion MIDI system modify scanning of blow pressure with different user modified curve. This curve makes playing easier, with small blow pressure. With this button, you have fast switching between natural and easy blow pressure mode.

## MASTER TRANSPOSE

**[7] MASTER TRANSPOSE -1** - this button change MASTER TRANSPOSE with 1 value Down.

**[8] MASTER TRANSPOSE +1** - this button change MASTER TRANSPOSE with 1 value Up.

When master transpose is changed, on display of MIDI system will be show: "XXX" and "tr", where XXX are new master transpose value from -11 to 11. LEDs of buttons [7] and [8] indicates master transpose status.

If both is OFF, master transpose is 0. (no master transpose)

If only LED of button [7] is ON, then master transpose is negative.

If only LED of button [8] is ON, then master transpose is positive.

When master transpose is changed, if sampler is in main page, master transpose parameter is auto selected!

## WIRELESS AIR CHANNEL CONTROL

[9] AIR CHANNEL -1 - this button change WIRELESS AIR CHANNEL with 1 value Down.

[8] AIR CHANNEL +1 - this button change WIRELESS AIR CHANNEL with 1 value Up.

When wireless AIR channel is changed, on display of MIDI system will be show: "chX" and "rAd", where X are new wireless AIR channel from 1 to 6.

### SWITCH RADIO OFF

If selected channel is 0(ZERO) this is equal to SWITCH OFF wireless transmitter. Then on display of MIDI system will be show: "rAd" and "oFF". Wireless transmitter receive command to stop any transmission, and no more wireless signal will be produced. To switch ON transmitter again, simple change WIRELESS CHANNEL to value different from ZERO.

### INDICATION

Both LEDs of buttons [9] and [0] indicates current wireless transmitter status.

If both is OFF, wireless transmitter is OFF (selected channel is 0)

If both are ON, wireless transmitter is active, and produce wireless signal by selected wireless channel.

## LEFT HAND On/Off

[3] LEFT HAND STATUS - this button switch On or OFF scanning of left side of accordion. When function is OFF, MIDI system don't scan basses of accordion, and not send any MIDI signal for basses. Use this function for temporary DISABLE bass side of accordion, if you don't need it.

When function status is changed, on MIDI system display will show: "Aco" follow by "On" or "oFF".

LED of button [3] indicate current function status.

## BLOW TO NOTE VELOCITY

[4] BLOW TO NOTE VELOCITY - this button switch On or OFF sending note velocity.

When function is OFF, all note velocity will be send with one fixed value.

When function is ON, velocity of MIDI notes dependent from current bellows pressure.

When function status is changed, on MIDI system display will show: "Aco" follow by "On" or "oFF", dependent from function status..

LED of button [4] indicate current function status.

This function affect all note velocity - for both left and right part of accordion.!

## MASTER EFFECTS On/Off

[5] MASTER EFFECT On/Off - this button switch On or OFF both master effects on sampler device. Use this function for temporary DISABLE master effect, when use external effects.

When function status is changed, on MIDI system display will show: "EFF" follow by "On" or "oFF", dependent from function status.

LED of button [5] indicate current function status.

Master effect On/Off command is send by Sysex message to sampler, and really switch sampler function.



## Exit from FAST MENU

For exit from fast menu, press one of the top row buttons: [SCENE], [SOLO], [ACOMP], [F.BASS] or [CHORD].

**Any changes of this menu are immediate memorized, and no need additional actions to save it!**

# TERCA

## **IMPORTANT TO UNDERSTAND!!!**

*Juzisound MIDI System not play or produce **TERCA!***

*Midi system only have function to REAL TIME control terca functionality of Juzisound Accordion Sampler!*

*All this is made with MIDI Sysex messages!*

Control of TERCA is made from Control Panel, with combination of button:

**[MENU/SAVE] + [6], [7], [8] and [9].**

Terca status LED indication is available under DIGIT display. This LED indicate terca On/Off and terca SCAN status.



## **TERCA On/Off**

**Combination: [MENU/SAVE] + [6]**

To switch TERCA ON or OFF, you will need to press and hold button **[MENU/SAVE]**, and button [6].

This will send command to sampler to switch On or Off terca. LED TERCA indicate current terca status. When LED is ON, TERCA is ON. When LED is OFF, TERCA is OFF. When terca status is changed, on MIDI system display is show 2 consecutive strings: “tEr” and “On” or “oFF”, dependent from new terca status.

When activate terca without new terca scanning, this will activate **last used terca**.

## **TERCA SCAN**

**Combination: [MENU/SAVE] + [7]**

To switch on TERCA SCAN procedure, you will need to press and hold button **[MENU/SAVE]**, and button [7]. When terca scanning procedure is activated, LED TERCA blinking fast. On display of control panel, is shown 2 consecutive strings: “tEr” and “SCA”.

After starting terca scan procedure, you need to press chord of 3 notes. This 3 notes select terca mode and terca base note. When terca scan is active, notes is not played, only MIDI system collect this notes.

- If chord is accepted, terca scan mode will be complete, and new recognized terca will be activated.
- if chord is not accepted, terca scan mode will be complete, but terca will be stay OFF.

After terca scan mode complete, Juzisound MIDI system send all info about new terca to sampler device. Sampler execute command, and play selected terca.

### **Important to understand!**

*Terca scanning is made from MIDI system, not from sampler. After terca scanning complete, MIDI system send control message to sampler, and adjust all sampler terca parameter, with the same values like in MIDI system.*

## **TERCA HOLD**

**Combination: [MENU/SAVE] + [8]**

To switch TERCA HOLD On or OFF, you will need to press and hold button **[MENU/SAVE]**, and button [8].

This will send command to sampler to switch TERCA HOLD On or Off terca. No LED indication about this function. When terca status is changed, on MIDI system display is show 2 consecutive strings: “tHL” and “On” or “oFF”, dependent from new TERCA HOLD status.

## **TERCA SPECIAL NOTE**

**Combination: [MENU/SAVE] + [9]**

To switch TERCA special note On or OFF, you will need to press and hold button **[MENU/SAVE]**, and button [9].

This will send command to sampler to switch TERCA special note On or Off. No LED indication about this function. When terca hold status is changed, on MIDI system display is show 2 consecutive strings: “tSn” and “On” or “oFF”, dependent from new TERCA special note status.

# SCALA

## **IMPORTANT TO UNDERSTAND!!!**

Accordion MIDI System don't apply scale. MIDI system only send Sysex command to slave MIDI device, and slave MIDI device apply scale internally.

Control of SCALA is made from Control Panel, with combination of button:

**[MENU/SAVE] + [1], [2], and [3].**

Scala status LED indication is available under DIGIT display. This LED indicate scala On/Off and scala SCAN status.



## **SCALA On/Off**

**Combination: [MENU/SAVE] + [1]**

To switch SCALA ON or OFF, you will need to press and hold button **[MENU/SAVE]**, and button [1].

This will send command to sampler to switch On or Off scala. LED SCALA indicate current scala status. When LED is ON, SCALA is ON. When LED is OFF, SCALA is OFF. When scala status is changed, on MIDI system display is show 2 consecutive strings: "SCL" and "On" or "oFF", dependent from new scala status.

When activate scala without new scala scanning, this will activate **last used scala**.

## **SCALA SCAN**

**Combination: [MENU/SAVE] + [2]**

To switch on SCALA SCAN procedure, you will need to press and hold button **[MENU/SAVE]**, and button [2]. When scala scanning procedure is activated, LED SCALA blinking fast. On display of control panel, is shown 2 consecutive strings: "SCL" and "SCA".

After starting scala scan procedure, you need to press some notes. Pressed notes will be altered with -50 semitones down. After press all need notes, then need again press buttons **[MENU/SAVE] + [1]** to inform MIDI system for scan process complete.

If have pressed notes, MIDI system send command to sampler to activate SCALA. LED SCALA stay ON.

If no preset notes between SCALA SCAN start and SCALA START end, then MIDI system send message to sampler to switch OFF scala. Led SCALA stay Off.

### **Important to understand!**

Scala scanning is made from MIDI system, not from sampler. After scala scanning complete, MIDI system send control message to sampler, and adjust all sampler scala parameter, with the same values like in MIDI system.

## **SCALA HOLD**

**Combination: [MENU/SAVE] + [3]**

To switch SCALA HOLD On or OFF, you will need to press and hold button **[MENU/SAVE]**, and button [3].

This will send command to sampler to switch SCALA HOLD On or Off. No LED indication about this function.

When scala hold status is changed, on MIDI system display is show 2 consecutive strings: "SHL" and "On" or "oFF", dependent from new SCALA HOLD status.

# REAL TIME MIDI CONTROL: PARTS OFFSETS

## IMPORTANT TO UNDERSTAND!!!

This **Accordion MIDI System** is highly integrated with **Juzisound Accordion Sampler**. This integration allows to have **direct and real time** control, over most important for sound parameters. Control over these parameters are very useful, when you **play in stage**, and not have physical access to sampler device, to do this from sampler device interface. PARTS offsets are for **OVERAL PART** (Common for all 3 internal sounds of every PART).

### What are the parameters, available for REAL-TIME PARTS control?

When play MIDI accordion, you have **3** basic important **PARTS** of sound: **SOLO, F.BASS** and **CHORDS**.

For **every one** of them, MIDI system have **individual and direct control over**:

- **Volume** - for control overall volume of every part, to build perfect balance with another parts.
- **Low Shelf EQ** - to fine tune individual low frequency of sound of every part
- **High Shelf EQ** - to fine tune individual high frequency / brightness of every part
- **Delay Send** - to individually adjust Delay send for every part
- **Reverb Send** - to individually adjust Reverb send for every part

### How real time PARTs control is organized on sampler side?

Real time control is organized by combination of 2 parameters:

- **one internal for PART parameter.** (Internal part parameters are memorized inside part parameters.)

- **one real time OFFSETS from MIDI.** (This MIDI offset comes from MIDI, and are not saved anywhere.)

Combination of these two parameters, + limitation of min and max value, make final value of parameter, applied to PART sound.

## IMPORTANT TO UNDERSTAND!!!

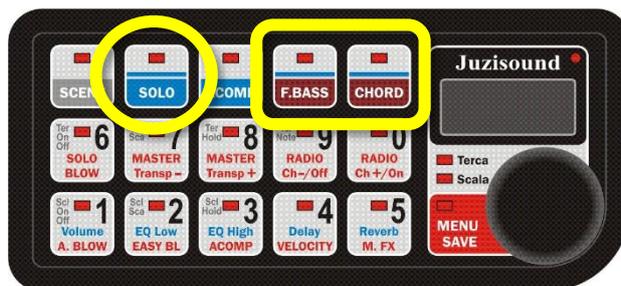
1. Both internal part offsets and MIDI real time offsets are **OFFSETS!!!**. They are not absolute values!
2. Both are with center 0 and range of +/- 63.
3. Final value of offset which is used to calculate audio are combination of both: internal and MIDI offset parameters. Final value is range imitated to +/-63 too!
4. Every time, when you change **SOLO, F.BASS** or **CHORD**, all real time MIDI offsets is **reset to ZERO!**
5. If you **NOT** execute **SAVE** before change PART, all MIDI offsets **will be lost**, and part will be return to previous state, before apply any MIDI offsets.
5. If you execute **SAVE**, BEFORE change of PART, the following will happen:
  - all final values, which are obtained from the combination of the internal and MIDI offsets, are **COPYED** to internal part parameters. Old values of internal part parameters will be destroyed.
  - new internal part values will be **SAVED** together with another part parameters.
  - after this, all real time MIDI offsets again will be reset to **ZERO**.

In this way, when the same PART will be loaded again, previously applied final MIDI offsets will be applied only from internal part parameters, and part will be ready to receive new offsets from MIDI. New offsets will be applied to already saved old final offsets. This will allow to continue to edit PART from previous saved state.

### How to do this in practice?

On MIDI System control panel, you have separate buttons for every parts: **SOLO, F.BASS** and **CHORD**. On these buttons have one additional blue line, not available in another buttons. All these buttons / parts have this functionality, for applying real time offsets to some parameters.

To activate offset edit for every of these parts, need to apply **FAST DOUBLE PRESS** to part button.



If Real Time MIDI PARTs offsets function is activated, LED of PART buttons will be **flash fast**, and on display will be show 2 consecutive strings, dependent from selected PART:

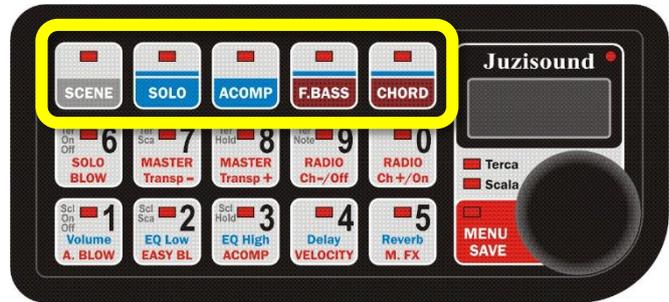
For **SOLO**, on display will be: “oFS”, “SLO”.

For **F.BASS**, on display will be: “oFS”, “FbS”.

For **CHORD**, on display will be: “oFS”, “chr”.

In real time offset mode, low row buttons from [1], [2], [3], [4], and [5] select what is parameter will be edited. For easy understanding, name of edited parameter is printed on button with **blue color**.

Other buttons [6], [7], [8], [9] and [0], from top row, have additional functions, explained latter.



Offset of selected parameter is made with **rotation encoder**. Every offset is made in range +/- 64. If no offset applied, on display will be string “- 0 -”.

**INTEGRATION WITH ACCORDION SAMPLER!!!**

All offsets are indicated on sampler display too, and available for editing from sampler interface too, **but we don't recommend to edit this settings from sampler**, because if edit is made from sampler interface, accordion MIDI system DON'T KNOW about new changes, and this destroy all logic for applying real time offsets remotely - from accordion MIDI system!

On MAIN page of sampler display, for every one PART, you have separate section with indication of all real time MIDI offsets, all part internal offsets, and final calculated offsets.

Top row of potentiometer, show current Real TIME MIDI offsets values. Bottom row of potentiometers are combined for internal part offset and final combined offset value. Bottom potentiometers have additional bar, where is show difference between internal part offset and final combined offset. For both rows of pots, if some offset is different from zero, value is show on display with digits.



All offsets, visible in sampler MAIN page are available in MIXER page too, because they are affect some mixing parameters. In first row are offsets in MAIN page. On second row are the same offsets in MIXER page. On current example are show only for PART SOLO, but this is the same for F.BASS and CHORD too.



**AVAILABLE REAL TIME PARTS OFFSET PARAMETERS:**

**[1] – VOLUME**

To apply real time offset to selected PART volume, button [1] need to be selected. When volume is selected, on display for moment will be show string “UOL”. If no volume offset is applied, on display will be string “-0-”.



**[2] – EQ Low**

To apply real time offset to selected PART Low Shelf EQ, button [2] need to be selected. When Low Shelf EQ is selected, on display for moment will be show string “EGL”. If no Low Shelf EQ offset is applied, on display will be string “-0-”.



**[3] – EQ High**

To apply real time offset to selected PART High Shelf EQ, button [3] need to be selected. When High Shelf is selected, on display for moment will be show string “EGH”. If no High Shelf EQ offset is applied, on display will be string “-0-”.



**[4] – Delay AUX**

To apply real time offset to selected PART Delay Aux, button [4] need to be selected. When Delay Aux is selected, on display for moment will be show string “dEL”. If no Delay Aux offset is applied, on display will be string “-0-”.



**[5] – Reverb AUX**

To apply real time offset to selected PART Reverb Aux, button [5] need to be selected. When Reverb Aux is selected, on display for moment will be show string “rEU”. If no Reverb Aux offset is applied, on display will be string “-0-”.



**SAVE PARTS OFFSETS FROM ACCORDION MIDI SYSTEM**

You have opportunity, to save all applied real time MIDI offsets, direct from accordion MIDI system.

To do this, you need to press button [MENU/SAVE] two time FAST!!! There are two variants:

If have same offsets, button [MENU/SAVE] will be continue to blink fast, and on display will be show 2 consecutive strings: “SAU” and “OFS”. If any of the buttons on the top row are flashing quickly, this means that MIDI offsets have been made for the corresponding part. Save is made with simple click of flashing button. If have more of one flashing buttons, we recommend to execute save from right to left buttons. This will keep PART hierarchical dependences structure and keep all MIDI offsets,



If no any offsets, double pressing of button [MENU/SAVE] will not activate save mode. On display will be show 2 consecutive strings: “” no” and “Edt”, and MIDI system return to previous state.

# REAL TIME MIDI CONTROL: Sound Controls

From MIDI System Version 6.2, we adding another 5 real time controls. These controls add access to control individual volume and status of all 3 internal SOUNDS for all PARTS: SOLO, FBASS and CHORD.

## IMPORTANT TO UNDERSTAND!!!

1. These controls are different from previous explained real time PARTS offsets, because they are NOT OFFSETS! They are only COMMAND to change volume or status of loaded SOUND!
2. Then not have central value, and MIDI system don't know about amount of added correction.
3. MIDI system don't know what is exact final resulting values of volume or status in sampler device!
4. Change of sound volume is made only if result not goes outside valid min/max range.
5. They are not memorized in MIDI system! From sampler look point, they are edits, like user make this edits direct from sampler interface.

Base idea is to have possibility, to remote apply change to volume and status of loaded 3 sounds of every PART.

## How to do this in practice?

When, on MIDI System control panel, PARTS OFFSET functions is activated with double pressing of one of the top row buttons: [SOLO], [F.BASS] or [CHORD], second row buttons [6], [7], [8], [9] and [0] have additional functions. They are:

Buttons [6], [7], and [8] are used, for selection of one of 3 SOUNDS of selected PART.

(Selected PART is indicated with fast blinking button from top row)

When one SOUND is selected, **rotation of encoder** made change of **VOLUME** of selected SOUND of part. No additional indication in MIDI system, when encoder is moving.

Buttons [9] and [0] work in different way. When one SOUND is selected:

- pressing of button [9] switch **OFF** selected SOUND of PART.
- pressing of button [0] switch **ON** selected SOUND of PART.

Every pressing of buttons will be indicated on display will 2 consecutive strings. Strings dependent from selected button.

Button [6] control volume of Sound 1 for selected PART. On display will be: "Sn1" and "VOL"

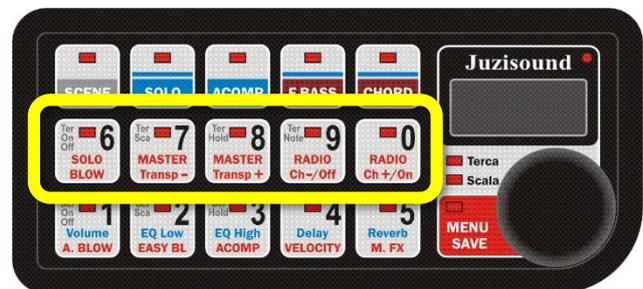
Button [7] control volume of Sound 2 for selected PART. On display will be: "Sn2" and "VOL"

Button [8] control volume of Sound 3 for selected PART. On display will be: "Sn3" and "VOL"

After these two information string, on display will be stay string "\_1\_", "\_2\_" or "\_3\_", dependent from selected sound.

Button [9] switch OFF selected PART. On display will be: "SnX" and "oFF", where X is number of selected sound.

Button [0] switch ON selected PART. On display will be: "SnX" and "On", where X is number of selected sound.



## INTEGRATION WITH ACCORDION SAMPLER!!!

When apply any offset from MIDI system, if sampler is in MIXER page, every change of any parameter from MIDI system, automatically select the same parameter in MIXER page too!

After editing of any of part real time offset or any individual sound of part parameter, affected PART (SOLO, F.BASS or CHORD) are marked like EDITED, and need to be saved, to keep changes in future.

If change part without save it, changes will be lost!

To keep changes, need to send **SAVE command** from MIDI system for EVERY corresponding edited PART.

## Extended Function Menu

Extended function menu mode is selected by press and hold button **[MENU/SAVE]** for **10 second**.  
When extended function mode is active, LED on button **[MENU/SAVE]** is **blinking!**

In extended function menu, have many parameters, grouped in different groups.  
Parameter groups is selected with buttons [6], [7], [8], [9] and [0]. Selected group is indicated with button LED.  
Parameters of selected group is selected by buttons [1], [2], [3], [4], and [5], and will be modified with buttons [+] and [-].

Exiting of Extended Function Menu is available only with long press of button **[MENU/SAVE]** (around 2 sec. ).  
After this, system will ask you to confirm modified parameters. On display will be displayed fast blinking string **“SAU”**.

You need to confirm saving with **ROTATION OF ENCODER!**

**The direction of rotation of the encoder determines whether the parameters are saved or not.**

- Rotation to right is confirm SAVE parameters. For moment on display will be string **“YES”**, and all parameters will be **saved** in non-volatile memory, and will be permanent until next change.
- Rotation to LEFT will CANCEL all saving. You will exit from Extended Function Menu, **without saving** parameters to non-volatile memory. All current edits of parameters will be lost when power off system.

### **IMPORTANT TO UNDERSTAND!!!**

*All modified parameters will be active until you power off device, but in next power on, will be activated previous status of parameters. To keep parameters valid for next restart, they are need to be SAVED, before power off MIDI system.*

Section ( 6 ) – [MIDI Channels]				
No	Parameter Name	Description	Range	Default Value
6.1	Solo MIDI channel	MIDI channel for SOLO notes from right hand.	1 - 16	1
6.2	Fund. Bass MIDI channel	MIDI channel for Fundamental BASS voice notes.	1 - 16	2
6.3	Chords MIDI channel	MIDI channel for CHORDS voice notes. <i>This parameter is set by default or from FAC function to MIDI channel 3. If you use Total SOLO Sampler 2 or Total SOLO Sampler MICRO, then set this parameter to MIDI channel 2. This allow to send Bass and Chords by the same MIDI channel but Bass and Chord notes are in different octaves. This is very useful for playing both left hand sounds together (bass and chords) from only one upper - Upper 2.</i>	1 - 16	3
6.4	Bellow MIDI channel	MIDI channel for BELLOW Control Change 11/43.	1 - 16	1
6.5	---	---	-	-

<b>Section ( 7 ) – [Blow settings]</b>				
<b>№</b>	<b>Parameter Name</b>	<b>Description</b>	<b>Range</b>	<b>Default Value</b>
7.1	Blow center point	Blow pressure reading produces 10 bit values from 0 to 1023. This parameter select point, when no pressure added.	0 - 1023	599
7.2	Death Zone	This is value for blow death zone size. If blow pressure value is in threshold of center cone +/- death zone, blow pressure is ignored.	0 - 50	16
7.3	Blow reading GAIN	This parameter is GAIN for amplification of signal from blow sensor.	x1.00 - x7.00	X2.75
7.4	Blow Messages	MIDI messages generated from accordion blow.	cc11 <b>Fixed</b>	cc11
7.5	See Blow (watch blow reading value in native or MIDI format)	This really is not parameter. This is function for Real Time watching RAW and MIDI values produced by accordion blow. Possible to show values in 2 different formats: If click on button (-), on display will be show 10bit RAW value produced by blow sensor. If click on button (+), on display will be shown MIDI value produced from blow pressure.	RAW 0 - 1023  MIDI 0 - 127	---

<b>Section ( 8 ) – [Pitch Bend settings]</b>				
<b>№</b>	<b>Parameter Name</b>	<b>Description</b>	<b>Range</b>	<b>Default Value</b>
8.1	Pitch Bend center point	Center value of Pitch Bend controller	0 - 1023	512
8.2	Pitch Bend death zone	Death Zone around center point	0 - 50	16
8.3	Pitch Bend GAIN	Gain of reading of Pitch Bend potentiometer.	x1.00 - x7.00	x1.50
8.4	Pitch Bend polarity	Inversion of Pitch Bend Up and Down position.	Up, Down	UP/down
8.5	See values read from Pitch Bend	This really is not parameter. This is function for Real Time watching RAW and MIDI values produced by Pitch Bend. Possible to show 2 different formats: If click on button (-), on display will be show 10bit RAW value read from Pitch Bend. If click on button (+), on display will be shown MIDI value produced from Pitch Bend.	RAW 0 - 1023  MIDI 0 - 127	---

Section ( 9 ) – [Modulation settings]				
No	Parameter Name	Description	Range	Default Value
9.1	Modulation wheel center point	Center point of modulation wheel analog input. If modulation wheel input is used like modulation wheel, then no center point is need. Set this parameter to 0. But if modulation wheel is used with Joystick, then this analog input produces combination of 2 parameters with center point. When joystick is moved up, this produce modulation Control Change 1 messages. When joystick is moved back, this produce Control Change 2 messages.	0 – 1023  0 - for mod. wheel  512 - for joystick	512
9.2	Mod. wheel Death Zone	Death Zone around center point	0 - 50	16
9.3	Modulation wheel GAIN	GAIN of read signal	x1.00 - x7.00	x1.50
9.4	See (CC 2)	This really is not parameter. This is function for Real Time watching RAW and MIDI values produced by Modulation. Possible to show 2 different formats: If click on button (-), on display will be show 10bit RAW value read from Modulation. If click on button (+), on display will be shown MIDI value produced from Modulation.	RAW 0 – 1023 MIDI 0-127	---
9.5	See Mod (CC 1)	This really is not parameter. This is function for Real Time watching RAW and MIDI values produced by Modulation. Possible to show 2 different formats: If click on button (-), on display will be show 10bit RAW value read from Modulation. If click on button (+), on display will be shown MIDI value produced from Modulation.	RAW 0 – 1023 MIDI 0-127	---

**Section ( 0 ) – [SYSTEM FUNCTIONS]**

<b>№</b>	<b>Parameter Name</b>	<b>Description</b>	<b>Range</b>	<b>Default Value</b>
<b>0.1</b>	<b>SELLECT EXTENDED SYSTEM PARAMETER</b>	<b>See EXTENDED SYSTEM PARAMETERS TABLE*</b>	---	---
0.2	Volume Pot Scanning	Volume Potentiometer scanning On or Off. If these function is active, accordion MIDI system enable scanning of volume potentiometer connected to control panel. If you not have connected potentiometer, please stay this function Off.	oFF/On	Off
0.3	Pitch Bend scanning	If these function is active, accordion MIDI system scanning Pitch Bend analog input. For properly work, need to have connected potentiometer for Pitch Bend function. If not have connected potentiometer, please stay this function Off.	oFF/On	Off
0.4	Modulation scanning	If these function is active, accordion MIDI system scanning Modulation analog input. For properly work, need to have connected potentiometer for Modulation function. If not have connected potentiometer, please stay this function Off.	oFF/On	Off
<b>0.5</b>	<b>MODIFY VALUE OF SELECTED EXTENDED SYSTEM PARAMETER</b>	<b>See EXTENDED SYSTEM PARAMETERS TABLE*</b>	---	---

## Extended function parameters:

In addition to this organizations, in group **0** have one different organization. This is **EXTENDED SYSTEM PARAMETERS**.

EXTENDED SYSTEM PARAMETERS are many additional system parameters, for control overall system, sensor assignment and many another system functions.

Selection of EXTENDED SYSTEM PARAMETERS is made by selecting group/button **0**, and parameter/button **1**. In proper position LED 0 and LED 1 need to be ON. Desired parameter is selected by rotation of encoder, and name/number of parameters are available on LCD display.

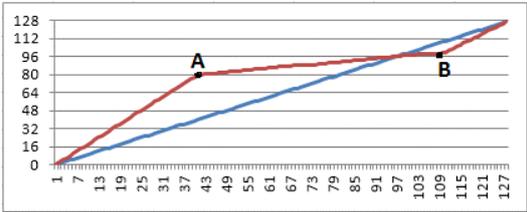
After desired parameter is selected, value of selected parameter is available to see and change, when move to parameter/button **[5]** (by pressing button **[5]**). Then LED 0 and LED 5 need to be ON. In this mode, value of selected parameter is visible on display, and modification of this value is possible with rotation of encoder.

If need to modify another parameter, then need to be return again to button **[1]**, select new Extended parameter with encoder, and move again to button **[5]** to see and modify value of new selected parameter.

Some Extended parameters are not parameter. They are functions. Execution of this functions is made by rotation of encoder in RIGHT WAY. This trigger start of selected function.

All Extended parameters are listed in next tables:

EXTENDED SYSTEM PARAMETERS TABLE				
No	Parameter Name	Description	Range	Default Value
<b>Fixed Note Velocity</b>				
<i>Use this note velocity values, when bellow to note velocity is off</i>				
<b>F.00</b>	Right Hand - (SOLO) Fixed note velocity	When note velocity is ON, note velocity depends from bellow pressure. When note velocity is OFF, then this fixed value is used while sending MIDI notes.	1 - 127	127
<b>F.01</b>	Left Hand – (BASSES) Fixed note velocity for Fundamental Basses	When note velocity is ON, note velocity depends from bellow pressure. When note velocity is OFF, then this fixed value is used while sending MIDI notes.	1 - 127	127
<b>F.02</b>	Left Hand – (CHORDS) Fixed note velocity for Chords	When note velocity is ON, note velocity depends from bellow pressure. When note velocity is OFF, then this fixed value is used while sending MIDI notes.	1 - 127	127
<b>F.03</b>	Fixed Blow Value	When blow scanning is OFF, this is fixed value used for BLOW pressure.	1 - 100	100
<b>F.04</b>	Blow ACP Reading Stabilizer	Value for stabilization of reading of BLOW pressure.	0 – 63	0
<b>F.05</b>	Bellows ON threshold level	This parameter is for choice minimum bellow pressure, where accordion start playing. If this value is below 0, then is formed some hysteresis between pressure start point and pressure off point. This is very useful, for very slow bellows pressure.	0 - 63	8
<b>F.06</b>	Minimum Bellows Pressure	This parameter fixes minimum bellow pressure. If this parameter is not 0, then accordion will play always, and if bellows pressure is under this threshold, this will be ignored. <small>This feature is very useful, when no need to move bellows for normal playing, but keep possibilities to make accents when need, with strong pressure of bellow. This is LAZY mode!</small>	0 - 127	0

Easy BLOW Curve point selection				
F.07	Easy Blow / Point A X position	<p><b>What is Easy Blow mode?</b>  <i>Easy blow is mode, designed for easy usage of accordion blow. Difference from standard blow mode is possibilities of blow pressure curve modification. Curve modification is made by 2 user assigned points, A and B. In picture below are shown values of midi messages, produced by default and easy blow curve. Bottom scale are blow pressure. Right scale are values of produced MIDI messages. Blue line is natural accordion blow pressure. Red line is default easy blow curve, designed for easy using of accordion blow pressure.</i></p> 	0 - 127	40
F.08	Easy Blow / Point A Y position		0 - 127	80
F.09	Easy Blow / Point B X position		0 - 127	110
F.10	Easy Blow / Point B Y position		0 - 127	100
F.11	Enable Central Register Button Scanning	This function enables or disable scanning of central register button. This will work only if have sensor with assigned function 152.	oFF/On	OFF
F.12	Central Register Function	<p>Function selection for central button for right hand - long button below keyboard:</p> <p>0 – Terca ON/OFF (depended from status of button). Use this mode, when used button is with 2 fixed positions – On or OFF.</p> <p>1 – Terca ON/OFF in Toggle mode. Use this mode, when button is only with one stable position. Each push on button will change function status.</p>	0 - 1	0
Right Hand - register sensors scanning mode/watch				
F.13	RIGHT HAND Enable GLOBAL Right Side Register Scanning	<p>Enable or disable scanning of register buttons for Right – SOLO Hand. This is GLOBAL parameter. If this parameter is disabled, no possible to scan Right hand Registers.</p> <p><i>NOTE: Second parameter affect to this function too. This is manual Right Register Scanning function is FAST MENU with button [F4]. To scan right scan registers, both parameters need to be enabled.</i></p>	oFF/On	On
F.14	RIGHT HAND Register sensors scanning mode.	<p>This parameter set mode for register scanning for right hand. Available 2 modes:</p> <p>bYt – byte mode. Use this, when sensors for register are installed on registers valve, and are assigned to function 128-135. Combination of sensors are used like bits in one byte.</p> <p>Ind – individual mode. Use this mode, when sensors for registers are installed on every button register, and assigned to function 136-151. In this mode, every register button is scanned individually. Be sure, sensors are configured to be active, when register button is pressed. Sensors/buttons with low numbers have priority over high numbers. Scanning is interrupted, when find first active sensors.</p>	bYt – Ind	bYt
F.15	RIGHT HAND Register sensors RAW or MAPPED value watch.	<p>This really is not parameter. This is function for real time watching registers sensors values for right hand registers:</p> <p>rAU – this is 8 bit value, produced by raw register sensors scanning – after debouncing. This value is from 0 to 255.</p>	rAU 0 – 255	-

Left Hand - register sensors scanning mode/watch				
F.16	Enable Left Side Register Scanning	Enable or disable scanning of register buttons for Left hand – Bass side.	oFF/On	On
F.17	LEFT HAND Register sensors scanning mode.	This parameter set mode for register scanning for right hand. Available 2 modes: bYt – byte mode. Use this, when sensors for register are installed on registers valve, and are assigned to function 153-158. Combination of sensors are used like bits in one byte. Ind – individual mode. Use this mode, when sensors for registers are installed on every button register, and assigned to function 159-170. In this mode, every register button is scanned individually. Be sure, sensors are configured to be active, when register button is pressed. Sensors/buttons with low numbers have priority over high numbers. Scanning is interrupted, when find first active sensors.	bYt – Ind	bYt
F.18	LEFT HAND Register sensors RAW or MAPPED value watch.	This really is not parameter. This is function for real time watching of 2 registers sensors values for right hand registers: rAU – this is 8 bit value, produced by raw register sensors bit scanning combination – after debouncing. This value is from 0 to 255.	rAU 0 – 255	-
Predefined Functions of some Control Panel Buttons				
F.19	Predefined function of button [4] in FAST MENU	This extended function parameter, predefine function of button [4] in FAST MENU mode. Standard function of button [4] in FAST MENU is to switch ON or OFF scanning of right hand registers. <i>Main idea to possible to fast switch off scanning of solo registers is need, if use MIDI SYSTEM with acoustic accordion. Then is possible to switch off register scanning, after select need MIDI sound, and then continue to switch acoustic registers, without affect already selected MIDI sound.</i> Alternate function of button [4] in FAST MENU is to switch ON or OFF sending velocity of MIDI notes, with fixed values, or with values dependent from accordion bellows pressure. <i>NOTE: Juzisound Accordion Sampler have internal parameter for every one part, for selecting how velocity of MIDI notes will be accepted. If use MIDI system with this sampler, we recommend to stay note velocity permanently ON from accordion, and make individual part settings in sampler.</i>	rEG - UEL	rEG
F.20	Predefined function of buttons [6] and [7].  Select BANKS or Control TERCA	This parameter determines function of buttons [6] and [7]. Normally these buttons are for selecting banks, but if this function is enabled, both buttons are used for direct control of TERCA in all modes: SCENE, SOLO or ACOMP. In this case: Button [6] is TERCA On/Off Button [7] is TERCA SCAN Leds of buttons is indicated terca status too, together with main terca led. <i>NOTE: When this function is enabled, you lost possibility to select bank 6 and 7 In F.BASS and CHORD mode, these buttons are digits, and not control terca..</i>	bAn - tEr	bAn

<b>Right Hand - Register Reassignment</b>				
<b>r.01</b>	Right Hand - Register 1 Sensors native combination	Register 1 – sensors native combination	0 – 63, 255	255
<b>r.02</b>	Right Hand - Register 2 Sensors native combination	Register 2 – sensors native combination	0 – 63, 255	255
<b>r.03</b>	Right Hand - Register 3 Sensors native combination	Register 3 – sensors native combination	0 – 63, 255	255
<b>r.04</b>	Right Hand - Register 4 Sensors native combination	Register 4 – sensors native combination	0 – 63, 255	255
<b>r.05</b>	Right Hand - Register 5 Sensors native combination	Register 5 – sensors native combination	0 – 63, 255	255
<b>r.06</b>	Right Hand - Register 6 Sensors native combination	Register 6 – sensors native combination	0 – 63, 255	255
<b>r.07</b>	Right Hand - Register 7 Sensors native combination	Register 7 – sensors native combination	0 – 63, 255	255
<b>r.08</b>	Right Hand - Register 8 Sensors native combination	Register 8 – sensors native combination	0 – 63, 255	255
<b>r.09</b>	Right Hand - Register 9 Sensors native combination	Register 9 – sensors native combination	0 – 63, 255	255
<b>r.10</b>	Right Hand - Register 10 Sensors native combination	Register 10 – sensors native combination	0 – 63, 255	255
<b>r.11</b>	Right Hand - Register 11 Sensors native combination	Register 11 – sensors native combination	0 – 63, 255	255
<b>r.12</b>	Right Hand - Register 12 Sensors native combination	Register 12 – sensors native combination	0 – 63, 255	255
<b>r.13</b>	Right Hand - Register 13 Sensors native combination	Register 13 – sensors native combination	0 – 63, 255	255
<b>r.14</b>	Right Hand - Register 14 Sensors native combination	Register 14 – sensors native combination	0 – 63, 255	255
<b>r.15</b>	Right Hand - Register 15 Sensors native combination	Register 15 – sensors native combination	0 – 63, 255	255
<b>r.16</b>	Right Hand - Register 16 Sensors native combination	Register 15 – sensors native combination	0 – 63, 255	255
<b>Left Hand - Register Reassignment</b>				
<b>L.01</b>	Left Hand - Register 1 Sensors native combination	Register 1 – sensors native combination	0 – 63, 255	255
<b>L.02</b>	Left Hand - Register 2 Sensors native combination	Register 2 – sensors native combination	0 – 63, 255	255
<b>L.03</b>	Left Hand - Register 3 Sensors native combination	Register 3 – sensors native combination	0 – 63, 255	255
<b>L.04</b>	Left Hand - Register 4 Sensors native combination	Register 4 – sensors native combination	0 – 63, 255	255
<b>L.05</b>	Left Hand - Register 5 Sensors native combination	Register 5 – sensors native combination	0 – 63, 255	255
<b>L.06</b>	Left Hand - Register 6 Sensors native combination	Register 6 – sensors native combination	0 – 63, 255	255
<b>L.07</b>	Left Hand - Register 7 Sensors native combination	Register 7 – sensors native combination	0 – 63, 255	255
<b>L.08</b>	Left Hand - Register 8 Sensors native combination	Register 8 – sensors native combination	0 – 63, 255	255
<b>L.09</b>	Left Hand - Register 9 Sensors native combination	Register 9 – sensors native combination	0 – 63, 255	255
<b>L.10</b>	Left Hand - Register 10 Sensors native combination	Register 10 – sensors native combination	0 – 63, 255	255
<b>L.11</b>	Left Hand - Register 11 Sensors native combination	Register 11 – sensors native combination	0 – 63, 255	255

<b>L.12</b>	Left Hand - Register 12 Sensors native combination	Register 12 – sensors native combination	0 – 63, 255	255
<b>Sensors reading polarity</b>				
<b>P.01</b>	Sensor H01 polarity	0 - non inverted / 1 - inverted	nOr / In	nOr
<b>P.02</b>	Sensor H02 polarity	-	nOr / In	nOr
<b>P.03</b>	Sensor H03 polarity	-	nOr / In	nOr
<b>P.04</b>	Sensor H04 polarity	-	nOr / In	nOr
<b>P.05</b>	Sensor H05 polarity	-	nOr / In	nOr
<b>P.06</b>	Sensor H06 polarity	-	nOr / In	nOr
<b>P.07</b>	Sensor H07 polarity	-	nOr / In	nOr
<b>P.08</b>	Sensor H08 polarity	-	nOr / In	nOr
<b>P.09</b>	Sensor H09 polarity	-	nOr / In	nOr
<b>P.10</b>	Sensor H10 polarity	-	nOr / In	nOr
<b>P.11</b>	Sensor H11 polarity	-	nOr / In	nOr
<b>P.12</b>	Sensor H12 polarity	-	nOr / In	nOr
<b>P.13</b>	Sensor H13 polarity	-	nOr / In	nOr
<b>P.14</b>	Sensor H14 polarity	-	nOr / In	nOr
<b>P.15</b>	Sensor H15 polarity	-	nOr / In	nOr
<b>P.16</b>	Sensor H16 polarity	-	nOr / In	nOr
<b>P.17</b>	Sensor H17 polarity	-	nOr / In	nOr
<b>P.18</b>	Sensor H18 polarity	-	nOr / In	nOr
<b>P.19</b>	Sensor H19 polarity	-	nOr / In	nOr
<b>P.20</b>	Sensor H20 polarity	-	nOr / In	nOr
<b>P.21</b>	Sensor H21 polarity	-	nOr / In	nOr
<b>P.22</b>	Sensor H22 polarity	-	nOr / In	nOr
<b>P.23</b>	Sensor H23 polarity	-	nOr / In	nOr
<b>P.24</b>	Sensor H24 polarity	-	nOr / In	nOr
<b>P.25</b>	Sensor H25 polarity	-	nOr / In	nOr
<b>P.26</b>	Sensor H26 polarity	-	nOr / In	nOr
<b>P.27</b>	Sensor H27 polarity	-	nOr / In	nOr
<b>P.28</b>	Sensor H28 polarity	-	nOr / In	nOr
<b>P.29</b>	Sensor H29 polarity	-	nOr / In	nOr
<b>P.30</b>	Sensor H30 polarity	-	nOr / In	nOr
<b>P.31</b>	Sensor H31 polarity	-	nOr / In	nOr
<b>P.32</b>	Sensor H32 polarity	-	nOr / In	nOr
<b>P.33</b>	Sensor H33 polarity	-	nOr / In	nOr
<b>P.34</b>	Sensor H34 polarity	-	nOr / In	nOr
<b>P.35</b>	Sensor H35 polarity	-	nOr / In	nOr
<b>P.36</b>	Sensor H36 polarity	-	nOr / In	nOr
<b>P.37</b>	Sensor H37 polarity	-	nOr / In	nOr
<b>P.38</b>	Sensor H38 polarity	-	nOr / In	nOr
<b>P.39</b>	Sensor H39 polarity	-	nOr / In	nOr
<b>P.40</b>	Sensor H40 polarity	-	nOr / In	nOr
<b>P.41</b>	Sensor H41 polarity	-	nOr / In	nOr
<b>P.42</b>	Sensor H42 polarity	-	nOr / In	nOr
<b>P.43</b>	Sensor H43 polarity	-	nOr / In	nOr
<b>P.44</b>	Sensor H44 polarity	-	nOr / In	nOr
<b>P.45</b>	Sensor H45 polarity	-	nOr / In	nOr
<b>P.46</b>	Sensor H46 polarity	-	nOr / In	nOr
<b>P.47</b>	Sensor H47 polarity	-	nOr / In	nOr
<b>P.48</b>	Sensor H48 polarity	-	nOr / In	nOr
<b>P.49</b>	Sensor H49 polarity	-	nOr / In	nOr
<b>P.50</b>	Sensor H50 polarity	-	nOr / In	nOr
<b>P.51</b>	Sensor H51 polarity	-	nOr / In	nOr
<b>P.52</b>	Sensor H52 polarity	-	nOr / In	nOr

<b>P.53</b>	Sensor H53 polarity	-	nOr / In	nOr
<b>P.54</b>	Sensor H54 polarity	-	nOr / In	nOr
<b>P.55</b>	Sensor H55 polarity	-	nOr / In	nOr
<b>P.56</b>	Sensor H56 polarity	-	nOr / In	nOr
<b>P.57</b>	Sensor H57 polarity	-	nOr / In	nOr
<b>P.58</b>	Sensor H58 polarity	-	nOr / In	nOr
<b>P.59</b>	Sensor H59 polarity	-	nOr / In	nOr
<b>P.60</b>	Sensor H60 polarity	-	nOr / In	nOr
<b>P.61</b>	Sensor H61 polarity	-	nOr / In	nOr
<b>P.62</b>	Sensor H62 polarity	-	nOr / In	nOr
<b>P.63</b>	Sensor H63 polarity	-	nOr / In	nOr
<b>P.64</b>	Sensor H64 polarity	-	nOr / In	nOr
<b>P.65</b>	Sensor H65 polarity	-	nOr / In	nOr
<b>P.66</b>	Sensor H66 polarity	-	nOr / In	nOr
<b>P.67</b>	Sensor H67 polarity	-	nOr / In	nOr
<b>P.68</b>	Sensor H68 polarity	-	nOr / In	nOr
<b>P.69</b>	Sensor H69 polarity	-	nOr / In	nOr
<b>P.70</b>	Sensor H70 polarity	-	nOr / In	nOr
<b>P.71</b>	Sensor H71 polarity	-	nOr / In	nOr
<b>P.72</b>	Sensor H72 polarity	-	nOr / In	nOr
<b>P.73</b>	Sensor H73 polarity	-	nOr / In	nOr
<b>P.74</b>	Sensor H74 polarity	-	nOr / In	nOr
<b>P.75</b>	Sensor H75 polarity	-	nOr / In	nOr
<b>P.76</b>	Sensor H76 polarity	-	nOr / In	nOr
<b>P.77</b>	Sensor H77 polarity	-	nOr / In	nOr
<b>P.78</b>	Sensor H78 polarity	-	nOr / In	nOr
<b>P.79</b>	Sensor H79 polarity	-	nOr / In	nOr
<b>P.80</b>	Sensor H80 polarity	-	nOr / In	nOr
<b>P.81</b>	Sensor H81 polarity	-	nOr / In	nOr
<b>P.82</b>	Sensor H82 polarity	-	nOr / In	nOr
<b>P.83</b>	Sensor H83 polarity	-	nOr / In	nOr
<b>P.84</b>	Sensor H84 polarity	-	nOr / In	nOr
<b>P.85</b>	Sensor H85 polarity	-	nOr / In	nOr
<b>P.86</b>	Sensor H86 polarity	-	nOr / In	nOr
<b>P.87</b>	Sensor H87 polarity	-	nOr / In	nOr
<b>P.88</b>	Sensor H88 polarity	-	nOr / In	nOr
<b>P.89</b>	Sensor H89 polarity	-	nOr / In	nOr
<b>P.90</b>	Sensor H90 polarity	-	nOr / In	nOr
<b>P.91</b>	Sensor H91 polarity	-	nOr / In	nOr
<b>P.92</b>	Sensor H92 polarity	-	nOr / In	nOr
<b>P.93</b>	Sensor H93 polarity	-	nOr / In	nOr
<b>P.94</b>	Sensor H94 polarity	-	nOr / In	nOr
<b>P.95</b>	Sensor H95 polarity	-	nOr / In	nOr
<b>P.96</b>	Sensor H96 polarity	-	nOr / In	nOr
<b>P.97</b>	Sensor H97 polarity	-	nOr / In	nOr
<b>P.98</b>	Sensor H98 polarity	-	nOr / In	nOr
<b>P.99</b>	Sensor H99 polarity	-	nOr / In	nOr
<b>P.00</b>	Sensor H100 polarity	-	nOr / In	nOr
<b>Sensors function assignment</b>				
<b>H.01</b>	Sensor H01 function index	For function number see function table	0 - 255/oFF	1
<b>H.02</b>	Sensor H02 function index	-	0 - 255/oFF	2
<b>H.03</b>	Sensor H03 function index	-	0 - 255/oFF	3
<b>H.04</b>	Sensor H04 function index	-	0 - 255/oFF	4
<b>H.05</b>	Sensor H05 function index	-	0 - 255/oFF	5
<b>H.06</b>	Sensor H06 function index	-	0 - 255/oFF	6

<b>H.07</b>	Sensor H07 function index	-	0 - 255/oFF	7
<b>H.08</b>	Sensor H08 function index	-	0 - 255/oFF	8
<b>H.09</b>	Sensor H09 function index	-	0 - 255/oFF	9
<b>H.10</b>	Sensor H10 function index	-	0 - 255/oFF	10
<b>H.11</b>	Sensor H11 function index	-	0 - 255/oFF	11
<b>H.12</b>	Sensor H12 function index	-	0 - 255/oFF	12
<b>H.13</b>	Sensor H13 function index	-	0 - 255/oFF	13
<b>H.14</b>	Sensor H14 function index	-	0 - 255/oFF	14
<b>H.15</b>	Sensor H15 function index	-	0 - 255/oFF	15
<b>H.16</b>	Sensor H16 function index	-	0 - 255/oFF	16
<b>H.17</b>	Sensor H17 function index	-	0 - 255/oFF	17
<b>H.18</b>	Sensor H18 function index	-	0 - 255/oFF	18
<b>H.19</b>	Sensor H19 function index	-	0 - 255/oFF	19
<b>H.20</b>	Sensor H20 function index	-	0 - 255/oFF	20
<b>H.21</b>	Sensor H21 function index	-	0 - 255/oFF	21
<b>H.22</b>	Sensor H22 function index	-	0 - 255/oFF	22
<b>H.23</b>	Sensor H23 function index	-	0 - 255/oFF	23
<b>H.24</b>	Sensor H24 function index	-	0 - 255/oFF	24
<b>H.25</b>	Sensor H25 function index	-	0 - 255/oFF	25
<b>H.26</b>	Sensor H26 function index	-	0 - 255/oFF	26
<b>H.27</b>	Sensor H27 function index	-	0 - 255/oFF	27
<b>H.28</b>	Sensor H28 function index	-	0 - 255/oFF	28
<b>H.29</b>	Sensor H29 function index	-	0 - 255/oFF	29
<b>H.30</b>	Sensor H30 function index	-	0 - 255/oFF	30
<b>H.31</b>	Sensor H31 function index	-	0 - 255/oFF	31
<b>H.32</b>	Sensor H32 function index	-	0 - 255/oFF	32
<b>H.33</b>	Sensor H33 function index	-	0 - 255/oFF	33
<b>H.34</b>	Sensor H34 function index	-	0 - 255/oFF	34
<b>H.35</b>	Sensor H35 function index	-	0 - 255/oFF	35
<b>H.36</b>	Sensor H36 function index	-	0 - 255/oFF	36
<b>H.37</b>	Sensor H37 function index	-	0 - 255/oFF	37
<b>H.38</b>	Sensor H38 function index	-	0 - 255/oFF	38
<b>H.39</b>	Sensor H39 function index	-	0 - 255/oFF	39
<b>H.40</b>	Sensor H40 function index	-	0 - 255/oFF	40
<b>H.41</b>	Sensor H41 function index	-	0 - 255/oFF	41
<b>H.42</b>	Sensor H42 function index	-	0 - 255/oFF	42
<b>H.43</b>	Sensor H43 function index	-	0 - 255/oFF	43
<b>H.44</b>	Sensor H44 function index	-	0 - 255/oFF	44
<b>H.45</b>	Sensor H45 function index	-	0 - 255/oFF	45
<b>H.46</b>	Sensor H46 function index	-	0 - 255/oFF	46
<b>H.47</b>	Sensor H47 function index	-	0 - 255/oFF	47
<b>H.48</b>	Sensor H48 function index	-	0 - 255/oFF	48
<b>H.49</b>	Sensor H49 function index	-	0 - 255/oFF	49
<b>H.50</b>	Sensor H50 function index	-	0 - 255/oFF	50
<b>H.51</b>	Sensor H51 function index	-	0 - 255/oFF	51
<b>H.52</b>	Sensor H52 function index	-	0 - 255/oFF	52
<b>H.53</b>	Sensor H53 function index	-	0 - 255/oFF	53
<b>H.54</b>	Sensor H54 function index	-	0 - 255/oFF	54
<b>H.55</b>	Sensor H55 function index	-	0 - 255/oFF	55
<b>H.56</b>	Sensor H56 function index	-	0 - 255/oFF	56
<b>H.57</b>	Sensor H57 function index	-	0 - 255/oFF	57
<b>H.58</b>	Sensor H58 function index	-	0 - 255/oFF	58
<b>H.59</b>	Sensor H59 function index	-	0 - 255/oFF	59
<b>H.60</b>	Sensor H60 function index	-	0 - 255/oFF	60
<b>H.61</b>	Sensor H61 function index	-	0 - 255/oFF	61
<b>H.62</b>	Sensor H62 function index	-	0 - 255/oFF	62

<b>H.63</b>	Sensor H63 function index	-	0 - 255/oFF	63
<b>H.64</b>	Sensor H64 function index	-	0 - 255/oFF	64
<b>H.65</b>	Sensor H65 function index	-	0 - 255/oFF	65
<b>H.66</b>	Sensor H66 function index	-	0 - 255/oFF	66
<b>H.67</b>	Sensor H67 function index	-	0 - 255/oFF	67
<b>H.68</b>	Sensor H68 function index	-	0 - 255/oFF	68
<b>H.69</b>	Sensor H69 function index	-	0 - 255/oFF	69
<b>H.70</b>	Sensor H70 function index	-	0 - 255/oFF	70
<b>H.71</b>	Sensor H71 function index	-	0 - 255/oFF	71
<b>H.72</b>	Sensor H72 function index	-	0 - 255/oFF	72
<b>H.73</b>	Sensor H73 function index	-	0 - 255/oFF	73
<b>H.74</b>	Sensor H74 function index	-	0 - 255/oFF	74
<b>H.75</b>	Sensor H75 function index	-	0 - 255/oFF	75
<b>H.76</b>	Sensor H76 function index	-	0 - 255/oFF	76
<b>H.77</b>	Sensor H77 function index	-	0 - 255/oFF	77
<b>H.78</b>	Sensor H78 function index	-	0 - 255/oFF	78
<b>H.79</b>	Sensor H79 function index	-	0 - 255/oFF	79
<b>H.80</b>	Sensor H80 function index	-	0 - 255/oFF	80
<b>H.81</b>	Sensor H81 function index	-	0 - 255/oFF	81
<b>H.82</b>	Sensor H82 function index	-	0 - 255/oFF	82
<b>H.83</b>	Sensor H83 function index	-	0 - 255/oFF	83
<b>H.84</b>	Sensor H84 function index	-	0 - 255/oFF	84
<b>H.85</b>	Sensor H85 function index	-	0 - 255/oFF	85
<b>H.86</b>	Sensor H86 function index	-	0 - 255/oFF	86
<b>H.87</b>	Sensor H87 function index	-	0 - 255/oFF	87
<b>H.88</b>	Sensor H88 function index	-	0 - 255/oFF	88
<b>H.89</b>	Sensor H89 function index	-	0 - 255/oFF	89
<b>H.90</b>	Sensor H90 function index	-	0 - 255/oFF	90
<b>H.91</b>	Sensor H91 function index	-	0 - 255/oFF	91
<b>H.92</b>	Sensor H92 function index	-	0 - 255/oFF	92
<b>H.93</b>	Sensor H93 function index	-	0 - 255/oFF	93
<b>H.94</b>	Sensor H94 function index	-	0 - 255/oFF	94
<b>H.95</b>	Sensor H95 function index	-	0 - 255/oFF	95
<b>H.96</b>	Sensor H96 function index	-	0 - 255/oFF	96
<b>H.97</b>	Sensor H97 function index	-	0 - 255/oFF	97
<b>H.98</b>	Sensor H98 function index	-	0 - 255/oFF	98
<b>H.99</b>	Sensor H99 function index	-	0 - 255/oFF	99
<b>H.00</b>	Sensor H100 function index	-	0 - 255/oFF	100

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<b>System UTIL Functions</b>				
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<b>ASn</b>	Set ALL sensor to Note	Set all sensors to NOTE functions	Press [+] to execute	
<b>AS-</b>	Set ALL sensors to OFF	Set all sensor to OFF mode	Press [+] to execute	
<b>CSF</b>	Clear special function sensors	Clear only special function registers	Press [+] to execute	
<b>dSn</b>	Set ALL sensors to DIGITAL SOUND	Set all sensor to DIGITAL SOUND mode + setting additional parameters to Digital Sound	Press [+] to execute	
<b>ErF</b>	See internal error	Display internal error flag (8 bit digit)	Press [+] to clear	
<b>Sbc</b>	Save current setup to Backup	Save all settings to Backup Memory	Press [+] to execute	

<b>Lbc</b>	Load setup from Backup	Load all settings from Backup Memory and restart system.	Press [+] to execute
<b>SLn</b>	Select LOWER note on keyboard.	This function selects lower note number on accordion keyboard. Really this is master transpose of scanning of all accordion keyboard.	Press [+] or [-] to select lower note Default F .4 (Note F4)
<b>AnA</b>	Start Auto Note Reassignment	Start procedure to reassign sensor to notes. <i>After this procedure is started, need to play one by one all accordion note keyboard, starting from lower note. After playng is complete, press key [5] (blinking on control panel). While play process, on control panel display is visible counter with sensor count assigned to note. If possible, system keep settings for sensors previously assigned to non-note functions, like register scanning or another special function. If any sensor previously is used for special function, but now is assigned to note, special function assignment for this sensor is lost.</i>	Press [+] to execute
<b>Arr</b>	Start Right Hand Auto register reassignment	Start procedure to reassign sensor to notes. <i>After this procedure is started, need to play one by one all accordion note keyboard, starting from lower note. After playng is complete, press key [5] (blinking on control panel). While play process, on control panel display is visible counter with sensor count assigned to note. If possible, system keep settings for sensors previously assigned to non-note functions, like register scanning or another special function. If any sensor previously is used for special function, but now is assigned to note, special function assignment for this sensor is lost.</i>	Press [+] to execute
<b>ArL</b>	Start Left Hand Auto register reassignment	Start procedure to reassign sensor to notes. <i>After this procedure is started, need to play one by one all accordion note keyboard, starting from lower note. After playng is complete, press key [5] (blinking on control panel). While play process, on control panel display is visible counter with sensor count assigned to note. If possible, system keep settings for sensors previously assigned to non-note functions, like register scanning or another special function. If any sensor previously is used for special function, but now is assigned to note, special function assignment for this sensor is lost.</i>	Press [+] to execute
<b>FAC</b>	Full Factory Reset	Full factory reset After full factory reset, system will be restarted, and all sensors will be assigned to note function, starting from note 48.	Press [+] to execute

Table 2

Function Numbers Used For Sensor Assignment			
Function Group	Function Number	Description	
Note Trigger	000 - 127	<p>Trigger Note with selected number!</p> <p>If on sensor is assigned function with numbers from 000 to 127, this sensor is used to trigger NOTE EVENT message, for note with the same number like number assigned to sensor function.</p> <p>Example:</p> <p>If on sensor is assigned function with number 60, this sensor is used to trigger note C with number 60.</p>	
SOLO Register position (sensor on valve position)	128	Solo Register change bit 0	<p>Use this sensor function, when register detection sensors are mounted on register voice valves.</p> <p>In most accordions, registers valves are only 3 or 4. You possible to use different register valve combination to detect different register positions. Combination of all this sensors are accepted like register combination.</p>
	129	Solo Register change bit 1	
	130	Solo Register change bit 2	
	131	Solo Register change bit 3	
	132	Solo Register change bit 4	
	133	Solo Register change bit 5	
	134	Solo Register change bit 6	
SOLO Register button scanning (one sensor for one register button)	136	Solo Register button 1	<p>Use this sensor functions, when one sensor is mounted to every one register button.</p> <p>Detection of register buttons are made one by one, and last changed is remember until new change.</p>
	137	Solo Register button 2	
	138	Solo Register button 3	
	139	Solo Register button 4	
	140	Solo Register button 5	
	141	Solo Register button 6	
	142	Solo Register button 7	
	143	Solo Register button 8	
	144	Solo Register button 9	
	145	Solo Register button 10	
	146	Solo Register button 11	
	147	Solo Register button 12	
	148	Solo Register button 13	
	149	Solo Register button 14	
150	Solo Register button 15		
151	Solo Register button 16		
Long central button	152	<p>Central register button scanning (long button below keyboard).</p> <p>Scanning or exact function of this sensor is dependent from parameters F.11 and F.12 in EXTENDED SYSTEM PARAMETERS TABLE.</p>	
Bass Register bits (sensor on valve position)	153	Bass Register change bit 0	<p>Use this sensor function, when BASS register detection sensors are mounted on register voice valves.</p> <p>In most accordions, registers valves are only 3 or 4. You possible to use different register valve combination to detect different register positions. Combination of all this sensors are accepted like register combination.</p>
	154	Bass Register change bit 1	
	155	Bass Register change bit 2	
	156	Bass Register change bit 3	
	157	Bass Register change bit 4	
	158	Bass Register change bit 5	

Bass Register button scanning (one sensor for one register button)	159	Bass Register button 1	Use this sensor functions, when one sensor is mounted to every one bass register button. Detection of register buttons are made one by one, and last changed is remember until new change.
	160	Bass Register button 2	
	161	Bass Register button 3	
	162	Bass Register button 4	
	163	Bass Register button 5	
	164	Bass Register button 6	
	165	Bass Register button 7	
	166	Bass Register button 8	
	167	Bass Register button 9	
	168	Bass Register button 10	
	169	Bass Register button 11	
	170	Bass Register button 12	
Free	171-199	Not Used...	
Fundamental Bass NOTE	200	F. Bass note C	Every sensor trigger one Fundamental BASS Note!
	201	F. Bass note C#	
	202	F. Bass note D	
	203	F. Bass note D#	
	204	F. Bass note E	
	205	F. Bass note F	
	206	F. Bass note F#	
	207	F. Bass note G	
	208	F. Bass note G#	
	209	F. Bass note A	
	210	F. Bass note A#	
	211	F. Bass note H	
Chords NOTE	212	Chord note C	Every sensor trigger one Chord Note!
	213	Chord note C#	
	214	Chord note D	
	215	Chord note D#	
	216	Chord note E	
	217	Chord note F	
	218	Chord note F#	
	219	Chord note G	
	220	Chord note G#	
	221	Chord note A	
	222	Chord note A#	
	223	Chord note H	
Free	224-254	Not Used...	
N. U.	255	Free / Not assigned sensor / Assign this number to sensor, when this sensor is not used.	

## FACTORY RESET

1. [MENU/SAVE] for 10 seconds
2. Press button [0]
3. Press button [1]
4. With rotation encoder UP go to **FAC**
5. Press button [5]
6. Turn rotation encoder UP to EXECUTE **FACTORY RESET**

## AUTO NOTE ASSIGN

1. [MENU/SAVE] for 10 seconds
2. Press button [0]
3. Press button [1]
4. With rotation encoder UP go to **AnA**
5. Press button [5]
6. Turn rotation encoder UP to start **AUTO NOTE ASSIGN** function
7. Play all note **ONE BY ONE**. On display have number of assigned notes.
8. When all notes are assigned, Press button [5]. Play on keyboard to test result.
9. [MENU/SAVE] for 2 seconds to exit.
10. Turn rotation encoder **UP** to **SAVE** changes or Turn rotation encoder Down to not save changes.

## MIDI MESSAGEs, produced by MIDI system for change PARTS in Juzisound Accordion Sampler

MIDI messages for change SCENE, SOLO, ACOMP, F.BASS and CHORD				
	MIDI Channel	Control Change 0	Control Change 32	Program Change
<b>SCENE</b>	Solo ( default 1)	120 + SCENE number/128	0	SCENE number % 128
<b>SOLO</b>	Solo (default 1)	120 + SOLO number/128	127	SOLO number % 128
<b>ACOMP</b>	Solo (default 1)	120 + ACOMP number/128	1	ACOMP number % 128
<b>F.BASS</b>	F.Bass (default 2)	120 + F.BASS number/128	2	F.BASS number % 128
<b>CHORD</b>	Chord (default 3)	120 + CHORD number/128	3	CHORD number % 128

## ERROR MESSAGES FROM MIDI SYSTEM

Where on display of MIDI system have same error messages, they are indicate for some problems.

There are list of all error messages:

**"FLA"** - this indicate flash checking problem in main program range of MIDI system. Software of MIDI system need to be reloaded.

**"OSC"** - this indicate problem with main clock oscillator. Possible to check for not dry PCB board or another metal connection around QUARTZ oscillator.

**"bAt"** - Blinking string "bAt", together with all LEDs indicate LOW Power Voltage. Check battery and cables.

# Settings algorithm after installation

*After installation of new MIDI system, you recommend to execute this steps in this order, to make all settings in proper way.*

Before first start of MIDI system, of stage of installation, need to collect some information about current installation, and write this to paper. Need to keep this information for future, if need.

Most important info is **NUMBER** of sensors and **POLARITY** of sensors. Every sensor in this MIDI system have individual number in format **H.XX**, where **XX** is number of sensors. All sensors are from **H.01** to **H.99** + **H.00** (Sensor with number 100). Every sensor is possible to execute every functions.

Before start to make settings, you need to know some information about physically installation of current accordion.

You need to know **exact number** of all sensors used for:

- sensors for register scan in right solo side.
- sensors for register scan of left bass side.
- all another sensors – used for special functions, like central button or another function.
- all free sensors, not used for any functions

You need to know **POLARITY** of sensors, used for NOTES and installed on inversed polarity. Sensors used for register scanning, is always work in normal polarity. You need to know, how is connected sensors for solo and bass register scanning – like bit combination or like individual sensors for every button.

That is all for now. When you collect this information, then is ready to start setup.

1. Execute function **FAC** (FACTORY RESET), to be sure, MIDI system is in startup predefined position. After factory reset, all sensors are assigned to NOTE function. This allow to see LED indication for every solo registers, and physically adjust distance of every one sensor, dependent from installation position to be proper activation when pressed note. This is very important for latter procedure, where need to activate all sensors ONE BY ONE.  
**Be sure ALL SENSORS DISTANCE TO MAGNETS ARE PROPER ADJUSTED!!!**  
To be 100 sure, check this in MIDI system menu, where every sensor have self-status indication (point of digit indicator). Check bass sensors and register sensors too.
2. Execute function **AS-**. This will remove all functions from all sensors, and all sensors will be OFF/no functions.
3. Set polarity of all sensors, which work in inversed mode with P.XX function. For example, accord sensors, and may be more, dependent from installation.
4. Set functions to all sensors, used for RIGHT SENSOR SCANNING. (128 to 135 in bit mode or 136 to 151 in individual mode).
5. Set function to all sensors for LEFT register scanning. (153 to 158 in bit mode or 159 to 170 in individual mode)
6. Check function **SLn**. This will set lower note of SOLO keyboard. Default is **F .4**. Change if need.
7. Execute function **AnA**, and play chromatic from low to high part of solo notes. This will assign all notes to all SOLO keys. Check counter, need to count every preset note.
8. Set NOTE functions for all sensors used for FUNDAMENTAL BASS (function 200 to 211).
9. Set NOTE function for all sensors used for CHORD (function 212 to 223).
10. Set SOLO register to position 2 (any position different from position 1) and execute function **Arr**.
11. Set BASS register to position 2 (any position different from position 1) and execute function **ArL**.
12. If all is OK, save settings when exit from menu.
13. Test all. If all is OK, execute function **Sbc** to save backup of all settings.

*We recommend to exit from menu and execute SAVE after every important point. This allow chance, if make error in next point, to restart system and return to previous proper position.*

# Update MIDI System Software

Update of MIDI System 2 is need, when new Operation System is published, for adding new function or fix some bugs.

## What is need to do update!!!

Update of Juzisound MIDI System is made by MIDI interface. What is need to do this:

1. Need computer with Windows operation system. MAC OS not supported.



2. Computer need to have one **MIDI OUT**.

Real physical MIDI Out is available in most professional sound cards.

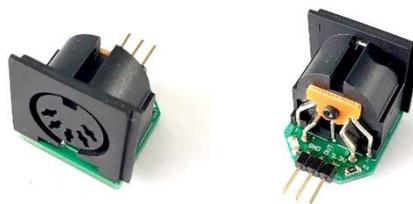
- If computer have MIDI out, then need one

**standard MIDI cable** with 5 pin DIN connectors.

- If computer not have MIDI out, then is possible to use **USB to MIDI cable**. We recommend to use good brand cables, because cheap china USB to MIDI cables not work good with MIDI Sysex messages. We recommend to use Roland UM-ONE or high level USB to MIDI interface.

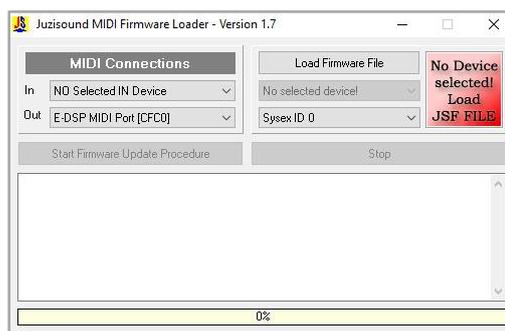


3. One Juzisound MIDI System **Update Interface board**, for connection between MIDI cable and MIDI system. Sold separate from MIDI system.



4. Software Update Tool "**JuzisoundFirmwareLoader.exe**"

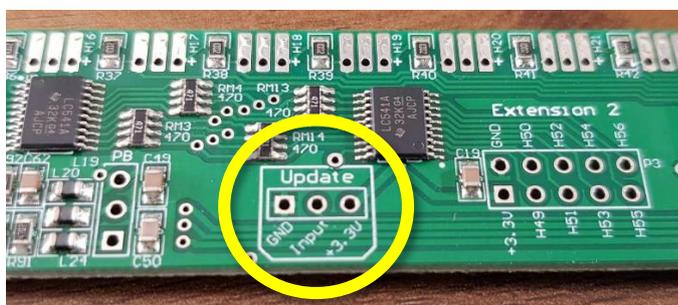
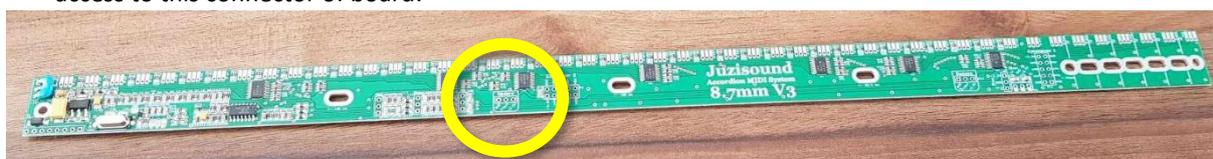
Version 1.7 or next, available for free download from Juzisound internet site.



5. **File** with new **Operation System**, with extension "**.JSF**". Download this from Juzisound internet site too.

### PREPARE HARDWARE:

1. Check for physical MIDI out of your computer or computer sound card.
  - If computer have MIDI out, connect standard MIDI cable to this MIDI Out.
  - If case to use USB midi cable, connect USB port of cable to computer and wait until computer recognize cable.
2. Connect another side of normal MIDI cable or MIDI Out wire of USB MIDI cable to **Juzisound Interface board**, like in picture. Be careful to use MIDI OUT wire of USB MIDI interface. For example, in Roland models, MIDI out wire is labeled “CONNECT TO MIDI IN”!
3. Allow access to Juzisound MIDI system main board. If need, remove register mechanism. You need to have access to this connector of board.

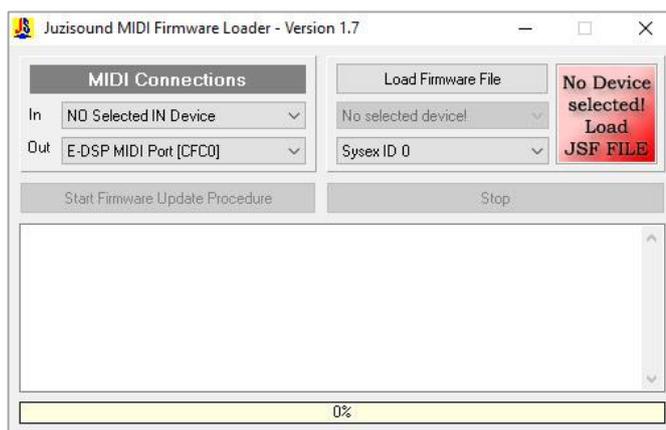


### ON ACCORDEON:

4. Power up MIDI System, and wait to loading process complete.

### ON COMPUTER:

5. Download and execute “**JuzisoundFirmwareLoader.exe**”
6. Select MIDI OUT port, where is connected MIDI cable.
7. Press [**Load Firmware File**] and select file with extension “**.JSF**”.
8. Press button [**Start Firmware Update Procedure**].
9. In question “You want to continue in NO MIDI FEEDBACK mode?” choice “YES”.
10. In next question choice “OK”.



With this, procedure will be start. If all connection is OK, Accordion MIDI System will be self-restarted, and on display will be show “bLd” for 1 second, and after this need to see rotation wheels, until process complete. After loading complete, MIDI system will be restart again, and new OS version will be show on display.

### IMPORTANT !!!

Until update procedure is running, don't touch BASS buttons of accordion!