

Juzisound Accordion MIDI System

**For Operation System
Version 2.7
or higher**



PROGRAM MODES

Juzisound accordion MIDI system have **4** different **program modes**.

Switching between program modes is made by **long pressing** (around 10 seconds) of **[PRG/HOLD]** button. Every program mode is indicated by different display indication.

Program mode 0

In program mode 0, you have direct access by numbers to **1000** program positions. From **000** to **999**. Program selections is made by pressing of 3 digit, or pressing 1 or 2 digit following by pressing of button **[PRG/HOLD]**.

For example, is need to select program 846, need to press buttons **[8]**, **[4]** and **[6]**. If need to select program with number 5, need to press button **[5]** and **[PRG/HOLD]**.

HOLD Mode

If program is already selected, pressing of button **[PRG/HOLD]** activate program **HOLD mode**. Activation of this mode is indicated by 2 points on number display. In this mode first 2 digits of current program is locked, and last digit is select direct by pressing of one of number buttons. Selected button is indicated by LED indicator. Use this mode for very easy and fast change of 10 programs in selected program diapason.

Function on buttons **[+]** and **[-]**

In program mode 0, buttons **[+]** and **[-]** have 2 different functions, dependent from selected value of parameter **F.28** in EXTENDED SYSTEM PARAMETERS TABLE.

If selected value is 0, these buttons work like direct volume control. With combination of button **[PRG/HOLD]** these buttons work like program +/-1.

If function is 1, these buttons work only like program +/-1.

If HOLD mode is not activated, buttons **[+]** and **[-]** increased or decreased program number by 1.

If hold mode is active, then buttons **[+]** and **[-]** increases and decreases program number by 10.

This program mode 0 is specially created to full control of programs of **Juzisound Total SOLO Sampler 1**. When program is selected, Accordion MIDI system send set of MIDI messages: Control Change 0, Control Change 32 and Program Change. Accepting of combinations of these messages are reassigned in Juzisound Total SOLO Sampler, but no problem to control any another MIDI device, who accept Bank Select (CC0 and CC32) and Program Change messages.

Using registers in program mode 0

Register switches work in these mode, for fast selecting predefined program numbers. Assignment of program mode is made by this procedure:

1. Be sure, you first select another register, different from register who need to program. (This is need, because midi system need to detect register change when select register who need to program).
2. Manually select program number who need to select, with pressing register button.
3. Press and hold button **[PRG/HOLD]**.
4. Now while holding **[PRG/HOLD]**, press and register button who need to call selected program. After this release **[PRG/HOLD]**.

With this, procedure is complete, and change is saved in system non-volatile memory. For future, this program number will be assigned to this register button until new reassignment or delete is executed. If need to reassign another program to the same button, execute again the same reassign procedure.

Delete registers in program mode 0

To execute **DELETE** procedure of any register button, first go to another register button. Then press and hold **MASTER TRANSPOSE** button, and while hold **MASTER TRANSPOSE** press register key, who need to delete. After this, any assignment to this register button is removed, and button is free.

IMPORTANT TO UNDERSTAND!!!

Working of register scanning is dependent from 2 things.

- 1. Need to have sensors with assigned register scanning functions.*
- 2. Global register scanning need to be enabled in Function Menu. (LED on button [4] need to be ON).*

Program mode 1

In program mode 1, you have fast access to 5 banks and 5 programs in every bank. Total 25 programs.

Bank selections is made by buttons 6, 7, 8, 9 and 0

Program selections is made by buttons 1, 2, 3, 4 and 5.

Current selected bank and program is indicated by button LED.

Function on buttons [+] and [-]

In program mode 1, buttons [+] and [-] have 2 different functions, dependent from selected value of parameter **F.28** in EXTENDED SYSTEM PARAMETERS TABLE.

If selected value is 0, these buttons work like direct volume control. With combination of button **[PRG/HOLD]** these buttons work like program +/-1.

If function is 1, these buttons work only like program +/- 1.

Using registers in program mode 1

Register switches work in these mode, for fast selecting banks or programs.

First 5 registers buttons are for fast call of program. This is equal to panel buttons 1-5.

Second 5 registers buttons are for fast choice of bank. This is equal to panel buttons 6-0.

NOTE:

In this program mode, function of register buttons is permanent, and not possible to change.

IMPORTANT TO UNDERSTAND!!!

Working of register scanning is dependent from 2 things.

- 1. Need to have sensors with assigned register scanning functions.*
- 2. Global register scanning need to be enabled in Function Menu. (LED on button [4] need to be ON).*

Program mode 2

In program mode 2, you have fast access to 10 banks and 16 programs in every bank. Total 160 programs.

Bank selections is made by number buttons on control panel. Selected bank is indicated by LED.

Program selections is made by register buttons, or by buttons [+] and [-].

Function on buttons [+] and [-]

In program mode 2, buttons [+] and [-] have 2 different functions, dependent from selected value of parameter **F.28** in EXTENDED SYSTEM PARAMETERS TABLE.

If selected value is 0, these buttons work like direct volume control. With combination of button **[PRG/HOLD]** these buttons work like program +/-1.

If function is 1, these buttons work like program +/- 1.

Using registers in program mode 2

Register switches work in these mode, for fast selecting program numbers from 1 to 16.

NOTE:

In this program mode, function of register buttons is permanent, and not possible to change.

IMPORTANT TO UNDERSTAND!!!

Working of register scanning is dependent from 2 things.

1. Need to have sensors with assigned register scanning functions.
2. Global register scanning need to be enabled in Function Menu. (LED on button [4] need to be ON).

Program mode 3

In program mode 3, you have fast access to 8 banks, every with 10 programs. Total 80 programs.

Program selections is made by control panel number buttons or registers, and current selected program is indicated by button LED.

Bank selections is made only by control panel buttons **[+]** and **[-]**. Current selected bank is indicated on LCD display with chars A, B, C, D, E, F, G, H.

Function on buttons **[+] and **[-]****

In program mode 3, buttons **[+]** and **[-]** have 2 different functions, dependent from selected value of parameter **F.28** in EXTENDED SYSTEM PARAMETERS TABLE.

If selected value is 0, these buttons work like direct volume control. With combination of button **[PRG/HOLD]** these buttons work like bank +/-1.

If function is 1, these buttons work like bank +/- 1.

NOTE:

In this program mode, function of register buttons is permanent, and not possible to change.

IMPORTANT TO UNDERSTAND!!!

Working of register scanning is dependent from 2 things.

1. Need to have sensors with assigned register scanning functions.
2. Global register scanning need to be enabled in Function Menu. (LED on button [4] need to be ON).

Additional function for buttons **[+] and **[-]****

Buttons **[+]** and **[-]** have additional functions, when buttons **[PRG/HOLD]**, **[MASTER TRANSP]**, **[SCALA ON/OFF]** or **[TERCA ON/OFF]** are active:

- When **[PRG/HOLD]** is active, buttons **[+]** and **[-]** work in standard way, dependent from current selected program mode.
- When **[MASTER TRANSP]** is active, (button master transpose LED is On), buttons **[+]** and **[-]** set Upper 2 volume. (Upper 2 play one of them parts: second voice, TERCA voice or Bass/Chords voice)
- When **[SCALA ON/OFF]** menu is active (On display is shown "ScL"), buttons **[+]** and **[-]** not have function.
- When **[TERCA ON/OFF]** is active (On display is "tE"), buttons **[+]** and **[-]** set TERCA volume.

MASTER TRANSPOSE

IMPORTANT TO UNDERSTAND!!!

Juzisound MIDI System have **2** different ways to work with MASTER TRANSPOSE! This dependent from parameter "**Transpose control mode**" available in Extended Function Menu, **section 0.4**.

- If parameter is set to "**ntE**", transpose is applied to out MIDI notes. Sysex messages are not send at all. In this mode, octave transpose is applied only to right hand. Basses and accords are not affected by octave transpose.

-if parameter value is set to "**SYS**", transpose value is sent only with standard MASTER TRANSPOSE SYSEX messages. Both octave and note transpose are part of sysex messages. All notes are send without transpose.

-if parameter value is set to "**bot**" – transpose is work in both modes together. Notes are send transposed, and SYSEX message are send too.

NOTE: For more info, see Extended Function Menu, section 0.4.

MASTER TRANSPOSE Menu

Master transpose menu is activated by pressing of button **[MASTER TRANSP]**.

When menu is active, LED of button **[MASTER TRANSP]** is ON!

IMPORTANT TO UNDERSTAND!!!

Master transpose have 2 separate components:

- **OCTAVE** master transpose with range of **+/-24** semitones.

- **NOTE** master transpose with range of **+/-11** semitones.

Final master transpose = **OCTAVE** master transpose + **NOTE** master transpose!!!

In this menu, all panel buttons have direct control over master transpose functions:

Buttons: **[6] [7] [8] [9] [0]** are for direct setting of **OCTAVE master transpose** component.

LEDs on these buttons indicates current value of **OCTAVE** master transpose value.

- button **[6]** set **OCTAVE** master transpose to **-24**. When this transpose is added, LED of button **[6]** blink.

- button **[7]** set **OCTAVE** master transpose to **-12**. When this transpose is added, LED of button **[7]** blink.

- button **[8]** reset **OCTAVE** master transpose to **0**. When this transpose is added, LED of button **[8]** is On.

- button **[9]** set **OCTAVE** master transpose to **+12**. When this transpose is added, LED of button **[9]** blink.

- button **[0]** set **OCTAVE** master transpose to **+24**. When this transpose is added, LED of button **[0]** blink.

Buttons: **[1] [3] [5]** are for direct setting of **NOTE master transpose** component.

Current **NOTE** master transpose is with range **+/-11** semitones, and current value is visible on display.

- button **[1]** decrease **NOTE** master transpose with **-1**. If **NOTE** master transpose is **< 0**, LED of button **[1]** blink.

- button **[3]** reset **NOTE** master transpose with **0**. If **NOTE** master transpose is **0**, LED of button **[3]** is On.

- button **[5]** increase **NOTE** master transpose with **+1**. If **NOTE** master transpose is **> 0**, LED of button **[5]** blink.

FAST VOLUME CONTROL – in this menu, we have 2 function for fast volume control for Help Synth and Upper 2.

Buttons: **[2] and [5]** are for fast control of **VOLUME** of **Help Synth** of **Sampler 2**.

- button **[2]** decrease current Help Synth volume with **-1**. On display is shown "**HS-**" for moment.

- button **[4]** increase current Help Synth volume with **+1**. On display is shown "**HS-**" for moment.

Buttons: **[-] and [+]** are for fast control of **VOLUME** of **Upper 2** of **Sampler 2** or **Sampler MICRO**.

- button **[-]** decrease current Upper 2 volume with **-1**. On display is shown "**u2-**" for moment.

- button **[+]** increase current Upper 2 volume with **+1**. On display is shown "**u2-**" for moment.

IMPORTANT TO UNDERSTAND!!!

Accordion MIDI System don't know exact value of volume for Help Synth or Upper 2. This is only commands to sampler to increase or decrease current internal value of these parts. This values are not memorized, and will be updated when preset of samplers are changed.

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. Supported Sysex formats messages dependent from value of parameter "Terca control mode" available in Extended Function Menu, **section 0.3**. Available options are:

JS – Scala control sysex messages in format for Juzisound Total SOLO Samplers. (default)

PAh – Scala control sysex messages in format for KORG PAX series.

PA8 – Scala control sysex messages in format for KORG PA80 series.

noS – Scala control sysex messages in format for KORG KRONOS.

NOTE: Scale control Sysex messages are predefined and if slave MIDI device not recognize one of them, then not possible to control scale.

SCALA On / Off

You will **activate/deactivate** scale, by **one short pressing** of button **[SCALA ON/OFF]**.

When **LED** of button is permanently **ON**, scale is **active**.

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

SCALA SCAN

You will start scale scanning procedure, by **fast double pressing** of button **[SCALA ON/OFF]**.

When scale scan procedure is active, **LED** of button is **fast blinking**.

After starting scale scan procedure, you need to press all notes on keyboard who need to be altered

When all altered notes are pressed, then need to press again one short time button **[SCALA ON/OFF]**. This will complete scale scan procedure. Exact in this moment, Juzisound MIDI system send all info about new scale to slave MIDI device. If have notes with scale, scale will be switched on. If no pressed note, scale will be switch off.

IMPORTANT TO UNDERSTAND!!!

Scale On/Off and scale scanning function work in all other menu modes, except SCALE CONTROL MENU, where all another panel buttons are used for extended scale control.

SCALA CONTROL Menu

Scala control menu is activated by long pressing (*for around 1 second*) of button **[SCALA ON/OFF]**.

When menu is active, **LED** of button **[SCALA ON/OFF]** is ON, and on display is visible "ScL"! When scale control menu is active, all another panel buttons are used for extend scale control.

Buttons: **[6] [7] [8] [9] [0]** are for direct selecting and activating of one of 5 predefined USER scale. These USER scale need to be prepared in slave MIDI device. Pressing of button, select scale and switch scale ON in one pass. On display show "US" and "0x" for short time, where x is number of user scale from 01 to 05.

- button **[1]** switch scale ON or OFF.

- button **[2]** start or stop scale scan procedure.

- button **[3]** switch on/off "Scale HOLD" function of slave MIDI device. Current status is indicated by button Led.

Buttons: **[4] [5] [-] and [+]** not have functions in this menu.

TERCA

IMPORTANT TO UNDERSTAND!!!

Juzisound MIDI System have **2** different way to work with **TERCA**:
This dependent from parameter "**Terca control mode**" available in Extended Function Menu, **section 0.2**.

- If parameter is set to "**ntE**", accordion MIDI system produces **real Terca notes**, and Terca is applied direct to produced MIDI notes. Possible to play terca notes by different MIDI channel, different velocity. In this mode, terca volume is controlled by Control Change with user defined number. Control change number is set in extended function parameter **F.26** – "Terca Volume CC number". Default value is Control Change 7. Terca MIDI channel is defined in section **6.2** "Terca MIDI channel".

-if parameter value is set to "**JS**", then all terca control is made by predefined MIDI SYSEX messages for direct control of all terca functions of all models of Juzisound Total SOLO Samplers. "**JS**" is default mode, but only Juzisound MIDI samplers accept this Sysex messages. All terca functions are executed inside in samplers. Accordion MIDI system, only control sampler terca functions. In this mode, terca volume is controlled with sysex message too.

Scanning for **terca mode** and **base note** always is made **inside Accordion MIDI System**.
In case of "**ntE**" mode, scanned terca mode and base note is used for produce terca notes.
In case of "**JS**" mode, scanned terca mode and base note is reported to slave MIDI device, and MIDI device produce terca with received parameters.

TERCA On / Off

You will **activate/deactivate** terca, by **one short pressing** of button [TERCA ON/OFF].
When **LED** of button is permanently **ON**, terca is **active**.
When activate terca without new terca scanning, this will activate **last used terca**.

TERCA SCAN

You will start terca scanning procedure, by **fast double pressing** of button [TERCA ON/OFF].
When terca scan procedure is active, **LED** of button is **fast blinking**.

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 slave MIDI device. Slave MIDI device execute command from MIDI system, and play selected terca.

IMPORTANT TO UNDERSTAND!!!

Terca On/Off and terca scanning function work in all other menu modes, except TERCA CONTROL MENU, where all another panel buttons are used for extended terca control.

TERCA CONTROL Menu

Terca control menu is activated by long pressing (*for around 1 second*) of button [TERCA ON/OFF].

When menu is active, LED of button [TERCA ON/OFF] is ON, and on display is visible “tE”! When terca control menu is active, all another panel buttons are used for extend terca control.

Buttons: [6] [7] [8] [9] [0] are used for direct control of TERCA OCTAVE.

LEDs on these buttons indicates current value of TERCA OCTAVE master transpose value.

- button [6] set terca OCTAVE transpose to -24. When this transpose is added, LED of button [6] blink.
- button [7] set terca OCTAVE transpose to -12. When this transpose is added, LED of button [7] blink.
- button [8] reset terca OCTAVE transpose to 0. When this transpose is added, LED of button [8] is On.
- button [9] set terca OCTAVE transpose to +12. When this transpose is added, LED of button [9] blink.
- button [0] set terca OCTAVE transpose to +24. When this transpose is added, LED of button [0] blink.

IMPORTANT TO UNDERSTAND!!!

Functions for terca octave on this buttons work only if terca work in “ntE” mode or in “JS”, mode but only in Total SOLO Sampler 1! Due most complicated structure of Sampler 2 and Sampler MICRO, terca octave is not possible to control from accordion. Terca octave dependent from octave of parts (Upper 2 or Help Synth) who play terca. This octave is set in sampler PRESET, and saved together with sampler PRESET.

- button [1] switch terca On/Off.
- button [2] start or stop Terca Scan procedure.
- button [3] switch on/off “Terca Hold” function of slave MIDI device. Current status is indicated by button LED.
- button [4] switch on/off “Terca Special Note” function of slave MIDI device. Current status is indicated by button LED.

- button [5] not have functions in this menu.

Buttons [+] and [-] control terca volume (direct or offset), applied to terca volume.

IMPORTANT TO UNDERSTAND!!!

Terca volume is internal value for MIDI system.

*- If terca work in “ntE” mode, this value is within range from 1 to 127 and default value 64. This value of terca volume is used to calculate Note ON velocity for terca notes. Terca notes velocity = (original note value * terca volume) / 128. Result is limited in range 1 – 127. Terca volume value, is also transmitted like MIDI controller with Control Change number and MIDI channels defined by user. Control change number is defined in extended parameter F.26 – “Terca Volume CC number” (default CC7) by MIDI channel defined in section 6.2 “Terca MIDI channel”.*

- If terca work in “JS” mode, then terca value is interpreted like offset with range -64 0 +64. This is OFFSET, not direct volume, and because this, offset is applied to current internal volume of terca in slave MIDI device. Terca volume offset value is transmitted with sysex message to slave MIDI device, and MIDI device apply this value to original value of volume for all parts who play terca.

Function Menu

Function menu mode is selected by short pressing of button **[FUNC/MENU]**.

When function mode is active, LED on button **[FUNC/MENU]** is ON, without blinking.

In function menu, all number buttons on control panel work like switches for different functions. Every button work like switch, and activate or deactivate one function. If selected function is active, LED on button is ON.

All changes is saved immediate in system non-volatile memory, until next change. No need write or save procedure.

Button Functions:

[6] – Accordion blow (dynamic) On or Off.

If these function is active, scanning of accordion blow is active too. If function is not active, scanning of accordion blow is disabled, and accordion work with fixed blow dynamic. Value for **fixed dynamic** is selected from **extended function menu 6.5**.

[7] – Velocity from blow (Note velocity dependent from blow) On or Off.

If these function is active, note velocity produced by MIDI system is dependent from blow pressure. If function is not active, note velocity is fixed. Fixed value is selected with **extended function menu 6.4**.

[8] – Pitch Bend scanning On or Off.

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.

[9] – Modulation scanning On or Off.

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.

[0] – Radio (wireless transmitter module) On or Off.

If these function is active, accordion MIDI system activate wireless transmitter module (optional). If you play with MIDI cable, or not have installed module, please stay this function Off.

[1] – Easy Blow (easy dynamic) On or Off.

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 function, you have fast switching between natural and easy blow pressure mode.

[2] – Bass (left hand) On or Off.

If these function is active, accordion MIDI system enable working of left hand BASS scanning module.

[3] – Central Register scanning On or Off.

If these function is active, accordion MIDI system enable scanning of central button – long button available on same models. If you accordion not have this button, not have assigned sensor to this button or not need to use this function for moment, disable this function.

[4] – Register Button scanning On or Off.

If these function is active, accordion MIDI system activate scanning of register buttons. For properly work of register scanning, you need to have sensors assigned to register scanning functions, and register buttons need to be properly programmed. If temporary not need to use register scanning, or not have sensors on register buttons, switch off this function.

[5] – 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.

Buttons: **[-]** and **[+]** not have functions in this menu.

Extended Function Menu

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

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 **[FUNC/MENU]** (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 pressing of button [+]. If select [+], 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.
If you press button [-], then you exit from Extended Function Menu, **without saving** parameters to non-volatile memory.

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.

Section (6) – [MIDI/AIR - Channels]				
№	Parameter Name	Description	Diapason	Default Value
6.1	Basic MIDI channel	Basic MIDI channel for play notes from right hand.	1 - 16	1
6.2	Terca MIDI channel	MIDI channel for TERCA voice notes.	1 - 16	1
6.3	Fund. Bass MIDI channel	MIDI channel for Fundamental BASS voice notes.	1 - 16	2
6.4	Chords MIDI channel	MIDI channel for CHORDS voice notes. <i>This parameter is set from FAC function to MIDI channel 2 too. This allow to send Bass and Chords by the same MIDI channel. This is very useful for playing left hand sounds from Upper 2 on Juzisound Total SOLO Sampler 2, but if need to send chords to different MIDI channel, simple change this parameter after FAC function.</i>	1 - 16	2
6.5	Antenna (Wireless AIR) channel	Wireless ON-AIR channels for MIDI Wireless transmitter.	1 - 5	5

Section (7) – [Blow settings]				
№	Parameter Name	Description	Diapason	Default Value
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	512
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	x1.50
7.4	Blow Messages	MIDI messages generated from accordion blow.	cc11 Fixed	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	---

Section (8) – [Pitch Bend settings]				
№	Parameter Name	Description	Diapason	Default Value
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/don
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	Diapason	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]				
No	Parameter Name	Description	Diapason	Default Value
0.1	SELLECT EXTENDED SYSTEM PARAMETER	See EXTENDED SYSTEM PARAMETERS TABLE*	---	---
0.2	Terca control mode	How accordion MIDI system control Terca function: ntE – MIDI for accordion produces real Terca noted, and Terca is applied direct to notes JS – Terca control is made by SYSEX messages for direct control of all function of Juzisound Total SOLO Samplers.	ntE - JS	JS
0.3	Scala control mode	How accordion MIDI system control SCALA function: JS – With SYSEX messages for Juzisound Total SOLO Sampler 1 or 2 PAh – With SYSEX messages for KORG PAX series. PA8 – With SYSEX messages for KORG PA80 series. noS – With SYSEX messages for KORG KRONOS.	JS PAh PA8 noS	JS
0.4	Transpose control mode	How accordion MIDI system apply master TRANSPeOSE settings: ntE – Transpose is applied to out MIDI notes. Sysex messages are not send at all. In this mode, octave transpose is applied only to right hand. Basses and chords are not affected by octave transpose. SYS – Transpose value is sent only with standard MASTER TRANSPeOSE SYSEX message. Both octave and note transpose are part of sysex message. All notes are send without any transpose. bOt – Both modes together. Notes are send transposed, and SYSEX message are send too. NOTE: Sysex message have info only for note transpose, without octave transpose. Octave transpose is applied only to right hand. Basses and chords are not affected by octave transpose. This combination allows on sound module to know exact note transpose value, to move correctly scale and Terca, if these functions are produced internally by sound module. WARNING! To avoid double transpose, sound module need to have function to NOT APPLY transpose to incoming notes, because these notes are already transposed from sender.	ntE SYS bOt	bOt
0.5	MODIFY VALUE OF SELEECTED EXTENDED SYSTEM PARAMETER	See EXTENDED SYSTEM PARAMETERS TABLE*	---	---

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 pressing buttons **[+]** or **[-]**, 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 buttons **[+]** and **[-]**.

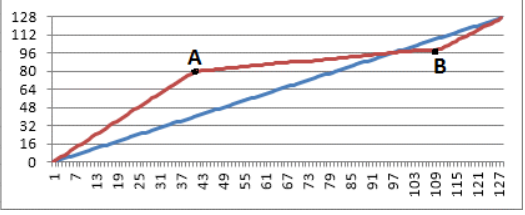
If need to modify another parameter, then need to be return again to button **[1]**, select new Extended parameter with buttons **[+]** and **[-]**, and move again to button **[5]** to see and modify value of new selected parameter.

Some Extended parameters are not parameter. They are functions. Execution of this functions is made by pressing button **[+]**.

All Extended parameters are listed in next tables:

EXTENDED SYSTEM PARAMETERS TABLE				
No	Parameter Name	Description	Diapason	Default Value
Program Mode 0				
<i>Program Select Control Change Messages</i>				
<i>Total 1000 positions - (programs with numbers from 000 to 999)</i>				
F.00	Program mode 0 / CC0 For program 000 - 127	Control Change 0	000 - 127	120
F.01	Program mode 0 / CC32 For program 000 - 127	Control Change 32	000 - 127	127
F.02	Program mode 0 / CC0 For program 128 - 255	Control Change 0	000 - 127	121
F.03	Program mode 0 / CC32 For program 128 - 255	Control Change 32	000 - 127	127
F.04	Program mode 0 / CC0 For program 256 - 383	Control Change 0	000 - 127	122
F.05	Program mode 0 / CC32 For program 256 - 383	Control Change 32	000 - 127	127
F.06	Program mode 0 / CC0 For program 384 - 511	Control Change 0	000 - 127	123
F.07	Program mode 0 / CC32 For program 384 - 511	Control Change 32	000 - 127	127
F.08	Program mode 0 / CC0 For program 512 - 639	Control Change 0	000 - 127	124
F.09	Program mode 0 / CC32 For program 512 - 639	Control Change 32	000 - 127	127
F.10	Program mode 0 / CC0 For program 640 - 767	Control Change 0	000 - 127	125
F.11	Program mode 0 / CC32 For program 640 - 767	Control Change 32	000 - 127	127
F.12	Program mode 0 / CC0 For program 768 - 895	Control Change 0	000 - 127	126

F.13	Program mode 0 / CC32 For program 768 - 895	Control Change 32	000 - 127	127
F.14	Program mode 0 / CC0 For program 896 - 999	Control Change 0	000 - 127	127
F.15	Program mode 0 / CC32 For program 896 - 999	Control Change 32	000 - 127	127
Program Mode 1 <i>Program Select Control Change Messages</i> <i>Total 25 positions - (5 Bank - every with 5 programs)</i>				
F.16	Program mode 1 / CC0 For program from 000 to 024	Control Change 0	000 - 127	8
F.17	Program mode 1 / CC32 For program from 000 to 024	Control Change 32	000 - 127	0
Program Mode 2 <i>Program Select Control Change Messages</i> <i>Total 160 positions - (10 Bank - every with 16 registers)</i>				
F.18	Program mode 2 / CC0 For program from 000 to 127	Control Change 0	000 - 127	9
F.19	Program mode 2 / CC32 For program from 000 to 127	Control Change 32	000 - 127	0
F.20	Program mode 2 / CC0 For program from 128 to 159	Control Change 0	000 - 127	10
F.21	Program mode 2 / CC32 For program from 128 to 159	Control Change 32	000 - 127	0
Program Mode 3 <i>Program Select Control Change Messages</i> <i>Total 80 positions - (8 Bank - every with 10 programs)</i>				
F.22	Program mode 3 / CC0 For program from 000 to 079	Control Change 0	000 - 127	11
F.23	Program mode 3 / CC32 For program from 000 to 079	Control Change 32	000 - 127	0
Other Common Parameters				
F.24	Transpose Display Mode	How to transpose value is displayed in LCD. 0 - Display octave + semitones 1 - Display only semitones. Octave is only with LEDs.	0 / 1	1
F.25	Master Volume control mode	This parameter select MIDI message produced to control master volume. 0 – Standard Sysex Master Volume Message 1 – Control Change 7	0 / 1	0
F.26	Terca Volume CC number	This parameter select MIDI message Control Change number, for controlling Terca volume.	0 – 120	7
F.27	Blow ACP Reading Stabilizer	Value for stabilization of reading of BLOW pressure.	0 – 63	0

F.28	Button [+] and [-] default function	This parameter selects default functions for buttons [+] and [-]. 0 – Default functions is Volume (<i>use this settings, when volume Pot. Is not installed</i>) 1 – Default function is Program Number or Bank Number selections with +1 / -1	0 / 1	1
Easy BLOW Curve point selection				
F.29	Easy Blow / Point A X position	<p>What is Easy Blow mode? 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 bellow 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.</p> 	0 - 127	40
F.30	Easy Blow / Point A Y position		0 - 127	80
F.31	Easy Blow / Point B X position		0 - 127	110
F.32	Easy Blow / Point B Y position		0 - 127	100
F.33	Right Hand Long Register Function	Function selection for central button for right hand - long button below keyboard: 0 – Terca ON/OFF (depended from status of button). Use this mode, when used button is with 2 fixed positions – On or OFF. 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.	0 - 1	0
Program Mode 0 - Program to Register Assignment				
With next parameters is possible to check and if need manually edit, user program number, associated with every register button in program mode 0. If parameter value if in range from 0 to 999, when press this register button, MIDI system send Control change and Program Change messages for selecting this program. If parameter value is oFF, then no MIDI message will be send.				
F.34	Program Mode 0 Register 1 – program	Program number from 0 to 999, associated with this register button. oFF for no register function.	0-999 / oFF(65535)	oFF
F.35	Program Mode 0 Register 2 – program	Program number from 0 to 999, associated with this register button. oFF for no register function.	0-999 / oFF(65535)	oFF
F.36	Program Mode 0 Register 3 – program	Program number from 0 to 999, associated with this register button. oFF for no register function.	0-999 / oFF(65535)	oFF
F.37	Program Mode 0 Register 4 – program	Program number from 0 to 999, associated with this register button. oFF for no register function.	0-999 / oFF(65535)	oFF
F.38	Program Mode 0 Register 5 – program	Program number from 0 to 999, associated with this register button. oFF for no register function.	0-999 / oFF(65535)	oFF
F.39	Program Mode 0 Register 6 – program	Program number from 0 to 999, associated with this register button. oFF for no register function.	0-999 / oFF(65535)	oFF
F.40	Program Mode 0 Register 7 – program	Program number from 0 to 999, associated with this register button. oFF for no register function.	0-999 / oFF(65535)	oFF
F.41	Program Mode 0 Register 8 – program	Program number from 0 to 999, associated with this register button. oFF for no register function.	0-999 / oFF(65535)	oFF
F.42	Program Mode 0 Register 9 – program	Program number from 0 to 999, associated with this register button. oFF for no register function.	0-999 / oFF(65535)	oFF

F.43	Program Mode 0 Register 10 – program	Program number from 0 to 999, associated with this register button. oFF for no register function.	0-999 / oFF(65535)	oFF
F.44	Program Mode 0 Register 11 – program	Program number from 0 to 999, associated with this register button. oFF for no register function.	0-999 / oFF(65535)	oFF
F.45	Program Mode 0 Register 12 – program	Program number from 0 to 999, associated with this register button. oFF for no register function.	0-999 / oFF(65535)	oFF
F.46	Program Mode 0 Register 13 – program	Program number from 0 to 999, associated with this register button. oFF for no register function.	0-999 / oFF(65535)	oFF
F.47	Program Mode 0 Register 14 – program	Program number from 0 to 999, associated with this register button. oFF for no register function.	0-999 / oFF(65535)	oFF
F.48	Program Mode 0 Register 15 – program	Program number from 0 to 999, associated with this register button. oFF for no register function.	0-999 / oFF(65535)	oFF
F.49	Program Mode 0 Register 16 – program	Program number from 0 to 999, associated with this register button. oFF for no register function.	0-999 / oFF(65535)	oFF
Bass Registers – User Program - Control Change 0 All values are 2 by default. This is Control Change message for selecting Upper 2 in Juzisound Total SOLO Sampler 2				
F.50	Bass Register 1	Control Change 0 - value	0-127	2
F.51	Bass Register 2	Control Change 0 - value	0-127	2
F.52	Bass Register 3	Control Change 0 - value	0-127	2
F.53	Bass Register 4	Control Change 0 - value	0-127	2
F.54	Bass Register 5	Control Change 0 - value	0-127	2
F.55	Bass Register 6	Control Change 0 - value	0-127	2
F.56	Bass Register 7	Control Change 0 - value	0-127	2
F.57	Bass Register 8	Control Change 0 - value	0-127	2
F.58	Bass Register 9	Control Change 0 - value	0-127	2
F.59	Bass Register 10	Control Change 0 - value	0-127	2
F.60	Bass Register 11	Control Change 0 - value	0-127	2
F.61	Bass Register 12	Control Change 0 - value	0-127	2
Bass Registers – User Program - Control Change 32 All values are 22 by default, to starting selection of SOUND of upper 2 from bank 22. First sound (firh Program Change 0) on bank 22 are sound with number 2816. (22*128)				
F.62	Bass Register 1	Control Change 32 - value	0-127	22
F.63	Bass Register 2	Control Change 32 - value	0-127	22
F.64	Bass Register 3	Control Change 32 - value	0-127	22
F.65	Bass Register 4	Control Change 32 - value	0-127	22
F.66	Bass Register 5	Control Change 32 - value	0-127	22
F.67	Bass Register 6	Control Change 32 - value	0-127	22
F.68	Bass Register 7	Control Change 32 - value	0-127	22
F.69	Bass Register 8	Control Change 32 - value	0-127	22
F.70	Bass Register 9	Control Change 32 - value	0-127	22
F.71	Bass Register 10	Control Change 32 - value	0-127	22
F.72	Bass Register 11	Control Change 32 - value	0-127	22
F.73	Bass Register 12	Control Change 32 - value	0-127	22
Bass Registers – User Program – Program Change First program change is with number 84, and all next is increased by 1. This allow to select sounds in Total SOLO Sampler 2, starting from sound 2900 to 2911. There need to be Bass register sounds in deffault.				
F.74	Bass Register 1	Program Change - value	0-127	84
F.75	Bass Register 2	Program Change - value	0-127	85
F.76	Bass Register 3	Program Change - value	0-127	86
F.77	Bass Register 4	Program Change - value	0-127	87

F.78	Bass Register 5	Program Change - value	0-127	88
F.79	Bass Register 6	Program Change - value	0-127	89
F.80	Bass Register 7	Program Change - value	0-127	90
F.81	Bass Register 8	Program Change - value	0-127	91
F.82	Bass Register 9	Program Change - value	0-127	92
F.83	Bass Register 10	Program Change - value	0-127	93
F.84	Bass Register 11	Program Change - value	0-127	94
F.85	Bass Register 12	Program Change - value	0-127	95
Right Hand - register sensors scanning mode/watch				
F.86	RIGHT 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 128-133. 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 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.	bYt – Ind	bYt
F.87	RIGHT 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 scanning – after debouncing. This value is from 0 to 255. cUr – this is final remapped number of currently selected register. This value is from 0 to 15. Switching between these 2 values is made by buttons [+] and [-].	rAU 0 – 255 cUr 0 - 16	-
Left Hand - register sensors scanning mode/watch				
F.88	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 128-133. 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 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.	bYt – Ind	bYt

F.89	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 scanning – after debouncing. This value is from 0 to 255. cUr – this is final remapped number of currently selected register. This value is from 0 to 15. Switching between these 2 values is made by buttons [+] and [-].	rAU 0 – 255 cUr 0 - 16	-
Fixed Values				
F.90	Fixed Blow Value	When blow scanning is OFF, this is fixed value used for BLOW pressure.	1 - 100	100
F.91	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
F.92	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
F.93	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
Fundamental Bass Settings				
F.94	Bass notes Octave Transpose	Base output transpose for Fundamental BASS midi notes. Range is +/- 2 octaves.	-2, -1, oFF, uP1, uP2	oFF
F.95	Bass Highest Note Limit	This parameter fix split point, when bass notes comes to lower octave. <i>Explanation: Total fundamental bass notes range is 1 octave – from note C to note B. This parameter select point, when bass note jump one octave down, to prevent bass sound to be acoustically very high.</i>	0 - 11	9
Chords Settings				
F.96	Chords notes Octave Transpose	Base output transpose for CHORDS MIDI notes. Range is +/- 2 octaves.	-2, -1, oFF, uP1, uP2	oFF
F.97	Chord Octave Split Point	This parameter fix split point, when chord notes comes to lower octave.	0 - 11	9
Bellows Additional Settings				
F.98	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

F.99	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. 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!	0 - 127	0
Right Hand - Register Reassignment				
r.01	Right Hand - Register 1 Sensors native combination	Register 1 – sensors native combination	0 – 63, 255	255
r.02	Right Hand - Register 2 Sensors native combination	Register 2 – sensors native combination	0 – 63, 255	255
r.03	Right Hand - Register 3 Sensors native combination	Register 3 – sensors native combination	0 – 63, 255	255
r.04	Right Hand - Register 4 Sensors native combination	Register 4 – sensors native combination	0 – 63, 255	255
r.05	Right Hand - Register 5 Sensors native combination	Register 5 – sensors native combination	0 – 63, 255	255
r.06	Right Hand - Register 6 Sensors native combination	Register 6 – sensors native combination	0 – 63, 255	255
r.07	Right Hand - Register 7 Sensors native combination	Register 7 – sensors native combination	0 – 63, 255	255
r.08	Right Hand - Register 8 Sensors native combination	Register 8 – sensors native combination	0 – 63, 255	255
r.09	Right Hand - Register 9 Sensors native combination	Register 9 – sensors native combination	0 – 63, 255	255
r.10	Right Hand - Register 10 Sensors native combination	Register 10 – sensors native combination	0 – 63, 255	255
r.11	Right Hand - Register 11 Sensors native combination	Register 11 – sensors native combination	0 – 63, 255	255
r.12	Right Hand - Register 12 Sensors native combination	Register 12 – sensors native combination	0 – 63, 255	255
r.13	Right Hand - Register 13 Sensors native combination	Register 13 – sensors native combination	0 – 63, 255	255
r.14	Right Hand - Register 14 Sensors native combination	Register 14 – sensors native combination	0 – 63, 255	255
r.15	Right Hand - Register 15 Sensors native combination	Register 15 – sensors native combination	0 – 63, 255	255
r.16	Right Hand - Register 16 Sensors native combination	Register 15 – sensors native combination	0 – 63, 255	255
Left Hand - Register Reassignment				
L.01	Left Hand - Register 1 Sensors ative combination	Register 1 – sensors native combination	0 – 63, 255	255
L.02	Left Hand - Register 2 Sensors native combination	Register 2 – sensors native combination	0 – 63, 255	255
L.03	Left Hand - Register 3 Sensors native combination	Register 3 – sensors native combination	0 – 63, 255	255
L.04	Left Hand - Register 4 Sensors native combination	Register 4 – sensors native combination	0 – 63, 255	255
L.05	Left Hand - Register 5 Sensors native combination	Register 5 – sensors native combination	0 – 63, 255	255
L.06	Left Hand - Register 6 Sensors native combination	Register 6 – sensors native combination	0 – 63, 255	255

L.07	Left Hand - Register 7 Sensors native combination	Register 7 – sensors native combination	0 – 63, 255	255
L.08	Left Hand - Register 8 Sensors native combination	Register 8 – sensors native combination	0 – 63, 255	255
L.09	Left Hand - Register 9 Sensors native combination	Register 9 – sensors native combination	0 – 63, 255	255
L.10	Left Hand - Register 10 Sensors native combination	Register 10 – sensors native combination	0 – 63, 255	255
L.11	Left Hand - Register 11 Sensors native combination	Register 11 – sensors native combination	0 – 63, 255	255
L.12	Left Hand - Register 12 Sensors native combination	Register 12 – sensors native combination	0 – 63, 255	255
Bass Register Functions				
E.01	Bass Register - Button 1 Function	Available functions are: oFF – No assigned function bPG - Bank 0, Bank 32 and Program change messages, send on MIDI channel, assigned for Fundamental Bass. Values are get from parameters F.50(cc0), F.62(cc32) and F.74(PG). APG - Bank 0, Bank 32 and Program change messages, send on MIDI channel, assigned for chords. Values are get from the same parameters. StA – Start playing MIDI Command. Use this command to control START function on MIDI sequencer or arranger. St0 – Stop playing MIDI Command. Use this command to control STOP function on MIDI sequencer or arranger.	oFF bPG APG StA St0	bPG
E.02	Bass Register - Button 2 Function	The same...	oFF, bPG, APG, StA, St0	bPG
E.03	Bass Register - Button 3 Function	The same...	oFF, bPG, APG, StA, St0	bPG
E.04	Bass Register - Button 4 Function	The same...	oFF, bPG, APG, StA, St0	bPG
E.05	Bass Register - Button 5 Function	The same...	oFF, bPG, APG, StA, St0	bPG
E.06	Bass Register - Button 6 Function	The same...	oFF, bPG, APG, StA, St0	bPG
E.07	Bass Register - Button 7 Function	The same...	oFF, bPG, APG, StA, St0	bPG
E.08	Bass Register - Button 8 Function	The same...	oFF, bPG, APG, StA, St0	bPG
E.09	Bass Register - Button 9 Function	The same...	oFF, bPG, APG, StA, St0	bPG

E.10	Bass Register - Button 10 Function	The same...	oFF, bPG, APG, StA, St0	bPG
E.11	Bass Register - Button 11 Function	The same...	oFF, bPG, APG, StA, St0	bPG
E.12	Bass Register - Button 12 Function	The same...	oFF, bPG, APG, StA, St0	bPG
Sensors reading polarity				
P.01	Sensor H01 polarity	0 - non inverted / 1 - inverted	nOr / In	nOr
P.02	Sensor H02 polarity	-	nOr / In	nOr
P.03	Sensor H03 polarity	-	nOr / In	nOr
P.04	Sensor H04 polarity	-	nOr / In	nOr
P.05	Sensor H05 polarity	-	nOr / In	nOr
P.06	Sensor H06 polarity	-	nOr / In	nOr
P.07	Sensor H07 polarity	-	nOr / In	nOr
P.08	Sensor H08 polarity	-	nOr / In	nOr
P.09	Sensor H09 polarity	-	nOr / In	nOr
P.10	Sensor H10 polarity	-	nOr / In	nOr
P.11	Sensor H11 polarity	-	nOr / In	nOr
P.12	Sensor H12 polarity	-	nOr / In	nOr
P.13	Sensor H13 polarity	-	nOr / In	nOr
P.14	Sensor H14 polarity	-	nOr / In	nOr
P.15	Sensor H15 polarity	-	nOr / In	nOr
P.16	Sensor H16 polarity	-	nOr / In	nOr
P.17	Sensor H17 polarity	-	nOr / In	nOr
P.18	Sensor H18 polarity	-	nOr / In	nOr
P.19	Sensor H19 polarity	-	nOr / In	nOr
P.20	Sensor H20 polarity	-	nOr / In	nOr
P.21	Sensor H21 polarity	-	nOr / In	nOr
P.22	Sensor H22 polarity	-	nOr / In	nOr
P.23	Sensor H23 polarity	-	nOr / In	nOr
P.24	Sensor H24 polarity	-	nOr / In	nOr
P.25	Sensor H25 polarity	-	nOr / In	nOr
P.26	Sensor H26 polarity	-	nOr / In	nOr
P.27	Sensor H27 polarity	-	nOr / In	nOr
P.28	Sensor H28 polarity	-	nOr / In	nOr
P.29	Sensor H29 polarity	-	nOr / In	nOr
P.30	Sensor H30 polarity	-	nOr / In	nOr
P.31	Sensor H31 polarity	-	nOr / In	nOr
P.32	Sensor H32 polarity	-	nOr / In	nOr
P.33	Sensor H33 polarity	-	nOr / In	nOr
P.34	Sensor H34 polarity	-	nOr / In	nOr
P.35	Sensor H35 polarity	-	nOr / In	nOr
P.36	Sensor H36 polarity	-	nOr / In	nOr
P.37	Sensor H37 polarity	-	nOr / In	nOr
P.38	Sensor H38 polarity	-	nOr / In	nOr
P.39	Sensor H39 polarity	-	nOr / In	nOr
P.40	Sensor H40 polarity	-	nOr / In	nOr
P.41	Sensor H41 polarity	-	nOr / In	nOr
P.42	Sensor H42 polarity	-	nOr / In	nOr
P.43	Sensor H43 polarity	-	nOr / In	nOr
P.44	Sensor H44 polarity	-	nOr / In	nOr

P.45	Sensor H45 polarity	-	nOr / In	nOr
P.46	Sensor H46 polarity	-	nOr / In	nOr
P.47	Sensor H47 polarity	-	nOr / In	nOr
P.48	Sensor H48 polarity	-	nOr / In	nOr
P.49	Sensor H49 polarity	-	nOr / In	nOr
P.50	Sensor H50 polarity	-	nOr / In	nOr
P.51	Sensor H51 polarity	-	nOr / In	nOr
P.52	Sensor H52 polarity	-	nOr / In	nOr
P.53	Sensor H53 polarity	-	nOr / In	nOr
P.54	Sensor H54 polarity	-	nOr / In	nOr
P.55	Sensor H55 polarity	-	nOr / In	nOr
P.56	Sensor H56 polarity	-	nOr / In	nOr
P.57	Sensor H57 polarity	-	nOr / In	nOr
P.58	Sensor H58 polarity	-	nOr / In	nOr
P.59	Sensor H59 polarity	-	nOr / In	nOr
P.60	Sensor H60 polarity	-	nOr / In	nOr
P.61	Sensor H61 polarity	-	nOr / In	nOr
P.62	Sensor H62 polarity	-	nOr / In	nOr
P.63	Sensor H63 polarity	-	nOr / In	nOr
P.64	Sensor H64 polarity	-	nOr / In	nOr
P.65	Sensor H65 polarity	-	nOr / In	nOr
P.66	Sensor H66 polarity	-	nOr / In	nOr
P.67	Sensor H67 polarity	-	nOr / In	nOr
P.68	Sensor H68 polarity	-	nOr / In	nOr
P.69	Sensor H69 polarity	-	nOr / In	nOr
P.70	Sensor H70 polarity	-	nOr / In	nOr
P.71	Sensor H71 polarity	-	nOr / In	nOr
P.72	Sensor H72 polarity	-	nOr / In	nOr
P.73	Sensor H73 polarity	-	nOr / In	nOr
P.74	Sensor H74 polarity	-	nOr / In	nOr
P.75	Sensor H75 polarity	-	nOr / In	nOr
P.76	Sensor H76 polarity	-	nOr / In	nOr
P.77	Sensor H77 polarity	-	nOr / In	nOr
P.78	Sensor H78 polarity	-	nOr / In	nOr
P.79	Sensor H79 polarity	-	nOr / In	nOr
P.80	Sensor H80 polarity	-	nOr / In	nOr
P.81	Sensor H81 polarity	-	nOr / In	nOr
P.82	Sensor H82 polarity	-	nOr / In	nOr
P.83	Sensor H83 polarity	-	nOr / In	nOr
P.84	Sensor H84 polarity	-	nOr / In	nOr
P.85	Sensor H85 polarity	-	nOr / In	nOr
P.86	Sensor H86 polarity	-	nOr / In	nOr
P.87	Sensor H87 polarity	-	nOr / In	nOr
P.88	Sensor H88 polarity	-	nOr / In	nOr
P.89	Sensor H89 polarity	-	nOr / In	nOr
P.90	Sensor H90 polarity	-	nOr / In	nOr
P.91	Sensor H91 polarity	-	nOr / In	nOr
P.92	Sensor H92 polarity	-	nOr / In	nOr
P.93	Sensor H93 polarity	-	nOr / In	nOr
P.94	Sensor H94 polarity	-	nOr / In	nOr
P.95	Sensor H95 polarity	-	nOr / In	nOr
P.96	Sensor H96 polarity	-	nOr / In	nOr
P.97	Sensor H97 polarity	-	nOr / In	nOr
P.98	Sensor H98 polarity	-	nOr / In	nOr
P.99	Sensor H99 polarity	-	nOr / In	nOr

P.00	Sensor H100 polarity	-	nOr / In	nOr
Sensors function assignment				
H.01	Sensor H01 function index	For function number see function table	0 - 255/oFF	1
H.02	Sensor H02 function index	-	0 - 255/oFF	2
H.03	Sensor H03 function index	-	0 - 255/oFF	3
H.04	Sensor H04 function index	-	0 - 255/oFF	4
H.05	Sensor H05 function index	-	0 - 255/oFF	5
H.06	Sensor H06 function index	-	0 - 255/oFF	6
H.07	Sensor H07 function index	-	0 - 255/oFF	7
H.08	Sensor H08 function index	-	0 - 255/oFF	8
H.09	Sensor H09 function index	-	0 - 255/oFF	9
H.10	Sensor H10 function index	-	0 - 255/oFF	10
H.11	Sensor H11 function index	-	0 - 255/oFF	11
H.12	Sensor H12 function index	-	0 - 255/oFF	12
H.13	Sensor H13 function index	-	0 - 255/oFF	13
H.14	Sensor H14 function index	-	0 - 255/oFF	14
H.15	Sensor H15 function index	-	0 - 255/oFF	15
H.16	Sensor H16 function index	-	0 - 255/oFF	16
H.17	Sensor H17 function index	-	0 - 255/oFF	17
H.18	Sensor H18 function index	-	0 - 255/oFF	18
H.19	Sensor H19 function index	-	0 - 255/oFF	19
H.20	Sensor H20 function index	-	0 - 255/oFF	20
H.21	Sensor H21 function index	-	0 - 255/oFF	21
H.22	Sensor H22 function index	-	0 - 255/oFF	22
H.23	Sensor H23 function index	-	0 - 255/oFF	23
H.24	Sensor H24 function index	-	0 - 255/oFF	24
H.25	Sensor H25 function index	-	0 - 255/oFF	25
H.26	Sensor H26 function index	-	0 - 255/oFF	26
H.27	Sensor H27 function index	-	0 - 255/oFF	27
H.28	Sensor H28 function index	-	0 - 255/oFF	28
H.29	Sensor H29 function index	-	0 - 255/oFF	29
H.30	Sensor H30 function index	-	0 - 255/oFF	30
H.31	Sensor H31 function index	-	0 - 255/oFF	31
H.32	Sensor H32 function index	-	0 - 255/oFF	32
H.33	Sensor H33 function index	-	0 - 255/oFF	33
H.34	Sensor H34 function index	-	0 - 255/oFF	34
H.35	Sensor H35 function index	-	0 - 255/oFF	35
H.36	Sensor H36 function index	-	0 - 255/oFF	36
H.37	Sensor H37 function index	-	0 - 255/oFF	37
H.38	Sensor H38 function index	-	0 - 255/oFF	38
H.39	Sensor H39 function index	-	0 - 255/oFF	39
H.40	Sensor H40 function index	-	0 - 255/oFF	40
H.41	Sensor H41 function index	-	0 - 255/oFF	41
H.42	Sensor H42 function index	-	0 - 255/oFF	42
H.43	Sensor H43 function index	-	0 - 255/oFF	43
H.44	Sensor H44 function index	-	0 - 255/oFF	44
H.45	Sensor H45 function index	-	0 - 255/oFF	45
H.46	Sensor H46 function index	-	0 - 255/oFF	46
H.47	Sensor H47 function index	-	0 - 255/oFF	47
H.48	Sensor H48 function index	-	0 - 255/oFF	48
H.49	Sensor H49 function index	-	0 - 255/oFF	49
H.50	Sensor H50 function index	-	0 - 255/oFF	50
H.51	Sensor H51 function index	-	0 - 255/oFF	51
H.52	Sensor H52 function index	-	0 - 255/oFF	52

H.53	Sensor H53 function index	-	0 - 255/oFF	53
H.54	Sensor H54 function index	-	0 - 255/oFF	54
H.55	Sensor H55 function index	-	0 - 255/oFF	55
H.56	Sensor H56 function index	-	0 - 255/oFF	56
H.57	Sensor H57 function index	-	0 - 255/oFF	57
H.58	Sensor H58 function index	-	0 - 255/oFF	58
H.59	Sensor H59 function index	-	0 - 255/oFF	59
H.60	Sensor H60 function index	-	0 - 255/oFF	60
H.61	Sensor H61 function index	-	0 - 255/oFF	61
H.62	Sensor H62 function index	-	0 - 255/oFF	62
H.63	Sensor H63 function index	-	0 - 255/oFF	63
H.64	Sensor H64 function index	-	0 - 255/oFF	64
H.65	Sensor H65 function index	-	0 - 255/oFF	65
H.66	Sensor H66 function index	-	0 - 255/oFF	66
H.67	Sensor H67 function index	-	0 - 255/oFF	67
H.68	Sensor H68 function index	-	0 - 255/oFF	68
H.69	Sensor H69 function index	-	0 - 255/oFF	69
H.70	Sensor H70 function index	-	0 - 255/oFF	70
H.71	Sensor H71 function index	-	0 - 255/oFF	71
H.72	Sensor H72 function index	-	0 - 255/oFF	72
H.73	Sensor H73 function index	-	0 - 255/oFF	73
H.74	Sensor H74 function index	-	0 - 255/oFF	74
H.75	Sensor H75 function index	-	0 - 255/oFF	75
H.76	Sensor H76 function index	-	0 - 255/oFF	76
H.77	Sensor H77 function index	-	0 - 255/oFF	77
H.78	Sensor H78 function index	-	0 - 255/oFF	78
H.79	Sensor H79 function index	-	0 - 255/oFF	79
H.80	Sensor H80 function index	-	0 - 255/oFF	80
H.81	Sensor H81 function index	-	0 - 255/oFF	81
H.82	Sensor H82 function index	-	0 - 255/oFF	82
H.83	Sensor H83 function index	-	0 - 255/oFF	83
H.84	Sensor H84 function index	-	0 - 255/oFF	84
H.85	Sensor H85 function index	-	0 - 255/oFF	85
H.86	Sensor H86 function index	-	0 - 255/oFF	86
H.87	Sensor H87 function index	-	0 - 255/oFF	87
H.88	Sensor H88 function index	-	0 - 255/oFF	88
H.89	Sensor H89 function index	-	0 - 255/oFF	89
H.90	Sensor H90 function index	-	0 - 255/oFF	90
H.91	Sensor H91 function index	-	0 - 255/oFF	91
H.92	Sensor H92 function index	-	0 - 255/oFF	92
H.93	Sensor H93 function index	-	0 - 255/oFF	93
H.94	Sensor H94 function index	-	0 - 255/oFF	94
H.95	Sensor H95 function index	-	0 - 255/oFF	95
H.96	Sensor H96 function index	-	0 - 255/oFF	96
H.97	Sensor H97 function index	-	0 - 255/oFF	97
H.98	Sensor H98 function index	-	0 - 255/oFF	98
H.99	Sensor H99 function index	-	0 - 255/oFF	99
H.00	Sensor H100 function index	-	0 - 255/oFF	100

System UTIL Functions			
PJS	Set only parameters to JS	Set parameters: - Terca control mode to: JS - Scala Control Mode to: JS - Transpose Control Mode to: SYS - Master volume sending mode to: 0 (Sysex) <i>Will be saved if select YES when exit from menu.</i>	Press [+] to execute
Pnt	Set only parameters to Note	Set parameters: - Terca control mode to: ntE - Scala Control Mode to: JS - Transpose Control Mode to: ntE - Master volume sending mode to: 1 (CC7) <i>Will be saved if select YES when exit from menu.</i>	Press [+] to execute
ASn	Set ALL sensor to Note	Set all sensors to NOTE functions	Press [+] to execute
AS-	Set ALL sensors to OFF	Set all sensor to OFF mode	Press [+] to execute
CSF	Clear special function sensors	Clear only special function registers	Press [+] to execute
SUP	Set ALL sensors to S4/SUPITA	Set all sensor to Supita/S4 mode	Press [+] to execute
dSn	Set ALL sensors to DIGITAL SOUND	Set all sensor to DIGITAL SOUND mode + setting additional parameters to Digital Sound	Press [+] to execute
ErF	See internal error	Display internal error flag (8 bit digit)	Press [+] to clear
Sbc	Save current setup to Backup	Save all settings to Backup Memory	Press [+] to execute
Lbc	Load setup from Backup	Load all settings from Backup Memory and restart system.	Press [+] to execute
SLn	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
AnA	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

Arr	Start Right Hand Auto register reassignment	<p>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).</i> <i>While play process, on control panel display is visible counter with sensor count assigned to note.</i> <i>If possible, system keep settings for sensors previously assigned to non-note functions, like register scanning or another special function.</i> <i>If any sensor previously is used for special function, but now is assigned to note, special function assignment for this sensor is lost.</i></p>	Press [+] to execute
ArL	Start Left Hand Auto register reassignment	<p>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).</i> <i>While play process, on control panel display is visible counter with sensor count assigned to note.</i> <i>If possible, system keep settings for sensors previously assigned to non-note functions, like register scanning or another special function.</i> <i>If any sensor previously is used for special function, but now is assigned to note, special function assignment for this sensor is lost.</i></p>	Press [+] to execute
FAC	Full Factory Reset	<p>Full factory reset After full factory reset, system will be restarted, and all sensors will be assigned to note function, starting from note 48.</p>	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: 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)	135	Solo Register change bit 7	<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>
	136	Solo Register button 1	
	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>Exact function of this button is defined in EXTENDED SYSTEM PARAMETERS TABLE, Function F.33</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. FUNC/MENU for 2 seconds
2. Press button [0]
3. Press button [1]
4. With button [+] go to **FAC**
5. Press button [5]
6. Press button [+] to EXECUTE **FACTORY RESET**

AUTO NOTE ASSIGN

1. FUNC/MENU for 2 seconds
2. Press button [0]
3. Press button [1]
4. With button [+] go to **AnA**
5. Press button [5]
6. Press button [+] to 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. FUNC/MENU for 2 seconds to exit.
10. Press [+] to SAVE changes or press [-] to not save changes.

REGISTER SENSOR ASSIGNMENT

For S4 mode...

1. FUNC/MENU for 2 seconds
2. Press button [0]
3. Press button [1]
4. With button [+] go to **h.45**
5. Press button [5]
6. With [+] and [-] select **128**

7. Press button [1]
8. With button [+] go to **h.46**
9. Press button [5]
10. With [+] and [-] select **129**

11. Press button [1]
12. With button [+] go to **h.47**
13. Press button [5]
14. With [+] and [-] select **130**

15. Press button [1]
16. With button [+] go to **h.48**
17. Press button [5]
18. With [+] and [-] select **131**

REGISTER MODES:

Change with press and hold button PRG for 6 seconds.

Mode 1: Program 000-999

Mode 2: 5 bank – 5 register

Mode 3: 10 bank – 16 register

Mode 4: 10 register – 8 bank.

REGISTER ORDERING IN MODE 3

1. Select different register
2. Select button 1
3. Press and hold button PRO/HOLD
4. Press register button

....

Repeat this to all another registers...

DIGITAL-SOUND – настройка

1. FAC
2. dSn
3. [FUNC] – Activate button [2] // Enable bass scanning. Not enabled by default.
4. Extended function -> Section [7]:[5] // Not move bellows! Remember center point from pressure sensor.
5. Extended function -> Section [7]:[1] // Set the same value who remember in previous post.