

# Juzisound Accordion MIDI System

## PROGRAM MODES

Juzisound accordion MIDI system have 4 different program modes. Switching between program modes is made by long pressing (around 6 seconds) of **[PRG/HOLD]** button. Every program mode is indicated by different display mode.

## 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**. 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 is 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 is executed. If need to reassign another program to the same button, execute again the same reassign procedure.

### WARNING!

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 predefined bank or program. Assignment registers is made by this procedure:

1. Be sure, you is 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. Press and hold pressed buttons for bank (6, 7, 8, 9 or 0) or button for program (1, 2, 3, 4 or 5).
3. While hold pressed button from previous point, press register who need to activate pressed button on control panel.

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

### WARNING!

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 predefined program numbers. Assignment registers is made by this procedure:

1. Be sure, you is 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. With buttons [+] and [-] manually select desired program number
2. Press and hold button [PRG/HOLD].
3. Now while holding [PRG/HOLD], press and register button who need to call selected program number. After this release [PRG/HOLD].

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

### WARNING!

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 10 programs and 8 banks. 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.

### Using registers in program mode 3

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

1. Be sure, you is 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. With numbers buttons from [0] to [9] manually select desired program number. LED of button will be ON.
2. Press and hold button [PRG/HOLD].
3. Now while holding [PRG/HOLD], press and register button who need to call selected this program number. After this release [PRG/HOLD].

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

### **WARNING!**

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).

## Програм моде

Регистрите се назначават във всички ПРОГРАМ МОДЕ режими по отделно и си се записват в самите програм модес. Тоест нямат менюта в авансед функциите.

### **В програм моде 0 (всички програми по номера) записа става като: 888**

1. Трябва да си избрал регистър, различен от този който искаш да запишеш, за да може след това да натиснеш искания регистър. (Трябва да настъпи промяна за да го отчете платката)
  2. Ръчно избираш номера на програмата, който искаш да се яви на регистъра който след малко ще програмираме.
  3. Натискаш и държиш копче [PRG/HOLD].
  4. Натискаш искания регистър, докато [PRG/HOLD] е натиснато. Чак тогава пускаш [PRG/HOLD].
- С това записа е готов и промяната е отразена и в EEPROM паметта

### **В програм моде 1 (5 банки с по 5 регистъра всяка) записа става като: 8-8**

1. Трябва да си на регистър различен от този който искаш да запишеш.
  2. Натискаш и задържаш бутона за банка (номера от 6 до 0) или бутона за регистър (номера от 1 до 5).
  3. Докато държиш бутона по предната точка, натискаш и регистъра който искаш да активира този бутон.
- С това записа е готов и промяната е отразена и в EEPROM паметта.

### **В програм моде 2 (10 банки на копчетата на панела с по 16 регистъра всяка) записа става като: 8. 8**

1. Трябва да си на регистър различен от този който искаш да запишеш
  2. Ръчно избираш с бутони [+] и [-] номера който трябва да активира регистъра който ще програмираме.
  2. Натискаш и държиш копче [PRG/HOLD].
  3. Докато държиш бутона по предната точка, натискаш и регистъра който ще програмираме.
- С това записа е готов и промяната е отразена и в EEPROM паметта

### **В програм моде 3 (10 регистъра на копчетата на панела и 8 банки с бутони [+] и [-]). 8-8**

#### **Банките се изписват с букви A, b, C, D, E, F, G, H:**

1. Трябва да си на регистър различен от този който искаш да запишеш
  2. Ръчно избираш регистъра с натискане на бутон 0-9 от панела. Избрания номер трябва да светне.
  3. Натискаш и задържаш бутона [PRG/HOLD].
  4. Докато все още държиш бутона [PRG/HOLD], натискаш и регистъра който ще програмираш.
- С това записа е готов и промяната е отразена и в EEPROM паметта.

**Master Transpose, Terca Control, Scala Control**

## Function Menu

Function menu mode is selected by pressing 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 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.

### 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 make 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.



## Extended Function Menu

Extended function menu mode is selected by press and hold button **[FUNC/MENU]** for 2 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]**.

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. **WARNING!**: 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 ) – [Main parameters]				
No	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	Antenna (Wireless) channel	Aon AIR channels for MIDI Wireless transmitter.	1 - 5	5
6.4	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
6.5	Fixed Blow Value	When blow scanning is OFF, this is fixed value used for BLOW pressure.	1 - 100	100

Section ( 7 ) – [Blow settings]				
No	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)	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 readed from 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>Diapason</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 readed or produced by 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 readed from Pitch Bend. If click on button (+), on display will be shown MIDI value produced from Pitch Bend.	RAW 0 - 1023  MIDI 0 - 127	---

<b>Section ( 9 ) – [Modulation settings]</b>				
<b>№</b>	<b>Parameter Name</b>	<b>Description</b>	<b>Diapason</b>	<b>Default Value</b>
9.1	Center point of modulation wheel	Center point of modulation wheel. Use this parameter, when modulation is not only wheel, and when is combined with Pitch Bend in Joystick.	0 - 1023	512
9.2	Death Zone	Death Zone	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 readed 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 readed from Modulation. If click on button (+), on display will be shown MIDI value produced from Modulation.	RAW 0 – 1023 MIDI 0-127	---

<b>Section ( 0 ) – [SYSTEM FUNCTIONS]</b>				
<b>№</b>	<b>Parameter Name</b>	<b>Description</b>	<b>Diapason</b>	<b>Default Value</b>
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 Sampler.	ntE - JS	JS

0.3	Scala control mode	How accordion MIDI system control SCALA function: JS – With SYSEX messages fo Juzisound Total SOLO Sampler PAh – With SYSEX messages for KORG PAX series. P80 – With SYSEX messages for KORG PA80 series.	JS / PAh / P80	JS
0.4	Transpose control mode	How accordion MIDI system control TRANSPOSE: ntE – Transpose is aplyed to notes SYS – Transpose is controlled with standart SYSEX MASTER TRANSPOSE control message. Notes are send without transpose.	ntE – SYS	SYS
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 0, parameter 1. LED 0 and LED 1 need to be ON. Desired parameter is selected by pressing buttons [+] and [-], and name 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 5 (pressing button [5]). 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 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
<b>Program Mode 0</b> <i>Program Select Control Change Messages</i> <i>Total 1000 positions - (programs with numbers from 000 to 999)</i>				
<b>F.00</b>	Program mode 0 / CC0 For program from 000 to 127	Control Change 0	000 - 127	120
<b>F.01</b>	Program mode 0 / CC32 For program from 000 to 127	Control Change 32	000 - 127	127
<b>F.02</b>	Program mode 0 / CC0 For program from 128 to 255	Control Change 0	000 - 127	121
<b>F.03</b>	Program mode 0 / CC32 For program from 128 to 255	Control Change 32	000 - 127	127
<b>F.04</b>	Program mode 0 / CC0 For program from 256 to 383	Control Change 0	000 - 127	122

<b>F.05</b>	Program mode 0 / CC32 For program from 256 to 383	Control Change 32	000 - 127	127
<b>F.06</b>	Program mode 0 / CC0 For program from 384 to 511	Control Change 0	000 - 127	123
<b>F.07</b>	Program mode 0 / CC32 For program from 384 to 511	Control Change 32	000 - 127	127
<b>F.08</b>	Program mode 0 / CC0 For program from 512 to 639	Control Change 0	000 - 127	124
<b>F.09</b>	Program mode 0 / CC32 For program from 512 to 639	Control Change 32	000 - 127	127
<b>F.10</b>	Program mode 0 / CC0 For program from 640 to 767	Control Change 0	000 - 127	125
<b>F.11</b>	Program mode 0 / CC32 For program from 640 to 767	Control Change 32	000 - 127	127
<b>F.12</b>	Program mode 0 / CC0 For program from 768 to 895	Control Change 0	000 - 127	126
<b>F.13</b>	Program mode 0 / CC32 For program from 768 to 895	Control Change 32	000 - 127	127
<b>F.14</b>	Program mode 0 / CC0 For program from 896 to 999	Control Change 0	000 - 127	127
<b>F.15</b>	Program mode 0 / CC32 For program from 896 to 999	Control Change 32	000 - 127	127
<b>Program Mode 1</b> <i>Program Select Control Change Messages</i> <i>Total 25 positions - (5 Bank every with 5 programs)</i>				
<b>F.16</b>	Program mode 1 / CC0 For program from 000 to 024	Control Change 0	000 - 127	8
<b>F.17</b>	Program mode 1 / CC32 For program from 000 to 024	Control Change 32	000 - 127	0
<b>Program Mode 2</b> <i>Program Select Control Change Messages</i> <i>Total 160 positions - (10 Bank every with 16 registers)</i>				
<b>F.18</b>	Program mode 2 / CC0 For program from 000 to 127	Control Change 0	000 - 127	9
<b>F.19</b>	Program mode 2 / CC32 For program from 000 to 127	Control Change 32	000 - 127	0
<b>F.20</b>	Program mode 2 / CC0 For program from 128 to 159	Control Change 0	000 - 127	10

<b>F.21</b>	Program mode 2 / CC32 For program from 128 to 159	Control Change 32	000 - 127	0
<b>Program Mode 3</b> <i>Program Select Control Change Messages</i> <i>Total 80 positions - (8 Bank every with 10 programs)</i>				
<b>F.22</b>	Program mode 3 / CC0 For program from 000 to 079	Control Change 0	000 - 127	11
<b>F.23</b>	Program mode 3 / CC32 For program from 000 to 079	Control Change 32	000 - 127	0
<b>Other Parameters</b>				
<b>F.24</b>	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
<b>F.25</b>	Master Volume control mode	This parameter select MIDI message produced to control master volume. 0 – Standard Sysex Master Transpose Message 1 – Control Change 7	0 / 1	0
<b>F.26</b>	Terca Volume CC number	This parameter select MIDI message Control Change number, for controlling Terca volume.	0 – 120	7
<b>F.27</b>	Blow ACP Reading Stabilizer	Value for stabilization of reading of BLOW pressure.	0 – 64	0
<b>F.28</b>	Button [+] and [-] default function	This parameter select default functions for buttons [+] and [-]. 0 – Default functions is Volume 1 – Default function is Program Number or Bank +1 / -1	0 / 1	1
<b>Easy BLOW Curve point selection</b>				
<b>F.29</b>	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 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.</i></p>	0 - 127	40
<b>F.30</b>	Easy Blow / Point A Y position		0 - 127	80
<b>F.31</b>	Easy Blow / Point B X position		0 - 127	110
<b>F.32</b>	Easy Blow / Point B Y position		0 - 127	100
<b>F.33</b>	Hand Long Register Function	Function selection for central hand long register key: 0 – Terca ON/OFF (depended from status of sensor) 1 – Terca ON/OFF Toggle mode	0 - 1	0
<b>F.34</b>	Program Mode 0 – Index [0] Register reassignment array	Register reassignment array Cell by index [ 0 ]	0-999 / OFF(65535)	OFF
<b>F.35</b>	Program Mode 0 – Index [1] Register reassignment array	Register reassignment array Cell by index [ 1 ]	0-999 / OFF(65535)	OFF

<b>F.36</b>	Program Mode 0 – Index [2] Register reassignment array	Register reassignment array Cell by index [ 2 ]	0-999 / OFF(65535)	OFF
<b>F.37</b>	Program Mode 0 – Index [3] Register reassignment array	Register reassignment array Cell by index [ 3 ]	0-999 / OFF(65535)	OFF
<b>F.38</b>	Program Mode 0 – Index [4] Register reassignment array	Register reassignment array Cell by index [ 4 ]	0-999 / OFF(65535)	OFF
<b>F.39</b>	Program Mode 0 – Index [5] Register reassignment array	Register reassignment array Cell by index [ 5 ]	0-999 / OFF(65535)	OFF
<b>F.40</b>	Program Mode 0 – Index [6] Register reassignment array	Register reassignment array Cell by index [ 6 ]	0-999 / OFF(65535)	OFF
<b>F.41</b>	Program Mode 0 – Index [7] Register reassignment array	Register reassignment array Cell by index [ 7 ]	0-999 / OFF(65535)	OFF
<b>F.42</b>	Program Mode 0 – Index [8] Register reassignment array	Register reassignment array Cell by index [ 8 ]	0-999 / OFF(65535)	OFF
<b>F.43</b>	Program Mode 0 – Index [9] Register reassignment array	Register reassignment array Cell by index [ 9 ]	0-999 / OFF(65535)	OFF
<b>F.44</b>	Program Mode 0 – Index [10] Register reassignment array	Register reassignment array Cell by index [ 10 ]	0-999 / OFF(65535)	OFF
<b>F.45</b>	Program Mode 0 – Index [11] Register reassignment array	Register reassignment array Cell by index [ 11 ]	0-999 / OFF(65535)	OFF
<b>F.46</b>	Program Mode 0 – Index [12] Register reassignment array	Register reassignment array Cell by index [ 12 ]	0-999 / OFF(65535)	OFF
<b>F.47</b>	Program Mode 0 – Index [13] Register reassignment array	Register reassignment array Cell by index [ 13 ]	0-999 / OFF(65535)	OFF
<b>F.48</b>	Program Mode 0 – Index [14] Register reassignment array	Register reassignment array Cell by index [ 14 ]	0-999 / OFF(65535)	OFF
<b>F.49</b>	Program Mode 0 – Index [15] Register reassignment array	Register reassignment array Cell by index [ 15 ]	0-999 / OFF(65535)	OFF
<b>F.50</b>	Program Mode 1 – Index [0] Register reassignment array	Register reassignment array Cell by index [ 0 ]	Valid: 0-15 OFF(255)	OFF
<b>F.51</b>	Program Mode 1 – Index [1] Register reassignment array	Register reassignment array Cell by index [ 1 ]	Valid: 0-15 OFF(255)	OFF
<b>F.52</b>	Program Mode 1 – Index [2] Register reassignment array	Register reassignment array Cell by index [ 2 ]	Valid: 0-15 OFF(255)	OFF
<b>F.53</b>	Program Mode 1 – Index [3] Register reassignment array	Register reassignment array Cell by index [ 3 ]	Valid: 0-15 OFF(255)	OFF
<b>F.54</b>	Program Mode 1 – Index [4] Register reassignment array	Register reassignment array Cell by index [ 4 ]	Valid: 0-15 OFF(255)	OFF
<b>F.55</b>	Program Mode 1 – Index [5] Register reassignment array	Register reassignment array Cell by index [ 5 ]	Valid: 0-15 OFF(255)	OFF
<b>F.56</b>	Program Mode 1 – Index [6] Register reassignment array	Register reassignment array Cell by index [ 6 ]	Valid: 0-15 OFF(255)	OFF
<b>F.57</b>	Program Mode 1 – Index [7] Register reassignment array	Register reassignment array Cell by index [ 7 ]	Valid: 0-15 OFF(255)	OFF
<b>F.58</b>	Program Mode 1 – Index [8] Register reassignment array	Register reassignment array Cell by index [ 8 ]	Valid: 0-15 OFF(255)	OFF
<b>F.59</b>	Program Mode 1 – Index [9] Register reassignment array	Register reassignment array Cell by index [ 9 ]	Valid: 0-15 OFF(255)	OFF

<b>F.60</b>	Program Mode 2 – Index [0] Register reassignment array	Register reassignment array Cell by index [ 0 ]	Valid: 0-15 OFF(255)	OFF
<b>F.61</b>	Program Mode 2 – Index [1] Register reassignment array	Register reassignment array Cell by index [ 1 ]	Valid: 0-15 OFF(255)	OFF
<b>F.62</b>	Program Mode 2 – Index [2] Register reassignment array	Register reassignment array Cell by index [ 2 ]	Valid: 0-15 OFF(255)	OFF
<b>F.63</b>	Program Mode 2 – Index [3] Register reassignment array	Register reassignment array Cell by index [ 3 ]	Valid: 0-15 OFF(255)	OFF
<b>F.64</b>	Program Mode 2 – Index [4] Register reassignment array	Register reassignment array Cell by index [ 4 ]	Valid: 0-15 OFF(255)	OFF
<b>F.65</b>	Program Mode 2 – Index [5] Register reassignment array	Register reassignment array Cell by index [ 5 ]	Valid: 0-15 OFF(255)	OFF
<b>F.66</b>	Program Mode 2 – Index [6] Register reassignment array	Register reassignment array Cell by index [ 6 ]	Valid: 0-15 OFF(255)	OFF
<b>F.67</b>	Program Mode 2 – Index [7] Register reassignment array	Register reassignment array Cell by index [ 7 ]	Valid: 0-15 OFF(255)	OFF
<b>F.68</b>	Program Mode 2 – Index [8] Register reassignment array	Register reassignment array Cell by index [ 8 ]	Valid: 0-15 OFF(255)	OFF
<b>F.69</b>	Program Mode 2 – Index [9] Register reassignment array	Register reassignment array Cell by index [ 9 ]	Valid: 0-15 OFF(255)	OFF
<b>F.70</b>	Program Mode 2 – Index [10] Register reassignment array	Register reassignment array Cell by index [ 10 ]	Valid: 0-15 OFF(255)	OFF
<b>F.71</b>	Program Mode 2 – Index [11] Register reassignment array	Register reassignment array Cell by index [ 11 ]	Valid: 0-15 OFF(255)	OFF
<b>F.72</b>	Program Mode 2 – Index [12] Register reassignment array	Register reassignment array Cell by index [ 12 ]	Valid: 0-15 OFF(255)	OFF
<b>F.73</b>	Program Mode 2 – Index [13] Register reassignment array	Register reassignment array Cell by index [ 13 ]	Valid: 0-15 OFF(255)	OFF
<b>F.74</b>	Program Mode 2 – Index [14] Register reassignment array	Register reassignment array Cell by index [ 14 ]	Valid: 0-15 OFF(255)	OFF
<b>F.75</b>	Program Mode 2 – Index [15] Register reassignment array	Register reassignment array Cell by index [ 15 ]	Valid: 0-15 OFF(255)	OFF
<b>F.76</b>				
<b>F.76</b>	Program Mode 3 – Index [0] Register reassignment array	Register reassignment array Cell by index [ 0 ]	Valid: 0-15 OFF(255)	OFF
<b>F.77</b>	Program Mode 3 – Index [1] Register reassignment array	Register reassignment array Cell by index [ 1 ]	Valid: 0-15 OFF(255)	OFF
<b>F.78</b>	Program Mode 3 – Index [2] Register reassignment array	Register reassignment array Cell by index [ 2 ]	Valid: 0-15 OFF(255)	OFF
<b>F.79</b>	Program Mode 3 – Index [3] Register reassignment array	Register reassignment array Cell by index [ 3 ]	Valid: 0-15 OFF(255)	OFF
<b>F.80</b>	Program Mode 3 – Index [4] Register reassignment array	Register reassignment array Cell by index [ 4 ]	Valid: 0-15 OFF(255)	OFF
<b>F.81</b>	Program Mode 3 – Index [5] Register reassignment array	Register reassignment array Cell by index [ 5 ]	Valid: 0-15 OFF(255)	OFF
<b>F.82</b>	Program Mode 3 – Index [6] Register reassignment array	Register reassignment array Cell by index [ 6 ]	Valid: 0-15 OFF(255)	OFF
<b>F.83</b>	Program Mode 3 – Index [7] Register reassignment array	Register reassignment array Cell by index [ 7 ]	Valid: 0-15 OFF(255)	OFF

<b>F.84</b>	Program Mode 3 – Index [8] Register reassignment array	Register reassignment array Cell by index [ 8 ]	Valid: 0-15 OFF(255)	OFF
<b>F.85</b>	Program Mode 3 – Index [9] Register reassignment array	Register reassignment array Cell by index [ 9 ]	Valid: 0-15 OFF(255)	OFF
<b>F.86</b>	Program Mode 3 – Index [10] Register reassignment array	Register reassignment array Cell by index [ 10 ]	Valid: 0-15 OFF(255)	OFF
<b>F.87</b>	Program Mode 3 – Index [11] Register reassignment array	Register reassignment array Cell by index [ 11 ]	Valid: 0-15 OFF(255)	OFF
<b>F.88</b>	Program Mode 3 – Index [12] Register reassignment array	Register reassignment array Cell by index [ 12 ]	Valid: 0-15 OFF(255)	OFF
<b>F.89</b>	Program Mode 3 – Index [13] Register reassignment array	Register reassignment array Cell by index [ 13 ]	Valid: 0-15 OFF(255)	OFF
<b>F.90</b>	Program Mode 3 – Index [14] Register reassignment array	Register reassignment array Cell by index [ 14 ]	Valid: 0-15 OFF(255)	OFF
<b>F.91</b>	Program Mode 3 – Index [15] Register reassignment array	Register reassignment array Cell by index [ 15 ]	Valid: 0-15 OFF(255)	OFF
<b><i>Sensors function assignment</i></b>				
<b>h.01</b>	Sensor H01 function index	For function number see function table	0 - 255	48
<b>h.02</b>	Sensor H02 function index	-	0 - 255	49
<b>h.03</b>	Sensor H03 function index	-	0 - 255	50
<b>h.04</b>	Sensor H04 function index	-	0 - 255	51
<b>h.05</b>	Sensor H05 function index	-	0 - 255	52
<b>h.06</b>	Sensor H06 function index	-	0 - 255	53
<b>h.07</b>	Sensor H07 function index	-	0 - 255	54
<b>h.08</b>	Sensor H08 function index	-	0 - 255	55
<b>h.09</b>	Sensor H09 function index	-	0 - 255	56
<b>h.10</b>	Sensor H10 function index	-	0 - 255	57
<b>h.11</b>	Sensor H11 function index	-	0 - 255	58
<b>h.12</b>	Sensor H12 function index	-	0 - 255	59
<b>h.13</b>	Sensor H13 function index	-	0 - 255	60
<b>h.14</b>	Sensor H14 function index	-	0 - 255	61
<b>h.15</b>	Sensor H15 function index	-	0 - 255	62
<b>h.16</b>	Sensor H16 function index	-	0 - 255	63
<b>h.17</b>	Sensor H17 function index	-	0 - 255	64
<b>h.18</b>	Sensor H18 function index	-	0 - 255	65
<b>h.19</b>	Sensor H19 function index	-	0 - 255	66
<b>h.20</b>	Sensor H20 function index	-	0 - 255	67
<b>h.21</b>	Sensor H21 function index	-	0 - 255	68
<b>h.22</b>	Sensor H22 function index	-	0 - 255	69
<b>h.23</b>	Sensor H23 function index	-	0 - 255	70
<b>h.24</b>	Sensor H24 function index	-	0 - 255	71
<b>h.25</b>	Sensor H25 function index	-	0 - 255	72
<b>h.26</b>	Sensor H26 function index	-	0 - 255	73
<b>h.27</b>	Sensor H27 function index	-	0 - 255	74
<b>h.28</b>	Sensor H28 function index	-	0 - 255	75
<b>h.29</b>	Sensor H29 function index	-	0 - 255	76
<b>h.30</b>	Sensor H30 function index	-	0 - 255	77
<b>h.31</b>	Sensor H31 function index	-	0 - 255	78
<b>h.32</b>	Sensor H32 function index	-	0 - 255	79



<b>h.33</b>	Sensor H33 function index	-	0 - 255	80
<b>h.34</b>	Sensor H34 function index	-	0 - 255	81
<b>h.35</b>	Sensor H35 function index	-	0 - 255	82
<b>h.36</b>	Sensor H36 function index	-	0 - 255	83
<b>h.37</b>	Sensor H37 function index	-	0 - 255	84
<b>h.38</b>	Sensor H38 function index	-	0 - 255	85
<b>h.39</b>	Sensor H39 function index	-	0 - 255	86
<b>h.40</b>	Sensor H40 function index	-	0 - 255	87
<b>h.41</b>	Sensor H41 function index	-	0 - 255	88
<b>h.42</b>	Sensor H42 function index	-	0 - 255	89
<b>h.43</b>	Sensor H43 function index	-	0 - 255	90
<b>h.44</b>	Sensor H44 function index	-	0 - 255	91
<b>h.45</b>	Sensor H45 function index	-	0 - 255	92
<b>h.46</b>	Sensor H46 function index	-	0 - 255	93
<b>h.47</b>	Sensor H47 function index	-	0 - 255	94
<b>h.48</b>	Sensor H48 function index	-	0 - 255	95
<b>Sensors reading polarity</b>				
<b>P.01</b>	Sensor H01 polarity	0 - non inverted / 1 - inverted	0 - 1	0
<b>P.02</b>	Sensor H02 polarity	-	0 - 1	0
<b>P.03</b>	Sensor H03 polarity	-	0 - 1	0
<b>P.04</b>	Sensor H04 polarity	-	0 - 1	0
<b>P.05</b>	Sensor H05 polarity	-	0 - 1	0
<b>P.06</b>	Sensor H06 polarity	-	0 - 1	0
<b>P.07</b>	Sensor H07 polarity	-	0 - 1	0
<b>P.08</b>	Sensor H08 polarity	-	0 - 1	0
<b>P.09</b>	Sensor H09 polarity	-	0 - 1	0
<b>P.10</b>	Sensor H10 polarity	-	0 - 1	0
<b>P.11</b>	Sensor H11 polarity	-	0 - 1	0
<b>P.12</b>	Sensor H12 polarity	-	0 - 1	0
<b>P.13</b>	Sensor H13 polarity	-	0 - 1	0
<b>P.14</b>	Sensor H14 polarity	-	0 - 1	0
<b>P.15</b>	Sensor H15 polarity	-	0 - 1	0
<b>P.16</b>	Sensor H16 polarity	-	0 - 1	0
<b>P.17</b>	Sensor H17 polarity	-	0 - 1	0
<b>P.18</b>	Sensor H18 polarity	-	0 - 1	0
<b>P.19</b>	Sensor H19 polarity	-	0 - 1	0
<b>P.20</b>	Sensor H20 polarity	-	0 - 1	0
<b>P.21</b>	Sensor H21 polarity	-	0 - 1	0
<b>P.22</b>	Sensor H22 polarity	-	0 - 1	0
<b>P.23</b>	Sensor H23 polarity	-	0 - 1	0
<b>P.24</b>	Sensor H24 polarity	-	0 - 1	0
<b>P.25</b>	Sensor H25 polarity	-	0 - 1	0
<b>P.26</b>	Sensor H26 polarity	-	0 - 1	0
<b>P.27</b>	Sensor H27 polarity	-	0 - 1	0
<b>P.28</b>	Sensor H28 polarity	-	0 - 1	0
<b>P.29</b>	Sensor H29 polarity	-	0 - 1	0
<b>P.30</b>	Sensor H30 polarity	-	0 - 1	0
<b>P.31</b>	Sensor H31 polarity	-	0 - 1	0
<b>P.32</b>	Sensor H32 polarity	-	0 - 1	0
<b>P.33</b>	Sensor H33 polarity	-	0 - 1	0
<b>P.34</b>	Sensor H34 polarity	-	0 - 1	0
<b>P.35</b>	Sensor H35 polarity	-	0 - 1	0
<b>P.36</b>	Sensor H36 polarity	-	0 - 1	0
<b>P.37</b>	Sensor H37 polarity	-	0 - 1	0
<b>P.38</b>	Sensor H38 polarity	-	0 - 1	0

<b>P.39</b>	Sensor H39 polarity	-	0 - 1	0
<b>P.40</b>	Sensor H40 polarity	-	0 - 1	0
<b>P.41</b>	Sensor H41 polarity	-	0 - 1	0
<b>P.42</b>	Sensor H42 polarity	-	0 - 1	0
<b>P.43</b>	Sensor H43 polarity	-	0 - 1	0
<b>P.44</b>	Sensor H44 polarity	-	0 - 1	0
<b>P.45</b>	Sensor H45 polarity	-	0 - 1	0
<b>P.46</b>	Sensor H46 polarity	-	0 - 1	0
<b>P.47</b>	Sensor H47 polarity	-	0 - 1	0
<b>P.48</b>	Sensor H48 polarity	-	0 - 1	0
<b>System UTIL Functions</b>				
<b>PJS</b>	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	
<b>Pnt</b>	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	
<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>SUP</b>	Set ALL sensors to S4/SUPITA	Set all sensor to Supita/S4 mode	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>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>SLn</b>	Select LOWER note on keyboard.	This function select lower note number on accordion keyboard. Really this is master transpose of scanning of all accordion keyboard.	Press [+] or [-] to select lower note	
<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	Trigger Note with selected number! 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. Example: If on sensor is assigned function with number 60, this sensor is used to trigger note C with number 60.
Register position (sensor on valve position)	128	Register change bit 0
	129	Register change bit 1
	130	Register change bit 2
	131	Register change bit 3
	132	Register change bit 4
	133	Register change bit 5
	134	Register change bit 6
Register button scanning (one sensor for one register button)	135	Register change bit 7
	136	Register button 1
	137	Register button 2
	138	Register button 3
	139	Register button 4
	140	Register button 5
	141	Register button 6
	142	Register button 7
	143	Register button 8
	144	Register button 9
	145	Register button 10
	146	Register button 11
	147	Register button 12
	148	Register button 13
149	Register button 14	
Long central button	150	Register button 15
	151	Register button 16
Long central button	152	Central register button scanning (long button below keyboard). Exact function of this button is defined in EXTENDED SYSTEM PARAMETERS TABLE, Function F.33
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:**

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...