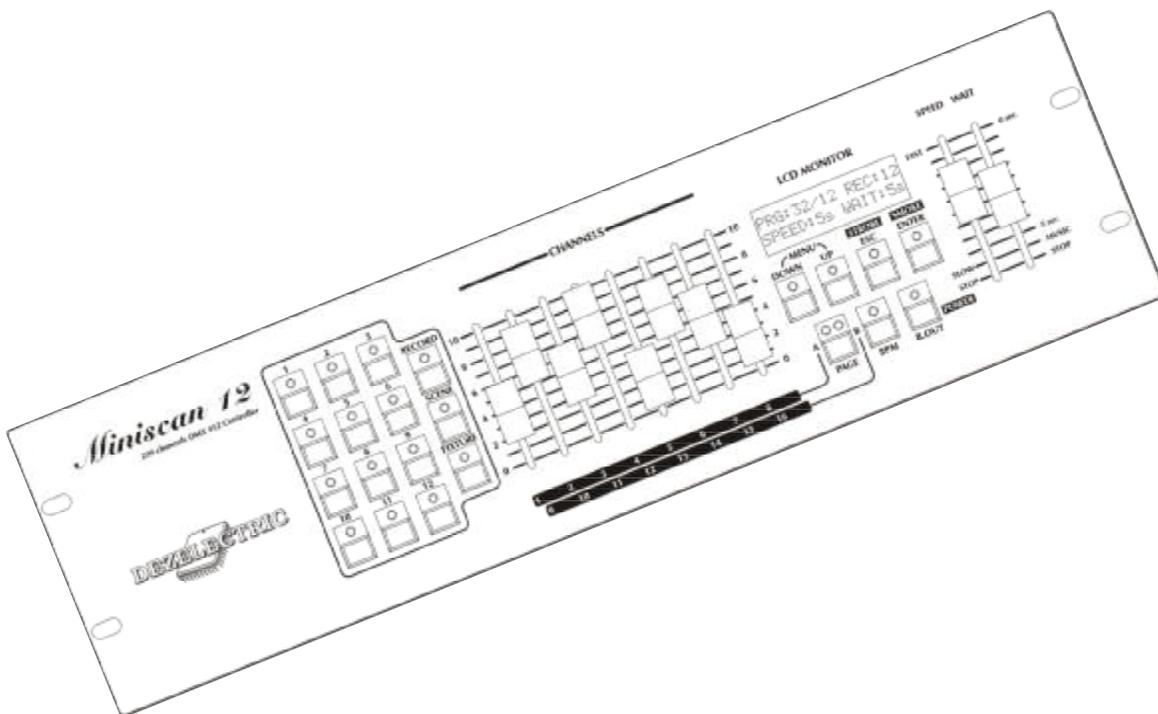




MINISCAN 12

DMX512 Controller

Operating Instructions



INTRODUCTION:

The controller suits to control 12 pc DMX-512 units of any type with maximum 16 channels respectively (scanner, moving head, stroboscope) and to control a smoke-machine with maximum 8 channels. The software of the controller can be upgraded through a serial port from the PC. **The controller can control the channels in 16bit soft mode!**

Reading through and operating the controller simultaneously are essential to handle the controller. If you have any question, please contact the manufacturer or dealer in e-mail. There you may report the contingent remarks experienced by you or proposals. We will answer your question in e-mail or load the software fixed by us to our home page, where you can download and install the fixed version, as the software of the controller can be upgraded free of charge. If you would like to be convinced that the software of your controller is updated, enter the menu, select the **SZOFTVER VERZIÓ** (software version) menu item. Entering, you can read the version number of the controller software and the date of placing on the market in the bottom line of the display. Compare the version number with the version number of the software found on the website of the manufacturer, and if necessary, upgrade the controller software by the help of those described in the chapter entitled as **SOFTWARE UPGRADE**.

INSTALLATION:

After connecting the power supply, LED of the B.OUT switch is flashing, marking the standby. After pressing the B.OUT button, the LEDs of the controller turn on, and the logging-in text can be seen on the display for some seconds, then the controller moves to automatic mode.



DEZELECTRIC
MINISCAN v.1.0

If the caption "SOFTWARE UPGRADE IS NECESSARY" can be read on the display after turning on, the controller can be used only after software upgrade.



SZOFTVER UPGRADE
IS NECESSARY

It may occur if the connection is cut off during the software upgrade or there is a power failure, so the upgrade is interrupted. **Shutting off the device:** if in any mode you keep the B.OUT pushbutton pressed for 3 sec, the device disconnects and gets into the so-called standby mode, which is marked with flashing by the LED of the pushbutton.

SOFTWARE UPGRADE:

Usage of the downloading software: ATTENTION! The software runs only with Windows operating systems.

Follow those described in the items listed below step by step to make the software upgrade:

1. Connect the controller and the computer with the suitable cable (cable type: Link cable DB9M/F), (port: COM1, COM2).
2. Connect the controller to the power supply.
3. Start the computer, download the upgrading software from the home page of the dealer or manufacturer (controller.exe) and the latest version of the controller (e.g.: Minisc12v10.dat).
4. Launch the software upgrading programme (controller.exe). After the first startup the controller offers the change of the most important settings:
 - a. Select a language, then click on the 'OK' button.
 - b. Select that port, to which you have connected the controller, the baud rate value means the speed of communication, it is worth setting it to be as large as it is possible (dependent on the computer), then click on the 'OK' button.
5. Click on the icon of connection (1st icon) or select the Settings/Connection menu item. The software starts connecting, the LEDs of the controller go out.
6. If the setting and the connection are settled, the data of the controller appear in the panel (type, etc.).
7. If the setting is not settled, the software warns you to check the connection, the accurate port setting, then try it again.
8. In case of proper connection click on the icon 'Opening the file' (2nd icon), find the file to be downloaded into the controller (e.g.: Minisc12v10.dat), then acknowledge the selection with the 'Select' button.
9. Click on the 'Download' icon or select the Setting/Start data downloading, downloading starts.
10. The state of downloading can be followed on the appearing process-marker, if it is finished, the caption 'Downloading is ready' appears, press the 'OK' button.

11. Click on the connection icon in the menu bar (1st icon) or select the Setting/Stop connection menu item, then clicking on the 'YES' button in the opening panel, terminate the connection, then the controller restarts automatically, the upgrade is finished.
12. If there is any error during the upgrading, eg. power failure, restart the controller disconnecting the power, and restart the upgrading software and repeat the transactions.

CONTROLLING THE UNITS:

The controller addresses the units automatically in 16s, the bit switches of the units should be set according to it.

Unit ordinal	Dmx address	Unit ordinal	Dmx address
1.	1	7.	97
2.	17	8.	113
3.	33	9.	129
4.	49	10.	145
5.	65	11.	161
6.	81	12.	177
Smoke-machine	193		

After turning on the controller gets into automatic mode. Press button 1, so you highlight the unit set to the dmx address 1. Move the 1. potentiometer, then the first channel of the unit 1 has to change according to the value of potentiometer. The first 8 channels of the unit can be set with potentiometers 1-8. Press the PAGE button, the 'B' LED illuminates with full intensity, you can reach the channels 9-16 of the unit with the potentiometers 1-8 now. If you manage to amend the channels of the units, then some other settings may be made so that the later work should be easier.

Settings to be executed:

- black out setting, see: 4. Chapter B.OUT SETTING
- soft setting, see: 3. Chapter SOFT SETTING
- strobo setting, see: 5. Chapter STROBE SETTING

After finishing the BLACK OUT, SOFT, and STROBE settings the programmes, records can be written, and each effect can be launched in automatic mode.

AUTOMATIC MODE:

After starting it, the controller gets into automatic mode.

```

PRG: 32/12 REC: 12
SPEED: 5 WAIT: 5

```

In the upper line after the PRG caption the number of the actually running programme can be read. At least one programme is running from 1-32 programmes all the time. After the REC caption the serial number of the record having been started last can be read. If '—' appears after the REC caption, it means that no record has been started.

In the bottom line the switching time of the channels set to soft type can be read: the soft channels get from one program picture to another during the set time. After the caption WAIT the actual latency can be seen: a program picture is invariant for this period, if this time is up, a new program picture is loaded.

Launching the programs:

The controller can store 32 programs altogether, which can be selected with the UP-DOWN buttons. After the selection of a program, its number flashes on the display for 2 sec, and if another program is not selected during this period, its flashing stops, and the program starts running. It is needed, because any other program can be selected after pressing the UP and DOWN buttons severally, while the 1st program is running. The speed of the moving mirror channels in the program can be set by the SPEED potentiometer, while the latency between the program pictures can be set with the WAIT potentiometer.

It is possible to stop the program and manually call the pictures of the just active program. Press the SCENE button, then its LED illuminates with full intensity, marking that program pictures can be selected with buttons 1-12 at that time. Among the LEDs of buttons 1-12 only that illuminates, with the serial number of which the program picture is written, and the LED is flashing with that serial number, which program picture has been loaded last.

Setting the program speed:

The switching time of the soft channels can be set with 0.2s step interval in 0.2s-5.0s range with the SPEED potentiometer. They reach their position from their actual value during this time reckoned from loading the new program picture.

Setting the program latency:

Switching time of the program pictures can be set with 0.2s step interval in 0.0s-5.0s range with the WAIT potentiometer. In a new program picture the next program picture loads within this time reckoned from stopping the soft channels.

Program STOP function:

Setting the SPEED and WAIT potentiometers to their lower value, caption STOP appears in the bottom line of the display, during this time switching of the program pictures stops, and the value of the channels does not change until the STOP function is terminated.

```
PRG: 32/12 REC: 12
      STOP
```

Program MUSIC function:

Setting the WAIT potentiometer on the MUSIC caption the MUSIC caption appears in the bottom line of the display flashing for 2 sec instead of the WAIT caption. When the time is up, the MUSIC function turns on and the program steps change according to the microphone bar. The MUSIC function can be switched off moving the WAIT potentiometer into higher range.

```
PRG: 32/12 REC: 12
      SPEED: 5 MUSIC
```

Program BPM function:

Switching of the program picture can happen according to manually set rhythm, this is the BPM. Pressing the BPM button its LED illuminates with full intensity, the flashing BPM caption appears in the right side of the bottom line of the display. Then the controller waits for the next pressing of the BMP button for 5mp. If during this period it is not pressed again, the BPM function switches off. If meanwhile the BPM button is pressed, the BPM text stops flashing, its LED starts flashing, the BPM mode becomes active. It means that the period between two pressings will be the switching time of the program picture. Pressing the button more than once rhythm of the music hearable at that time can be given, so switching of the program pictures follows the rhythm of the music. The BPM function can be turned off moving the WAIT potentiometer, then the value set by the WAIT potentiometer will be active.

```
PRG: 32/12 REC: 12
      SPEED: 5   BPM
```

Strobe function:

See information on the settings in chapter STROBE SETTING. The set strobo value can be written out to the marked strobo channels with pressing the STROBE button. Pressing the STROBE button, its LED starts flashing, the display writes out the STROBE BE caption for a short time. On the set strobo channels the set strobo value appears until the next pressing, then the strobo function swithes off.

If a channel is of strobe and black out types at the same time, then the black out overloads the strobo settings if the black out function is active.

```
PRG: 32/12 REC: 12
      STROBE ON
```

Black out function:

See information on the settings in chapter B.OUT SETTING. The set black out value can be written out on the marked black out channels pressing the B.OUT button. On the set black out channels 0 value appears until the next pressing, then the black out function switches off.

```
PRG: 32/12 REC: 12
      B. OUT ON
```

Smoke function:

With the help of this function controlling of the dmx smoke-machine is possible. The smoke machine shall be always addressed to the 192. dmx channel. In zero setting the controller transmits 0 value from the 192. channel to the 22. channel. When pressing the SMOKE button, it can be set on these eight channels with the 1-8 potentiometers what value it should transmit.

Press the SMOKE button and keep it pressed. Then its LED illuminates with full intensity and the caption “SMOKE AKTIVE” appears in the bottom line of the display for a short time. Now the value of the eight channels can be set with the 1-8 potentiometers. After unlocking the SMOKE button all the 8 channels will get 0 value again from the controller until the SMOKE button is pressed again. At every pressing the values set last will appear on the channels.



MANUAL CONTROLLING:

All the channels of the units can be changed manually, when the program is running further on other channel, then the manually overridden channels can be set back to program running.

Press the FIXTURE button, its LED will illuminate with full intensity marking that now units can be selected by the 1-12 buttons. The caption “UNITS (1-12)” will appear in the bottom line of the display. The LED of which is flashing among the LEDs of the 12 buttons, the unit with that serial number is selected at present. The units can be highlighted or terminated with 1-12 buttons.

With 1-8 potentiometers the 1-8 channels and the 9-16 channels of the units can be reached depending on the position of the PAGE button. If the left LED of the PAGE button illuminates with full intensity, then the 1-8 channels can be reached with the potentiometers, if its right LED illuminates with full intensity, then the 9-16 channels can be reached with the potentiometers. When moving a potentiometer, its current value can be read in the bottom line of the display.

Those channels of the selected units get to manual state, the potentiometer belonging to which is moved. If at least one channel is in manual mode, then the LED of the FIXTURE button marks it flashing. Resetting the channels in automatic mode is possible with pressing the FIXTURE button again, then its LED stops flashing and will illuminate with full intensity again.

LAUNCHING THE RECORDS:

It is possible to automatically turn off, start or stop a part of the functions of the controller at set times. For this 12 records are available, with 999 steps by records. Press the RECORD button, then its Led illuminates with full intensity marking that records can be selected with 1-12 buttons, on the display the caption “RECORDS (1-12)” appears.

Launching a record is possible with 1-12 buttons, always the serial number of the record launched last can be read after the REC caption in the upper line of the display. One record can be run at the same time, if we start one, if another one is just running, then that will switch off.

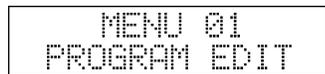
If you do not want to run a record, you can switch it off pressing the button relating to the just running record.



MENU:

The different settings can be reached from the menu. For this press down and keep the DOWN and UP buttons pressed simultaneously for 3 sec.

Menu items of the controller:



Writing, amending programmes (32program / 12program scene).



Writing, amending records (12 records/ 999record steps).



Setting the soft channels (mirror movement, max.192 channels).

```
MENU 04
B.OUT SETUP
```

Setting the black out channels

```
MENU 05
STROBE SETUP
```

Setting the strobo channels

```
MENU 06
DISPLAY CONTR.
```

Setting the contrast of the display

```
MENU 07
DISP. BACKLIGHT
```

Setting the background lighting of the display

```
MENU 08
LED LIGHTPOW.
```

Setting the full intensity or half intensity of the LEDs

```
MENU 09
WORKHOUR
```

Indicating the time in switched on state of the controller

```
MENU 10
LANGUAGE
```

Language selection, the texts appearing on the display are written out in this language

```
MENU 11
SOFTWARE VER.
```

Indicating the version number of the software running in the controller and the date of issue.

```
MENU 12
CONTROLLER DATA
```

Indicating the serial number of the controller and the manufacturing time

```
MENU 13
POTI NAMES
```

Survey and modify the slider names

You can navigate between the menu items with the UP-DOWN buttons, it enters the selected menu item pressing the ENTER button, pressing the ESC button the controller returns to the automatic mode.

1. PROGRAM WRITING:

Writing and amending the programs are possible in the 1st menu item. Select the 1st menu item with the DOWN-UP buttons and press the ENTER button.

```
SELECT
PROGRAM: 01
```

The flashing number in the bottom line of the display means the selected program. Select the program to be written with the DOWN-UP buttons, then press ENTER. You can return to the menu pressing the ESC button.

```
PRG: 01/01
SPEED: --- WAIT: ---
```

Entering the upper line of the display, the serial number of the selected program and the actual picture number can be seen. In the bottom line the speed relating to the program and the latency are found. If there “- -” can be seen, then no SPEED or WAIT value are ordered to this programme at present.

The channels of the units can be amended according to those described in the chapter of manual controlling, so after pressing the FIXTURE button the units can be selected with 1-12 buttons, it can be selected with the PAGE button that we should reach the 1-8 and 9-16 channels of the selected units with the 1-8 potentiometers.

If you have set a picture, press the ENTER button, then the "PICTURE SAVING" text appears on the display for a short time, the picture number increases with one in the upper line. So the temporary storage of the first picture has been made, then the next picture can be written. The channels of this unit are standing according to the previous saved state. Continue constructing the pictures and saving them so many times as many program pictures you would like to attach one after another, a program may contain maximum 12 pictures.

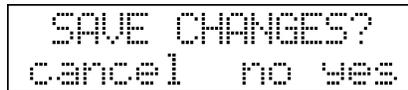
It is possible to view the written pictures before you save the program. Press the SCENE button, then its LED illuminates with full intensity, marking that program pictures can be selected with the 1-12 buttons. Now the program pictures can be shown in any order with 1-12 buttons.

It may occur that we would like to copy a program picture inside the program. Then select that picture you would like to copy with 1-12 buttons in scene mode, then select the picture with that serial number you would like to copy into with the DOWN-UP buttons. Press the ENTER button, and the picture is saved to the selected place.

It is possible to save a SPEED and WAIT values for each program. It means that if we set any WAIT or SPEED value, then the actual SPEED or WAIT value is overwritten with the value having been set here in automatic mode in case of launching the program.

Simply the wanted value can be set with moving the SPEED and Wait potentiometers, either both or only one. If you do not want to save the values, then the set values can be deleted pressing the B.OUT button.

If the written program is finished, you have to pay attention to that it will run in so many steps as the SERIAL NUMBER OF THE LAST SAVED PICTURE was, so if we copied pictures or did not modify the last one for the last time, then select the program picture wanted to be the last with the 1-12 buttons in scene mode, then press the ENTER. Now you may log off from program writing with the ESC button.



```
SAVE CHANGES?  
cancel no yes
```

If there has not been any modification, the controller returns to the menu, in other cases caption "SAVE THE CHANGES?" appears in the upper line, while in the bottom line the "still not no yes" text. If you do not want to log off from program writing, press the DOWN button, the controller goes back to writing, you may continue the setting. If you do not want to save the amendments and log off from the writing, press the ESC button. If you want to save the amendments and log off from the writing, press the ENTER button.

2. RECORD WRITING:

Writing and modifying records are possible in the 2nd menu item. Select the 2nd menu item with the DOWN-UP buttons, and press the ENTER button.



```
SELECT  
RECORD:01
```

The flashing number in the bottom line of the display means the selected record. Select the record to be written with the DOWN-UP buttons, then press ENTER. You can return to the menu pressing the ESC button.



```
RECORD:01/001  
PROGRAM:--/--
```

In the upper line of the display the serial number of the selected record and its actual step number can be read. The step number is flashing, marking that this value can be set with the DOWN-UP and SPEED potentiometer at present. In case of writing a new record stay on the step 001, then press the ENTER button to go further.

Now the left side of the bottom line of the display is flashing. There you can select all the events, the parameters of which you would like to set in this record. The first event is the program, then the events can be selected one after the other with the DOWN-UP buttons: program, wait, strobe, time. Pressing the ENTER you may go further to write the parameters of the selected event, or pressing the ESC you can return to select the record step selection. Now let us take the events to be selected one by one:

Program event:

```
RECORD: 01/001
PROGRAM: --/--
```

Select the PROGRAM caption with the DOWN-UP button, then press the ENTER button. The data before the diagonal will flash, marking that you can select a program with the DOWN-UP buttons or the SPEED potentiometer, that is you may provide which program should start in this step of the record. If you do not want to start a program in this step of the record, press the B.OUT button and the program number will be deleted. If you would like call only one picture of one program in this record step, then press the ENTER button and now select the wanted picture with the help of the DOWN-UP buttons or the SPEED potentiometer.

So if there is no selected program, no program will start in this record step, if only a program is selected, but a program picture is not, the selected program will start, if a program picture is also selected, then only that picture will appear on the output.

You may get back to the event selection pressing the ENTER button further or with the ESC button.

Speed event:

```
RECORD: 01/001
SPEED: --
```

Select the SPEED caption with the DOWN-UP button, then press the ENTER button. The data after the colon will be flashing, marking that now a SPEED value can be set with the help of the DOWN-UP or the SPEED potentiometer. It means that the speed of the running programme will modify to this value in this record step. If you do not want that this record step modifies the program speed, the set value can be deleted pressing the B.OUT button.

Pressing the ENTER button further or with the ESC button you may go back to the event selection.

Wait event:

```
RECORD: 01/001
WAIT: --
```

Select the WAIT caption with the DOWN-UP button, then press the ENTER button. The data after the colon will be flashing, marking that now a WAIT value can be set with the help of the DOWN-UP or the SPEED potentiometer. This means that the latency of the running program pictures will modify to this value in this record step. If you do not want the record step to modify the latency of the program pictures, the set value can be deleted pressing the B.OUT button.

You may get back to the event selection pressing the ENTER button further or with the ESC button.

Strobe event:

```
RECORD: 01/001
STROBE: ----
```

Select the STROBE caption with the DOWN-UP button, then press the ENTER button. Flashing of the data after the colon means that state of the strobe mode can be set in this record step. It can be turned on or off. The state can be set with the DOWN-UP buttons. If you would not like this record step to change the stobo state, you may delete it pressing the B.OUT button.

You may get back to the event selection pressing the ENTER button further or with the ESC button.

Smoke event:

```
RECORD: 01/001
SMOKE: ----
```

Select the SMOKE caption with the DOWN-UP button, then press the ENTER button. Flashing of the data after the colon means that the state of the smoke mode can be set now in this record step. It can be turned on or off. The state can be set with the DOWN-UP buttons. If you would not like the record step to change the smoke state, it can be deleted pressing the B.OUT button.

You may get back to the event selection pressing the ENTER button further or with the ESC button.

Time event:

```
RECORD: 01/001
TIME: 001
```

Select the TIME caption with the DOWN-UP button, then press the ENTER button. This time means that the next step may come after the record step after this time, or the first step after the last one. Set the desired time with the help of the DOWN-UP buttons or the SPEED potentiometer. It can be a value between 1s and 999s with a step interval of 1s. You may get back to the event selection pressing the ENTER button further or with the ESC button.

After setting the events press the ESC button until the number of record steps starts flashing. Pressing the UP button go to the next step, and you can write this record step as well in the described way. If you do not want to write more record steps, go to that record step, which you would like to be the last one, and press the ESC button.

```
SAVE CHANGES?
cancel no yes
```

If no modification has been made, the controller goes back to the menu, in other cases the caption “SAVE THE CHANGES?” appears in the upper line, while in the bottom line the “still not no yes” text. If you do not want to step out from the record writing, press the DOWN button, the controller goes back to the writing, and you may continue the settings. If you would not like to save the modifications, but you want to go out from the writing, press the ESC button. If you would like to save the modifications and log off from the writing, press the ENTER button.

3. SOFT SETTING:

The soft channels can be set in the 3rd menu item. Select the 3rd menu item with the DOWN-UP buttons, and press the ENTER button.

It is possible that a value of a channel should not appear on the output immediately after a switch of the program pictures, but it should reach it continuously within the time set by the SPEED potentiometer. This setting is particularly important when controlling a mirror units or those with rotating heads. In such cases it is worth setting the PAN and TILT channels of the units to soft. It is worth utilizing the possibility that any channel of a unit – simultaneously either more or all – can be soft. In case of setting an IRIS, ZOOM or DIMMER channel to soft special effects can be reached.

```
MENU 03
SOFT SETUP -> ENTER -> SOFT UNIT: --
SELECT UNIT
```

In the left of the upper line a flashing SOFT caption marks that you are in SOFT setting. In the right side after the UNIT caption the number of the unit selected last appears (1-12), or if no unit is selected, then two horizontal lines, and in the bottom line the UNIT SELECTION caption is flashing. You can select a unit with the 1-12 buttons.

If at least 1 unit is selected, in the bottom line the SOFT settings of the unit can be seen by channels. The channels has four different states: normal, soft 8bit, soft 16bit, soft fine. Move the slider under 50%, and the channel will be normal, so it hasn't got soft effect. Move the slider over 50%, and the channel will be soft 8bit channel. If you want to control 16 soft channels, then you should press BPM button, and now you have to change the poti which you like to control as fine channel. On the display you can see always the actual settings. Between the brackets you can read the pair of the 16bit soft channels.

Example to set a 16bit moving head install (PAN, PAN-FINE, TILT, TILT-FINE):

- move slider 1 to max value (this channel will be soft)
- press and hold pressed the BPM button, and change the slider 2 (now will channel 1 to soft 16bit, and channel 2 soft fine).
- move slider 3 to max value (this channel will be soft)
- press and hold pressed the BPM button, and change the slider 4 (now will channel 3 to soft 16bit, and channel 4 soft fine).

At most 96 channel can be soft channel, but all can be 16 bit!

Soft state of a unit can be set moving the potentiometer, in a 0-50% standstill the indications cease, in 51-100% standstill it turns on. It can be adjusted by the PAGE pushbutton if 1-8 or 9-16 channels of the selected units can be reached with the 8 potentiometers. **If a channel is of strobo type, it does not work in soft mode!**

If you have completed the settings, press the ESC button.

```
SAVE CHANGES?  
cancel no yes
```

If no modification has been made, the controller goes back to the menu, in other cases the “SAVE THE CHANGES?” caption appears in the upper line, while in the bottom line the “still not no yes” text. If you do not want to log off from the SOFT setting, press the DOWN button, the controller goes back to the writing, you may continue the settings. If you do not want to save the modifications, but want to log off from the writing, press the ESC button. If you would like to save the modifications and log off from the writing, press the ENTER button.

4. B.OUT SETTING:

The black out channels can be set in the 4th menu item. Select the 4th menu item with the DOWN-UP buttons and press the ENTER button.

In automatic mode the connected units close the way of light when pressing the B.OUT button, so until it is not pressed again, no light comes out from the units. It is varying by types which channel of a unit is suitable to block the way of light. It can be adjusted on the MINISCAN 12 controller which channels should be of BLACK OUT type, which gets 0 value from the controller in BLACK OUT mode. However, it is worth setting the channel to BLACK OUT type, which can be fulfil this task, this is generally the SHUTTER channel. In case of controlling the dimmer it is possible to set all of its channels to BLACK OUT type.

```
MENU 04  
B.OUT SETUP
```

 -> ENTER ->

```
B.OUT UNIT: ---  
SELECT UNIT
```

In the left side of the upper line a flashing B.OUT caption marks that you are in BLACK OUT setting. In the right side after the UNIT caption number of the unit selected last appears (1-12), or if there is no selected unit, then two horizontal lines, and in the bottom line the “UNIT SELECTION” caption is flashing. You can select a unit with the 1-12 buttons.

If at least one unit is selected, then the BLACK OUT settings of the unit can be seen by channels in the bottom line. Each character represents one channel. The ‘-’ means that the channel with the given serial number is not BLACK OUT, if a star can be seen, it is. Simultaneously more units can be selected with the 1-12 buttons, then you can set the channels simultaneously.

```
B.OUT UNIT: 01  
-----*-----
```

Moving a potentiometer the channel relating to it will be of BLACK OUT type, while the selection terminates on its other channels of such type. Remember that the 9-16 channels of the units can be reached in ‘B’ position of the PAGE button. Pressing the B.OUT button all channels of the selected unit will be of BLACK OUT type.

If you control more units, of which the shutter is a channel with different serial number, then at first select one of them, set its suitable channel to BLACK OUT type, then press the button suitable for the serial number of the unit, and select the next unit, etc. If you have completed the settings, press the ESC button.

```
SAVE CHANGES?  
cancel no yes
```

If no modification has been made, then the controller goes back to the menu, in other cases the caption “SAVE THE CHANGES?” appears in the upper line, while in the bottom line the “still not no yes” text. If you do not want to log off from the BLACK OUT setting, press the DOWN button, the controller goes back to the writing, you may continue the settings. If you do not want to save the modifications, but want to log off from the writing, press the ESC button. If you would like to save the modifications and log off the writing, press the ENTER button.

5. STROBE SETTING:

The strobo channels can be set in the 5th menu item. Select the 5th menu item with the DOWN-UP buttons, and press the ENTER button.

It is possible that a preset value could appear on any channel of all controlled units pressing the STROBE button until the STROBE button is pressed again. Generally it is worth selecting the shutter channel of the units for this purpose or giving such a channel value, at which the channel is strobing. These settings can be adjusted in the menu item of strobe settings.



In the left side of the upper line the flashing STROB caption marks that you are in strobe setting. In the right side after the UNIT caption the number of the unit selected last appears (1-12), or if there is no selected unit, then two horizontal lines. In the bottom line the CH means the channel number, the VALUE means the set value of the selected channel. The “- -“ can be seen, when the channel of the selected unit (units) with displayed serial number is not of strobo type.

Select a unit with the 1-12 buttons, with the DOWN-UP buttons find the channel with that serial number, which you would like to set to strobo type, and move that poti, with the serial number of which you would like to set to strobo type. It can be set with the PAGE pushbutton that 1-8 or 9-16 channels of the selected units can be reached with the 8 potentiometer. The channel can be set to strobe type with a relating poti, with its further setting the active value can be set, which gets to output when pressing the STROBE button in automatic mode. Pressing the B.OUT button the strobo-typed setting of the selected channel of the selected units can be terminated. **If a channel is of strobo typed, it does not work in soft mode!**



If no modification has been made, then the controller goes back to the menu, in other cases the caption “SAVE THE CHANGES?” appears in the upper line, while in the bottom line the “still not no yes” text. If you do not want to log off from the STROBE setting, press the DOWN button, the controller goes back to the writing, you may continue the settings. If you would not like to save the modifications, but would like to log off from the writing, press the ESC button. If you would like to save the modifications and log off from the writing, press the ENTER button.

6. DISPLAY CONTRAST SETTING:

The display contrast can be set in the 6th menu item. Select the 6th menu item with the DOWN-UP buttons, and press the ENTER button.



The display contrast may deviate under different temperature conditions, the ideal value can always be set in this menu item with the DOWN-UP buttons and the SPEED potentiometer so that the texts of the display could be always seen the most perfectly.

If you have completed the settings, press the ESC button. If no modification has been made, the controller goes back to the menu, in other cases the caption “SAVE THE CHANGES” appears in the upper line, while in the bottom line the “still not no yes” text. If you do not want to log off from the setting, press the DOWN button, the controller goes back to the writing, you may continue the setting. If you would not like to save the modifications, but would like to log off from the writing, press the ESC button. If you would like to save the modifications and log off from the writing, press the ENTER button.

7. SETTING OF THE DISPLAY BACKGROUND LIGHTING:

The display contrast can be set in the 7th menu item. Select the 7th menu item with the DOWN-UP buttons, press the ENTER button.



Intensity of the display background lighting can be set with the DOWN-UP buttons or the SPEED potentiometer.

If you have completed the settings, press the ESC button. If no modification has been made, the controller goes back to the menu, in other cases the caption “SAVE THE CHANGES” appears in the upper line, while in the bottom line the “still not no yes” text. If you do not want to log off from the setting, press the DOWN button, the controller goes back to the writing, you may continue the settings. If you would not like to save the modifications, but would like to log off from the writing, press the ESC button. If you would like to save the modifications and log off from the writing, press the ENTER button.

8. LED INTENSITY SETTING:

The intensity of the LEDs can be set in the 8th menu item. Select the 8th menu item with the DOWN-UP buttons, and press the ENTER button.



During the operation of the controller the LEDS may have four kinds of states. If a LED does not illuminate, then the button relating to it does not have any part in the actual setting. If a LED illuminates with little intensity (so-called half intensity), with full intensity or flashes, then the button relating to it has a function, perhaps turned-on state. In this menu item the values of the half intensity and full intensity can be set.

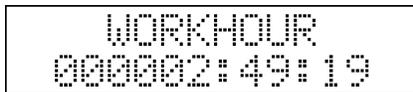
With the SPEED potentiometer the full intensity can be adjusted, the actual full intensity can be found on the LEDs of the PAGE, BPM and B.OUT buttons.

With the WAIT potentiometer the half intensity can be set, the actual half intensity can be found on the LEDs of the DOWN, UP and ESC buttons.

If you have completed the settings, press the ESC button. If no modification has been made, then the controller goes back to the menu, in other cases the caption "SAVE THE CHANGES?" appears in the upper line, while in the bottom line the "still not no yes" text. If you do not want to log off from the setting, press the DOWN button, the controller goes back to the writing, you may continue the settings. If you would not like to save the modifications, but would like to log off from the writing, press the ESC button. If you would like to save the changes and log off from the writing, press the ENTER button.

9. WORKING TIME INDICATION:

The working time can be indicated in the 9th menu item. Select the 9th menu item with the DOWN-UP buttons, and press the ENTER button.



In this menu item all the time spent working by the controller can be seen with accuracy of seconds.

You can log off with pressing the ESC button.

10. LANGUAGE SELECTION:

The language can be selected in the 10th menu item. Select the 10th menu item with the DOWN-UP buttons, and press the ENTER button.



The controller is able to write its texts on the display in several languages, in this menu item the desired language can be selected with the DOWN-UP buttons.

If you have completed the settings, press the ESC button. If no modification has been made, the controller goes back to the menu, in other case the caption "SAVE THE CHANGES?" appears in the upper line, while in the bottom line the "still not no yes" text. If you do not want to log off from the setting, press the DOWN button, the controller goes back to the writing, you may continue the settings. If you would not like to save the modifications, but would like to log off from the writing, press the ESC button. If you would like to save the modifications and log off from the writing, then press the ENTER button.

11. SOFTWARE VERSION DISPLAY:

The software version number can be indicated in the 11th menu item. Select the 11th menu item with the DOWN-UP buttons, and press the ENTER button.



In the bottom line the version number of the software running in the controller can be read, compare it with the version number of the software in the home page of the manufacturer or dealer, and if you find a higher one on the home page, you can upgrade your controller. The date means the date of software issue.

You can log off with pressing the ESC button.

12. INDICATION OF THE CONTROLLER DATA:

The controller data can be indicated in the 12th menu item. Select the 12th menu item with the DOWN-UP buttons, and press the ENTER button.

```
CONTROLLER DATA
00001 2003.06.16
```

In the bottom line the serial number of the controller and its manufacturing time can be read. You can log off with pressing the ESC button.

13. RENAME SLIDER NAMES:

The name of the channels can be configured in the 13th menu item. Select the 13th menu item with the DOWN-UP buttons, and press the ENTER button.

```
MENU 13          POT1 NAMES
POT1 NAMES      01 POT1
```

With UP and DOWN button you can select the channels, and you can read the name of the channels on the bottom line of the display. If you want to modify a name, press ENTER.

```
POT1 NAME MODIFY
01 POT1
```

The first character will be blinking, and you can change its value with the SPEED slider. The slider 1 helps to select the great letters, and the slider 2 helps to select the small letters. With the UP and DOWN buttons you can select other characters. If you are ready with the modification, press ESC.

```
SAVE CHANGES?
cancel no yes
```

If no modification has been made, then the controller goes back to the menu, in other cases the caption “SAVE THE CHANGES?” appears in the upper line, while in the bottom line the “still not no yes” text. If you do not want to escape from the setting, press the DOWN button, the controller goes back to the writing, you may continue the settings. If you would not like to save the modifications, but would like to escape from the writing, press the ESC button. If you would like to save the modifications and escape from the writing, press the ENTER button.

Technical data:

- devices to be operated: 12 pc any dmx units + 1 pc dmx smoke-machine
- channel capacity: 12 units x 16 channels, + 8 smoke-machine channels
- number of the floatable channels: 96soft + 96 soft fine
- channel number of a scanner is max. 16
- number of record is max. 12
- number of record steps is max. 999
- period of the record steps can be set from 1 sec to 999 sec in steps of 1 sec
- number of the programs is max. 32
- number of the program pictures is max. 32/program
- mirror or head moving time can be set from 0.2 sec to 5 sec in steps of 0.2 sec
- latency of the program pictures can be set from 0.0 sec to 5 sec in steps of 0.2 sec
- movement tracking adjustable with a pushbutton 12 – 200 BPM

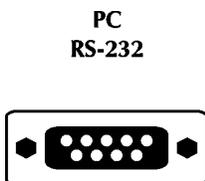
Connectors and their linking:



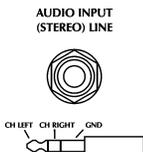
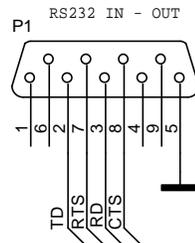
DMX connector: For scanners, movingheads, dimmers and smoke-machines



Power supply: The controller can be operated from a power supply of AC and DC types, therefore the linking is not sensitive to polarity. The controller should be operated only from such a power supply, which is of 12 voltage and can be loaded with at least 500mA.



PC RS232 connector: SubD9
Cable to be used: LINK CABLE DB9 M/F



AUDIO INPUT (STEREO LINE) connector: 6,3mm jack

Dimensions and weight:

- Width: 483mm, 19"; Height: 132mm 4HE; Depth: 83mm
- Weight of the controller: 3,3kg
- Weight of the power supply: 0,6 kg
- Gross weight: 4,5kg

Accessories:

- 1pc 230V/12V AC/DC or AC power supply
- 1pc operating instruction

