DMX Merger

Instruction Manual

Models:

DXD-DIN

version since 3 November 2025

ATTENTION!

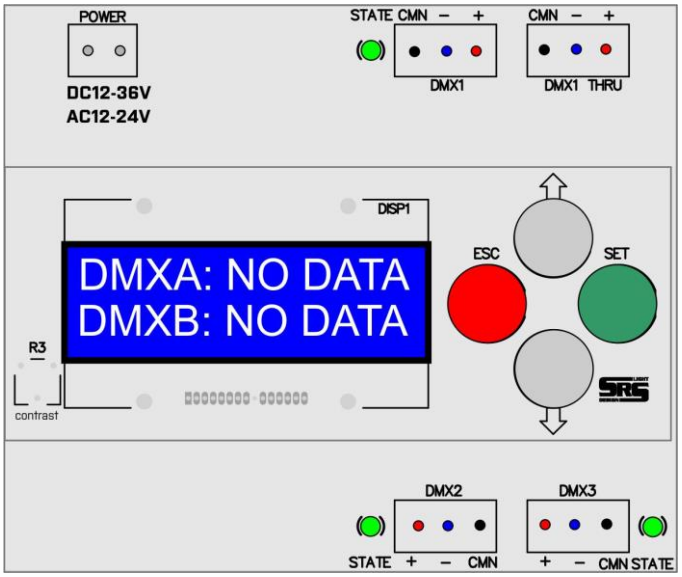
This instruction manual contains important information about the installation and the use of the equipment. Please read and follow these instructions carefully.

Always ensure that the power to the equipment is disconnected before opening the equipment or commencing any maintenance work.

DXD-DIN_en_manual_M107

DXD-DIN DMX Merger

DXD-DIN is a two-input DMX merger with HTP / LTP / DMX-A backup or DMX-B backup modes. It is ideal for applications where merging of two DMX signals is needed. Examples of usage are two DMX consoles controlling one dimmer system or controlling of house light. Unit is equipped with a USB update thru SRS Update cable for later software updates according to customer's needs.



- **2x DMX512 optically isolated input**
- **1x DXM512 optically isolated output**
- **DATA presence indication**
- **Wide range of power supply**
- **MODES**
  - **HTP – Higher takes presence**
  - **LTP – Last takes presence**
  - **DMX-A backup by DMX-B**
  - **DMX-B backup by DMX-A**
- **Easy to setup**
- **12x2 display**
- **4 buttons**

DMX input/output
USITT DMX 512 (1990)

Power supply:
DC 12-36V, 160mA
AC 12-24V, 160mA

DMX IN / DMX OUT connector

Pin 1	Data CMN
Pin 2	Data -
Pin 3	Data +

DMX state LED:
GREEN: Both lines are alive.
RED: DMX is not connected or only one data wire is connected.
ORANGE: Short circuit in between D+ or D- and CMN signal.

Temperature of use
-20...+60°C

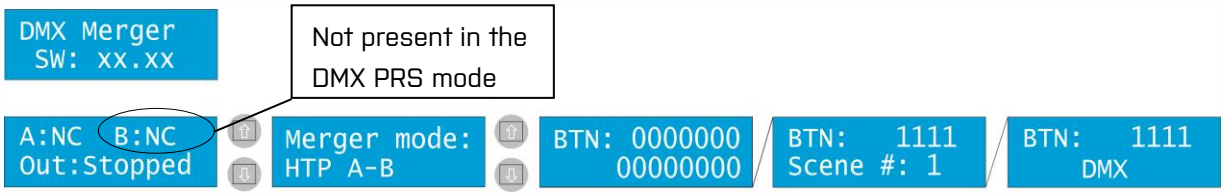
Housing
Plastic DIN box, 6 unit, 106x90x73mm

Weight
0.32 kg

Device use:

Device is controlled by 4 buttons: UP/DOWN/ESC/SET

After the device is plugged in, home screen with the product type and SW version appears. The home screen is automatically replaced by the stand-by screen displayed below. The stand-by screen consists of several pages that can be seen by the press of UP/DOWN buttons.



Channels A/B:
NC: Not connected
OK: Correct DMX signal
ERR: Error on the DMX
RDM: RDM communication in progress

Output options:
Stopped / DATA / unknown / Scene / Preset / RDM / to 0% / to 100% / A HTP B / 0

Selected merger mode:
HTP A-B
LTP A-B
BKP B>A
BKP A>B
DMX PRS
DMX SFX

This screen appears in LATCH mode.

Information about active buttons BTN:
0: not active
1: active

Positions:
Bottom right representing button #1, from the right to the left bottom and then top line incrementing by 1

These screens appear in FLASH mode.

Information about active buttons on the input BTN:
0: not active
1: active

Bottom row show the active scene number.

No scenes are active. DMX goes directly from input to output.

NAVIGATION IN THE MENU:
Press SET to enter the menu.
In the menu, there are several options to choose from:

1. **Merger mode**
2. **Display**
3. **DMX settings**
4. **OC output**
5. **Buttons**
6. **Factory reset**

Press "SET" to enter the submenu.
Press "ESC" to escape from the submenu or to return to previous level of the menu.
Use buttons and the arrow keys to proceed with the required function according to the schematics below.

Objects in yellow color indicate blinking and the position of the cursor.

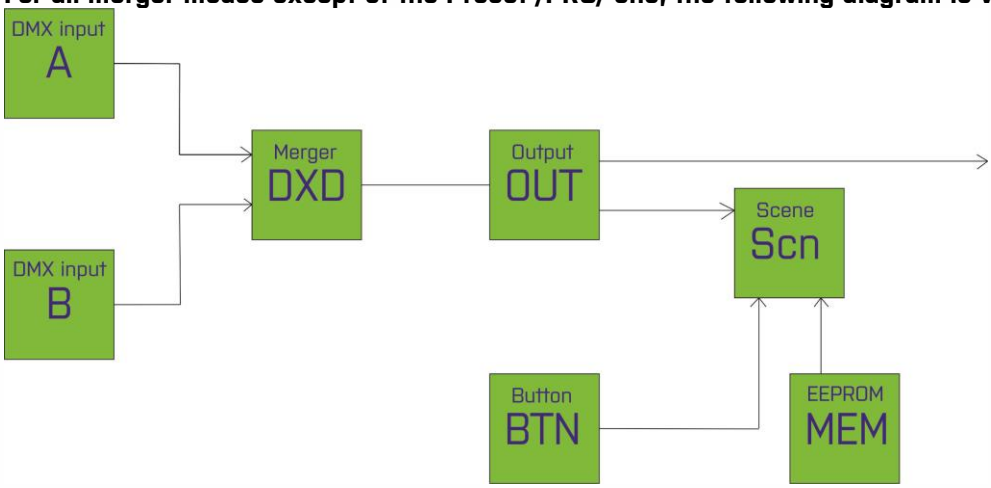
To confirm each setting, scroll down to "OK" and press "SET".

1. Merger mode

This submenu allows you to set the desired merger mode.
There are several modes of merging. One of the following modes can be chosen:

- **HTP A-B** Higher takes presence.
- **LTP A-B** Last takes presence.
- **BKP B>A** Backup by DMX B in case of signal loss on DMX A.
- **BKP A>B** Backup by DMX A in case of signal loss on DMX B.
- **DMX PRS** DMX preset function /More info below/.
- **DMX SFX** DMX safety function /More info in the SFX setup/.

For all merger modes except of the Preset /PRS/ one, the following diagram is valid:



DMX PRS /DMX preset/ is a function that allows its user to save and call scenes directly from a console using channels 1 to 16. The console is connected to the DXD device using the DMX INPUT B. Faders on channels 1 to 16 respectively, serve as controllers of the preset output intensity. Activating channel 17, the DXD unit ignores the DMX A input. Channel 18 is used to save the individual presets.

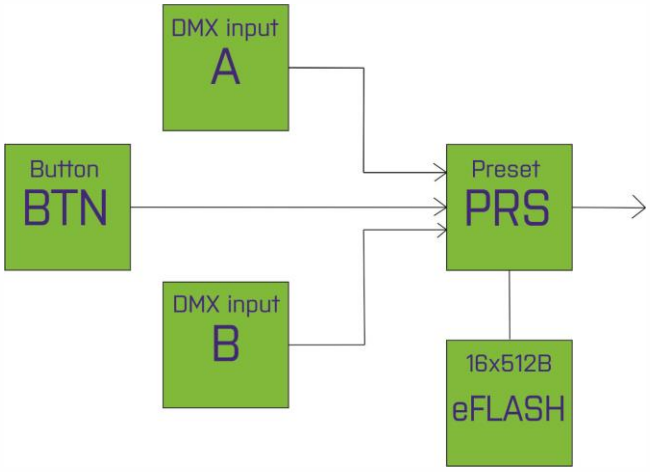
The DMX preset can also be controlled using an additional equipment of the DXD device. In this case, the presets are called using a single press of a corresponding button. They are saved when the button is held for more than 5 seconds.

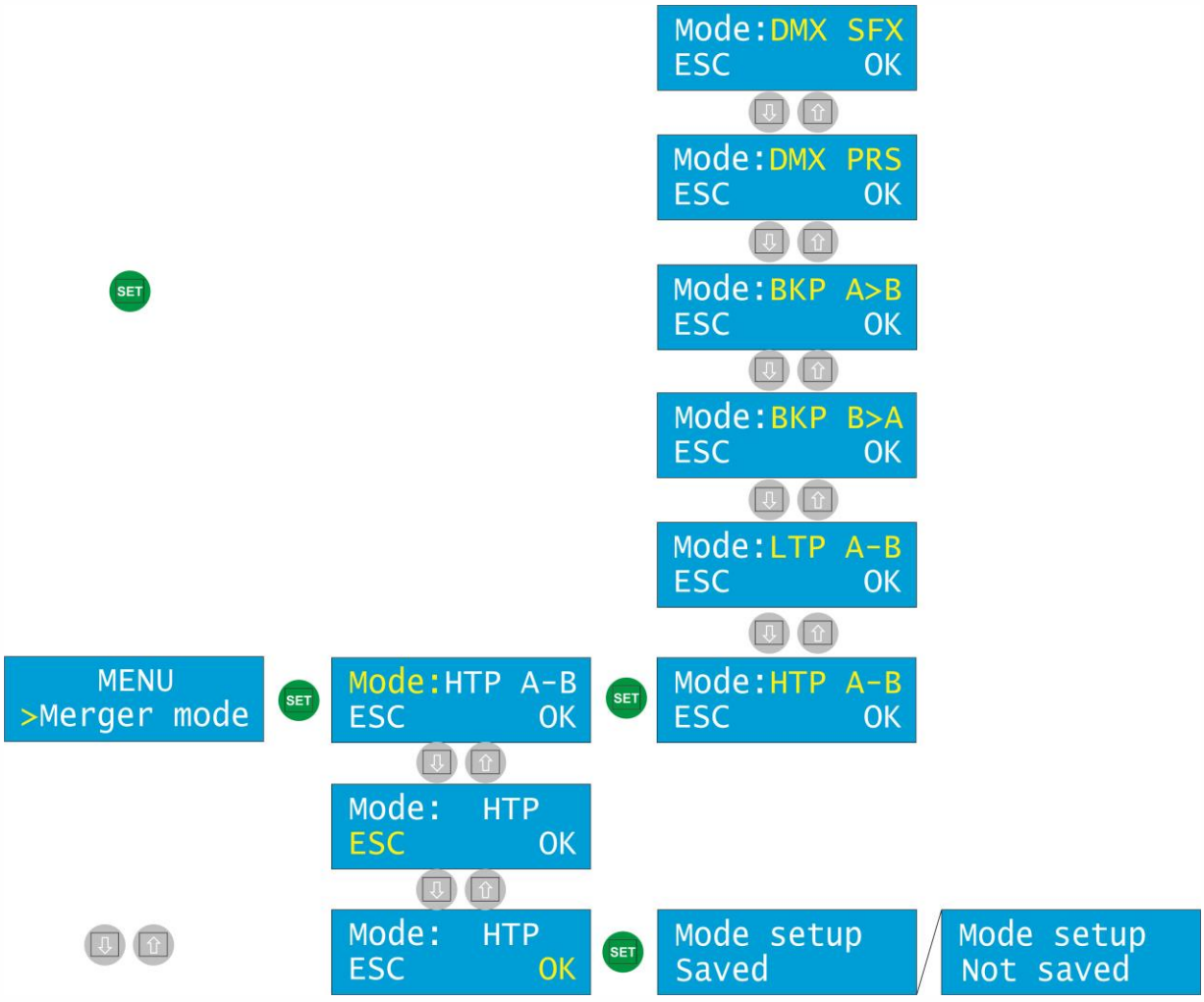
The following screen with the corresponding Preset number appears after the preset is saved:



and the device shows their values in the home screen.

The following diagram is valid for the PRS Preset mode:





Press "SET" to enter the *Merger mode*. Press "SET" again to adjust the merger mode. Use the arrow keys to reach the desired option and confirm by "SET". Scroll down to "OK" and press "SET" to save the settings.

2. Display

This submenu allows you to set the *Sleep* function and the intensity of the *Backlight*.

Press "SET" to enter the *Display*. Use the arrow keys to choose between the *Sleep* and *Backlight* setting and confirm by "SET".

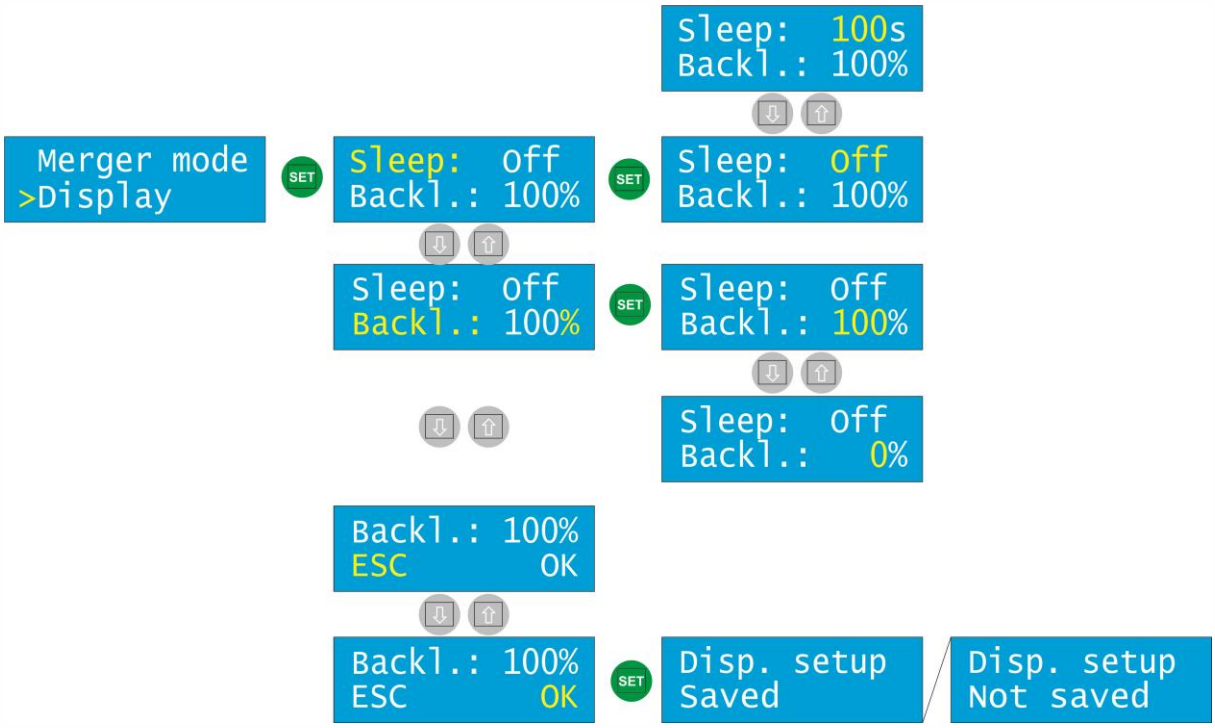
Sleep: Sets the time of inactivity (in seconds) after the device goes into sleep mode (display is off).

Off: Sleep mode disabled
Adjustable range: 5s-100s
Press any key to wake up.

Backlight: Sets the intensity of display light.

Adjustable range: 0-100%

Use the arrow keys to choose the desired value and confirm by "SET". Scroll down to "OK" and press "SET" to save the settings.



3. DMX settings

This submenu allows you to set several values of the DMX.



Press "SET" to enter the *DMX sett*.
In this submenu, there are several options to choose from:

a. **Loss of DMX**
b. **SFX setup**
c. **PRS Lock**
d. **Start address**
e. **Scene 1**

f. **Scene 2**

...

g. **Scene 8**

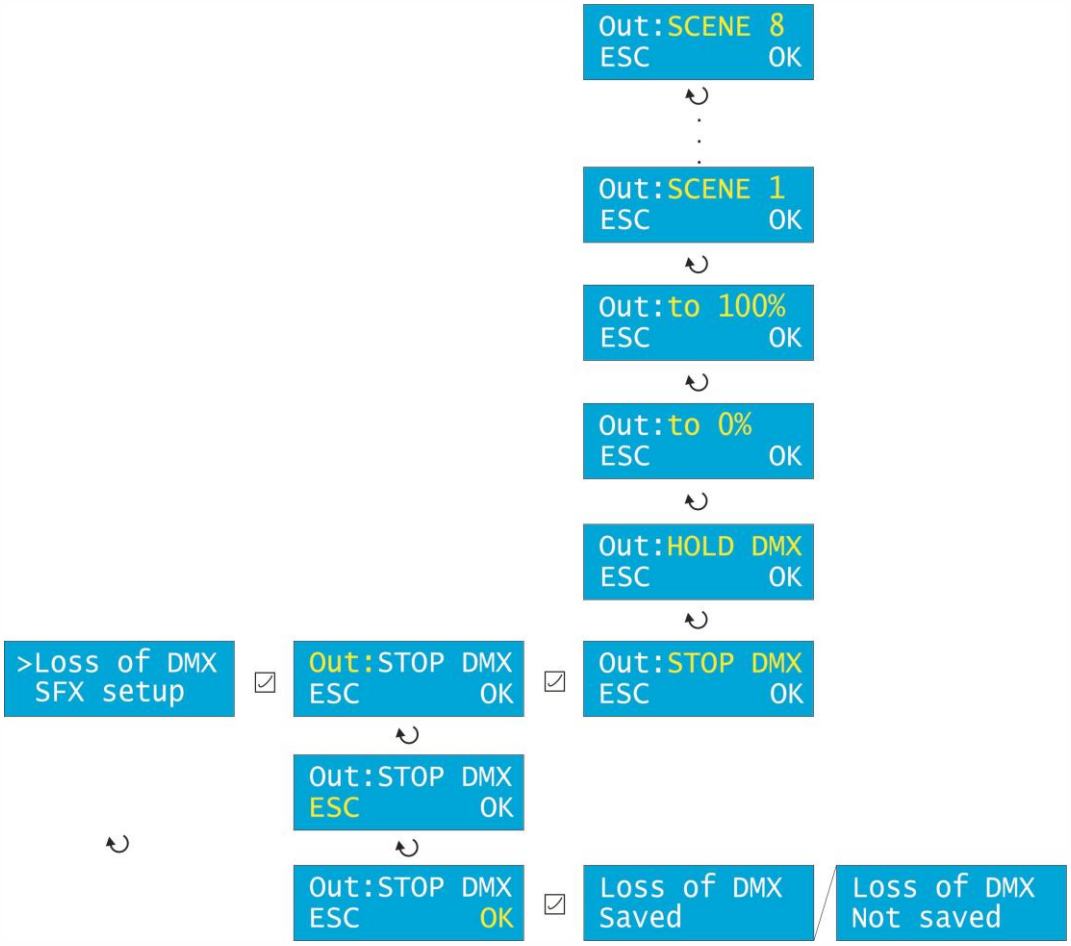
Use the arrow keys to navigate in the submenu. Press "SET" to enter the submenu.

a. Loss of DMX

This submenu allows you to set an action that is executed in case the DMX signal is lost. There are several options to choose from:

- **STOP** There is no DMX transmission on the output.
- **HOLD** Transmits last DMX data.
- **to 0%** Transmits DMX with values 0.
- **to 100%** Transmits DMX with values 255.
- **SCENE 1-8** Calls the preset scene that is being transmitted.

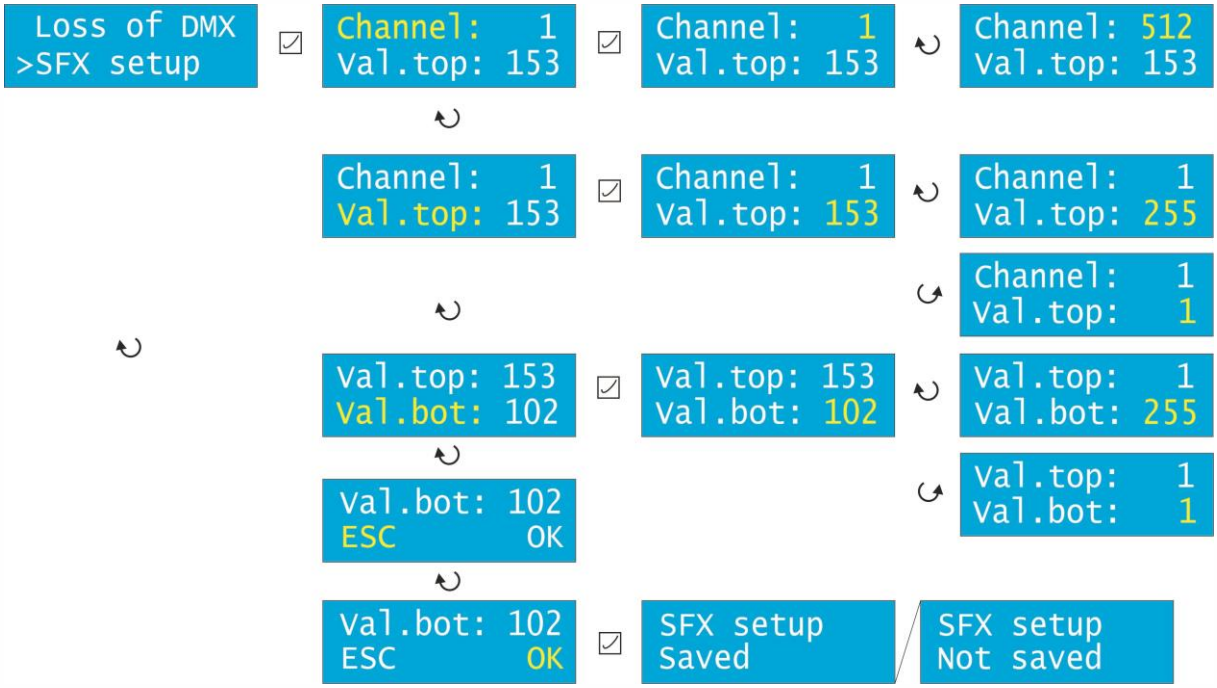
Press "SET" to enter the *Loss of DMX* submenu. Press "SET" again to adjust the option. Use the arrow keys to reach the desired option and confirm by "SET". Scroll down to "OK" and press "SET" to save the settings.



b. SFX setup

This submenu allows you to set safety limits to the desired channel. For one channel (1-512), you can set the top and bottom values (range 1-255).

In the *SFX setup* submenu, Use the arrow keys to navigate between the *Channel*, *top* and *bottom value* and confirm by "SET." Use the arrow keys to select the desired value and confirm by "SET." Scroll down to "OK" and press "SET" to save the settings.

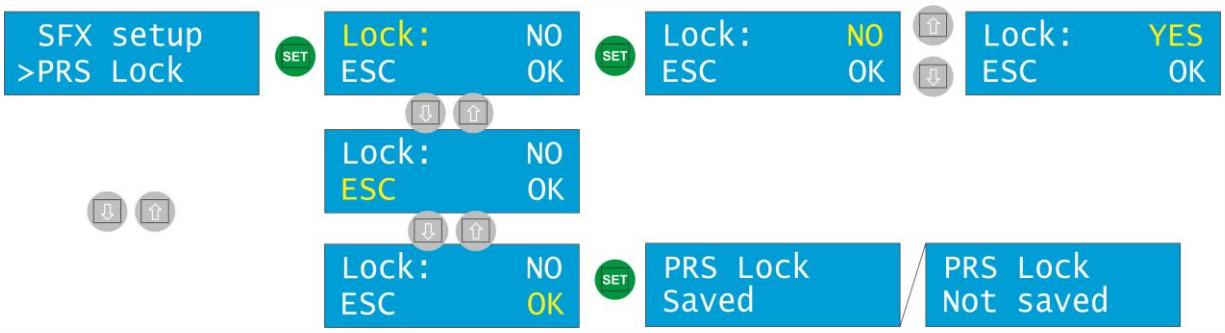


If the merger falls into tolerable range, the home screen shows: A:NC B:NC Out:DATA. If it is outside of the range , the home screen shows: A:NC B:NC Out:to 0. If both channels are functioning, there is a signal on both of them and the precedence is according to the HTP: A:NC B:NC Out: A HTP B.

c. PRS Lock

This submenu allows you to enable or disable the *Preset Lock*. The Preset Lock serves as a safety feature preventing from undesired button press on the preset equipment. When active, the SAVE function of the preset is disabled.

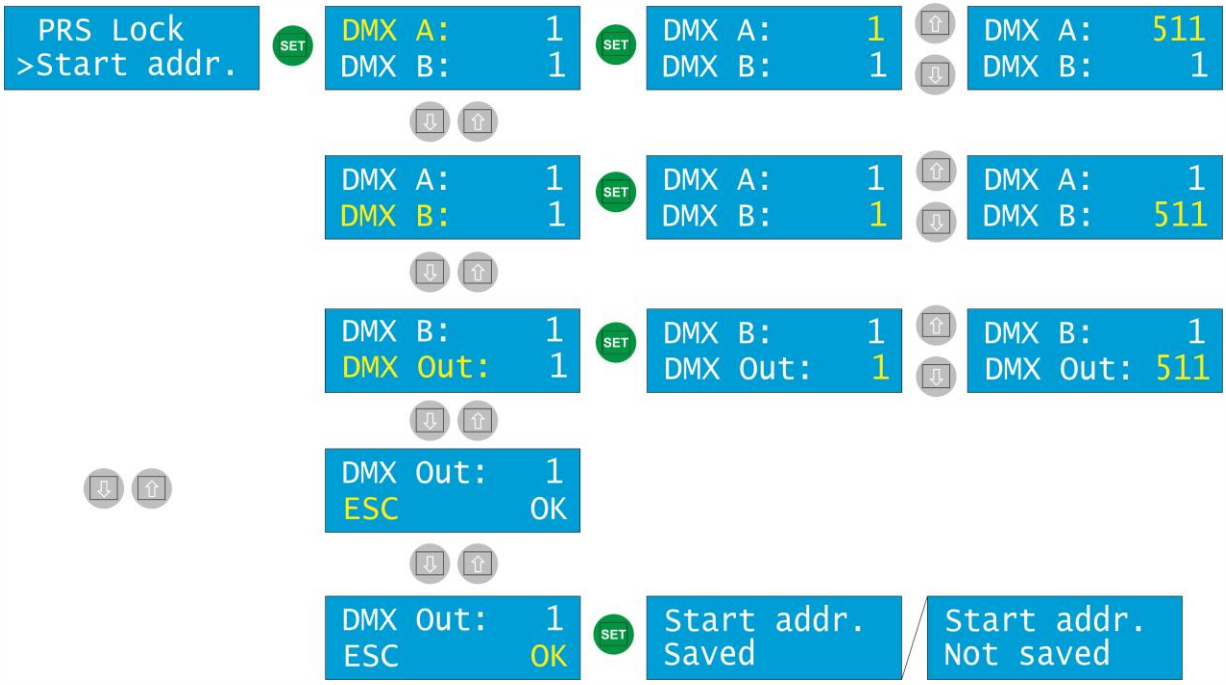
In the *PRS Lock* submenu, press "SET" to enter into the options. Use the arrow keys to alter between YES and NO and confirm by "SET." Scroll down to "OK" and press "SET" to save the settings.



d. Start address

This submenu allows you to set the *Start address* of the DMX A and B Inputs and the Output. The address can be set in a range of 1 - 511.

In the *Start addr.* submenu, Use the arrow keys to select the desired input or output and press "SET" to confirm. Use the arrow keys to choose the desired value and confirm by "SET." Scroll down to "OK" and press "SET" to save the settings.



e. Scene

The last options of the *DMX settings* submenu are the settings of scenes 1-8. Use the arrow keys to select the desired scene number to be adjusted and confirm by "SET."







The *Scene* submenu allows you to set up each scene and to load them into the DMX A & B inputs, respectively. There are the following options to choose from:

- **Setup**
- **Load DMXA**
- **Load DMXB**

In *Setup* submenu:

- every scene can be assigned one channel that loads it /scene is loaded proportionally/
- if more scenes are active, HTP and HTP DMX-A are made of them
- there is 1024 reserved bits for scene setting to the EEPROM
- memory is managed dynamically

Press "SET" to set up the scene. Scroll down to select one of the following options:

- **Mode**
- **Control channel**
- **Start channel**
- **Size**

Mode

This option selects the mode of the scene. It can be OFF, ON, or ALWAYS ON.

OFF: Scene is turned off
ON: Scene is turned on
ALWAYS ON: Scene is always on and preheat is performed as follows:
Loaded value is a minimum value on the output and the rest (remaining to 255) is linearly divided. Range of DMX values is 0-255. Therefore the highest load value is 255. This yields to a simple formula:

255 – channel load value = value of the preheat

Example: The channel load value is 100. 255 – 100 = **155.**
155 is the value of the preheat.

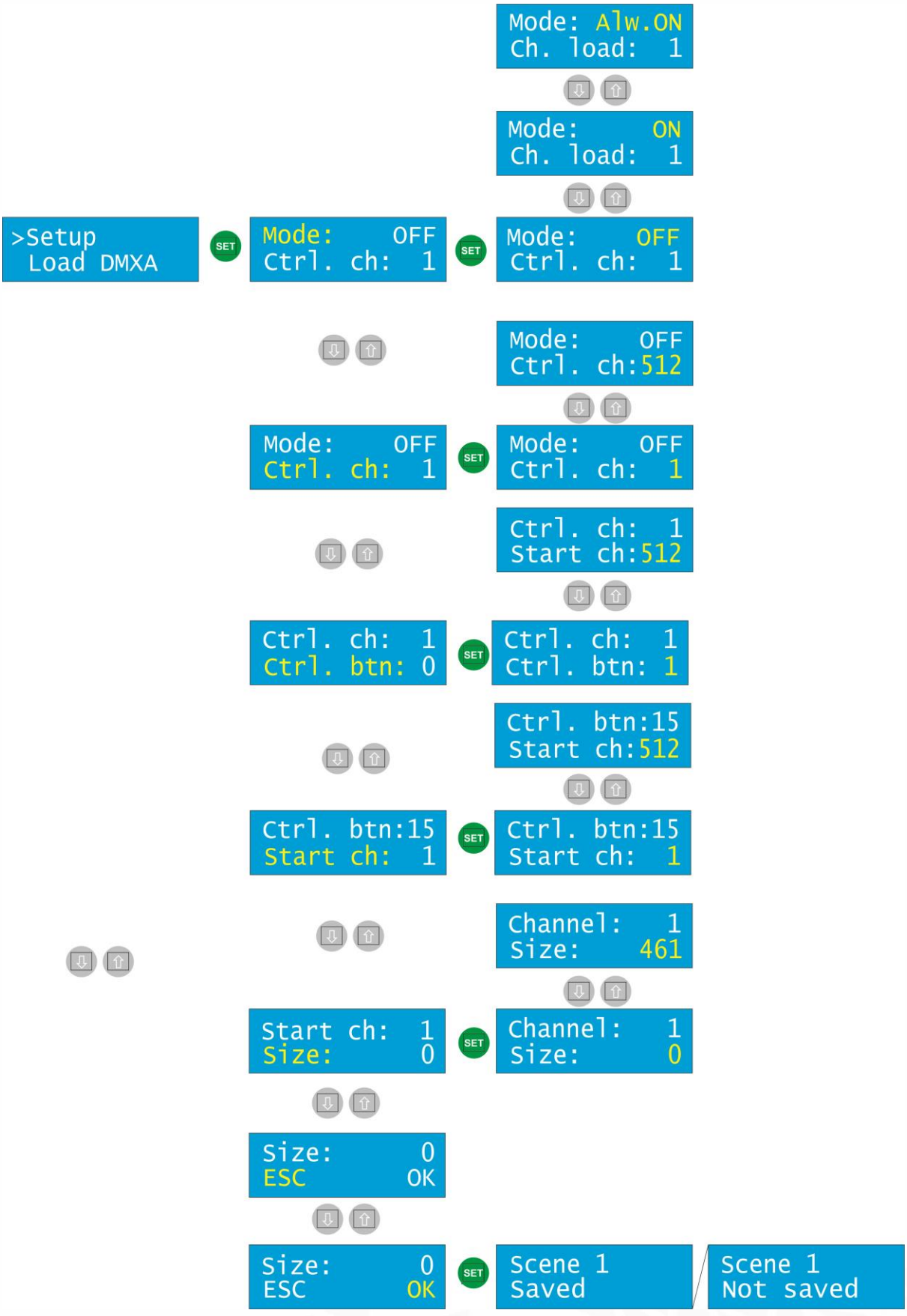
Use the arrow keys to the desired option and confirm by "SET."

Control channel
This option allows you to select the control channel that calls the scene in a range of 1-512.
Use the arrow keys to the desired option and confirm by "SET."

Control button
This option allows you to select the control button that calls the scene in a range of 1-15.
Use the arrow keys to the desired option and confirm by "SET."

Start channel
This option allows you to select the start channel where the scene begins in a range of 1-512.
Use the arrow keys to the desired option and confirm by "SET."

Size (in B):
This option allows you to set the number of channels that are assigned for a scene. **Maximum memory is 1024B for all scenes in total.** Use it wisely. Scene is saved to EEPROM.
Use the arrow keys to the desired option and confirm by "SET."

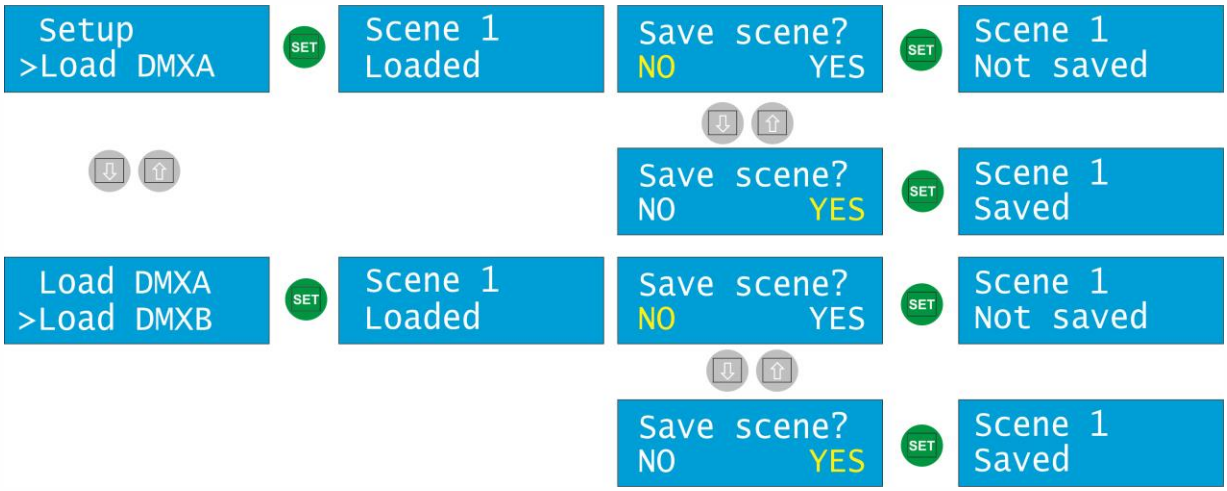


Scroll down to "OK" and press "SET" to save the settings.

Each scene can be saved by a long press of a button (for more than 10 seconds.)

***Load DMXA/DMXB* submenu** is used to decide whether to load the scene from the DMX-A or the DMX-B to the memory. The scene is loaded right after the entry to this submenu. According to the chosen *Merger mode*, the resulting output value is generated and used for scene calculation on the output.

Scroll down to *Load DMXA* or *DMXB* respectively and press "SET" to load the corresponding scene from the DMX A or B input. Use the arrow keys to accept (YES) or deny (NO) the setting and confirm by "SET."

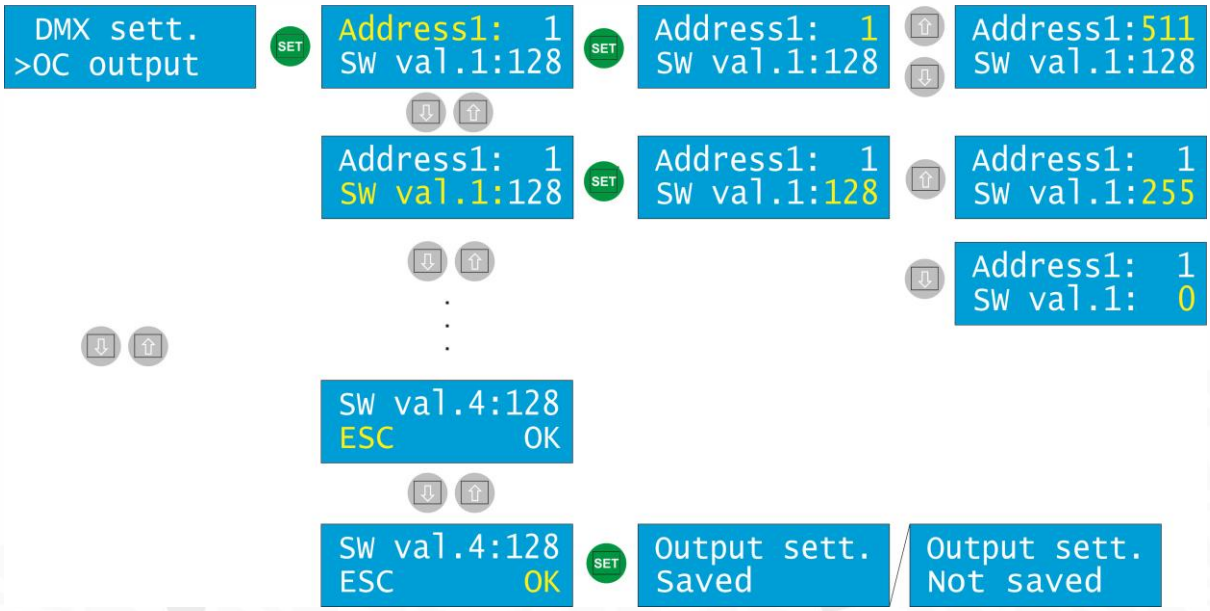


Press "ESC" to return to the main menu.

4. OC /Open Collector/ output /useful only in DXD-8NI version/

The DXD unit features 4 open collectors that serve as an additional switching equipment. For each of them, the DMX output address and the switch value can be selected.

Press "SET" to enter the *OC output* submenu. Use the arrow keys to select one of Address and switching value. The number behind represents the corresponding open collector (1-4). Press "SET" to confirm and Use the arrow keys to select the desired value and confirm by "SET." Scroll down to "OK" and press "SET" to save the settings.

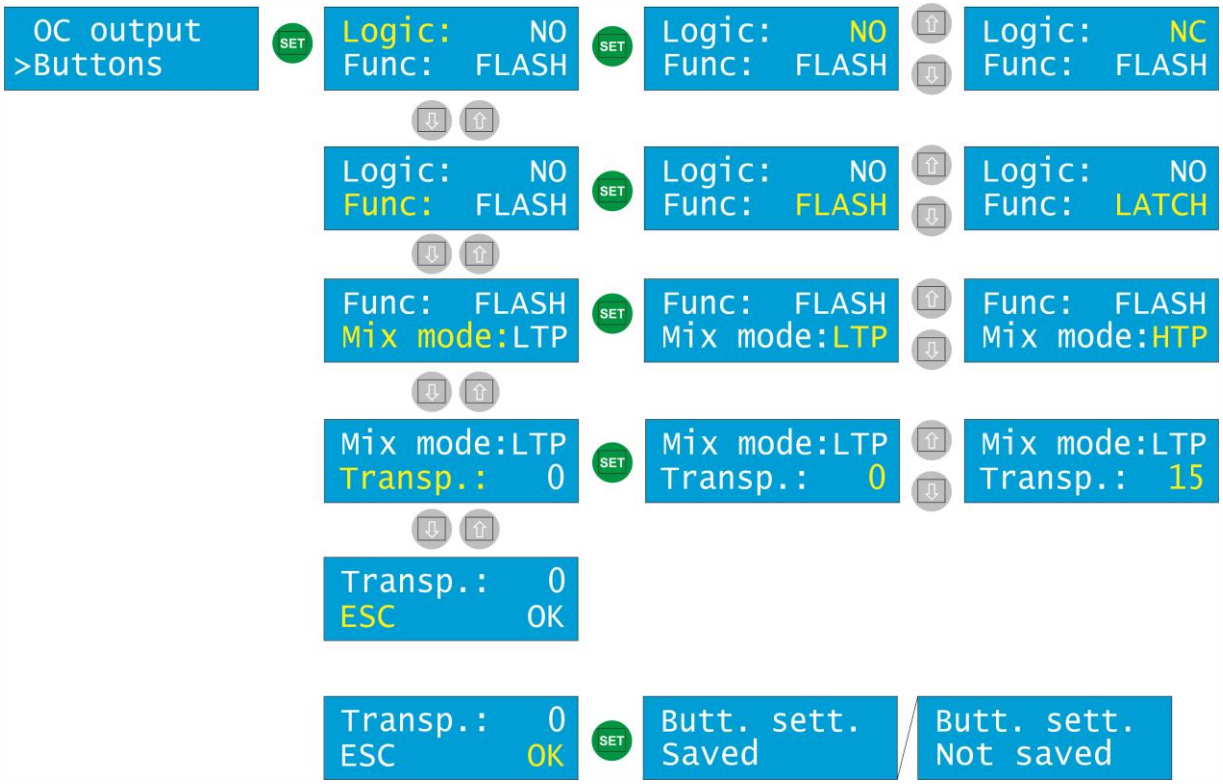


5. Buttons /useful only in DXD-8NI version/

DXD-8NI device features the network interface that serves as a platform for additional buttons.
BT on the NI.
This submenu allows you to set the buttons.
Press "SET" to enter the *Logic*. Use the arrow keys to choose between *NO* (Normally Open) and *NC* (Normally Closed) and confirm by "SET".
Scroll down to *Function* to choose between *FLASH* and *LATCH*.

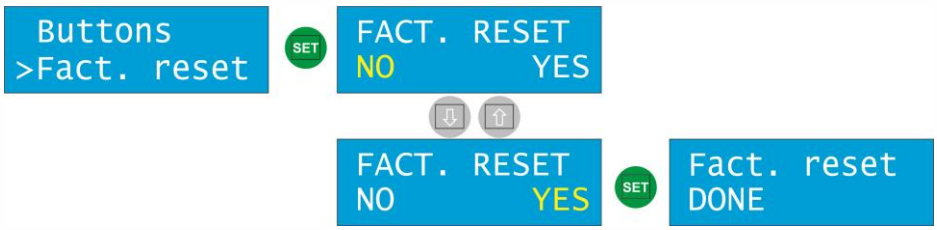
FLASH allows you to activate one button at a time. By activating another button, the previous button is deactivated. To deactivate all buttons, activate the *Transparent scene* button.
LATCH allows you to activate as many buttons as you wish by pressing them. Press each button again to deactivate it and so on.

Confirm by "SET".
Scroll down to the *Mix mode* to choose between *LTP* and *HTP* mode in case both button and fader are active. Confirm by "SET".
Scroll down to the *Transparent scene* to choose value between *0* and *15*. This is the button number that is used to deactivate all scenes. Confirm by "SET".
Scroll down to "OK" and press "SET" to save the settings.

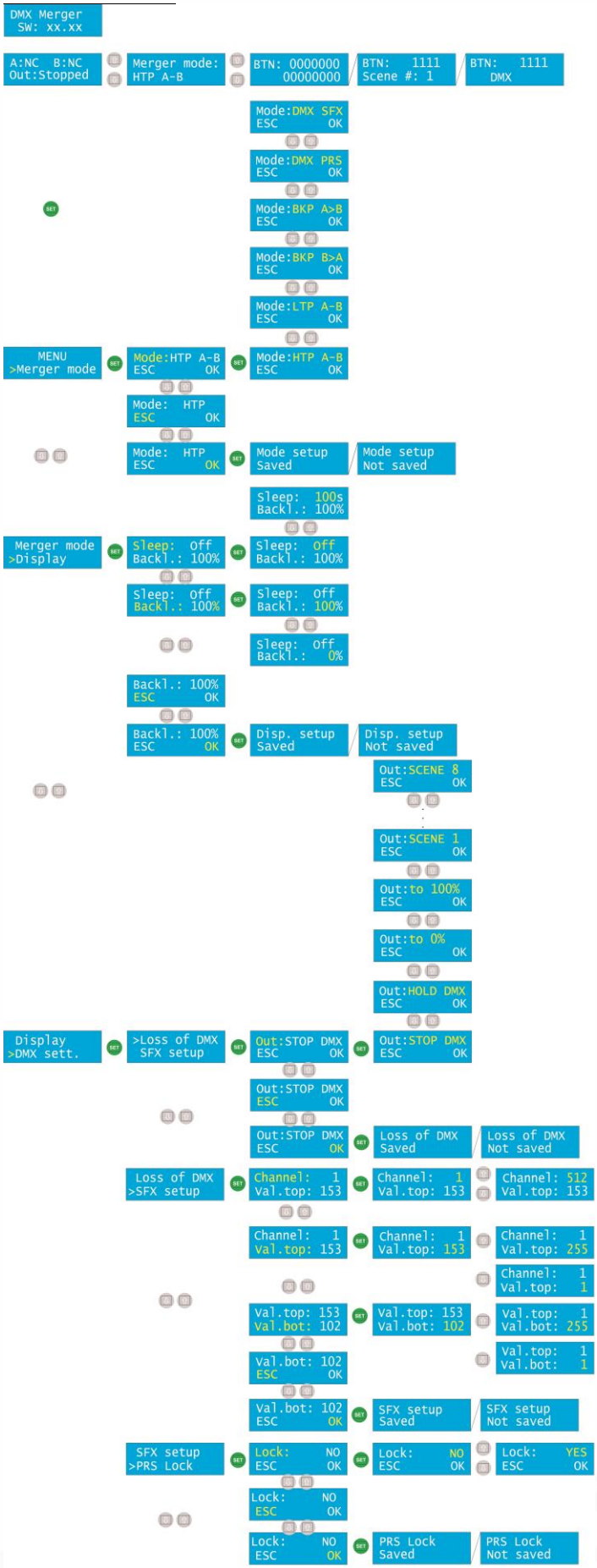


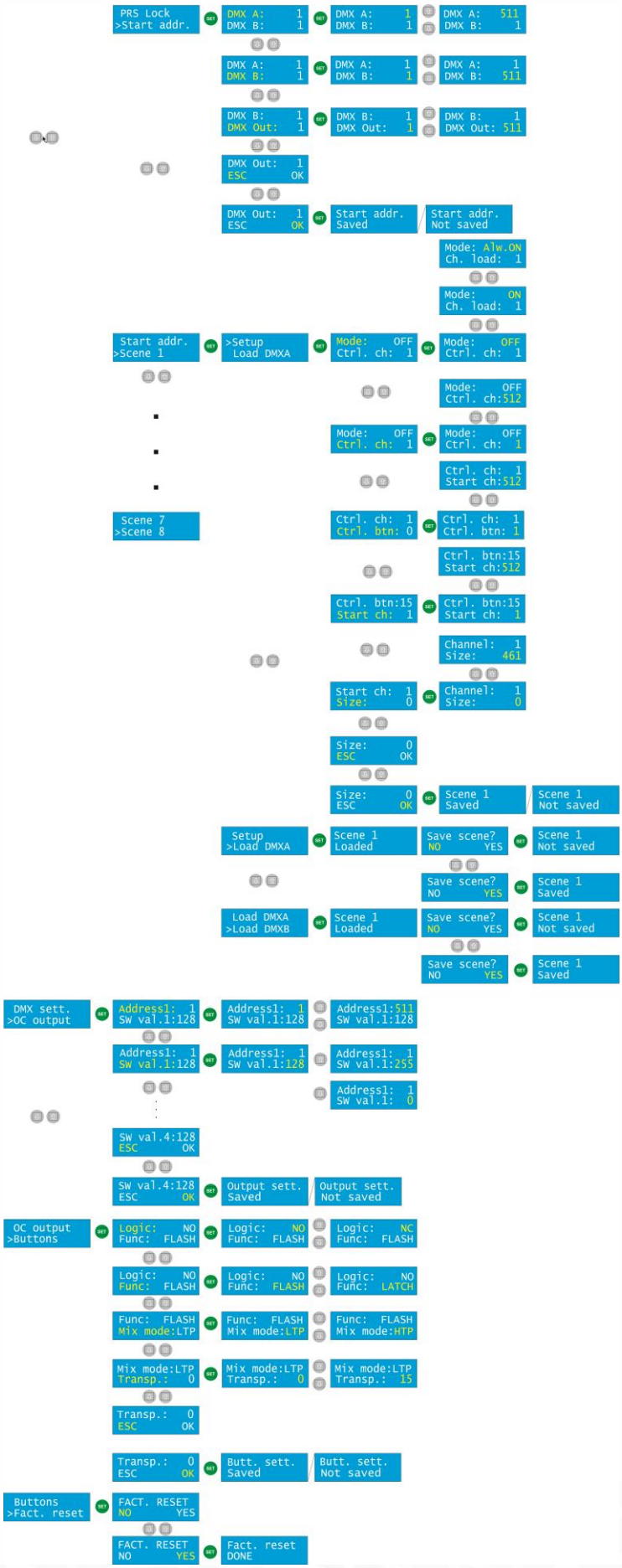
6. Factory reset

This submenu allows you to reset the unit to the factory defaults.
THIS OPTION WILL DELETE ALL YOUR SETTINGS AND SAVED SCENES!!!
Use the arrow keys to *YES* and confirm by "SET".

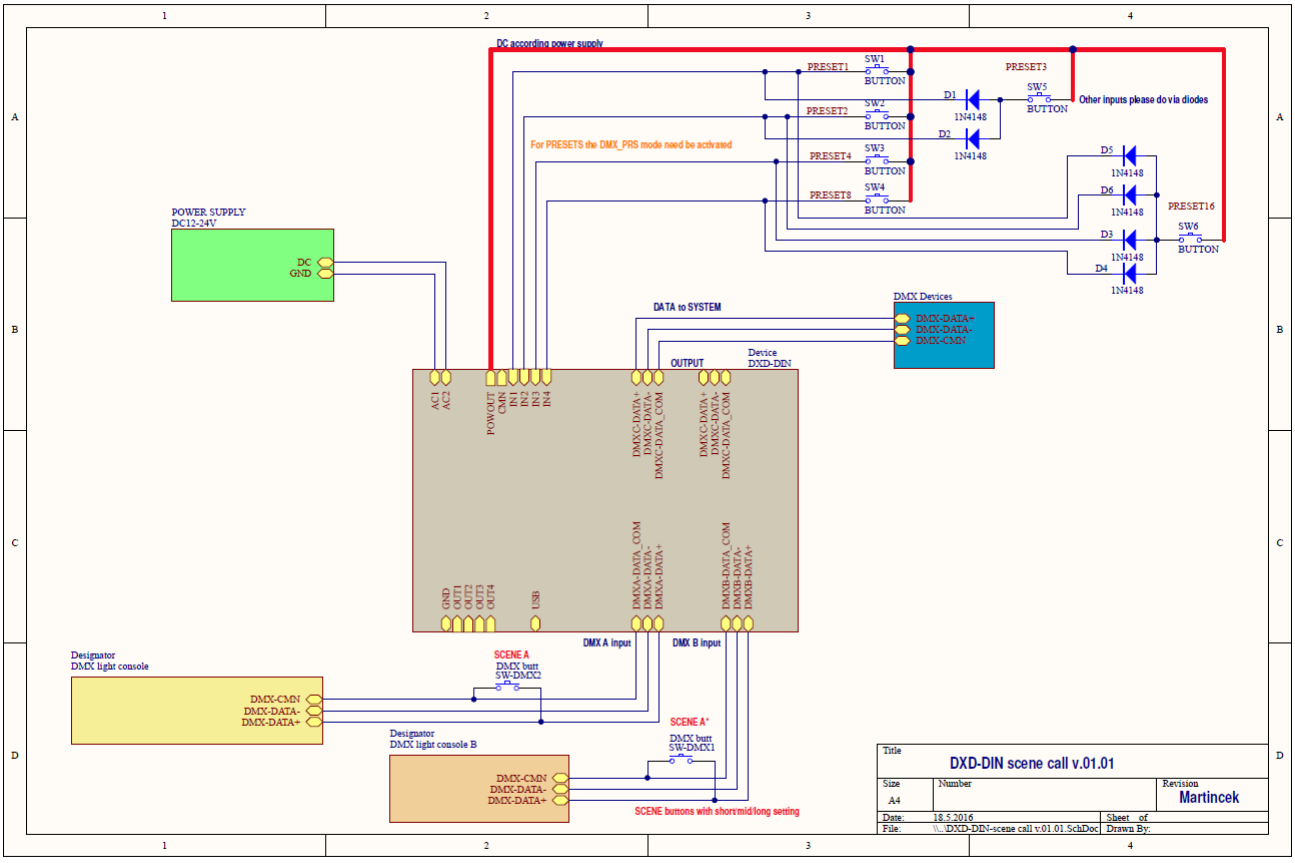


MENU structure:




PRS Lock
>Start addr.
DMX A: 1
DMX B: 1
DMX A: 511
DMX B: 1
DMX B: 1
DMX Out: 511
DMX Out: 1
ESC OK
Start addr.
Saved
Start addr.
Not saved
Mode: Alw.ON
Ch. load: 1
Mode: ON
Ch. load: 1
Start addr.
>Scene 1
>Setup
Load DMXA
Mode: OFF
Ctrl. ch: 1
Mode: OFF
Ctrl. ch:512
Ctrl. ch: 1
Start ch:512
Scene 7
>Scene 8
Ctrl. ch: 1
Ctrl. btn: 0
Ctrl. btn:15
Start ch:512
Ctrl. btn:15
Start ch: 1
Channel: 1
Size: 461
Start ch: 1
Size: 0
Channel: 1
Size: 0
Size: 0
ESC OK
Scene 1
Saved
Scene 1
Not saved
Setup
>Load DMXA
Scene 1
Loaded
Save scene?
NO YES
Load DMXA
>Load DMXB
DMX sett.
>OC output
Address1: 1
SW val.1:128
Address1:511
SW val.1:128
Address1: 1
SW val.1:255
Address1: 1
SW val.1: 0
SW val.4:128
ESC OK
Output sett.
Saved
Output sett.
Not saved
OC output
>Buttons
Logic: NO
Func: FLASH
Logic: NC
Func: FLASH
Logic: NO
Func: LATCH
Func: FLASH
Mix mode:LTP
Func: FLASH
Mix mode:HTP
Mix mode:LTP
Transp.: 0
Mix mode:LTP
Transp.: 15
Transp.: 0
ESC OK
Butt. sett.
Saved
Butt. sett.
Not saved
Buttons
>Fact. reset
FACT. RESET
NO YES
Fact. reset
DONE

Sample connection diagram:

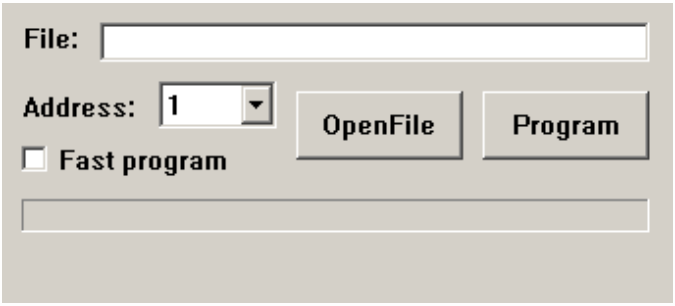


USB SW update:

For Windows XP, the following drivers from FTDI are required:
http://www.ftdichip.com/Drivers/D2XX.htm

Installation manual can be found here:
http://www.ftdichip.com/Support/Documents/InstallGuides.htm

Flashing window:



1. Connect the SW-UPG-x USB to RS485 cable to the computer and the DMX-A port of DXD-DIN.
2. Run the boot loader.
3. Click on the Open file button and select the file with firmware you wish to flash.
4. Select Address to 1 and tick Fast Program.
5. Click Program and you will see the progress of flashing.
6. After the flash, one of two messages appears on the display of DXD-DIN:
    a. BOOTLOADER DONE – flashing went correctly
    b. BOOTLOADER ERROR – wrong firmware: press ESC and SET at the same time and try again.

For help, check firmware or contact manufacturer at sales@srs-group.com.

IMPORTANT INSTRUCTIONS:

All safety and operating instructions should be read before the equipment is installed or operated.

IMPORTANT SAFETY INFORMATION:

The following general safety precautions have to be observed during all phases of operation, service, and the repair of this equipment. Failure to comply with these precautions or with specific warnings in this manual violates safety standards of design, manufacture, and the intended use of this equipment.

Do not operate this equipment in the presence of flammable gases or fumes. Operation of any electrical instrument in such an environment constitutes a definite safety hazard. Do not operate this equipment near water or in areas with wet floors or in high humidity atmosphere where condensation forms on the equipment.

It should never be placed near or over a heat register or other source of heated air and it should not be installed or operated without proper ventilation.

Device must be connected to the secured circuit with circuit breaker or main switch of maximum 16A. The device does not contain any fuses and there are no serviceable parts inside.

Warranty:

The product design should be varied to keep the product continuously updated. The product price should be subject to possible variations for eventual rises of production costs or duties. Claims for possible damages during the freight must be notified to the carrier. All claims must be notified to the distributor or manufacturer within 8 days from the receipt of goods. Buyer is responsible for the right installation and the use of the apparatus.

The apparatus is covered by a **TWO-YEAR** warranty from the date of purchase against defects of manufacture and components. Defects and breakages caused by wrong use/connection are not subject to warranty. For any dispute is competent the Tribunal of Bratislava, Slovak Republic.

DECLARATION OF CONFORMITY

According to guidelines 89/336 EEC and 92/31 EEC:

Name of producer: SRS Group s.r.o.

Address of producer: Rybnicna 38/B, SK- 83106 Bratislava, Slovak Republic

Declares that the product

Name of product: DMX Merger

Type: DXD-DIN

Corresponds to the following product specifications:

Safety: EN60065, resp. EN 60950

EMC: EN55103-1, EN55103-2, EN50082-1, EN50081-1

Bratislava, 10 May 2013



Robert Sloboda

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