



# DMX Switch Pack

## Instruction Manual

### Models:

**SPU1210, SPU1213, SPU1216**  
**SPUN1210, SPUN1213, SPUN1216**

**SPU6010, SPU6013, SPU6016**  
**SPUN6010, SPUN6013, SPUN6016**

### **ATTENTION!**

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

### **ATTENTION!**

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

# **1. General**

## ***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 in an explosive atmosphere!***

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.

### ***Power connections***

This device must be earthed.

Let the device adapt the environment for at least 10 minutes after unpacking.

Connect the power cable – 5-way (3L+N+E) or CEE form input socket if required.

### ***Output connection***

The output terminals are located inside of the switch pack. Live, neutral and earth connections should be made to all load equipment. These instructions are valid for fixed installations.

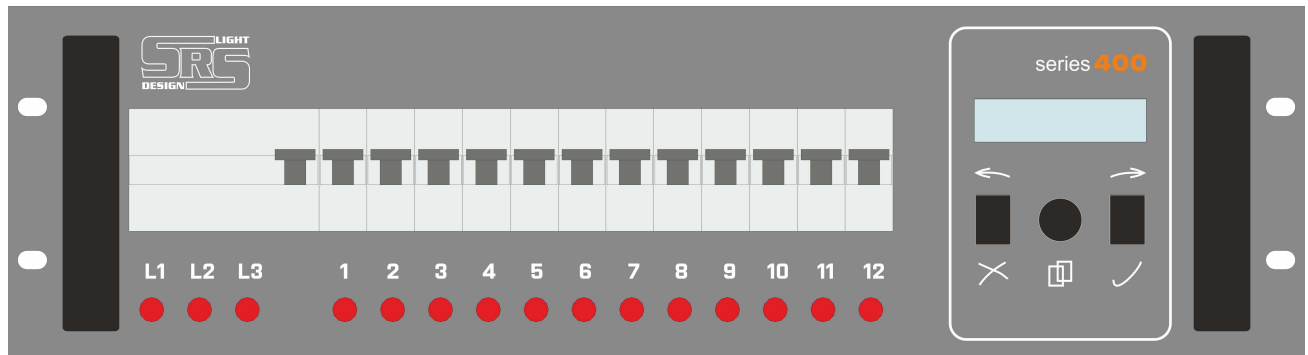
### ***Input connection***

Male and female DMX standard 3-/5-pin XLR connectors are provided on the rear panel for IN and OUT connections. These also facilitate the use of a low impedance terminator if the switch pack is the last equipment on the DMX line. DMX input is optically isolated.

Analog input (standard 0-10V) comes in form of SUB-HD socket. Pin #15 serves as a DC supply output with +20V, which can be used to power small lighting desks that consume less than 150mA supply current. This output is protected against short circuit with self-healing fuse.

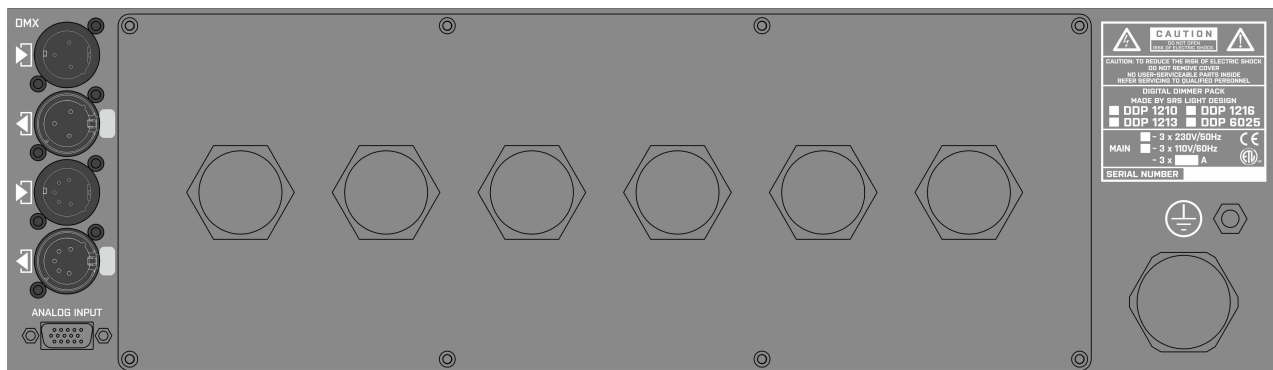
## 2. Functions and Control

### Front panel:



1. GF163 or 80A, 30mA main switch / \* B models
2. Indicator of main input
3. Circuit breakers **1P** for SPU model or **1P+N** for SPUN model
4. Output indication of each channel
5. ESC button
6. Encoder
7. OK button




### Rear panel:



- DMX input/output
- Analog/Scene input – SUB HD15
- 6x Dimmer output
- Power cable 5G6mm2 or 5G10mm2
- GND grounding point

### 3. Operation

The operation of SPU12xx is done using two pushbuttons and a 3-directional Encoder.

The left button is ESC , the right button is OK  and the Encoder is in the middle  of them.

Introductory screen informs about the software version.

```
SPU12xx v.52
SRS LIGHT DESIGN
```

The main screen appears after 3 seconds and indicates the DMX start address, the temperature of the cooler and the main voltage. In manual and analog modes, the mode is indicated. In the patch mode, correctness of the DMX is indicated, and in the scene mode, the scene number is shown.

```
DMX:001-OK T:37C
228V 230V 231V
```

```
MANUAL MOD T:37C
228V 230V 231V
```

```
ANALOG MOD T:37C
228V 230V 231V
```

```
P.M.DMX-OK T:37C
228V 230V 231V
```

```
SCENE:15 T:37C
228V 230V 231V
```

Rotate the Encoder to see the output levels.

```
SW
OUT: | | | | |
```

Press the Encoder to enter the menu. Rotate it to select one of the following options:

1. SET DMX START ADDRESS
2. AUTOMATIC TEST
3. SET LOCK CODE
4. SETUP

#### 3.1 Set the DMX address

```
SET DMX < 1 >
START ADDRESS >
```

Press the OK button.

```
DMX START: <001>
ESC < > ENTER
```

Rotate the Encoder to select the DMX start address [between 001 and 512] and confirm by the OK button.

#### 3.2 Automatic test

```
AUTOMATIC < 2 >
TEST >
```

Press the OK button. System tests channels one by one. To move onto the next channel, press the Encoder.

```
SW
OUT: | | | | |
```

### 3.3 Set Lock code

```
LOCK      < 3 >
SET CODE  >
```

Press the OK button.

```
ENTER OLD CODE : < ?000 >
ENTER NEW CODE : < 123? >
NEW LOCK CODE IS ! 1234 !
```

Enter the old code first (factory setting is 0000). Rotate the Encoder to change digit (0-9), press the OK button to move onto next position. Press the Encoder or OK button and enter a new code. Set the new code by a single press of the Encoder.

To lock the menu, press ESC and OK buttons at the same time in the main screen. To unlock it, press the Encoder and enter the code. Rotate the Encoder to change digit (0-9), press the OK button to move onto next position. Press the Encoder or OK button to confirm.

### 3.4 Setup

```
SETUP      < 4 >
PRESS < > PRESS
```

To enter the setup submenu, press ESC and OK buttons at the same time. There are several options to choose from:

1. DMX MODE
2. ANALOG MODE
3. MANUAL MODE
4. MIX INPUT MODE
5. PATCH
6. SCENE
7. LOST DMX
8. FACTORY RESET

Navigation in the options is done using the Encoder.

#### 3.4.1 DMX mode

```
SETUP:     < 1 >
DMX MODE  >
```

Press the OK button.

```
DMX START: <001>
ESC < > ENTER
```

Rotate the Encoder to select the DMX start address (between 001 and 512) and confirm by the OK button. Now the device works only using the DMX input.

### 3.4.2 Analog mode

```
SETUP: < 2 >  
ANALOG MODE ▶
```

Press the OK button.

```
SWITCH TO ANALOG  
ECS ◀ ▶ ENTER
```

Press the OK button. Now the device works only using the analog input.

### 3.4.3 Manual mode

```
SETUP: < 3 >  
MANUAL MODE ▶
```

Press the OK button.

```
SWITCH TO MANUAL  
ECS ◀ ▶ ENTER
```

Press the OK button.

```
<01> |  
000: _ _ _ _ _
```

Rotate the Encoder to select between 000 and 255, press OK to move onto next channel. Active channel number is shown in the angle brackets < >. Press the Encoder to escape from the manual mode menu.

Now the device works without inputs.

### 3.4.4 Mix input mode

```
SETUP: < 4 >  
MIX INPUT MODE ▶
```

Press the OK button. Rotate the Encoder to choose from one of the following options and confirm by OK.

```
MIX MODE: < 1 > | MIX MODE: < 2 > | MIX MODE: < 3 >  
OFF ▶ | HTP ▶ | LTP ▶
```

### 3.4.5 Patch mode

```
SETUP: < 5 >  
PATCH ▶
```

Press the OK button.

```

INPUT:      OUT
< MANUAL:000 01 >

```

Use the OK button to select the output channel [0-12]. The number of an active channel is shown in the bottom right corner of the display.

Use ESC to choose the controlling mode. MANUAL, DMX and ANALOG can be chosen for each channel. The selected mode is indicated in the bottom left corner.

Rotate the Encoder:

- to set the DMX address (in the DMX mode),
- to select the number of analog inputs (in the ANALOG mode) and
- to select the value of the output in MANUAL mode.

After all settings are done, press the Encoder and save settings using the OK button. To cancel, press ESC.

```

SAVE SETTINGS?  ✓
ESC < > ENTER

```

```

SAVED !
ESC < > ENTER

```

### 3.4.6 Scene

```

SETUP: < 6 >
SCENE >

```

Press the OK button to enter this submenu. A selection of one of the following options can be done using the Encoder:

1. ENABLE/DISABLE
2. FLASH
3. FADE SPEED
4. SAVE OUTPUT
5. SETUP SCENE

#### 3.4.6.1 Enable/Disable

If the scene is disabled, the following display appears. Otherwise the bottom line reads "DISABLE". If the scene is disabled, this option enables it; if it is enabled, the scene can be disabled here. To change the state, press the OK button and confirm by the OK button. To cancel, press ESC.

```

SCENE: < 01 >  ✓
ENABLE >

```

```

ENABLE SCENE ?  ✓
ESC < > ENTER

```

```

SCENE ENABLED
SAVED !

```

#### 3.4.6.2 Flash

Press the OK button. Press the Encoder to navigate to the desired scene number, rotate it to add or remove scene to/from a list. The scene numbers appear on the list in the angle brackets in selected order. Press OK to save the flash, ESC to cancel it.

```

SCENE: < 02 >  ✓
FLASH >

```

```

SCN:1 < >
ESC < > ENTER

```

```

SCN:2 < >
ESC < > ENTER

```

### 3.4.6.3 Fade speed

The fade speed can be chosen here. There are 3 speed levels available: [1] SLOW, [2] NORM, [3] FAST. The current setting is indicated in the round brackets in the bottom right corner of the display. In the picture below, it is set to [1] SLOW.

```
SCENE:    < 03 >
FADE SPEED (1) ▶
```

To change the setting, press the OK button. Rotate the Encoder to choose from one of the following speed options and confirm by OK.

```
SPEED < SLOW >   SPEED < NORM >   SPEED < FAST >
ESC ◀ ▶ ENTER   ESC ◀ ▶ ENTER   ESC ◀ ▶ ENTER
```

### 3.4.6.4 Save output

A scene to be used at the output can be selected here.

```
SCENE:    < 04 >
SAVE OUTPUT ▶
```

Press the OK button. The following display appears. Rotate the Encoder to select the scene number. Selected scene number is shown in angled brackets in the top right corner. In this case the DMX input is saved to Scene 1. Confirm by OK. To cancel, press the ESC button.

```
SEL. SCENE < 01 >
ESC ◀ ▶ ENTER
```

### 3.4.6.5 Setup scene

Items 5-19 of this submenu allow the scene setup of scenes 1 through 15.

```
SCENE:    < 05 >
SETUP SCENE 01 ▶
```

Rotate the Encoder to navigate to the desired scene (the number of active scene is indicated in the right bottom corner) and enter by a press of OK.

```
SCENE 01 < OFF >
- CHANNEL:01 +
```

Rotate the Encoder to select the value [0-255] or turn it OFF at channel 1. The value is shown in angled brackets. Change the channel using the OK and ESC buttons; OK to move one channel up, ESC to move one down. Press the Encoder to confirm and save settings by a press of the OK button.

### 3.4.7 Lost DMX

This option sets what the device does if the DMX signal is lost.



```

SETUP: < 7 >
LOST DMX >

```

Press the OK button and navigate to one of the following options rotating the Encoder.

```

LOST DMX: < 1 >   LOST DMX: < 2 >
DMX HOLD >       DMX TO 0% >

LOST DMX: < 3 >   LOST DMX: < 4 >
DMX TO 100% >    LOAD SCENE 01 >

```

Choose the desired option and press OK to confirm. When the fourth option (LOAD SCENE) is confirmed, the following screen appears:

```

SEL. SCENE < 01 >
ESC < > ENTER

```

Rotate the Encoder to select the scene to be loaded when the DMX signal is lost and confirm by OK.

### 3.4.8 Factory reset

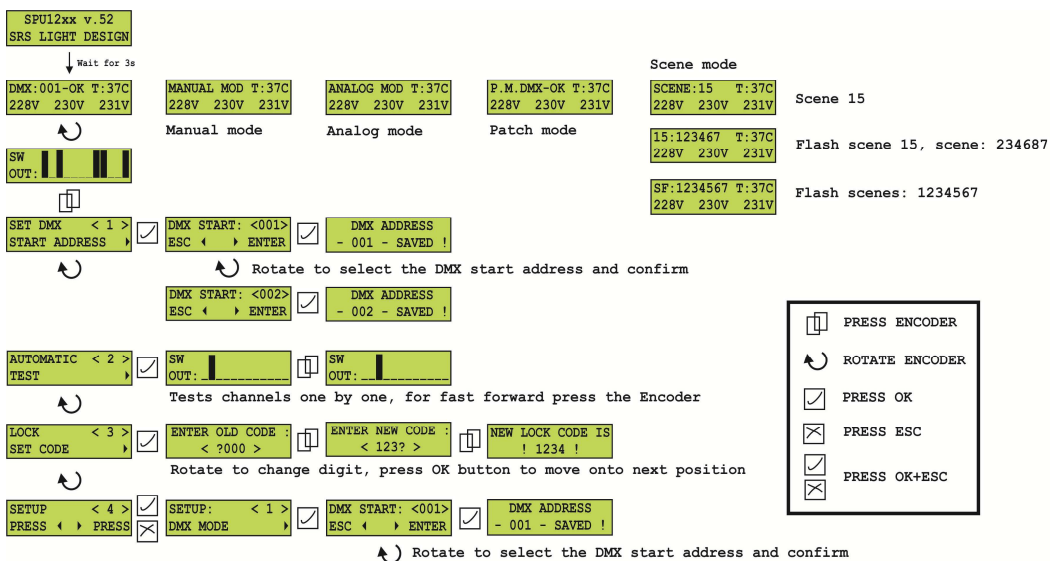
This option sets all values and settings of menu to the default state when the device was run for the first time. To perform this action, press the OK button and confirm by the OK button. After the reboot, menu starts at the very beginning. To cancel, press the ESC button.

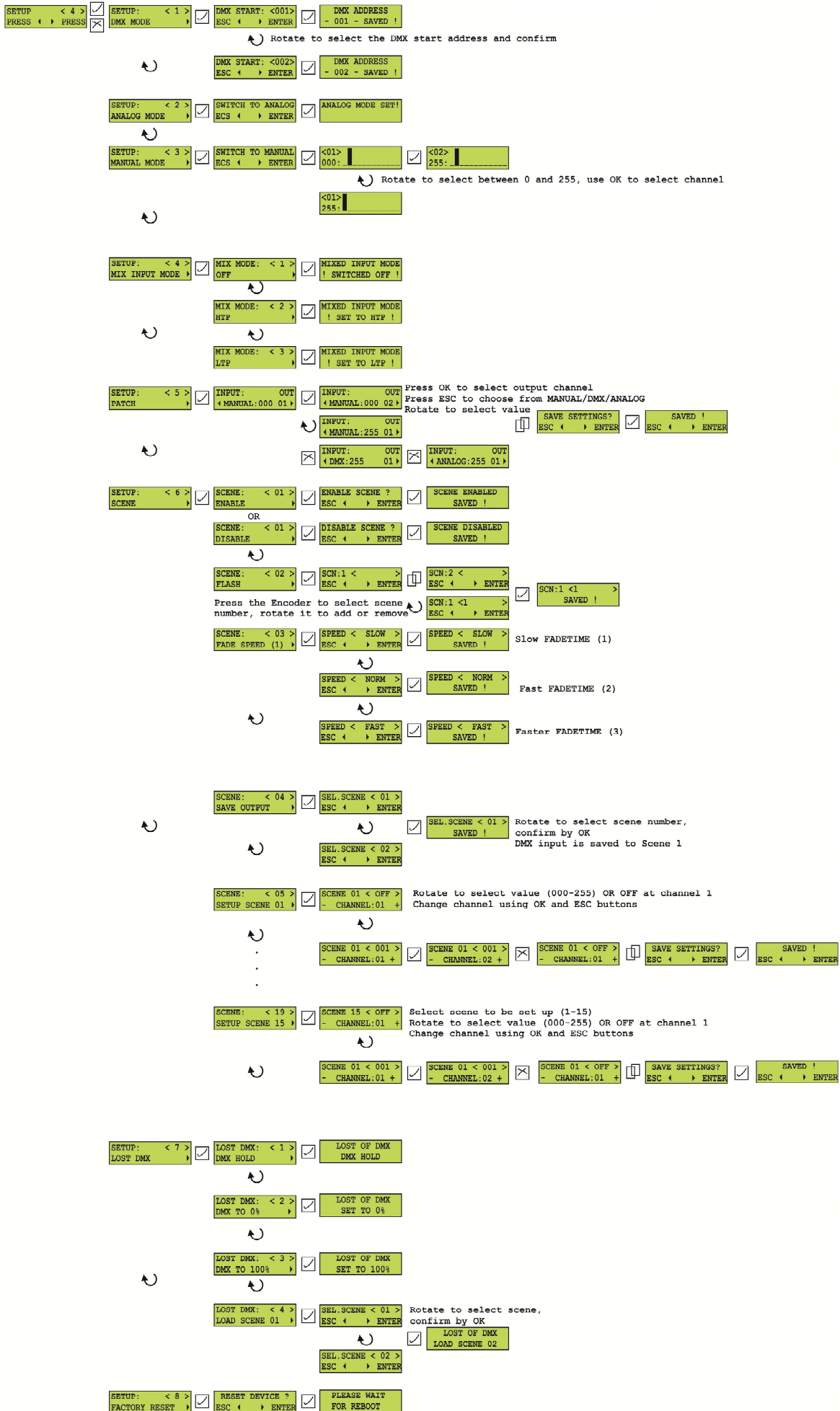
```

SETUP: < 8 >   [OK]   RESET DEVICE ?   [OK]   PLEASE WAIT
FACTORY RESET >   ESC < > ENTER   FOR REBOOT

```

## 4. Menu tree





## 5. Technical data

### Capacity:

SPUx1210	12x10A	12x2.3kW
SPUx1213	12x13A	12x3kW
SPUx1216	12x16A	12x3.7kW
SPUx6025	6x25A	6x5.7kW
SPUx6032	6x32A	6x7.3kW

### Housing and dimensions:

Steel housing with gray powder coating  
482.5 x 132 x 420 mm, 20kg

### Pin out for the XLR connectors:

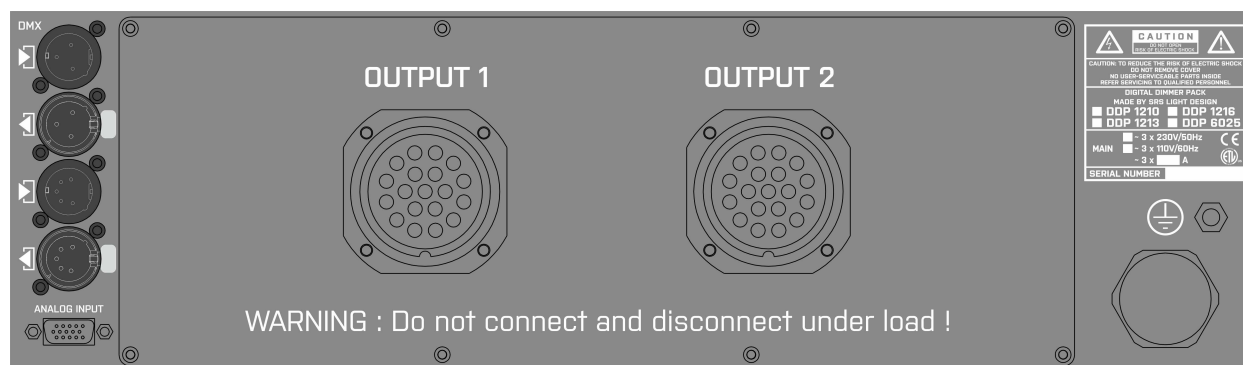
Pin 1	Data CMN (not connected to earth)
Pin 2	Data -
Pin 3	Data +
Pin 4, 5	Not connected

The DMX Input and Output are wired in ratio 1:1.

### Pin out for the SUB-HD connector:

Pins 1-12	channels 1-12, analog input (0-10V)
Pins 13-14	DC - pole
Pin 15	DC out +20V, 150mA

### Pin out for the SOCAPEX connectors:



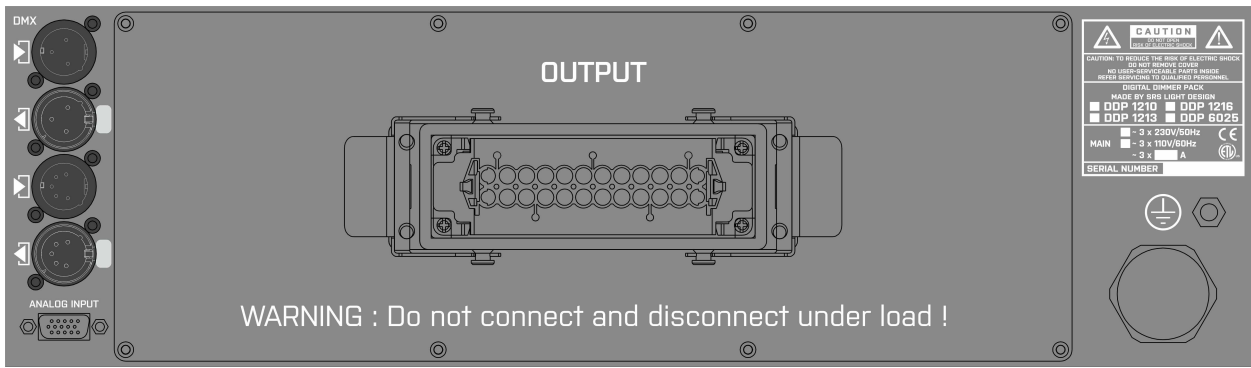
### Output 1:

Pin 1,3,5,7,9,11	Phase 1,2,3,4,5,6
Pin 2,4,6,8,10,12	Neutral
Pins 13-19	Earth

### Output 2:

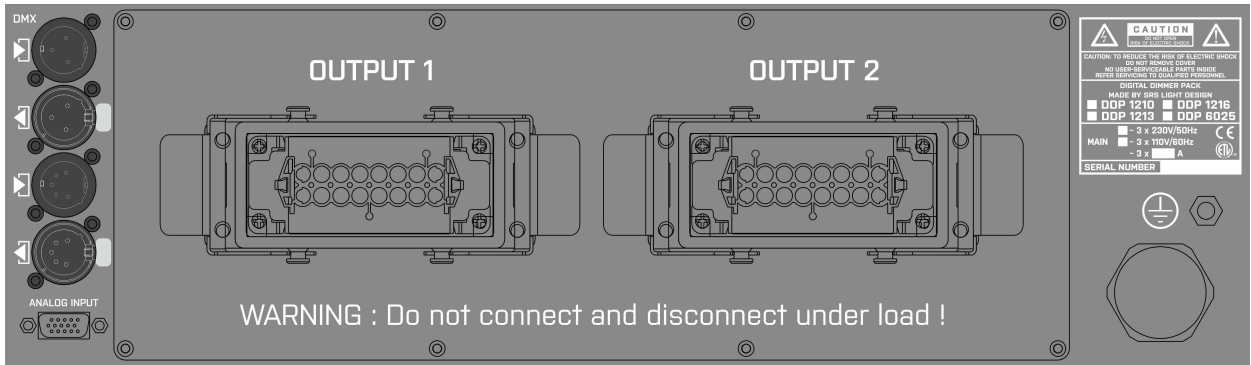
Pin 1,3,5,7,9,11	Phase 7,8,9,10,11,12
Pin 2,4,6,8,10,12	Neutral
Pins 13-19	Earth

**Pin out for the Harting/ILME 24 connectors:**



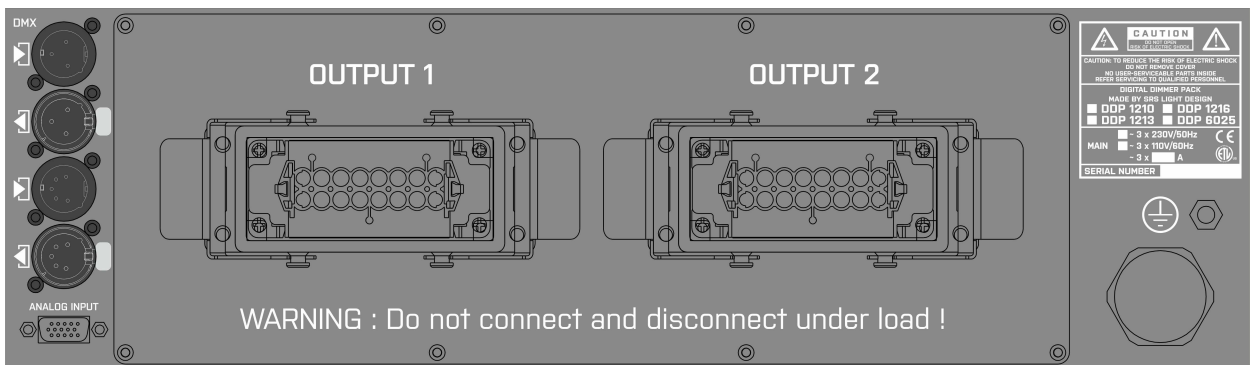
Pins 1-12      Phases 1-12  
 Pins 13-24    Neutral

**Pin out for the Harting/ILME 16 connectors /Type A – phase + neutral/**



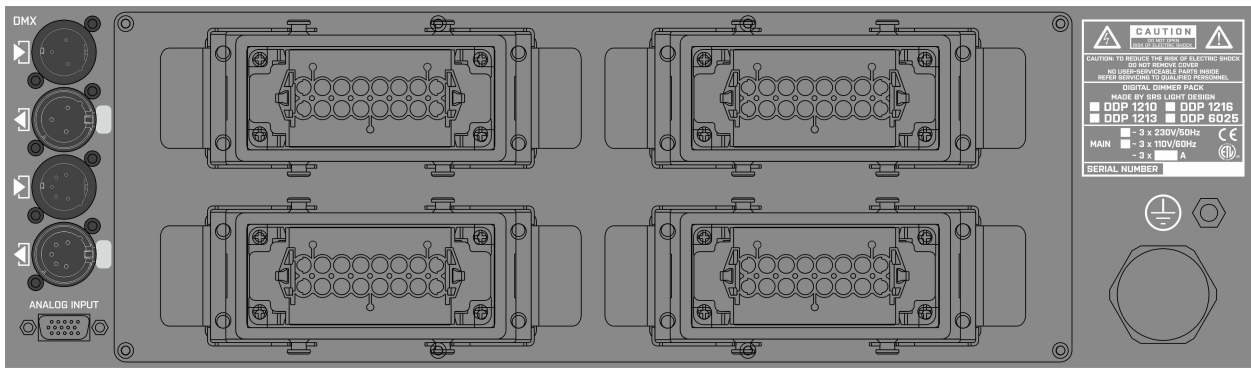
Pins 1-6      Phases 1-6/7-12  
 Pins 9-14    Neutral

**Pin out for the Harting/ILME 16 connectors /Type B – phases + neutral inline/**



Pin 1,3,5,7,9,11      Phases 1-6/7-12  
 Pin 2,4,6,8,10,12    Neutral

**Pin out for the 4x Harting/ILME 16 connectors /wiring on request/**



**Pin out for the ILME 6 connectors:**

Output 1:

Pin 1,2,3 Phase 1,2,3

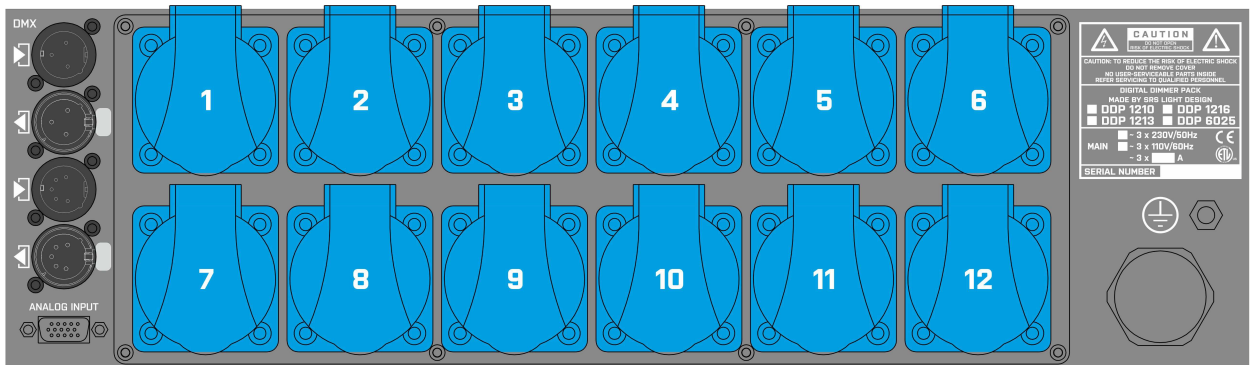
Pin 2,4,6 Neutral

Output 2:

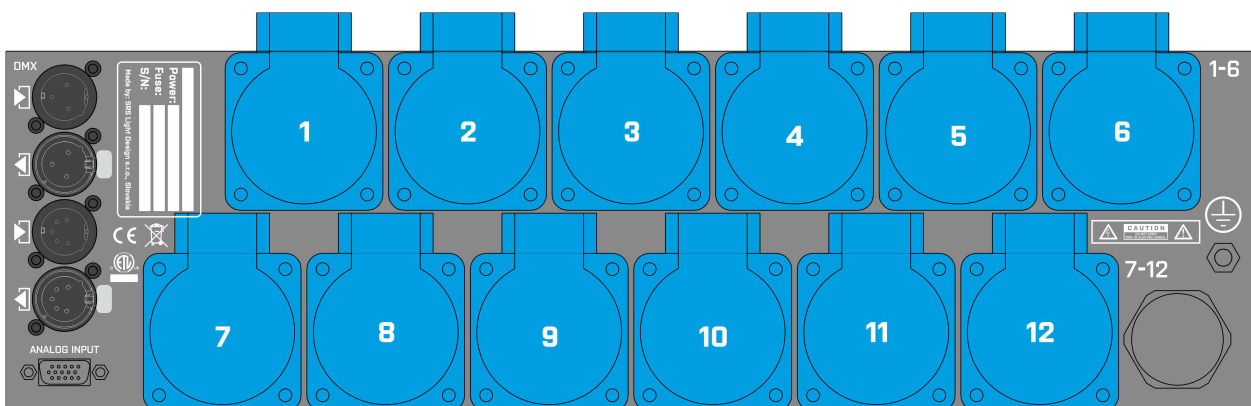
Pin 1,2,3 Phase 4,5,6

Pin 2,4,6 Neutral

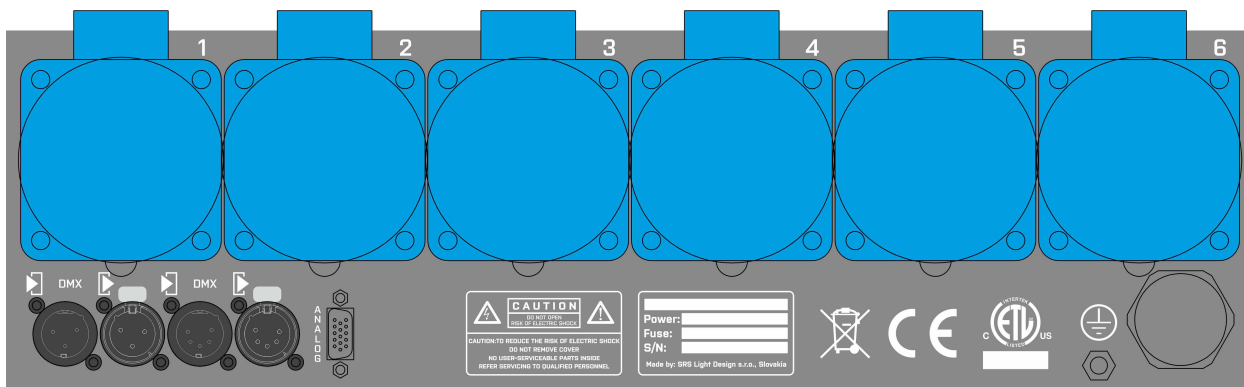
**Pin out for the 12x Socket /French, Schuko, UK, Danish,.../**



**Pin out for the 12x CEE16/3p type 17 socket**



## Pin out for the 6x CEE32/3p socket on SPU60xx





# Declaration of conformity

We hereby declare that the equipment described below conforms to its design, type and version introduced by us to the fundamental safety and health requirements of the EU Guidelines Machines.

Manufacturer:

SRS Light Design  
Rybničná 36/D  
83106 Bratislava  
Slovakia

Declares the product

Name of product:  
Type/version:

Digital switch pack  
**SPU12xx, SPUN12xx, SPU60xx, SPUN60xx**

Correspond to the specification:

EN 60-950-1:2003  
EN 55103-1:2000  
EN 55103-2:2000  
EN 60-598-2-17 1989 including amendments 1/2  
EN 60-598-1 1992 including amendment 1

CE marking directive 93/68 EEC  
Low voltage directive [2006/95/EG]  
EMC directive [2004/108/EWG]

Bratislava, April 29, 2012

Robert Sloboda