



# Digital Dimmer Unit

## Instruction Manual

Models:

**DDP4006-8, DDP4010-8**

**DDPN4006-8, DDPN4010-8**

version 1.0 since 15 November 2018

**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.

## ***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.

### ***Water, moisture, heat and humidity***

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. It should not be installed or operated without proper ventilation.

### ***Power connections***

This equipment must be earthed.

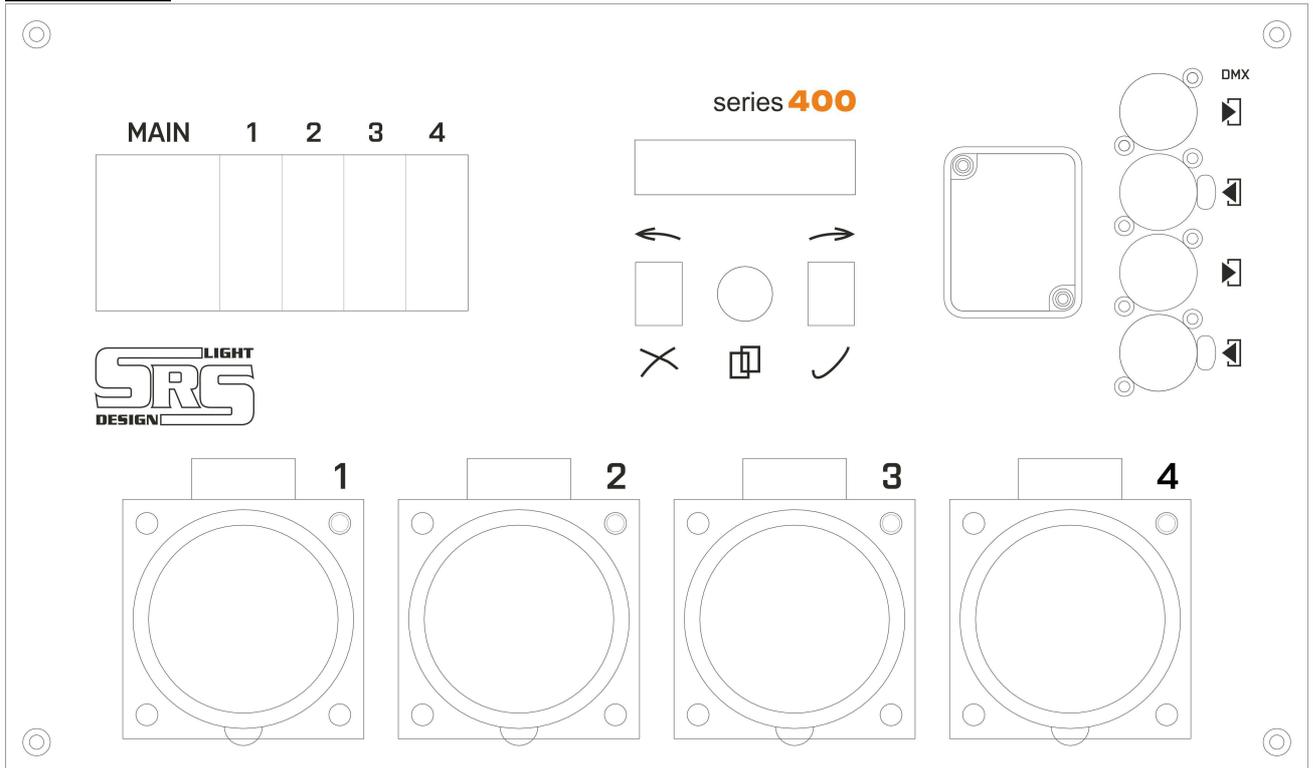
Let the equipment adapt the environment for at least 10 minutes after unpacking.

### ***Output connection***

The output terminals are located on the front panel of the dimmer. Live, neutral and earth connections should be made to all load equipment.

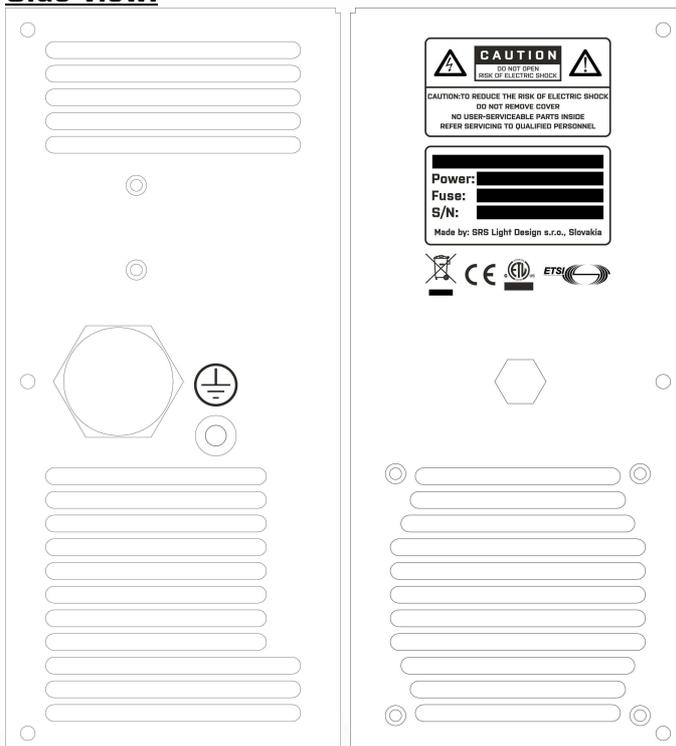
The DDP40xx unit is a 4-channel dimmer. It can be controlled by a DMX console via standard 3- or 5-pin DMX connectors or via the Wireless DMX connection port. This unit is ideal for applications requiring usage of a small device without a dimmer pack or to have a DMX installation via wireless connection.

**Front view:**



- GFI or Main switch and 4x protection circuit breakers
- Control panel display, two buttons and an encoder
- DMX input/output via NC3/NC5 DMX input/output connector
- Optional wireless DMX module
- 4x output

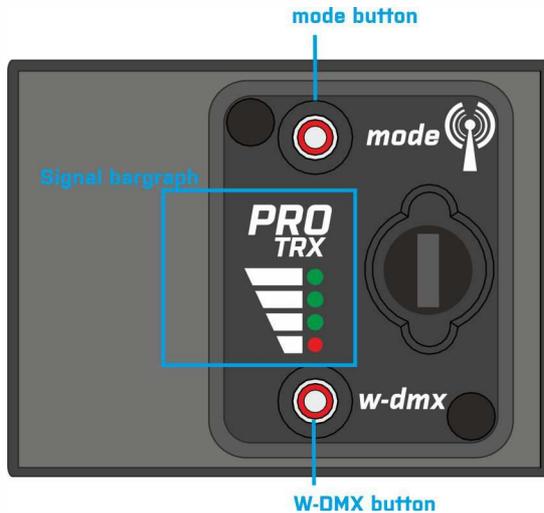
**Side view:**



- M10 mounting point for truss mount

## Operation modes

### DMX operation (optional)



For the DMX operation, turn off the W-DMX module by holding the MODE button. The MODE button should be RED.

Connect the DMX cable to DMX-IN connector and control the DDP40xx with DMX connected to the DMX port or with manual operation via menu.

### Wireless DMX/DMX operation

For the W-DMX/DMX operation, turn the W-DMX module on by holding the MODE button. MODE button should light GREEN, W-DMX button shows the state of the W-DMX receiver.

There is an automatic back-up of the W-DMX line using the cable connection. If the W-DMX is linked to the transmitter and the signal quality is poor, the DDP40xx will be controlled from cable DMX signal in/thru port. In normal state, when the W-DMX signal quality is good, the DDP40xx will be controlled from Wireless DMX connection.

The W-DMX button has only one function – logging off from the linked transmitter.

### W-DMX LED signalization in the Receiver mode:

Not linked to any Transmitter



Linked to Transmitter + Missing DMX on Transmitter



Linked to Transmitter + Receiving DMX



### Receiver Mode unlinked

MODE LED is GREEN and the receiver W-DMX LED is RED. The bargraph does not show the signal strength.

### Receiver Mode linked

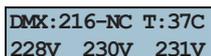
MODE LED is GREEN and the receiver W-DMX LED is RED or GREEN according to the DMX connection on the Transmitter's side. The bargraph shows the signal strength.

## Navigation menu

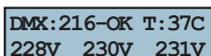
The initial menu indicates the DMX start address, DMX status, inside dimmer temperature and main voltage.

### **DMX status:**

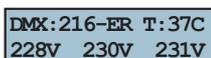
NC DMX is not connected  
ER swap 2 and 3 on the DMX cable  
OK DMX is OK



DMX: 216-NC T: 37C  
228V 230V 231V



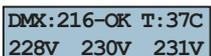
DMX: 216-OK T: 37C  
228V 230V 231V



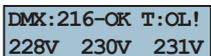
DMX: 216-ER T: 37C  
228V 230V 231V

### **Temperature status:**

# Number shows the temperature of dimmer in °C  
OL! Warning: The inside temperature of the dimmer is higher than 75°C.  
Outputs are switched off.



DMX: 216-OK T: 37C  
228V 230V 231V



DMX: 216-OK T: OL!  
228V 230V 231V

Rotate the ENCODER to see the output bargraph.



### **Menu navigation:**

Press the ENCODER to enter the main menu.

Rotate the ENCODER and select one of the following items by pressing it:

1. START ADDRESS
2. PREHEAT
3. CURVE
4. AUTOMATIC TEST
5. LOCK CONTROLS
6. LIMIT OUTPUTS
7. SETUP /to enter the SETUP, press the ESC and ENTER buttons at the same time/
  1. DMX MODE
  2. ANALOGUE MODE
  3. MANUAL MODE
  4. MIX MODE
  5. PATCH
  6. SCENE
  7. LOST DMX
  8. FACTORY RESET

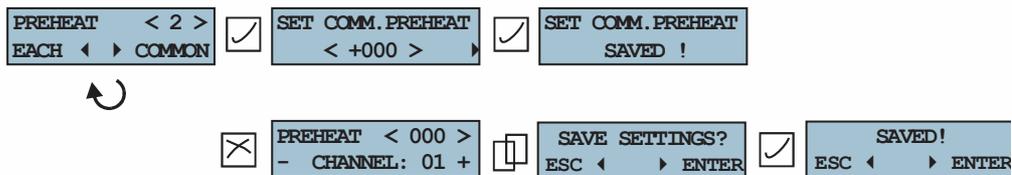
## Set the DMX address



Press the ENTER button.

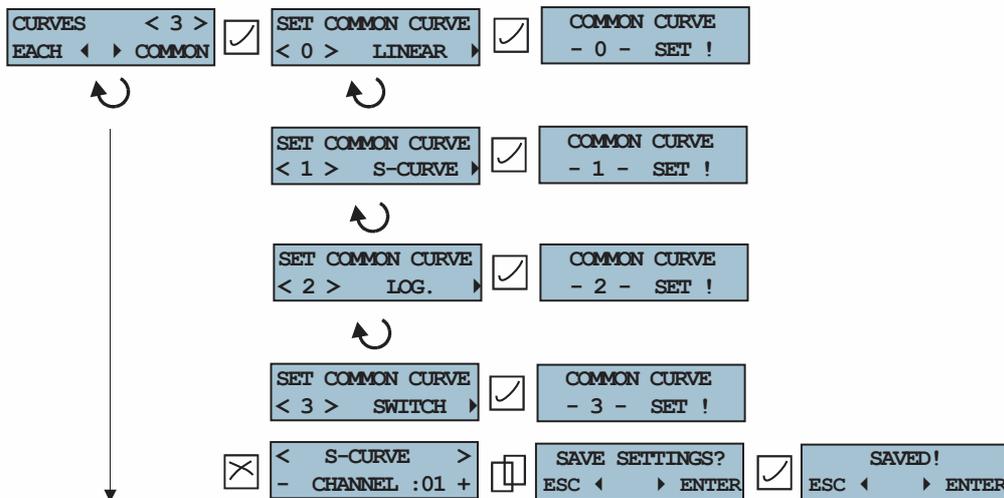
Rotate the ENCODER to set the DMX start address (001-512). Press the ENTER button to confirm.

## Preheat



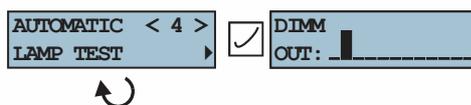
Press the left button to select preheats for every channel individually or the right button to set one common preheat for all channels. If necessary, use preheat 0-100% for a fast control of the dimmer output.

## Dimmer curves



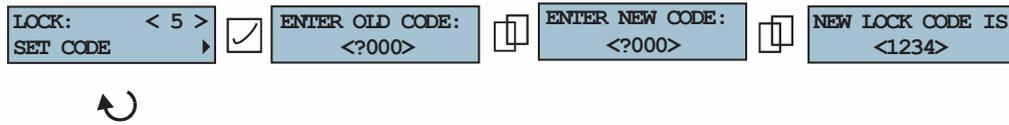
Press the left button to select the curves for each channel individually or the right button to set one common set of curves for all channels.

## Automatic lamp test



Press the ENTER button to start the test. Every channel will be tested by increasing/decreasing the output value per channel.

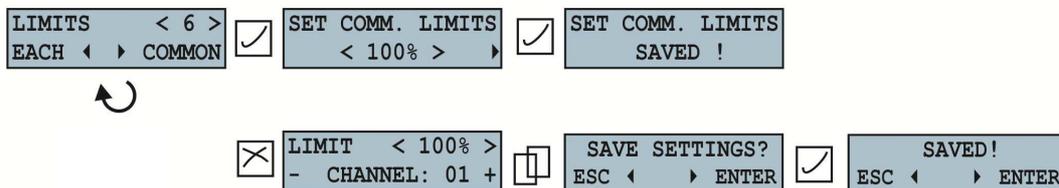
## Lock Code



Enter the old code (factory setting is 0000). Press the ENCODER button.

Enter a new code and press the ENCODER button. The new code is now saved. To lock the menu, press both buttons at the same time. To unlock the menu, press the ENCODER and enter the code. The menu is now unlocked. If you need to restore the code, please ask for service manual.

## Limits



Press the left button to select the limit for each channel individually or the right button to set one common limit for all channels. Limit 100% means that output will go to 100%. Limit 50% means that outputs will go to 50% maximum. You can set the limit from 0-100%.

## Setup



Press the ESC and ENTER buttons at the same time to enter the SETUP MODE.

The dimmer has six modes of control:

- DMX mode /controlled by DMX/
- Analogue mode /controlled by 0-10V/
- Manual mode /controlled by menu of dimmer/
- Mix input mode /LTP or HTP rule/
- Patch mode
- Scene control

## DMX mode



Rotate the ENCODER and set the DMX address [001-512].

Press the ENTER button to confirm.

The dimmer works only with the DMX input now.

## Analogue mode 0-10V



Press the ENTER button.  
The dimmer works only with 0-10V control now.

## Manual mode



Press the ENTER button.  
The dimmer works only with manual control now. You can set output channel for each channel.

## Mix mode



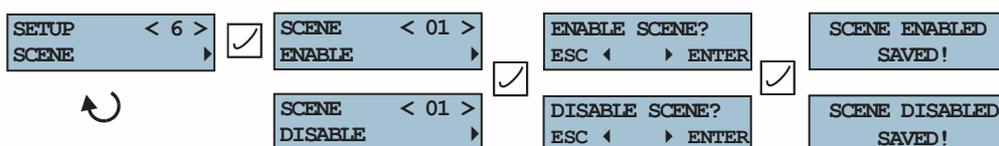
The dimmer is switched to the HTP or LTP mix mode now. In this mode, the dimmer is controlled via DMX and 0-10V input at same time.

## Patch mode



Press the right button to select the dimmer channel. Press the left button to select the control mode (DMX, analogue or manual mode) for each channel. Use the ENCODER to assign control mode for each channel.

## Scene mode



In menu scene, you can enable or disable the scene function. Press the ENTER button to confirm your selection.

## Flash scene



The flash scene is a scene mode, where scenes are called by a single press of a button. When any other button on the HLC is pressed, the other scene is called. You can preset up to 8 scenes. A scene that is to be flashed must be added to the Flash scene list. Rotate the ENCODER until you get to the desired scene number and confirm by the ENTER button. To remove a scene from the Flash scene list, rotate the ENCODER to the scene number and press the ESC button. A single press of the ENCODER saves all settings.

## Scene channel



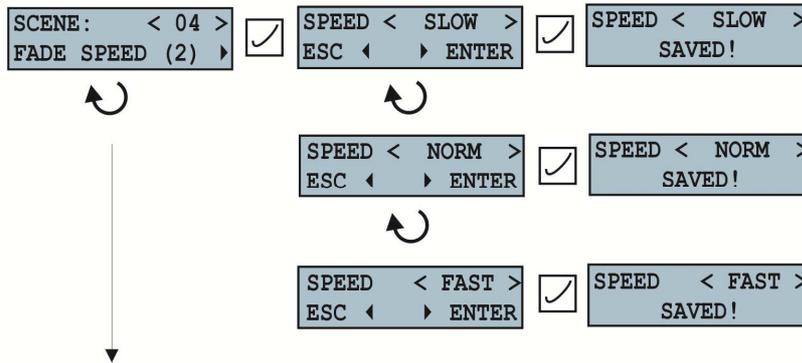
The channel for scene call from the DMX console (as if it was from analogue input) can be set here. The scene is called when the channel value is set to one of ten values. Scene numbers and their channel value ranges are illustrated in the table below. For example, to call scene 1, channel 13 can be used.

The scene is called if fader is set in one of these values for more than 2 seconds. Value other than 0 blocks the scene call via analogue input, while value 255 cancels all scenes.

Scene #	Channel value range
1	10-19
2	20-29
3	30-39
4	40-49
5	50-59
6	60-69
7	70-79
8	80-89
9	90-99
10	100-109
11	110-119
12	120-129
13	130-139
14	140-149
15	150-159

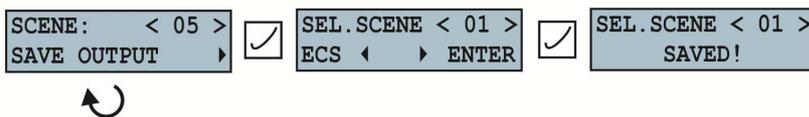
**Note:** If the MIX INPUT MODE [SETUP <4>] is turned off, the selected channel does not cancel the scene call.

## Scene fade speed



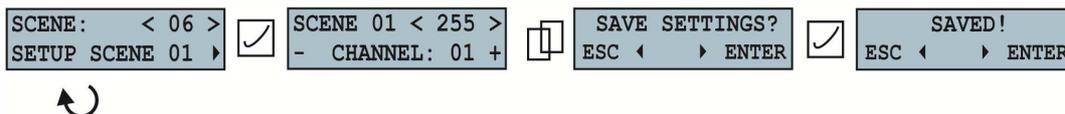
The fade speed can be set in three timeframes: SLOW, NORMAL or FAST. According to the setup, the scene will be changed to the selected speed when the scene is called.

## Save output of dimmer to scene



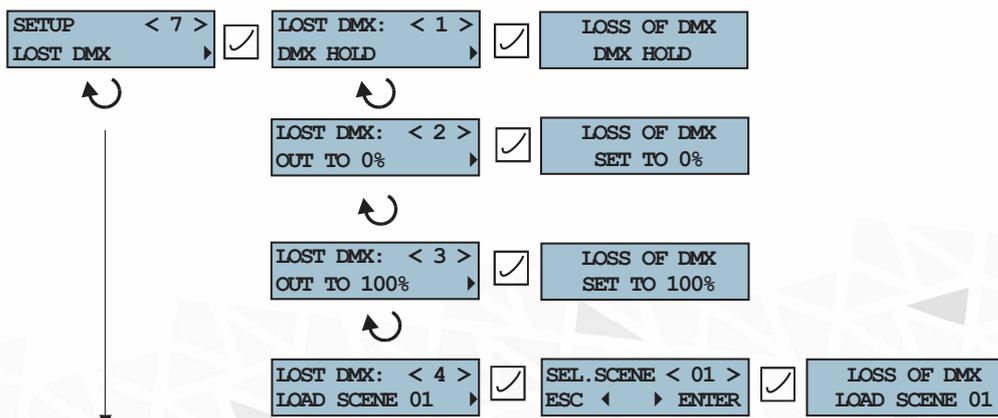
The output of dimmer can be easily saved to any scene. This means that actual light output from dimmer can be saved to a scene and called later remotely. Select scene by rotating the ENCODER and save it by the ENTER button. This value will then be processed by a curve. If preheat on the channel is later changed, the scene will remain unchanged.

## Set up the scene manually



Up to 15 scenes in the dimmer can be set up/recorded and their LATCH/FLASH function can be selected. Use ESC/ENTER button for scrolling over channels and the ENCODER for the selection of channel value and its confirmation. Then set up the output levels for each scene individually and confirm by pressing the ENTER button.

## DMX lost setup



There are four options to set if the DMX signal from DMX port is disconnected:

- Outputs will hold the last DMX data frame.
- Outputs will fade to zero.
- Outputs will go to 100%.
- Outputs will be changed to a selected SCENE [0-15].

## Factory reset

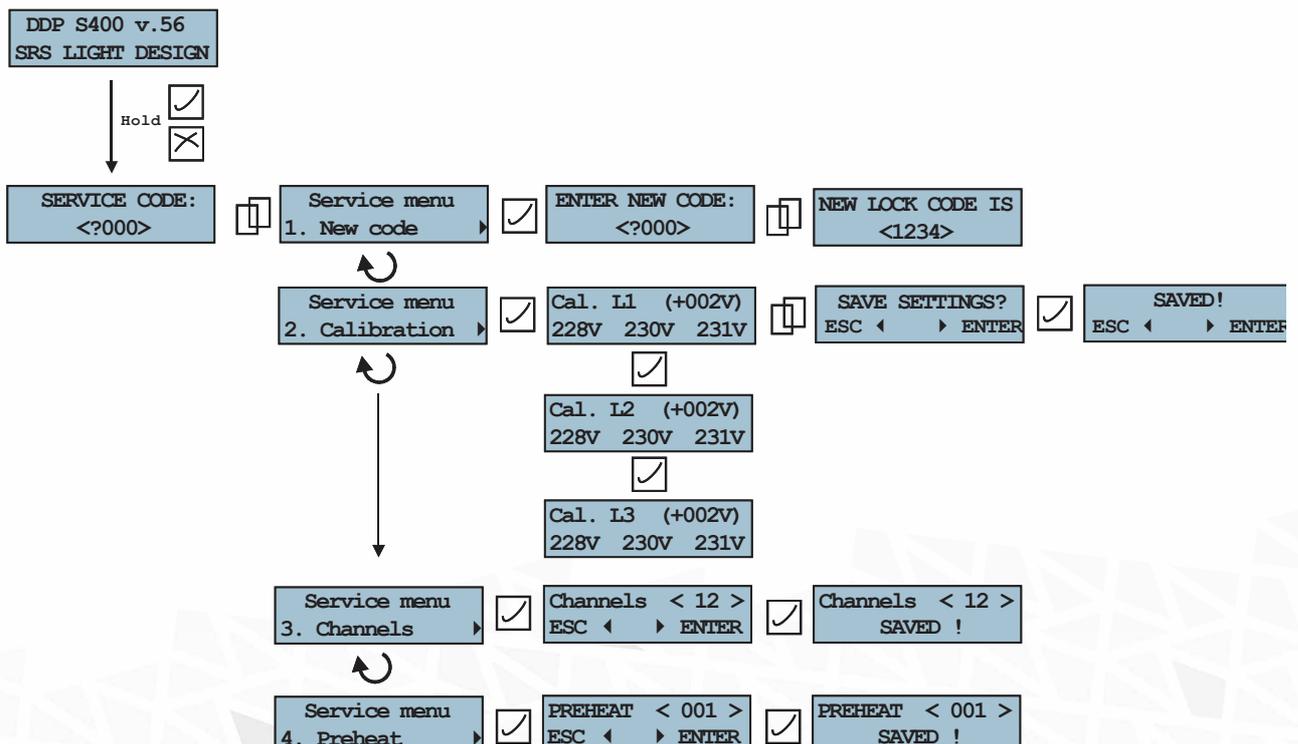


The following are the factory defaults:

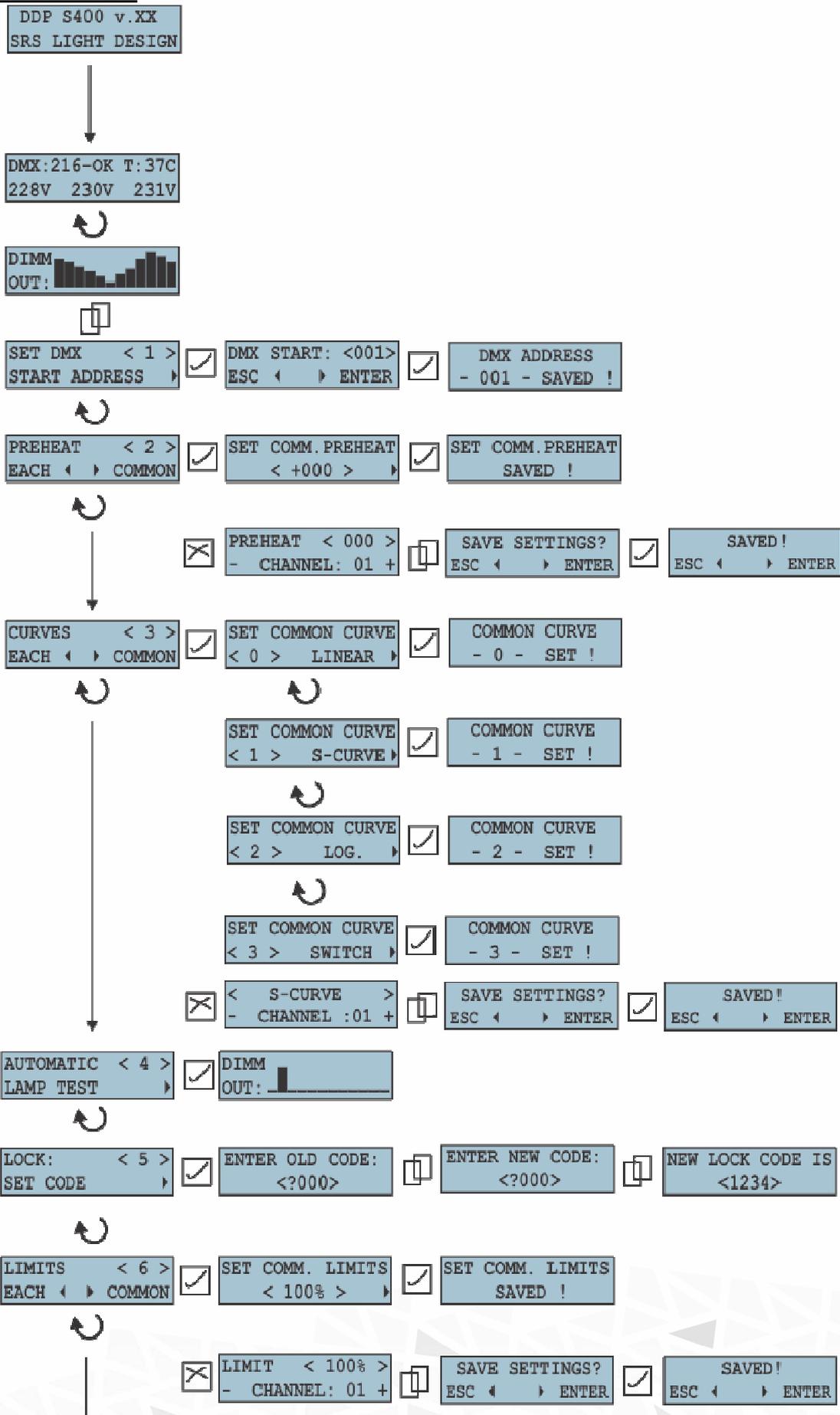
- DMX mode
- DMX start address: 001
- Preheat: 000
- Curve 01: linear
- Mixed mode: OFF
- Limits: 100%
- Lock code: 0000
- Scene: disabled
- All scenes are erased
- Flash scene: 1-8
- Latch scene: 9-15
- Fade speed: NORM
- Lost DMX: hold active

## Service menu

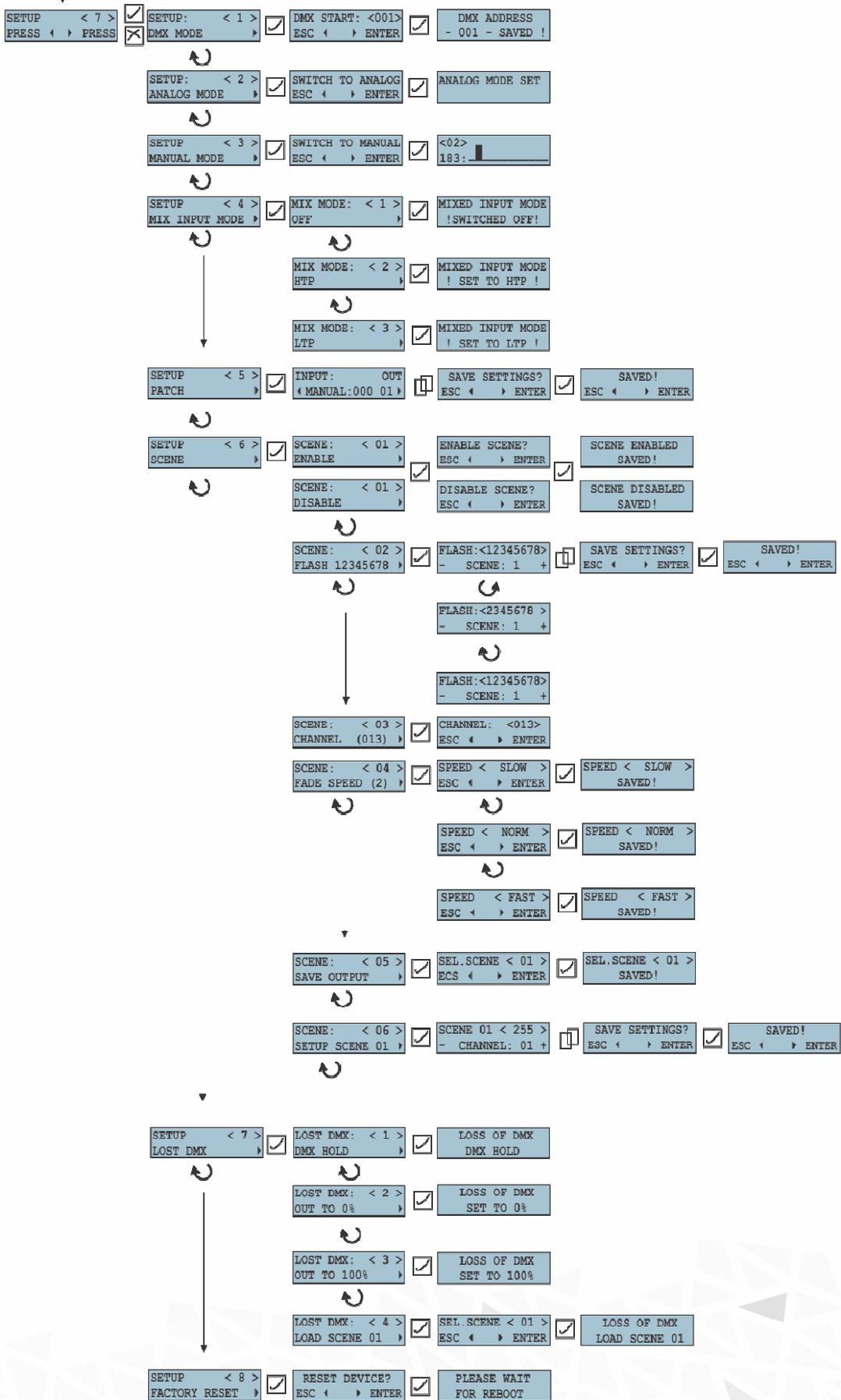
Contact your distributor or manufacturer to get the code to enter the service menu. In this menu, you are able to change the type of dimmer. You can set up the new lock code if the old one has been lost or calibrate the voltage metering and the global preheat.



# Menu tree



# Setup menu tree



## **Technical data**

### **Power supply:**

AC230V/ 43-60Hz

### **Power Cable:**

H07RNF cable 3m, 3G 4mm<sup>2</sup> / 3G 6mm<sup>2</sup> / 3G 10mm<sup>2</sup>

### **Operating temperature:**

-10...+45°C

### **Housing and dimensions:**

Powder coated metalwork, 380x260x120 mm

### **Weight:**

9.24kg

### **Dimming capacity:**

DDP4006-8 4x 6A

DDP4010-8 4x 10A

DDP4013-8 4x 13A

DDP4016-8 4x 16A

DDP6006 6x 6A

DDP6010 6x 10A

DDP6013 6x 13A

DDP6016 6x 16A

### **Interference suppression:**

Phase-angle control with Triac and in-line precision filters 400us

### **Protection/Ventilation:**

Life protection by 30mA type A GFI/RCD

Short circuit protection by MCB

100% duty cycle

Double thermal protection

Automatic shutdown at critical temperature

**DECLARATION OF CONFORMITY**  
**According to the guidelines 89/336 EEC and 92/31 EEC:**

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

**Address of producer:** Rybnicna 36/D, 83107 Bratislava, Slovak Republic

*Declares that the product*

**Name of product:** DDP40xx portable dimmer series400

**Type:** DDP40xx and variants

*Corresponds to the following product specifications and R&TTE Directive of the European Union:*

**Safety:** EN60065, resp. EN 60950

**EMC:** EN55103-1, resp. EN55103-2

**Radio:** EN 301 489-1; 301 489-17; EN 300-328-1; EN 300-328-2

Bratislava, May 10, 2011



Robert Sloboda

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