SRS LIGHTING

Digital Dimmer Unit

Instruction Manual

Models:

DDP1210 WM, DDP1213 WM, DDP1216 WM, DDP6025 WM, DDP6032 WM, DDPN1210 WM, DDPN1213 WM, DDPN1216 WM, DDPN6025 WM, DDPN6032 WM, DDPD1210 WM, DDPD1213 WM, DDPD1216 WM DDPD6025 WM, DDPD6032 WM

version 4.0 since 3 February 2020

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.

DDP12XX-WM_en_manual_M020

General information

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.
Please double check the signals of the power cable.

For DDP and DPDN, the cable must be 5-wire (3L+N+E) with the CEE form input socket 32A/63A – 5-pin or hardwired to the installation rack.
DDPD DELTA and DDPD DELTA/STAR versions are supplied with a 4-pole cable (3L+PE).

Output connection

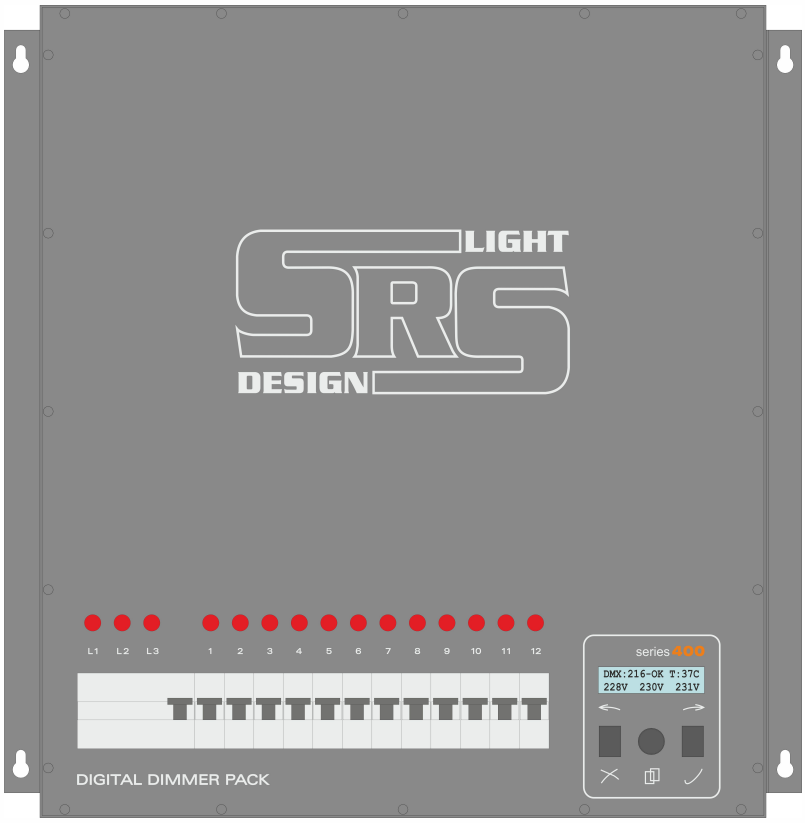
The output terminals are located inside the dimmer. Live, neutral and earth connections must be made to all load equipment. Have a look at the PCB for more information about connection of outputs and the power input.

DMX Input connection

DMX512 standard 3-pin and 5-pin XLR connectors are located on the rear panel of DDP12xx. DMX input is optically isolated. Analogue input (standard 0-10V) is made via the HD-SUB 15-pin connector.

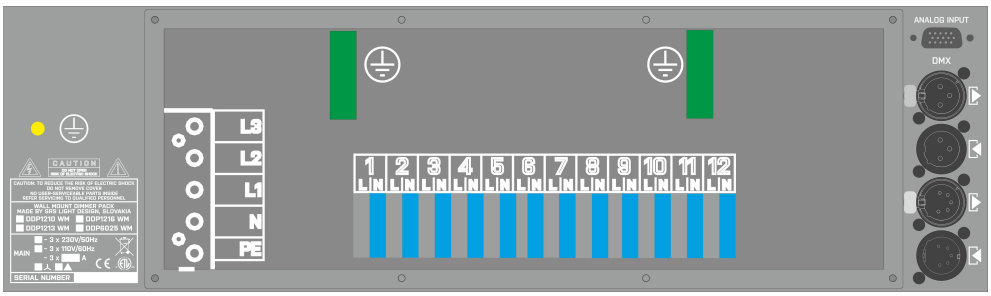
Functions and Control

Front panel:



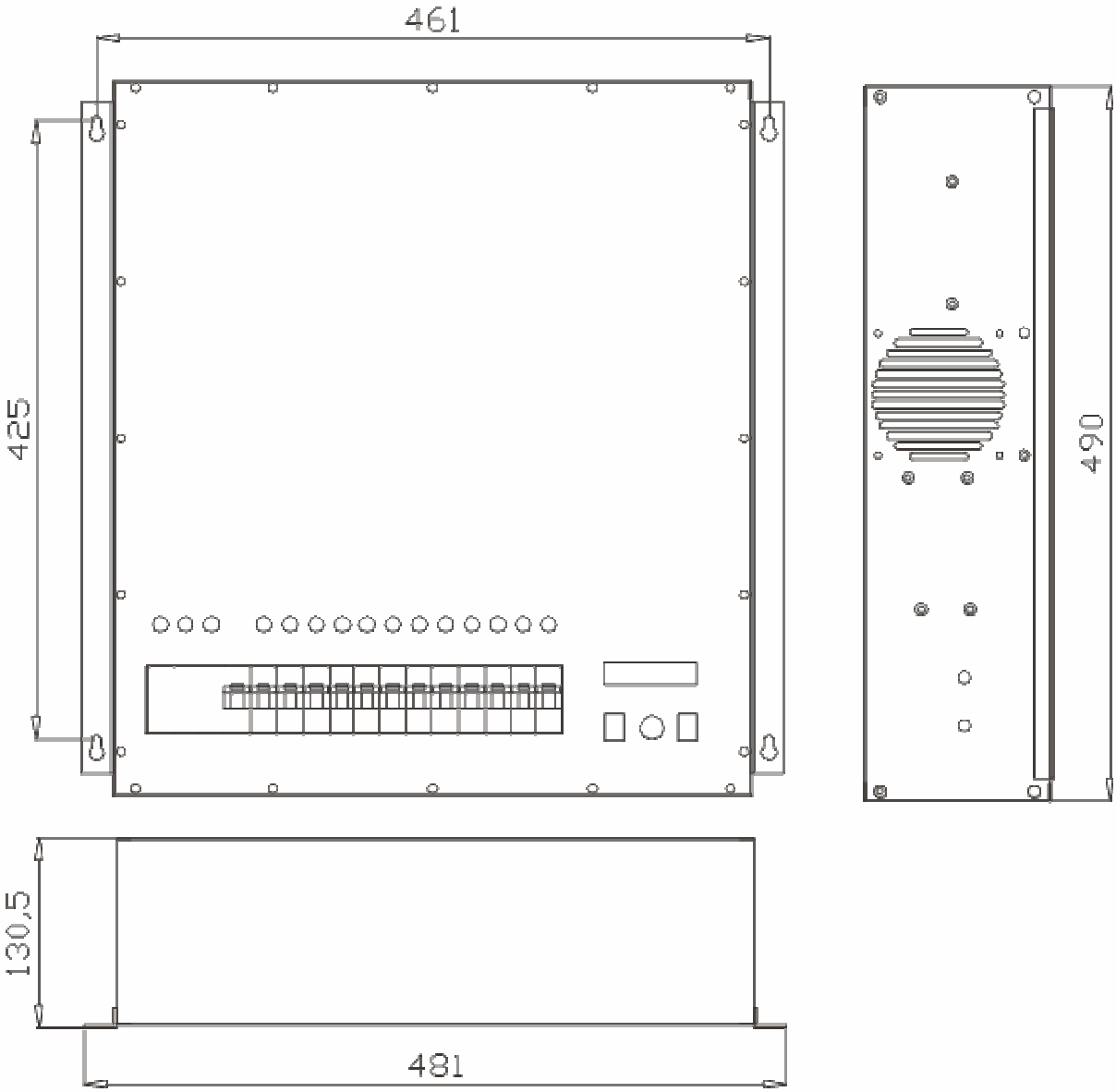
GFI (or main switch)
Indicator of main input
Circuit breakers
Unload indicator
ESC button
ENCODER
ENTER button

Top panel:



DMX 3-pin in/thru
DMX 5-pin in/thru
Analogue input – SUB HD15
Dimmer outputs
Power cable input gland
GND grounding point

Dimensions



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

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.

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

Error! Objects cannot be created from editing field codes.

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

Error! Objects cannot be created from editing field codes.

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

Error! Objects cannot be created from editing field codes.

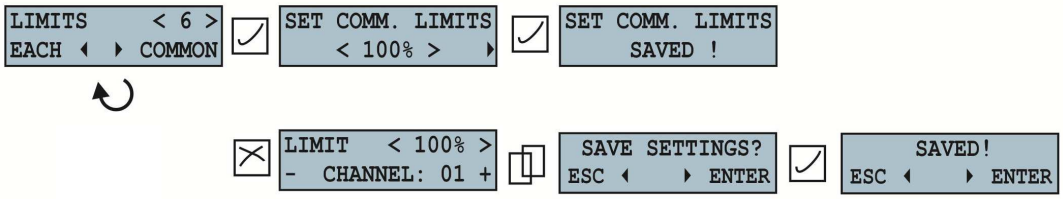
Press the ENTER button to start the test.
Every channel will be tested by increasing/decreasing the output value per channel.

Lock Code

Error! Objects cannot be created from editing field codes.

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

Error! Objects cannot be created from editing field codes.

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

Error! Objects cannot be created from editing field codes.

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

Error! Objects cannot be created from editing field codes.

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

Manual mode

Error! Objects cannot be created from editing field codes.

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

Mix mode

Error! Objects cannot be created from editing field codes.

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

Error! Objects cannot be created from editing field codes.

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

Error! Objects cannot be created from editing field codes.

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

Flash scene

Error! Objects cannot be created from editing field codes.

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.

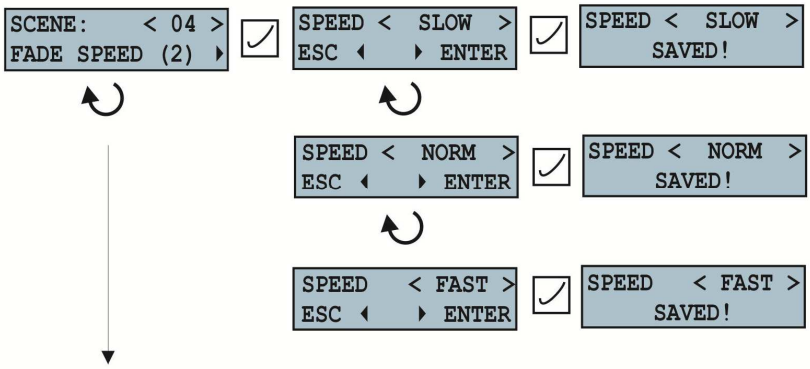
Scene channel

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.

Error! Objects cannot be created from editing field codes.

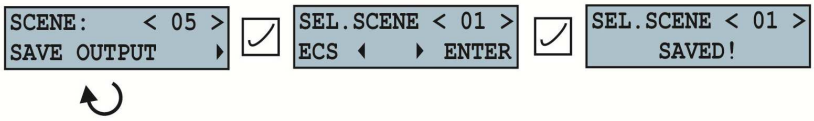
Note: If the MIX INPUT MODE (SETUP <4>) is turned off, the selected channel does not cancel the scene call.

Scene fade speed



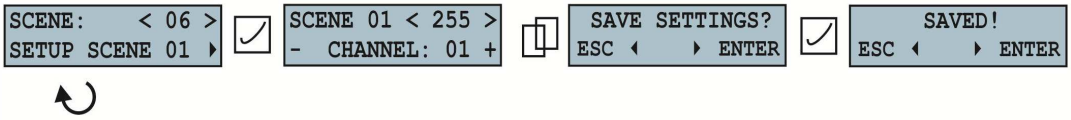
The fade speed can be set in three timeframes: SLOW, NORMAL or FAST. According to the setup, the scene will be changed to the selected speed when the scene is called.

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

Error! Objects cannot be created from editing field codes.

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

Error! Objects cannot be created from editing field codes.

The following are the factory defaults:

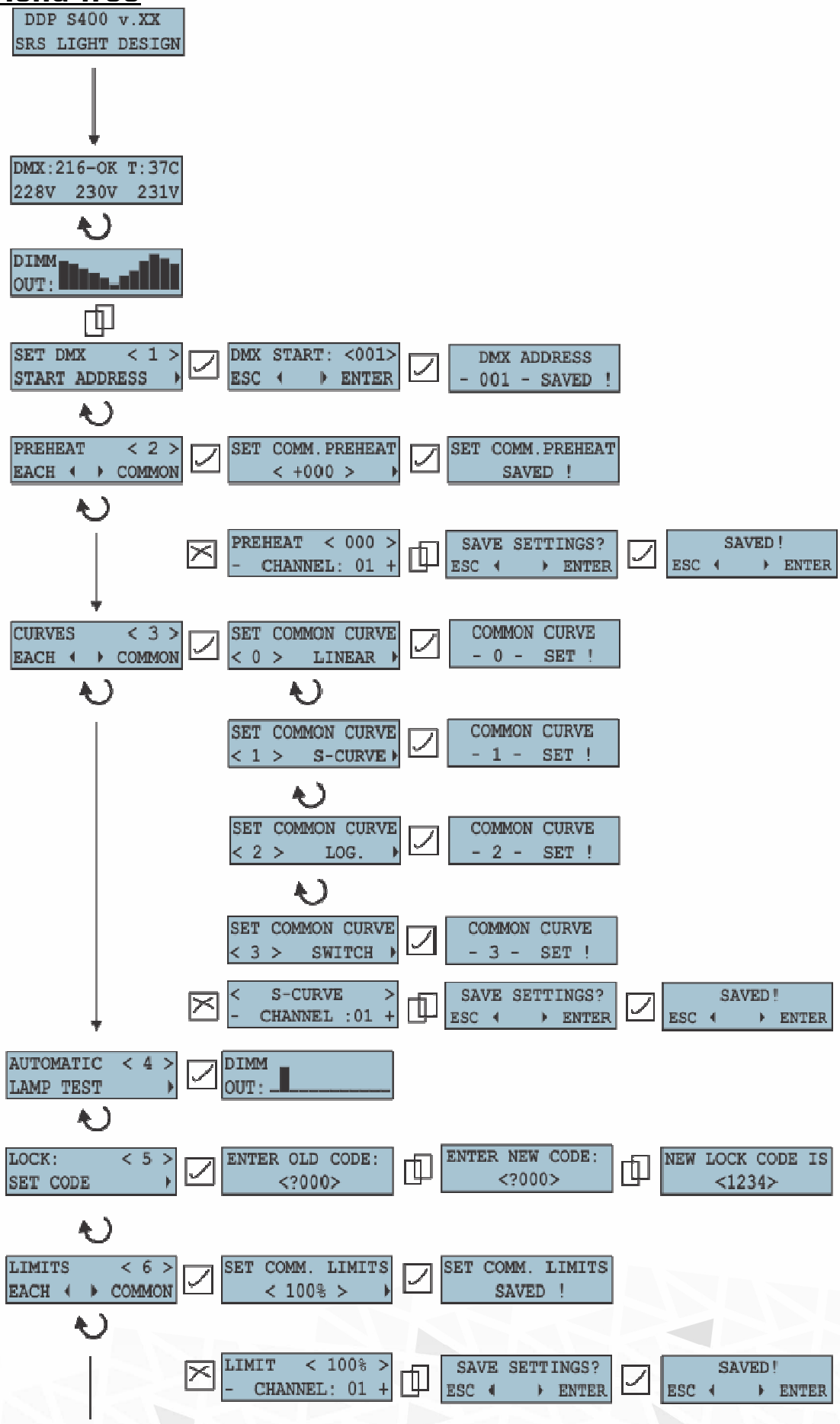
- DMX mode
- DMX start address: 001
- Preheat: 000
- Curve 01: linear
- Mixed mode: OFF
- Limits: 100%
- Lock code: 0000
- Scene: disabled
- All scenes are erased
- Flash scene: 1-8
- Latch scene: 9-15
- Fade speed: NORM
- Lost DMX: hold active

Service menu

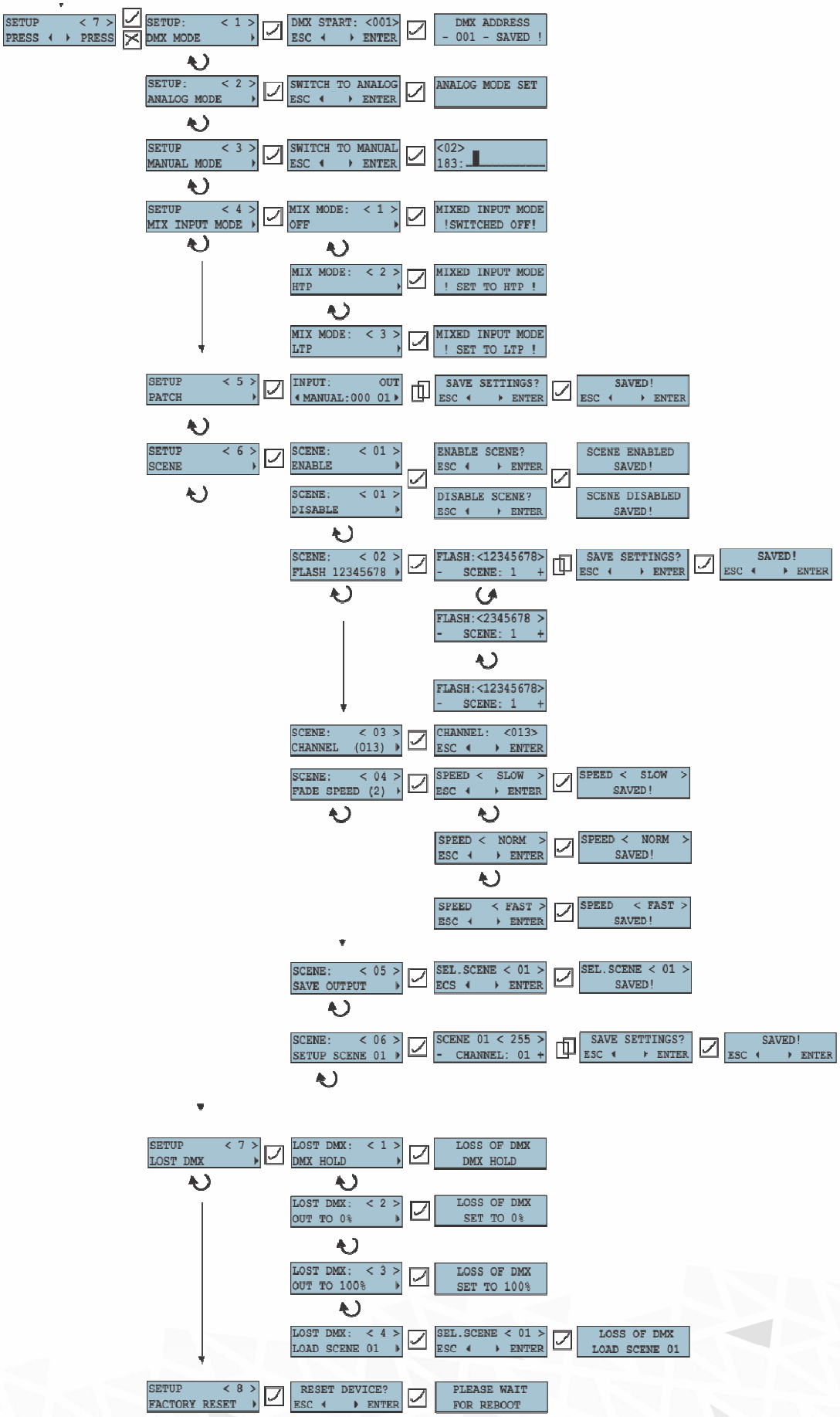
Contact your distributor or manufacturer to get the code to enter the service menu. In this menu, you are able to change the type of dimmer. You can set up the new lock code if the old one has been lost or calibrate the voltage metering and the global preheat.

Error! Objects cannot be created from editing field codes.

Menu tree


DDP S400 v.XX
SRS LIGHT DESIGN
DMX:216-OK T:37C
228V 230V 231V
DIMM
OUT:
SET DMX < 1 >
START ADDRESS
DMX START: <001>
ESC ENTER
DMX ADDRESS
- 001 - SAVED !
PREHEAT < 2 >
EACH COMMON
SET COMM.PREHEAT
< +000 >
SET COMM.PREHEAT
SAVED !
PREHEAT < 000 >
- CHANNEL: 01 +
SAVE SETTINGS?
ESC ENTER
SAVED!
ESC ENTER
CURVES < 3 >
EACH COMMON
SET COMMON CURVE
< 0 > LINEAR
COMMON CURVE
- 0 - SET !
SET COMMON CURVE
< 1 > S-CURVE
COMMON CURVE
- 1 - SET !
SET COMMON CURVE
< 2 > LOG.
COMMON CURVE
- 2 - SET !
SET COMMON CURVE
< 3 > SWITCH
COMMON CURVE
- 3 - SET !
< S-CURVE >
- CHANNEL :01 +
SAVE SETTINGS?
ESC ENTER
SAVED!
ESC ENTER
AUTOMATIC < 4 >
LAMP TEST
DIMM
OUT:
LOCK: < 5 >
SET CODE
ENTER OLD CODE:
<?000>
ENTER NEW CODE:
<?000>
NEW LOCK CODE IS
<1234>
LIMITS < 6 >
EACH COMMON
SET COMM. LIMITS
< 100% >
SET COMM. LIMITS
SAVED !
LIMIT < 100% >
- CHANNEL: 01 +
SAVE SETTINGS?
ESC ENTER
SAVED!
ESC ENTER

Setup menu tree



Technical data

Dimming capacity
DDPx1210 WM 12x10A 12x2.3kW
DDPx1213 WM 12x13A 12x3kW
DDPx1216 WM 12x16A 12x3.7kW
DDPx6025 WM 6x25A 6x5.7kw
DDPx6032 WM 6x32A 6x7.3kW

Dimensions & Housing:
482 x 132 x 490 mm, Steel housing with gray powder coating

Weight:
DDPx12xx WM: 29 kg, DDPx60xx WM: 28 kg

Interference suppression:
Phase-angle control with triacs and in-line precision filters: 400us

Protection:
Short circuit protection by MCB
Optional 1P+N, 1P+1P short circuit protection
Double thermal protection

Ventilation:
100% duty cycle
Temperature-controlled fan
Automatic shutdown at critical temperatures

Others:
All safety features are displayed on the display
Soft start
Controlling of special functions via display, three keys and an encoder
Circuit breakers on the front panel
Easy change of power output connectors

Display Functions:
Voltage of all 3 phases
Single channel values
Inner temperature
Load status check
DMX signal status

Digital menu functions:
Preheat per channel
Dimmer curve per channel
Single channel patch
Variable channel set
DMX processing with fast output response
Hold function for output in case of the DMX data failure

Power Cable:
H07RNF cable 5x 4/6/10 mm^2 or H07RNF cable 4x 4/6/10 mm^2 for DELTA UNIT

Inputs and Outputs:

Pin out for the XLR connectors:

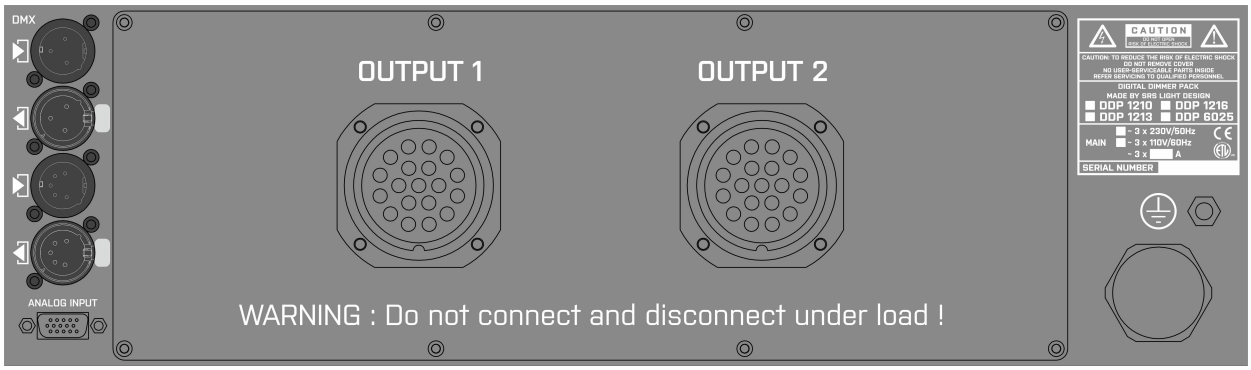
Pin 1: Data CMN (not connected to earth)
Pin 2: Data -
Pin 3: Data +
Pin 4, 5: Not connected

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

Pin out for the SUB-HD connector:

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

Pin out for the SOCAPEX connectors (DDP 12xx):



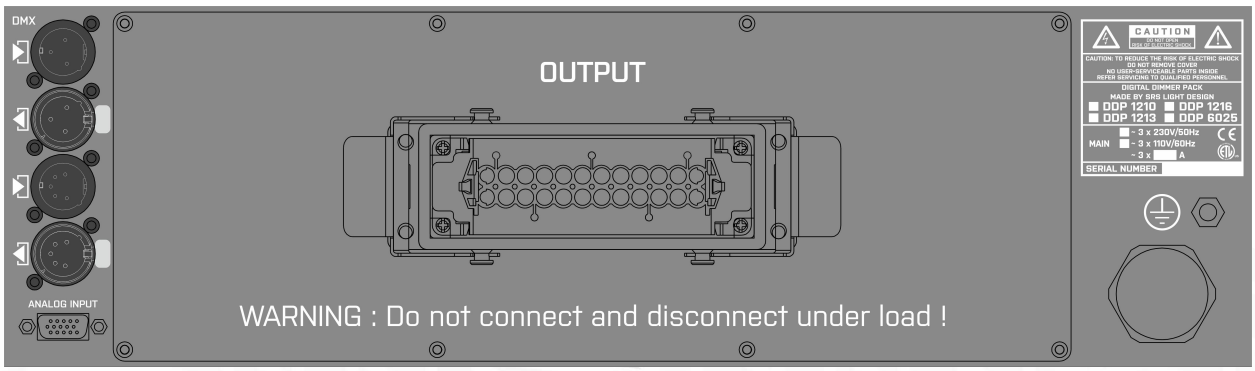
Output 1:

Pin 1,3,5,7,9,11 Phase 1,2,3,4,5,6
Pin 2,4,6,8,10,12 Neutral or HOT Phases on DELTA dimmer
Pins 13-19 Earth

Output 2:

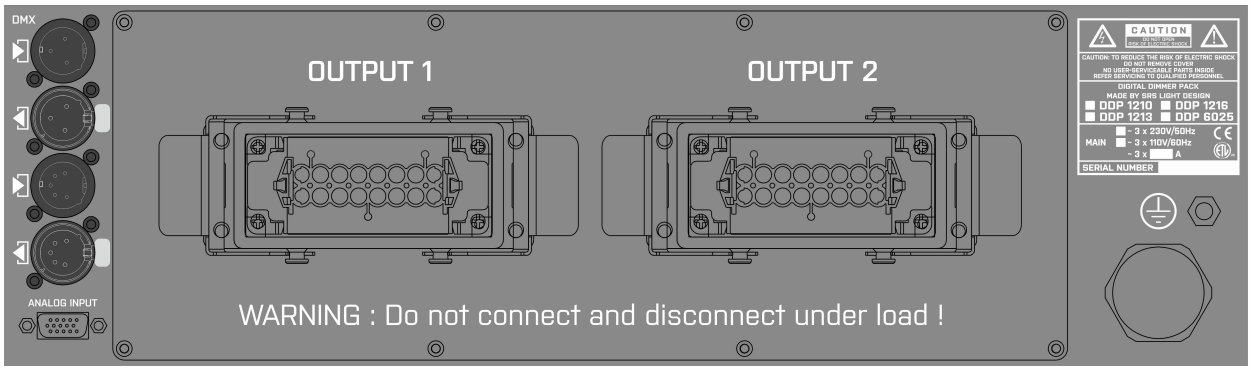
Pin 1,3,5,7,9,11 Phase 7,8,9,10,11,12
Pin 2,4,6,8,10,12 Neutral or HOT Phases on DELTA dimmer
Pins 13-19 Earth

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:



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

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

DECLARATION OF CONFORMITY

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

Address of producer: Rybnicna 36/D, SK- 83106 Bratislava, Slovak Republic

Declares that the product

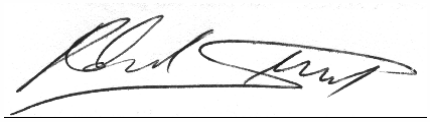
Name of product: Digital Dimmer Pack
Type:

DDP1210-WM, DDP1213-WM, DDP1216-WM,
DDPN1210-WM, DDPN1213-WM, DDPN1216-WM

Corresponds to the following product specifications:

EN60065, resp. EN60950-1
EN55103-1:2009
55103-2:2009
EN55014
EN55011

Additional information:
All DMX512 and analogue inputs and outputs must be shielded and the shielding must be connected to the ground respective to the case of the corresponding plug. The unit and all connected apparatuses must also be earthed via main cable. Always check for correct shielding of the device.



Bratislava, 29 Aril 2011 Robert Sloboda

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