



Digital dimmer unit

Instruction Manual

Models:

**DDP 1210 DDP 1213
DDP 6025**

ATTENTION!

This instruction manual contains important information's about the installation and 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 INFORMATIONS

The following general safety precautions have to be observed during all phases of operation, service, and repair of this equipment. Failure to comply with these precautions or with specific warning in this manual violates safety standards of design, manufacture, and 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, also not in high humidity atmosphere where condensation forms on the equipment. It should never be placed near or over heat register or other source of heated air and it should not be installed or operated without proper ventilation.

Power connections

- This equipment must be earthed
- Wait for at least 10 minutes after the unpacking for adapting of the equipment
- Correctly to connect the power cable – 5 way (3L+N+E) CEE form input socket if required

Output connection

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

These instructions are valid for the fixed installation.

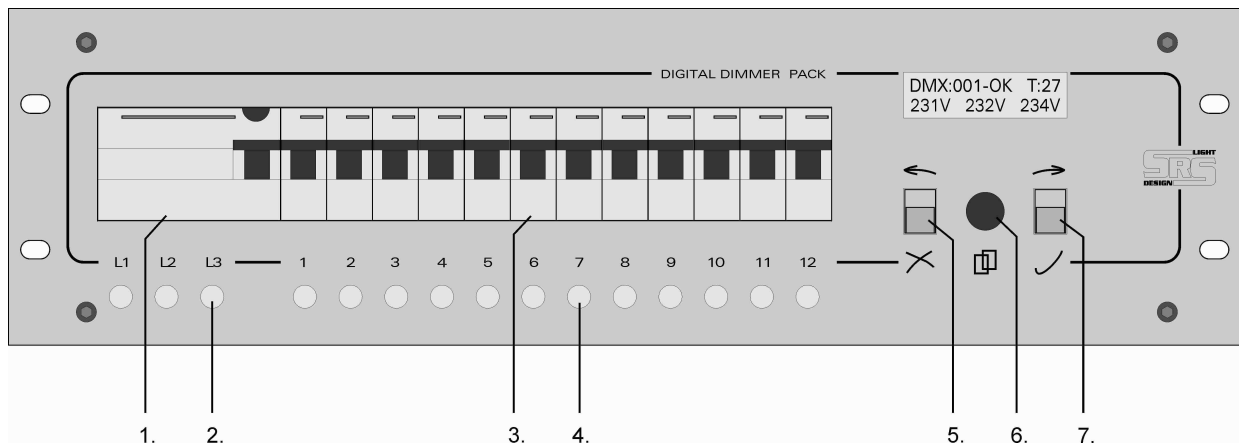
Input connection

Male and female DMX standard 5 pin XLR connectors are provided on the back panel for IN and OUT connections. This will also facilitate use of a low impedance terminator if the dimmer is the last equipment on the DMX line. DMX input is optically isolated.

Analog inputs (standard 0-10V) are provided in the form of SUB-D socket. Pin 17 and 18 sockets include a DC supply output at +20V which can be used to power small lighting desks which draw less than the 150mA maximum supply current. This output is protected against short circuit with polyswitch.

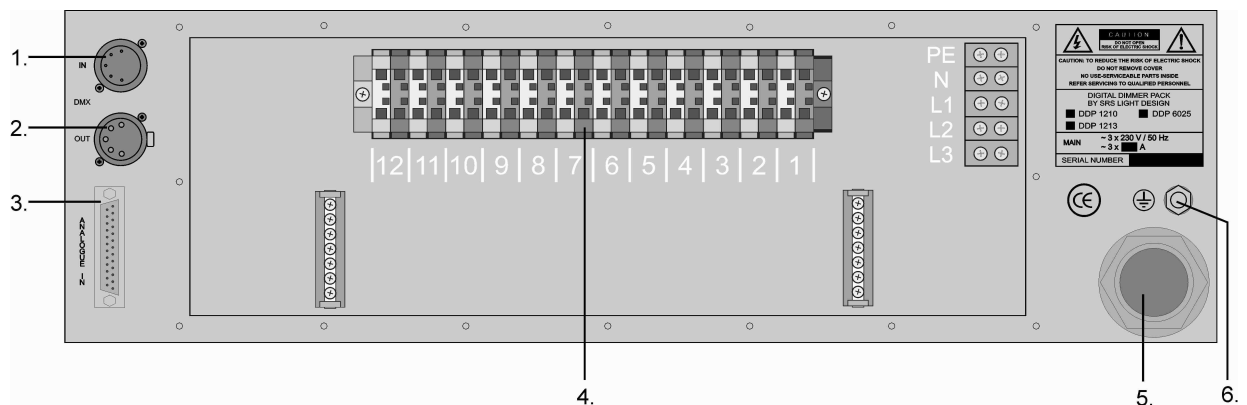
2. Functions and Control

Front panel:



1. GFI (or main switch)
2. Indicator of main input
3. Circuit breakers
4. Unload indicator
5. Escape button
6. Encoder
7. Enter button

Rear panel:



1. DMX input
2. DMX output
3. Analogue input – SUB D 25
4. Power output
5. Power cable
6. GND

3. Operations

First menu indicate DMX start address, temperature of cooler and main voltage.

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

Roll to encoder show bargraph output level.

```
DIMM
OUT: [bargraph]
```

Press encoder for entrance to menu.

Roll to encoder and select function:

- START ADDRESS
- PREHEAT
- CURVES
- AUTOMATIC LAMP TEST
- SETUP
- LOCK

3.1 Set DMX address

```
SET DMX < 1 >
START ADDRESS ▶
```

Press ENTER button.

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

Roll ENCODER and set DMX start address - (001-512).

Press ENTER button.

3.2 Preheat

```
PREHEAT < 2 >
EACH ◀ ▶ COMMON
```

Left button is preheat for each channel or right button for all channels.

```
PREHEAT < 000 >
- CHANNEL: 01 +
```

```
SET COMM. PREHEAT
< +000 > ▶
```

3.3 Dimmer curves

Left button is curves for each channel or right button for all channels.

```
CURVES < 3 >
EACH ◀ ▶ COMMON
```

```
< S-CURVE >
- CHANNEL :01 +
```

```
SET COMMON CURVE
< 0 > LINEAR ▶
```

3.4 Automatic lamp test

```
AUTOMATIC < 4 >
LAMP TEST ▶
```

Press ENTER button.

```
DIMM
OUT: █-----
```

3.5 Setup

```
SETUP < 5 >
PRESS ◀ ▶ PRESS
```

Press two buttons together
Setup has five mode:

- Digital mode
- Analog mode
- Manual mode
- Mix input mode
- Patch mode

3.5.1 Digital mode

```
SETUP: < 1 >
DIGITAL MODE ▶
```

Press ENTER button.

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

Roll ENCODER and set DMX address - (001-512).
Press ENTER button.
DIMMER works only with DMX input.

3.5.2 Analog mode

```
SETUP: < 2 >
ANALOG MODE ▶
```

Press ENTER button.

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

Press ENTER button. DIMMER works only with analog input.

3.5.3 Manual mode

```
SETUP      < 3 >
MANUAL MODE ▶
```

Press ENTER button.

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

Press ENTER button.

```
<02>
183: █
```

Left and right button select channel and roll encoder and set value.
For escape from this menu PRESS encoder.
DIMMER works without inputs.

3.5.4 Mix mode

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

Press ENTER button.

```
MIX MODE: < 1 >
HTP ▶
```

Press ENTER button.

```
MIXED INPUT MODE
! SET TO HTP !
```

Dimmer is switched to HTP mix mode – analog input + DMX input.

3.5.5 Patch mode

```
SETUP      < 5 >
PATCH ▶
```

Press ENTER button.

```
INPUT:      OUT
◀ MANUAL: 000 01 ▶
```

Right button selects dimmer channel. Left button selects controlled mode (DMX, analog, manual mode) for each channel. Encoder set DMX address, select number of analog inputs or value of output manual mode.

3.6 Lock

```
LOCK:      < 6 >
SET CODE   ▶
```

Press ENTER button.

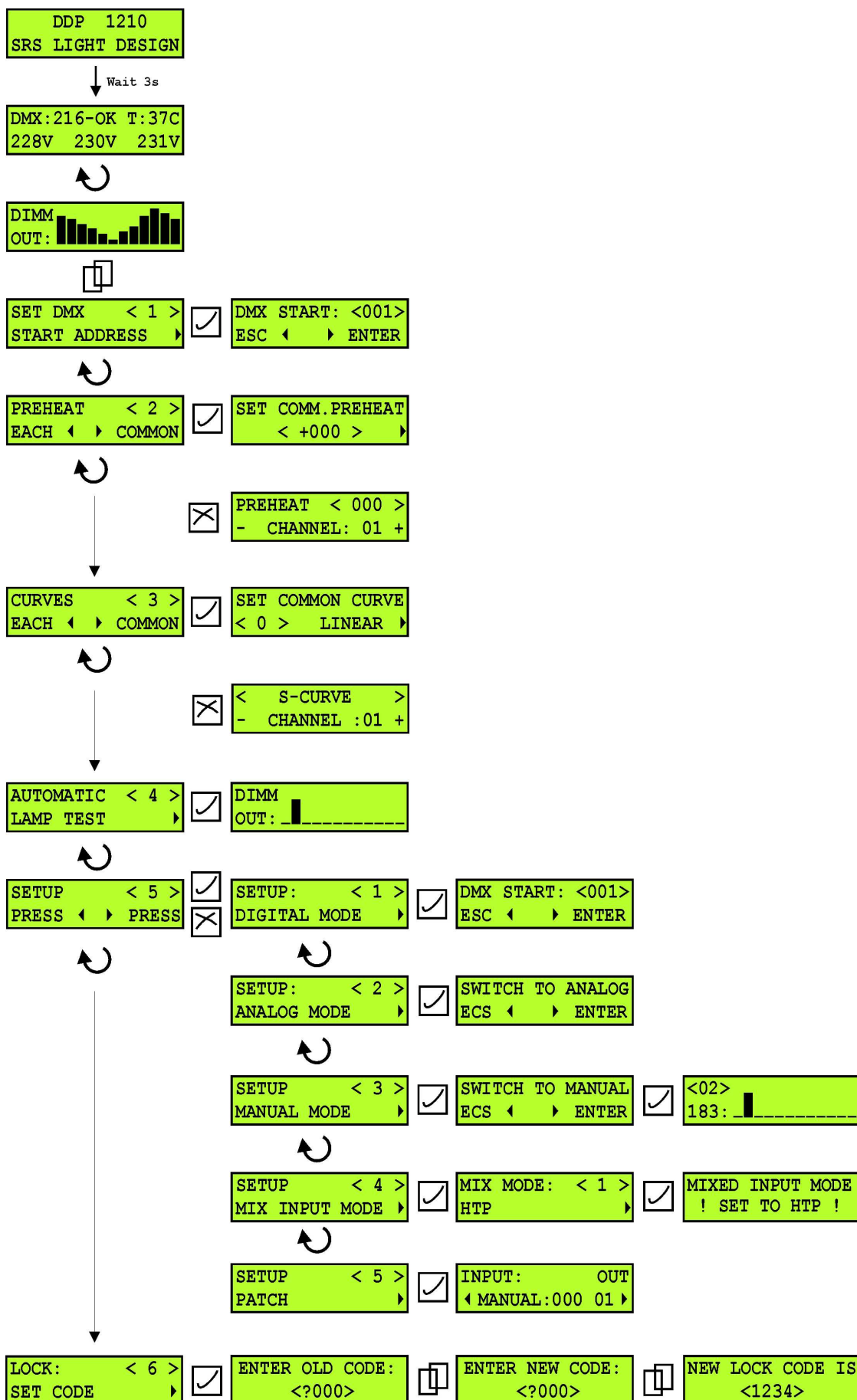
```
ENTER OLD CODE :
<?000>
```

Set old code (factory setting is 0000). Press MENU button.

```
ENTER NEW CODE :
<?000>
```

Enter new code and press MENU button. New code is saved. For locking menu press two buttons together. For unlock press MENU and enter code. Menu is unlocked.

4. Menu tree



5. Technical data

Capacity:

- 12 x 2300 W (10 Amp/channel) DDP 1210
- 12 x 2990 W (13 Amp/channel) DDP 1213
- 6 x 5750 W (25 Amp/channel) DDP 6025

Interference suppression:

- Phase-angle control with triacs and in line precision filters

Protection:

- Short circuit protection by medium speed automatic circuit breakers
- Separate ground on rear panel

Ventilation:

- Dimmer has 100% duty cycle
- Temperature controlled fan
- Airflow site
- Automatic shutdown at critical temperature

Safety measure:

- Showing of all safety features via display
- The triacs are turned on only when processor is fully functional, soft start

Practical attributes:

- Controlling of special functions via display, three keys and encoder
- Circuit breakers on front panel
- Load check status for each channel on front panel by lamps
- Easy change of power output connectors
- GFI on front panel

Display Functions:

- Voltage of all 3 phases
- Brightness of single channels
- Temperature of cooler
- Load status check
- DMX status

Functionalities:

- Preheat per channel
- Dimmer curve per channel
- Programming of brightness per channel at dimmer
- Single channel patch
- Variable channel set
- DMX processing with fast output response
- Hold function for output if DMX data failure

Power Cables:

- 12 x 2300 W: 1,5m / 5' rubber cable 5 x 6 mm²
- 6 x 5750 W: 1,5m / 5' rubber cable 5 x 10 mm²

Colored marks of main cable:

Yellow-green	PE
Blue	N
Grey	L1
Brown	L2
Black	L3

Power Outputs:

- 12 x 2300 W and 12 x 2990 W
 - 2 x ILME 16 pin (compatible with Wieland, Harting, Procon)
 - 1 x ILME 24 pin (compatible with Wieland, Harting, Procon)
 - 2 x Socapex EF 319
- 6 x 5750 W
 - 2 x ILME 6 pin (compatible with Wieland, Harting, Procon)
 - 2 x Socapex EF 319

Housing:

- Steel housing with gray powder coating
- 482,5 x 132 x 420 mm

Weights:

- 12 x 2300 W: 22 kg
- 6 x 5750 W: 25 kg

Inputs and Outputs:

Pinout for the XLR connectors:

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

The DMX output is wired 1:1 to the DMX Input.

Pinout for the SUB-D connector:

Pin 1-12	channel 1-12, analog input (0-10V)
Pin 13-16	Not connected
Pin 17-18	DC out +20V, 150mA
Pin 19-25	Ground (not connected with earth)

Pinout for the SOCAPEX connectors (dimmer DDP 12xx):

SOCAPEX 1

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

SOCAPEX 2

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

Pinout for the Ilme 24 connectors (dimmer DDP 12xx):

Pin 1-12	Phase 1-12
Pin 13-24	Neutral

Pinout for the Ilme 16 connectors (dimmer DDP 12xx):

Ilme 1

Pin 1-6	Phase 1-6
Pin 9-14	Neutral

Ilme 2

Pin 1-6	Phase 7-12
Pin 9-14	Neutral

Pinout for the Ilme 6 connectors (dimmer DDP 6025):

Ilme 1

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

Ilme 2

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

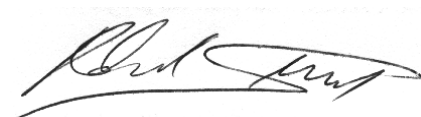
6. Parameters

Processor	RISC 8bit
LCD display	2x16 digit with backlight
Risetime	400uS
Filters	iron metal powder core
Input: USITT DMX 512 (1990)	XLR 5 pin
	XLR 3 pin
Input: Analog 0-10V, max 4 mA	25 pin SUB-D
Output: 12 x 10(13)A, 6 x 25A	2 x Socapex 19
	2 x Harting 16
	1x Harting 24
	Terminal box (fixed installation)
Main 3x230V/50Hz, 3x40(50)A	Power cable 5 x 6/10 mm ²
Measurement	482,6 x 132 x 460 mm
Weight	DDP 1210/0625 – 22/25kg

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