

# DDS24/DDS48

DIGITAL DIMMER UNIT

12 Modules 2x10A or 1x25A / 12 Modules 4x6A

LIGHTING  
Nova



The fully digital dimmer unit DDS is compact convection-cooled cabinet designed for wall or floor mounting. It is equipped with well-trieed digital technology witch stems from long-time experiences. This technology guarantees high stability of all parameters. The DDS unit offers a number of programmable software features to match the dimmers performance to the precise requirements of the installation from simple interior illumination up to challenging lighting in theatres and TV or film studios. The processor module allows controlling range of 48 x 1.3kW (DDS48) and 24 x 2.5kW to 12 x 5kW (DDS24) dimmers. Dimmer control is digital input DMX512 and analog input 0/+10V (optional) available.

## Device Description

The dimmer case DDS is standard equipped with the mounting frame for uncomplicated hang-up on the wall. The case-depth is only 140mm and vertical projection is a square with 1m side. Installation of the case is simple even for inexpert user and the same simplicity in case of exchanging of power modules.

The case contains following three basic parts:

- Mounting area with power supply cable connection to input circuit breaker 3x80A, remote controlled power supply contactor, residual current device (RCD) and clamps for load connections.
- 3 power blocks for each line incl. thermal breakers. Each power block contains four power modules 2x10A or 1x25A in standard configuration or customer configuration of power modules (in this case it is necessary to define configuration in order). The circuit breakers C10A / C25A provide line protection.  
By DDS48 contains each power block four power modules 4x6A with circuit breakers C6A in standard configuration.
- Powerful control unit section equipped with fast processor DALLAS 80C320, field programmable gate array XILINX and comprehensive back-lighting LCD to provide an accurate, stable and reliable output value for each channel. All operating parameters can be easily modified with the user friendly control panel.

# DDS24/DDS48

## Main Features

- Power supply 3x230/400V 50/60Hz
- Fusing each dimmer by circuit breaker
- Smooth 1000 step fade resolution
- Precision line voltage regulation for stable output with fluctuating supply voltage
- Line voltage indication on LCD
- PLL technology for balancing of mains frequency fluctuation
- High specification TV Broadcast standard filtering - RFI fulfils EN55014 (300µs)
- Fluorescent lamps control possibility
- 98 programmable cues for preset and backup use
- Two DMX512 inputs DMXA and DMXB with individual patches
- 24 analog 0/+10V patchable inputs and outputs
- Wireless or wire remote control
- Convection cooling with additional cooling by electronically controlled fans

## Programmable Features

### Menu SET allows these settings:

- Language: English or German
- 1st dimmer address from DMX512 in all range
- Case number
- Keypad lock

### Menu DIMMER allows these settings:

- All settings are available for single or all dimmers
- Max. output voltage in range 50 - 250V
- Preheat in range 0 - 20%
- Fluorescent mode
- Dimmer characteristics (LAW): Linear, Square, S-law, Nondim
- Response time 30, 100, 300ms
- Individual addressing (PATCH) for all inputs

### Menu PRESET/CHASER allows:

- Programming of 98 lighting cues from DMX512 input or manually
- Setting of cues fade time
- Determination of unit behaviour when DMX signal is interrupted (DBO, Hold, Preset)
- Deleting of whole cues

### Menu TEST provides 3 tests:

- Chaser through all dimmers
- Switch on/off of all dimmers
- Switch on/off of selected dimmers

## Optional Equipment

- Input for wireless remote control
- Second input DMX512 (DMX B)
- Analog inputs and outputs module (24 channels)

## Accessories

- Wireless remote control system RC941
- Wire remote control system RCTW941

Digital and analog control connectors and cables

## Available Versions

- DDS24 - full dimmer case 24x10A
- DDS24L - 24x10A without RCD a Air Contactor
- DDS24-12 - full dimmer case 12x25A
- DDS24-12L - 12x25A without RCD and AC
- customer configuration case (necessary to define 2x10A and 1x25A modules configuration in order)
- DDS48 - full dimmer case 48x6A
- DDS48L - 48x6A without RCD and Air Contactor
- xxxxx UP/DOWN - direction of connection for power cables (necessary to define in order)

## Technical Specification

	DDS24	DDS48
Dimmers	12 x 25 A to 24 x 10 A	48 x 6 A
Lighting Cues		98
Programmable Fade Time		0-99s
Power Supply	3 x 230/400V / 50/60Hz + PE +N	
Max. Supply Current	3 x 80 A	
Maximal Total Load	55.2 kW	
Maximal Load per Dimmer	5.75 kW (25A) or 2.3 kW (10A)	1.38 kW (6A)
Minimal Load per Dimmer	60 W	
Maximal Surrounding Temperature	35°C	
RFI Suppression	450 µs	
Digital Control Signal	DMX512/1990	
Analog Control Signal	0/+10V / 0.5 mA	
Dimensions (WxHxD)	1005 x 995 x 140 mm	
Weight	approx. 85kg (according to configuration)	