



MODE LIGHTING
CONTROLLING THE FUTURE OF LIGHTING

eDIN

Product Overview ◀

MODE LIGHTING
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www.modelighting.com



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LONDON

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eDIN is a highly flexible, scalable, cost effective, DIN rail mounting, modular approach to lighting control, designed to meet the increasing needs of systems integrators, residential developers and designers for simple, yet versatile, lighting controls in a manageable and understandable form factor.

Aimed at commercial and residential projects alike eDIN is easy to specify and install opening up the possibilities for intelligent lighting control for small to medium scale projects. As part of a fully integrated multi-media system it can provide multi-room, multi scene lighting and blind control while for single areas a standalone mode provides simple control in a compact format.

eDIN gives the user genuine control of their lighting with intuitive operation and the ability to adjust and reprogram lighting levels themselves This meets the demand for small, compact control systems offering a perfect balance between system features, power handling and cost. The unique "building block" approach offers features and connectivity rarely seen in modular based control systems with the ability to select standard off the shelf modules and adapt them using the long list of inbuilt features. This gives the specifier and installer the confidence to deliver the right level of control for each individual project, from apartment living, home cinema rooms and living spaces to meeting room clusters, boardrooms, auditoriums or hotel suites.



DIN-NPU-00-01 Network Processor
System processor for multi-room control with Ethernet and RS232 connectivity. 1000+ Scene capacity with web enabled programming

DIN-03-04 4x3A Leading Edge Dimmer
Dimmer Module for control of 750w per circuit. Built in selection of switching or dimming function for maximum flexibility

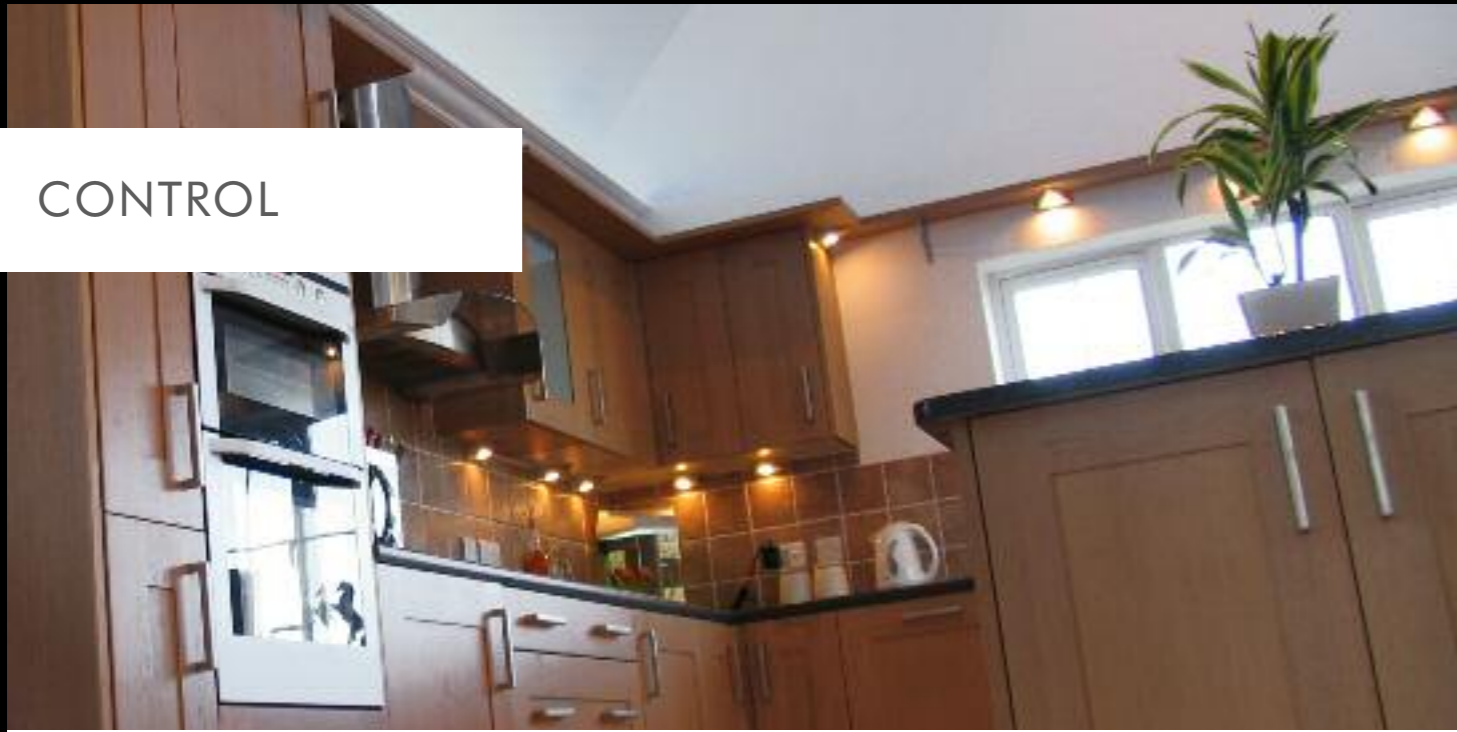
DIN-02-08 8x2A Leading Edge Dimmer
Dimmer Module for control of 500w per circuit (maximum module load of 2700w.) Built in selection of switching or dimming function for control of multiple load types in a single enclosure.

DIN-RP-05-04 4x5A Relay
Feedthrough Relay Module for control of blinds and motors. 1 x DPCO and 3 x SPCO contacts.

DIN-INT-00-08 8 Channel Input/Output Interface
Individual channels configurable for control of 0/1-10v or DSI loads and for the integration of 0-10v signals or conventional switches into systems.

DIN-PSU-24v eDIN Power Supply
2000mA Supply for the control of eDIN Modules

CONTROL



eDIN is a revolution in commercial and residential lighting control. Lighting moods are easily created using web based graphical pages, the operation of which will be familiar to anyone who uses the internet. Moods, or scenes, can be controlled by the web browser, keypads or integrated with other forms of control including multi-room AV touch-screen systems or conventional electrical switches.



Operation is not limited to the selection of basic lighting scenes. Buttons can toggle between settings for ON/OFF control, activate contacts for automated blind control or trigger Welcome and Exit modes, giving the installation a more personal feel.

Individual eDIN modules display the percentage energy saving that is being achieved through using eDIN. This is also displayed on the web browser enabling users to see how "green" their lighting is and how much energy is being saved using eDIN.



For automation and energy conservation, presence detectors can be linked into an eDIN system to turn lighting on when movement is detected or to ensure lighting is turned off when a space is unoccupied.

Setup of an eDIN system uses a network connection to gain access to the system configuration pages. These allow the control functions to be actioned using simple on screen controls. The web based interface also allows setup up of automatic lighting changes using the onboard astronomical time clock built into the main Network Processor Module.

www.edincontrols.com

OPERATION



At the heart of a fully integrated multi-room lighting system lies the eDIN Network Processor Unit. This module unlocks the full potential of the eDIN range allowing users to select and adjust lighting scenes using standard web browsers and provides the features needed for modern living with simple to understand user interfaces.

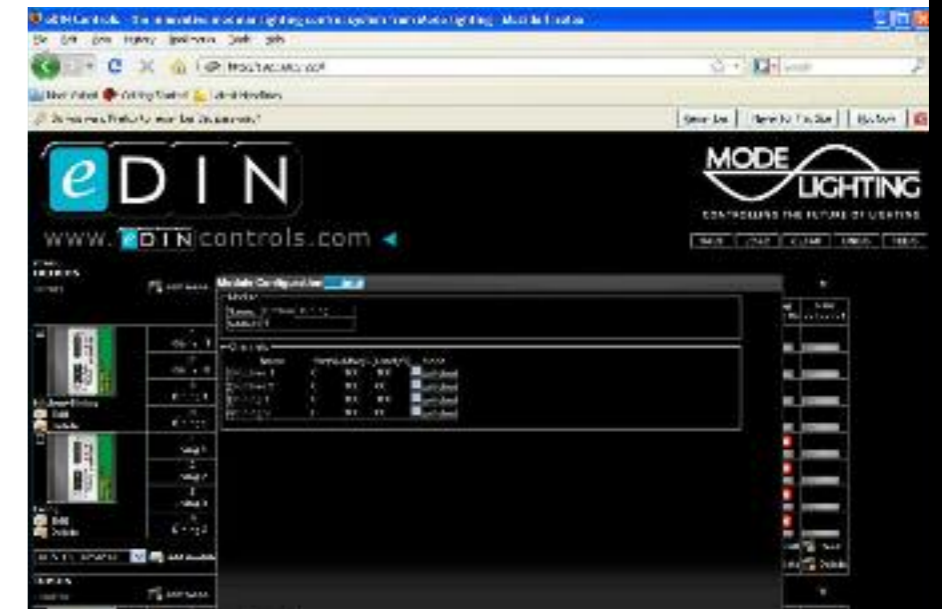
This web based facility is not just of use to the end client who can control their eDIN system from almost anywhere in the world. Engineers can go online and access the sophisticated built-in web-server through a secure link and setup, configure or test an installation as well as adjust and save lighting levels without having to attend site. Useful for projects in remote locations or when quick changes are requested.

RS232 and Ethernet connections are built-in as standard and a comprehensive command library is available for full AV integration.

For smaller applications a built-in Standalone Mode with a reduced feature set can be activated using the on board menu system. In its simplest format this allows a single keypad to operate up to eight circuits in a scene setting arrangement or to provide individual control of each circuit in an Impulse control style (ON/OFF and

dimming from a single button), creating simple systems that are both cost effective and quick to install.

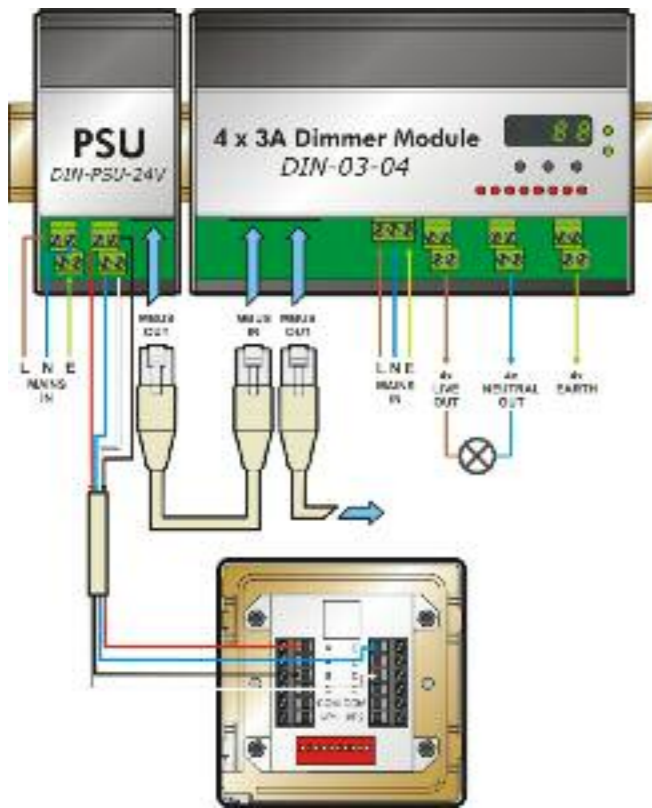
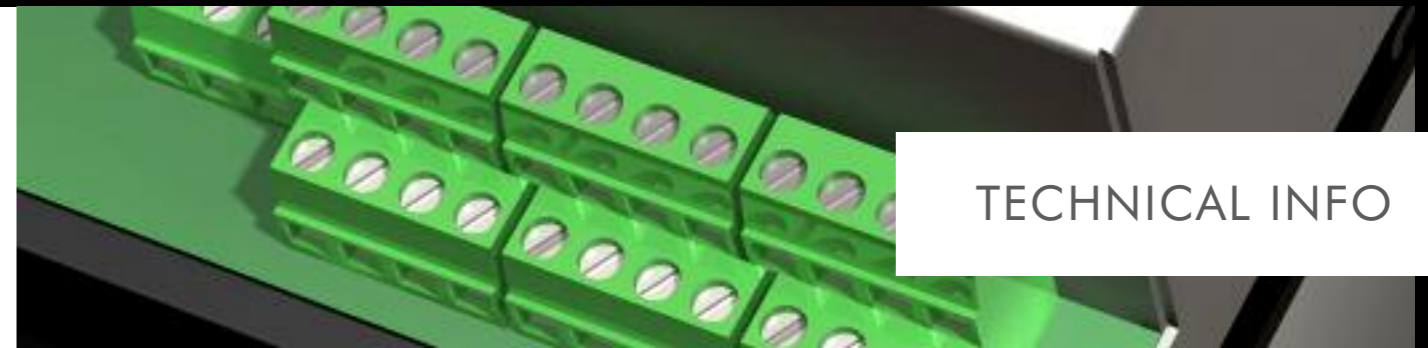
eDIN modules may also be considered as expansion modules for the Evolution Lighting Control System from Mode Lighting. Using the same M-BUS network eDIN modules operate as slave devices to an Evolution system allowing the flexibility of eDIN to be coupled with the capacity and power of the Evolution System (see www.evolutioncontrols.com for more details)



INSTALLATION



TECHNICAL INFO



The eDIN modules utilise a custom designed metal enclosure for installation reliability and thermal management.

By using the standard DIN rail mounting method eDIN modules can be installed in distribution boards or consumer units to meet a projects individual needs. Compliance to 17th Edition Installation Regulations is easily achieved including the use of RCBOs on the input or output side of eDIN modules.

Each eDIN module incorporates an on-board, display driven, menu system through which circuit functions can be setup without the use of a computer. Functions include dimming or switching operation, maximum and minimum dimming levels, test modes and network diagnostics.

Once installed in the enclosures modules connect together using standard CAT5 leads for speed and simplicity. When using keypads these should be connected to the M-BUS terminals located on the eDIN Power Supply using a 0.5mm² stranded two-twisted pair (four core) cable (EVO-CAB-00-04) or equivalent.

eDIN Modules can be connected together and operate in a standalone mode. The table below gives outline details of the type of control possible in standalone mode.

eDIN STANDALONE FUNCTIONS					
INPUT MODULE	I/O Module as switch inputs	EVO-INT-CI-04	EVO-SGP-55 Ten Button Evolution Plate	I/O Module as 0-10v inputs	I/O Module as DSI inputs
OUTPUT MODULE		Impulse 0-10v or Impulse DSI		DSI Out	0-10v Out
I/O Module			Impulse or Scene Setting	Dimming	Dimming
8 x 2A Dimmer		Impulse	Impulse Ch 1-4 or Impulse Ch 5-8 or Scene Setting	Dimming Ch 1-4 or Dimming Ch 1-8	Dimming Ch 1-4 or Dimming Ch 1-8
4 x 3A Dimmer		Impulse Ch 1-4 or Impulse Ch 5-8			
Relay Unit		Switch on I/P 1-4 or Switch on I/P 5-8		Switch 10% on I/P 1-4 or on I/P 5-8	Switch 10% on I/P 1-4 or on I/P 5-8

MODEL	4 x 3A Dimmer Module
Part code	DIN-03-04
DIN Module Size	9M
Dimensions	156mm Wide x 100mm High x 64mm Deep
Weight	0.95Kg
Power Input	230 Volt ± 10% 50-60Hz, single phase
Input Connections	5mm rising-cage screw terminals. Maximum wire size 2.5mm ²
Control Input	Mode M-BUS
M-BUS Connection	2 x RJ-45 (in and out)
M-BUS Current Consumption	50 mA
Outputs	4 x 3A (resistive or inductive) dimmed outputs 4 neutral connections, 4 earth connections
Output Control Type	Leading edge dimming
Channel loading	3A (approx. 750W) per channel resistive or inductive load
Module Loading @ 230V	12A maximum
Standards (CE, EMC)	EN55015, EN61547, EN61000-3-3, EN60669-1 and EN60669-2-1

MODEL	8 x 2A Dimmer Module
Part code	DIN-02-08
DIN Module Size	9M
Dimensions	156mm Wide x 100mm High x 64mm Deep
Weight	0.95Kg
Power Input	230 Volt ± 10% 50-60Hz, single phase
Input Connections	5mm rising-cage screw terminals. Maximum wire size 2.5mm ²
Control Input	Mode M-BUS
M-BUS Connection	2 x RJ-45 (in and out)
M-BUS Current Consumption	50 mA
Outputs	8 x 2A (resistive or inductive) dimmed outputs 8 neutral connections, 8 earth connections.
Output Control Type	Leading edge dimming
Channel loading	2A (approx. 500W) per channel resistive or inductive
Module Loading @ 230V	12A maximum
Standards (CE, EMC)	EN55015, EN61547, EN61000-3-3, EN60669-1 and EN60669-2-1

MODEL	Network Processor Unit
Part code	DIN-NPU-00-01
DIN Module Size	6M
Dimensions	104mm Wide x 100mm High x 64mm Deep
Weight	0.35Kg
Input Voltage	24v DC - Supplied through M-BUS Connection
Input Connections	M-Bus Connection
Control Input (1)	Mode M-BUS
M-BUS Connection	2 x RJ-45 (in and out)
M-BUS Current Consumption	500mA
Control Input (2)	RS232 (Bi directional)
RS232 Connection	1 x 5-way Rising-cage 5mm screw terminals. Maximum wire size 2.5mm ²
Control Input (3)	Ethernet TCP/IP (Bi-directional)
Ethernet Connection	1 x RJ-45
Standards (CE, EMC)	EN55015, EN61547, EN61000-3-3, EN60669-1 and EN60669-2-1

MODEL	4 x 5A Feed Through Relay Module
Part code	DIN-RP-05-04
DIN Module Size	6M
Dimensions	104mm Wide x 100mm High x 64mm Deep
Weight	0.43Kg
Input Voltage	24v DC-Supplied through M-BUS Connection
Input Connections	M-Bus Connection
Control Input	Mode M-BUS
M-BUS Connection	2 x RJ-45 (in and out)
M-BUS Current Consumption	200 mA
Outputs	1 x DPCO / 3 x SPCO. Maximum wire size 2.5mm ²
Output Control Type	Switching only - Volt Free Contact Closures
Channel loading	5A (approx. 1100W) (resistive or inductive load) per relay feed-through relay
Module Loading @ 230V	20A maximum
Standards (CE, EMC)	EN55015, EN61547, EN61000-3-3, EN60669-1 and EN60669-2-1

MODEL	Network Processor Unit
Part code	DIN-INT-00-08
DIN Module Size	6M
Dimensions	104mm Wide x 100mm High x 64mm Deep
Weight	0.35Kg
Input Voltage	24vDC - Supplied through M-BUS Connection
Input Connections	M-Bus Connection
Control Input	Mode M-BUS
M-BUS Connection	2 x RJ-45 (in and out)
M-BUS Current Consumption	Input Mode:50 mA Output Mode: Up to 1500mA
Control Inputs	0-10v input or contact-closure input (configurable as closed / released / held / released)
Control Outputs	0/1-10v output or DSI output (configurable)
Channel loading (input)	2mA per channel maximum
Channel loading (output)	250mA per channel maximum
Standards (CE, EMC)	EN55015, EN61547, EN61000-3-3, EN60669-1 and EN60669-2-1

MODEL	Network Processor Unit
Part code	DIN-PSU-24V
DIN Module Size	3M
Dimensions	56mm Wide x 100mm High x 64mm Deep
Weight	0.34Kg
Power Input	230 Volt ± 10% 50-60Hz, single phase
Input Connections	5mm rising-cage screw terminals.
Control Input	Mode M-BUS
M-BUS Connection	1 x RJ-45, 1 x 4-way Rising-cage 5mm screw terminals
M-BUS Output Current	2000mA
Outputs	Each eDIN System requires at least one DIN-PSU-24V. If the M-BUS current requirements exceed 2000mA additional DIN-PSU-24v Modules should be used.
Module Loading @ 230V	0.25A maximum
Standards (CE, EMC)	EN55015, EN61547, EN61000-3-3, EN60669-1 and EN60669-2-1

All eDIN Modules carry the CE Mark and are fully compliant with EC, EMC and LV Directives.