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Networked Controls Product Catalogue

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Philips Dynalite

Philips Dynalite is synonymous with the creation of sophisticated, simple, reliable and energy-efficient lighting control solutions for a wide range of industry sectors, including residential, custom installation, offices, retail, hospitality and public spaces. An industryleading innovator for over 20 years, Philips Dynalite is the solution of choice for a wide range of 'smart home', energy management and architectural lighting control applications. Philips Dynalite solutions blend high-level functionality with dramatic aesthetic sustainability to enable and enhance our lives.





End-to-End Lighting

Philips Dynalite specialises in the provision of end-to-end intelligent lighting control systems, rather than just products. We know that the critical link between products like lamps, luminaires and LEDs and a fully integrated solutions environment, is the control capability. Lighting control infrastructure underpins the fully integrated environment that is the future of building and energy management systems worldwide.

When combined with the broad selection of Philips Lighting's energy-efficient luminaires, Philips Dynalite lighting control systems allow users to create ambiances, develop innovative and distinctive lighting scenes and transform environments.











Our Key User Groups

Office

Our lighting control systems allow building owners to create inviting and highly functional office environments – ones that stimulate productivity and optimise energy use, while permitting users to tailor work areas to specific tasks and accommodate future layout and occupancy changes.

Retail

Shop owners, store operators and retail centre management need to be able to tailor eye-catching lighting schemes to individual retail zones, products, store events and themed days, maximise customer engagement and enrich the overall shopping experience. This is made simple with our advanced lighting control solutions, which have energy management functionality built-in, making the much sought-after 'green store' an achievable reality.

Hospitality

Lighting plays a key role in optimising guest comfort and stakeholder returns, creating workable and inviting ambiances in front-of-house, public and functional spaces and building brand differentiation in hotels all over the world.

Public Spaces – multipurpose event centres, stadiums and places of worship

Environments such as public spaces, multipurpose event centres, stadiums and places of worship, require specialised lighting control solutions. Our solutions allow designers to create and implement attractive and engaging environments with optimised levels of comfort and safety, enhancing the public's sense of wellbeing.

Smart Home

Clever lighting control solutions allow developers, designers and homeowners to express individual personality and style and create atmospheres tailored to function, mood or occasion – all in an easy-to-use and cost-effective sustainable way.

Our Global Centre of Competence

As the Philips global centre of competence for indoor networked controls, our headquarters and manufacturing facility in Sydney Australia develops world-leading lighting control technologies for a global marketplace. From here, our technical experts set the standard in research and development, engineering sophisticated, simple, and sustainable lighting control technologies. Complementing our talented technicians is our extensive sales and management team – an experienced and knowledgeable group of professionals dedicated to partnering with industry to deliver excellence in lighting control.

Our steadfast commitment to sustainability extends to our own premises, which are fully equipped with a reference lighting control and energy management system – one that utilises daylight harvesting and presence sensing techniques to minimise unnecessary lighting energy consumption.

A global network of technical experts and sales teams support our innovative lighting control solutions the world over. These include Philips Lighting Country Sales Units (CSUs), Philips Dynalite regional offices, Controls Applications Groups (CAGs), exclusive Value-Added Resellers (VARs) and an extensive network of accredited Dealers.

User Interfaces

Providing end-users with an intuitive means of interaction with the lighting system, Philips Dynalite user interfaces come in a wide range of styles and finishes to match any project budget or décor requirements. This range includes wall panels, touchscreens, universal sensors, timer clocks and temperature sensors.



Panels

A local control panel allows occupants to adjust the lighting control system to suit their requirements. To help perform the various functions required of the control system and help users to intuitively interact with the many different features, there is a wide selection of options:

- Custom engraving of pushbuttons and faceplate to describe panel functionality.
- Capability for receiving IR commands from hand-held remotes.
- Key lockable switches for disabling panel functions.
- Local access network sockets to allow programming changes within area.
- Manual adjustable sliders for setting light level output.
- Built-in displays showing control system information*.

Each panel family is available with many different button configurations that allows for flexible project solutions. All panels utilise the same low voltage DyNet port for connecting to the network. They are powered directly from the network and therefore require no mains wiring.

Each panel can be individually configured via EnvisionProject commissioning software to perform simple or complex logical functions without the need for additional network devices. Using any Philips Dynalite panel within a project brings the full power of the control system at the single touch of a button.

*Options are on specific models



Revolution Series

The Revolution DR2P Series of panels offers the ultimate in choice and flexibility. Each panel can be selected from a vast range of standard plate finishes or if required custom finishes of glass, stone, wood, metal and ceramic. The panels come in many different button layouts as well, allowing up to three columns of buttons, ensuring a maximum number of functions from a single panel.

Each button can be custom engraved with text or icons that help describe its functionality and the engraving is back-lit to allow ease-of-use in low light environments. An option of an integrated OLED display within the button column is available, allowing fully editable text and icons to indicate the current system status.



The contemporary Revolution series user control panels incorporate a clip-on cover fastening system which provides the ultimate in aesthetic design flexibility.

Incorporating a unique button depth adjustment facility, the panels can accommodate covers of practically any flat architectural surface medium, ranging in thickness from 1.2mm to 6.5mm.

DR2P / DR2PE series panels are available in a range of configurations including single column, which provides arrangements of one to eight buttons and double or triple column designs for up to 24 buttons.

Smooth action buttons with LED indicators provide both tactile and visual feedback and are easily removed for engraving, further assisting the identification of button function. Button backlighting is also provided to illuminate engraved text, improving night time panel location and operation.

Infra-red (IR) receive capabilities have been integrated, eliminating the need for separate sensors where IR remote control operation is required.



Glass, stone, wood, metal, ceramic... the options are endless.

- Available in the two standard international mounting formats, in single and multi-gang configurations
- From 1 to 24 buttons on single, double & triple gang plates
- Rear-lit engravable buttons for clear identification of function
- Button colour: charcoal grey, silver or white
- LED Status Indicators: blue as standard, other colours available
- · Integrated IR receive capability
- Front cover finishes: stainless steel, white glass & black glass as standard, an infinite number of options are available
- Card triggered room actuator allows for full hotel room integration & consistent panel finishes throughout.



The second generation DR2P Revolution series user control panels incorporate a clip-on cover fastening system which provides the ultimate in aesthetic design flexibility. DR2P series panels are available in a range of configurations including single column, which provides arrangements of one to eight buttons and double or triple column designs for up to 24 buttons. Smooth action buttons with LED indicators provide both tactile and visual feedback and are easily removed for engraving, further assisting the identification of button function. Button backlighting is also provided to illuminate engraved text, improving night time panel location and operation. Optional infra-red (IR) receive capabilities are available, eliminating the need for separate sensors where IR remote control operation is required.

Classic Series

The Classic DPN Series is a truly timelessly styled panel that is well suited to any commercial environment. These classic panels are available in a wide range of standard options which include network sockets, key switches and fader sliders to meet the varying function requirements of modern projects. Panels are available in different button configurations, allowing different levels of functionality. Each plate and switch cap has the opportunity to be custom engraved, allowing intuitive control for the end-user. Standard options are available throughout the range.



Philips Dynalite DPN-SF and DPNE-SF series user control panels are a popular choice for commercial and residential applications, providing integrated automation solutions. These robust panels are supplied as standard in a brushed stainless steel finish, with square button caps in silver, black bezel and black engraving. Smooth action buttons with LED indicators provide both tactile and visual feedback and are easily removed for engraving, further assisting the identification of button function. Custom design, finish and capability options further enhance the DPN series, offering superior choice and functionality.



The workhorse of the Philips Dynalite range is particularly well-suited to a commercial environment. These robust panels are available with or without concealed fixings. The Classic series is available in two standard international mounting formats in both single and multi-gang configurations.

The panels can be customised to provide a multitude of control options, including buttons, faders, keyswitches and custom engraving on either buttons or metalwork.

- Smooth action switches with LED indicator provide tactile & visual feedback
- Engravable buttons available in silver, charcoal, grey & ivory
- Face plate finished in 1.6mm stainless steel, other finishes such as gold-plate and powder coat also are available
- Control options include buttons, faders, key switches and custom engraving

Standard Series

The Standard DLP Series range is contemporarily styled to blend in with its surroundings. Built with the full Philips Dynalite feature set, these simple yet elegant panels bring the full power of the automated system to a touch of a button. Available in a range of different cover finishes* and switch cap colours, the DLP is the flexible choice in control panels. This range of panels is available in a slim line option which can make the panel as unobtrusive as possible.

*Details of finishing options are series dependant.



Philips Dynalite DLP / DLPE series user control panels are an aesthetically pleasing, cost-effective method of providing integrated automation in commercial buildings and homes. They are available in two configurations: a single column, which provides for button configurations of one to five buttons and a dual column design for up to ten buttons. Smooth action buttons with LED indicators provide both tactile and visual feedback and are easily removed for engraving, further assisting the identification of switch function.

The Philips Dynalite DLP series user control panels incorporate a miniature DyNet control network socket, which is accessed by removing the snap-on panel cover, enabling system adjustments and programming to be carried out from any user control panel on the network. Infra-red (IR) receive capabilities have been integrated, eliminating the need for separate sensors where IR remotes are required.

Standard options available throughout the range

- Available with I to 10 buttons
- 2 grid plates available, 1 or 2 columns
- Smooth action switches
- Programmable indicator blue LED. Available in green or red
- Optional custom engraved buttons
- Optional inbuilt infra-red receiver
- Options for European or Australian grid types

DL2P additional features

- Slim line mounting
- Australian / North American mounted

DLPE additional features

- Cover options
- European mounted



- Available in button configurations from 1 to 10 buttons
- 2 grid plates available, I column of 5 buttons & 2 columns of 5 buttons
- Smooth action switches with LED indicator provide tactile & visual feedback
- Engravable buttons
- Blue standard LED on each button, optionally available in green and red
- Optional inbuilt infra-red receiver

The Philips Dynalite DPVVE series user control panels are an aesthetically pleasing, costeffective method of providing integrated automation in homes and commercial buildings. They are available in two configurations: a single column, which provides for button configurations of one to five buttons and a dual column design for up to ten buttons. Smooth action buttons with LED indicators provide both tactile and visual feedback and are easily removed for engraving, further assisting the identification of button function. The Philips Dynalite DPWE series user control panels incorporate a miniature DyNet control network socket, which is accessed by removing the snapon panel cover, enabling system adjustments and programming to be carried out from any user control panel on the network. Infra-red (IR) receive capabilities have been integrated, eliminating the need for separate sensors where IR remotes are required.

DPWE

- Low profile mounting
- European mounted
- Available with 1 to 10 buttons
- 2 grid plates available, 1 column of 5 buttons & 2 columns of 5 buttons
- Smooth action switches with LED indicator provide tactile & visual feedback
- Engravable buttons
- Blue standard LED on each button, optionally available in red and green
- Optional inbuilt infra-red receiver



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Hand-held Remotes

DTK500 – Hand-held Remotes

The DTK500 hand-held remotes are compatible with all Philips Dynalite Sensors and panels equipped with IR receive option. The hand-held remote control allows users to select scenes, ramp lighting levels or trigger tasks.

- Available in 4, 6, 8, 10 & 12 buttons
- Compatible with Philips Dynalite sensors infra-red receiver



Touchscreens

A Philips Dynalite touchscreen adds to any system a new dimension of control opportunities. Each touchscreen supports a range of features that can be used together giving end-users the ultimate in interaction with the automation system. The screen intuitive interface can be custom created to control the various elements within any automation, from one location.

When integrated with other third-party systems, a Philips Dynalite touchscreen can incorporate the different options on one screen. Intuitive floor plans can be displayed allowing end-users with a physical reference to navigate through the different options.

Incorporating an innovative clip-on fascia capability, the touchscreen fascia accommodates practically any flat architectural surface. That gives the freedom of choosing: stainless steel, stone, glass, laminate, wood, vinyl and ceramic, making the matching options limitless. Fascia material may be matched with Philips Dynalite's DRP Revolution series user control panels for perfect colour coordination throughout the project.



DTPI00 – Colour Touchscreen

The DTP100 is a feature rich colour LCD touchscreen that uses vivid graphics and sophisticated on screen controls which allow the systems installer to create visually stunning and easy-to-use pages.

Control of various equipment such as lighting, AV, security and HVAC can be easily integrated and controlled from the one location. Objects such as logos, buttons, faders, floor plans and diagnostic icons can be placed on pages and used to perform simple and complex conditional logic macros. Pages are created using Philips Dynalite's touchscreen editor or using a standard HTML editor such as Macromedia Dreamweaver. JavaScript is fully supported. Incorporating an innovative clipon capability, the DTP100 fascia accommodates practically any flat architectural surface medium. That gives you the freedom to choose: stainless steel, stone, glass, laminate, wood, vinyl, ceramic – the options are limitless. Fascia material may be matched with Philips Dynalite's DRP Revolution series user control panels for perfect colour coordination.





DTPI70 – Colour Touchscreen

The DTP170 is a feature rich colour LCD touchscreen that uses vivid graphics and sophisticated on screen controls which allow the systems installer to create visually stunning and easy-to-use pages.

Control of various equipment such as lighting, AV, security and HVAC can be easily integrated and controlled from one location. Objects such as logos, buttons, faders, floor plans and diagnostic icons can be placed on pages and used to perform simple and complex conditional logic macros.

Incorporating an innovative clipon capability, the DTP170 fascia accommodates practically any flat architectural surface medium. That gives you the freedom to choose: stainless steel, stone, glass, laminate, wood, vinyl, ceramic – the options are limitless. Fascia material may be matched with Philips Dynalite's DRP Revolution series user control panels for perfect colour coordination. Full Internet connectivity is supported. The DTP170 is powered from the DyNet network so does not require a mains voltage connection.

DynamicTouch iPad Apps

The DynamicTouch app is ideal for "smart homes" and commercial control applications alike. DynamicTouch combines easy-to-use operability with advanced functions, permitting Philips Dynalite control system elements to be accessed and configured via an iPad or iPhone device.

Some steps are required to enable your Philips Dynalite DynamicTouch app that include:

- the lighting and other devices you wish to control must be under the management of a Philips Dynalite control system
- there must be a Philips Dynalite Ethernet gateway in the control system and the Ethernet gateway must be connected to a wireless router.

DynamicTouch

The DynamicTouch iPad/iPhone application complements traditional methods of managing sophisticated lighting automation and control technologies, bridging the gap between purpose-built control devices and consumer technology.

The intuitive, easy-to-use application will allow iPad and iPhone owners to configure lighting schemes, adjust present levels and run task-specific customised macros, both remotely and on-site, all from a multifunction device. Importantly, the application of DynamicTouch is not limited to the lighting control system. Third-party control systems, such as AV, blind and temperature control can also be accessed. Users will be able to ring changes to third-party systems that are interfaced with the lighting control system network.

DynamicTouch helps consolidate control system functionality – one application to manage all automated processes at the office, in the restaurant, at the conference centre or at home. In addition to providing streamlined remote access to control system elements, DynamicTouch will deliver added operational flexibility on-site. Once on-site, the iPhone can be used as a hand-held remote control, while the iPad can be placed in wall-mounted cradle and used as a touchscreen operator interface. This multifunctionality has the potential to reduce the total cost of deploying automation and control systems, putting them within reach of a wider range of businesses and homeowners.



Individual lighting levels can easily be adjusted then saved to a button to be recalled at a later date. These settings are then saved to a local control panel within the room alowing editability of the system lighting levels.

Supporting a range of different finishes that match the physical panels within the project. Each button can be custom labelled to allow for ease-of-use.

Other elements within the space such as blinds may also be added to the scope of control available.

DynamicTouch features at a glance

- Permits home or office control via iPhone or iPad
- Single 'remote' point of control for lighting, climate control, security and more
- Use a hand-held remote in the home or office
- Reduces potential cost of smart home system development



Timer Clocks

All Philips Dynalite timer clocks are true astronomical 365 day clocks with sunrise/ sunset tracking, automatic daylight saving adjustment and powerful macro and conditional logic functions. The timer clock interfaces with other devices over the DyNet RS485 network to automate tasks and trigger timed based events. It may be used as an energy management controller or simply to select scenes at preset times of the day or week. The timer clock is powerful enough to provide full automation of a large commercial project and can be programmed with events that automatically run at the specified time.

A typical application would entail automatically adjusting lighting levels throughout the day within a restaurant for breakfast, lunch, dinner, evening entertainment and cleaning, using long fade time to ensure a disruption free and smooth work cycle. If required, a local button press on a panel can override the pre-programmed events until the next timed event occurs.

In energy management applications, the timer clock can set the operating mode of other devices, such as Philips Dynalite sensors' motion time-out, so that in afterhours a shorter time-out can be set, ensuring the lights are not left burning when not required.







- Controls 255 areas, 255 channels per area, 96 scenes per area, 250 events, 16 tasks (sequences)
- Fade times from instant to 20 minutes
- Each event selective of the time and number of active days in a week
- Sunrise and sunset & daylight saving capability
- Complex sequencing control of lighting
- Password (PIN) locking of panel for security
- Supported by PC software, for easy configuration allowing local override of lighting levels
- Real timer clock with battery backup
- Large LCD screen for monitoring
- Utilises EEPROM memory for 100 year memory life without power
- Available in the two standard international mounting configurations:
- DTC602 H 115mm x W 164mm x D 24mm (Aus/US Mounting Configuration)
- DTCE602 H 86mm x W 146mm x D 24mm (UK/Euro Mounting Configuration)
- Packed weight: 0.2kg

DTC602 & DTCE602 – Timer Clock

The DTC602 can be programmed and operated remotely via a PC or via the front panel LCD display and keypad, which incorporates a PIN password to prevent unauthorised adjustment.

The DTC602 can be used to make programming changes to a Philips Dynalite system without the use of a computer. The LCD display will help guide the user step by step through the programming task. Information such as channel. area and preset scene names are automatically uploaded from the network to assist in programming. It can be used in conjunction with standard control panels to access preset scenes that are not commonly used or that require protection from accidental selection. The device is available in Aus/US (DTC) & UK/Euro (DTCE) mounting configurations.

The DTC602 is an astronomical 365 day timer clock with sunrise/ sunset tracking, automatic daylight saving adjustment and powerful macro and conditional logic functions. The timer clock interfaces with other devices over the DyNet RS485 network to automate tasks and events. It may be used as an energy management controller or simply to select scenes at preset times of the day or week. The DTC602 is powerful enough to provide full automation of a large commercial project and can be programmed with events that automatically run at the specified time.

In energy management applications, the timer clock sets the operating mode of other devices, such as Philips Dynalite DUS704 sensors, to give priority to either IR, PIR or PE facilities, depending on the time of day or day of week.

DDTC001 – Timer Clock

The DDTC001 is a tamper-resistant DIN rail mounted embedded timer clock. All functions are programmed via a PC and there are no external controls available, preventing disruption to device operation.

The DDTC001 features an astronomical 365 day timer clock with sunrise/sunset tracking, automatic daylight saving adjustment and powerful macro and conditional logic functions.

The timer clock interfaces with other devices over the DyNet RS485 network to automate tasks and events and may be used as an energy management controller or simply to select scenes at preset times of the day or week.

The DDTC001 is powerful enough to provide full automation of a large commercial project and can be programmed with events that automatically run at the specified time. The timer clock forms part of a powerful energy management system when used in conjunction with other Philips Dynalite devices. For instance, when used to set the operating mode of the Philips Dynalite DUS704 universal sensors, the timer clock can give priority to infra-red, PIR or PE capability, depending on the time of day or day of week, ensuring that energy is not used unnecessarily. The DDTC001 is programmed remotely via a PC and will operate autonomously even if the PC is disconnected.



Sensors

Offering the ability to interact with project spaces passively, the Philips Dynalite sensor range brings the features of motion detection, light level detection and IR receive into one unit. Each of these features can be operating at the same time, allowing automation scenarios such as turning on the lights after detecting motion and then dimming the lighting level once the available sun light has been measured, providing additional energy savings. After the area has been unoccupied for the predetermined time, the lights will then switch off. By combining each of these functions into one device, operational efficiency is improved, helping reduce the requirement for many different types of sensors cluttering the ceiling space.

Each sensor has an inbuilt microprocessor, allowing for logical functions to control one small room, the floor of a building or an entire building. In applications such as office buildings, lecture theatres and homes, the Philips Dynalite universal sensor can be utilised to detect motion and switch on the lights. All sensors receive their power from the DyNet network and as they are fully remotely programmable, they can be configured to automate and control virtually an unlimited number of controlled outputs.



DUS804C-UP – Multifunction Sensor

The DUS804C-UP is a 360° ceiling mount sensor that combines ultrasonic and passive infra-red (PIR) motion detection and infra-red remote control reception (IR) in the one device.

In applications such as office buildings, lecture theatres and homes, the DUS804C-UP universal sensor can be utilised to detect motion and switch on the lights. When rooms are unoccupied, lights can be automatically dimmed or switched off to provide energy savings. The unit also incorporates a segmented click-up bezel surrounding the PIR motion sensor element, which enables a portion of the sensing field to be readily masked to prevent nuisance detection from adjacent doorways or corridors. The same sensor provides IR control reception to enable full remote control over lights, audio-visual equipment and blinds. A range of hand-held infra-red transmitters to complement the DUS804C-UP series universal sensors are available.



- Multifunction fully programmable sensor
- All functions remotely programmable

PE Cell for Light Measurement

- Dynamic range <5 lux to >5,000 lux
- Automatic "Daylight Harvesting" mode
- Standard functions for proportional and multifunction illumination control
- LED activation indicator
- Dimensions: 90mm diameter x Depth 26mm (exposed)
- Weight: Packed weight 0.25kg

Infra-red Remote Control Receiver

- Range >6m
- LED activation indicator
- Can be used with DTK500 series infra-red remotes or other learning IR remote controls

Motion Detection

PIR:

- Maximum detection range: 5.0m
- Detection area: 7.4m x 5.6m ellipse (at a height of 2.5m)
- Detection speed: I.0m/s
- Detection object: 700mm × 500mm
- Detection zones: 64
- LED activation indicator
- Adjustable Pulse Count & Sensitivity
- Sensor: Quad element pyro-electric
- R.F.I. Immunity: >15V/m @ 10-1000MHz

Ultrasonic:

- Detection area: 8m x 16m (128m2 coverage)
- Transducer pairs: 2
- Operating frequency: 32KHz

DUS804C – Multifunction Sensor

The DUS804C is a low profile recessed flush mount 360° ceiling mount sensor that combines motion detection (PIR), infra-red remote control reception (IR) and ambient light level detection (PE) in the one device. In applications such as office buildings, lecture theatres and homes, the DUS804C universal sensor can be utilised to detect motion and switch on the lights.

When rooms are unoccupied, lights can be automatically dimmed or switched off to provide energy savings. The unit also incorporates a segmented click-up bezel surrounding the motion sensor element. This enables a portion of the sensing field to be readily masked to prevent nuisance detection from adjacent doorways or corridors. The same sensor provides IR control reception to enable full remote control over lights, audio-visual equipment and blinds. A range of hand-held infra-red transmitters to complement DUS804 series

universal sensors are available. In situations where it is critical to maintain precise lighting control for individual workspaces, such as an office workstation or even air traffic control centres, the DUS804C facilitates light compensation. The DUS804C can also be placed in an automatic "Daylight Harvesting" mode for energy savings.

The DUS804C sensor has additional optional accessories that allow it to be surface mounted when required.



PE Cell for Light Measurement

- Dynamic range <5 lux to >5,000 lux
- Automatic "Daylight Harvesting" mode
- Standard functions for proportional and multifunction illumination control
- LED activation indicator
- Adjustable pulse count and sensitivity
- Sensor: Quad element pyro-electric
- R.F.I. Immunity: >15V/m @ 10-10,000MHz
- Dimensions: Diameter 72mm x D 26mm
- Packed weight: 0.116kg

Infra-red Remote Control Receiver

- Range >6m
- LED activation indicator
- Can be used with DTK500 series infra-red remotes or other learning IR remote controls
- Multifunction fully programmable sensor
- All functions remotely programmable

Motion Detection

Available in two sensitivity levels:

DUS804C - Standard

- Maximum detection range: 5.0m
- Detection area: 7.4 × 5.6m ellipse (at a height of 2.5m)
- Detection speed: I.0m/s
- Detection object: 700mm x 500mm
- Detection zones: 64

DUS804C-SM - Slight Motion

- Maximum detection range: 2.0m
- Detection area: 5.0m circular (at height of 2.0m)
- Detection speed: 0.5m/s
- Detection object: 200mm × 200mm
- Detection zones: 104

DUS704C – Multifunction Sensor

The DUS704C sensors combine motion detection (PIR), infra-red remote control reception (IR) and ambient light level detection (PE) in the one device.

In applications such as homes, lecture theatres, car parks and office towers, DUS704C universal sensors can be utilised to detect motion and switch on the lights. When rooms are unoccupied, lights can be automatically dimmed or switched off to provide energy savings. The same sensor provides IR control reception to enable full remote control over lights, audio-visual equipment and blinds. A range of hand-held infra-red transmitters to complement DUS704C universal sensors are available. In situations where it is critical to maintain precise lighting control for individual workspaces, such as a flight control tower or office workstation, the DUS704C facilitates light compensation. The DUS704C can also be placed in an automatic "Daylight Harvesting" mode for energy savings.

DUS704W – Universal Sensor

Infra-red Remote Control Receiver

- Range >6m
- LED activation indicator
- Can be used with DTK500 series infra-red remotes or other learning IR remote controls
- Multifunction fully programmable sensor
- All functions remotely programmable

Wide Angle Wall Mount PIR Motion Detector

- Detection range 12m × 90^a
- Mounting height: I.Im to 3.Im, on wall or corner
- LED activation indicator
- Adjustable pulse count
- Adjustable sensitivity
- Detection zones: 20 dual element zones
- Sensor: Dual element pyro-electric
- R.F.I. Immunity: >15V/m @ 10-1,000MHz
- Optional lens: 30m narrow long range and 15m curtain

PE Cell for Light Measurement

- Dynamic range <5 lux to >5,000 lux
- Automatic "Daylight Harvesting" mode
- Standard functions for proportional and multithreshold illumination control
- Dimensions: H 85mm x W 66mm x D 45mm
- Packed weight: 0.116kg

Infra-red Remote Control Receiver

- Range >6m
- LED activation indicator
- Can be used with DTK500 series infra-red remote or other learning IR remote controls
- Multifunction fully programmable sensor
- All functions remotely programmable

Wide Angle 360° Ceiling Mount

- PIR motion detector
- Detection range 9m x 6m ellipse
- Mounting height: 2.1 m to 5.0m (2.4m optimum), on ceiling
- LED activation indicator
- Adjustable pulse count
- Adjustable sensitivity
- Detection zones: 34 dual element zones
- Sensor: Dual element pyro-electric
- R.F.I. Immunity: >15V/m @ 10-1,000MHz

PE Cell for Light Measurement

- Dynamic range <5 lux to >5,000 lux
- Automatic "Daylight Harvesting" mode
- Standard functions for proportional and multi-threshold illumination control
- Dimensions: Diameter 102mm x D 30mm
- Packed weight: 0.116kg

The DUS704W wall-mounted sensor is available with an adjustable bracket for mounting and aiming the desired detection zone.

Combining motion detection (PIR), infra-red remote control reception (IR) and ambient light level detection (PE) in the one device makes this sensor suitable for applications such as single office spaces, stair way landing, hall ways, meeting rooms, class rooms and data centres. DUS704W universal sensors can be utilised to detect motion and switch on the lights. When rooms are unoccupied, lights can be automatically dimmed or switched off to provide energy savings. The same sensor provides IR control reception to enable full remote control over lights, audio-visual equipment and blinds. A range of hand-held infra-red transmitters to complement DUS704W universal sensors are

available. In situations where it is critical to maintain precise lighting control for individual workspaces, the DUS704W can also be placed in an automatic "Daylight Harvesting" mode for energy savings.

Available with two lens options of wide angle with a motion detection range of $12M \times 90^{\circ}$ or long range $30M \times 30^{\circ}$.



DTS900 – Temperature Sensor

The DTS900 measures ambient temperature then provides the captured data to other devices on a DyNet network, such as relay controllers used to switch heating and cooling plants. The thermostat set points can be adjusted through some of the Philips Dynalite interfaces such as the colour touchscreens or DR2P panels with OLED screens. These devices can also be used to show what temperature the sensor is currently reading in real time.

The DTS900 incorporates

filtering and hysteresis to provide compensation for rapid temperature fluctuations to prevent pulsing of the airconditioning unit. The unit also supports visual feedback features such as an LED indicator that provides the status of the device. The DTS900 is also available with a user-adjustable temperature set point knob (DTS900M).

The DTS900 measures ambient temperature and provides data to other devices on a DyNet network, such as relay controllers used to switch heating and cooling plants. High and low set points are configured using EnvisionProject commissioning software or can be dynamically set via other Philips Dynalite devices, such as the DTK600 touchscreen. Conversely, the touchscreen can also be used to interrogate the DTS900 and to display the current temperature in real time.

The DTS900 incorporates filtering and hysteresis to provide compensation for rapid temperature fluctuations.



- Measures ambient temperature, provides data to other controllers
- Range 0° to 50°C, accuracy +/- $1^{\circ}\mathrm{C}$
- Bi-colour LED status indicator
- Also available with user-adjustable set point knob (DTS900M)
- Dimensions: H 71mm x W 71mm x D 26mm
- Packed weight: 0.11kg



Sensors and Load Controller Kits

To accommodate and meet project requirements, Philips Dynalite has developed groups of controllers and user interfaces that overcome many of the challenges that come with applying the system. The Controller Kits were created as a result of Philips Dynalite's many years of project experience and bring many of the advantages of automation control systems to any project.



ECOSET Networked System

EcoSet operates as a scalable and fully capable lighting network, the new system delivers excellent energy management benefits without the need for complex commissioning and has the ability to be upgraded into a fully-networked solution in the future. EcoSet is perfect for applications such as offices, schools, public buildings and many commercial environments, the distributed EcoSet system has the advanced functionality to easily address all basic lighting energy-management needs. The EcoSet system comes complete within the box functionality that doesn't require additional components, computer software or a skilled technician to deploy.

The components of the EcoSet system consist of a ceiling mounted PIR motion sensor and a two circuit relay controllers. With these two simple devices used as the building blocks of the system, the EcoSet can be used in a multitude of combinations to fit any projects presence detection needs. The relationship of the PIR detecting presence and relay device driving the lights has never been simpler. These devices are connected together in a network allowing powerful functions to be used and future proofing the site for possible further developments. Each device has an accessible ray of dipswitches that can be configured by the installer, to allow simple set-up and access to the powerful EcoSet functions. There is no need for the system to be configured with a PC at any stage.

The relay controller directly driving the lighting load is the DMRC210-RJ-DA. This device offers two 10A relay-switched circuits purpose built for light control. Each circuit within the device is individually configurable via the accessible dipswitches built-in, allowing each circuit to be assigned to different individual areas if required.

The DUS804C-RJ-DA is a recessed ceiling mounted PIR motion sensor with built-in dipswitches that allow for area set-up and time-out setting adjustment. Each sensor can be assigned to an area and has selectable time-out from 30 seconds, 5min, 15min or 30min, to meet the projects requirements. This motion sensor comes with the useful feature of an adjustable shroud to block the detection range preventing nuisance tripping, making it suitable for many applications.

EcoSet features at a glance

- Intelligent occupancy-based lighting control provides energy savings of up to 60% and fast payback times
- Easy to install without the need for specialist integrators and no need for the system to be configured by a PC
- Suited for either retrofit or new projects
- Assists in meeting regulatory and legislative requirements
- Simple system products include a two circuit relay load controller and PIR motion sensor with an adjustable shroud to block nuisance tripping
- Dipswitch setting on products allows access to powerful functions and controls up to 31 logically controllable areas
- With the functions of corridor hold-on and adjustable sensor time out available from multiple areas, then you'll never leave occupants in the dark
- Forms building blocks to create a networked energy management lighting control solution that is both readily scalable and a truly upgradable system solution for the future
- When upgraded, EcoSet utilises Philips Dynalite's vast knowledge base in lighting control requirements to provide expandable functionality, including reporting and timed events to gain further energy savings, user comfort and facility management optimisation.



DALI Multimaster System Solution



Mastering the possibilities of DALI

Combining the networking flexibility of DALI and the control power of Dynet, Philips Dynalite sets new standards in what is possible in lighting control solutions. The new DALI networked sensor and dry contact input devices, remove the need for additional network wiring normally required for user interface devices. These user interface devices can be connected directly onto the DALI network bus and communicate directly with the required light fittings. The local DALI controller (DDBCI20-DALI) manages each user interface device on its own DALI universe and can re-transmit network messages through DyNet, which allows lighting groups in other remote universes also to be controlled. This advanced functionality is only possible by using the Philips Dynalite dedicated lighting control protocol DyNet. This industry proven protocol allows powerful control options and brings the many different elements together into a one system solution. Useful features such as "corridor hold-on" and "day light harvesting" are easily applied. By using DyNet together with the DALI protocol, different elements of controllers can be brought together. The scalability of the control network allows for much more that the standard native DALI can offer alone.







Load Controllers

Acting as the heart of the automation system, the Philips Dynalite range of load controllers can directly drive the different lighting groups within projects. By supporting a variety of different style and capacity of units, this allows the system to be compatible with any lamp type. All Philips Dynalite load controllers have evolved to perform in the realities of the lighting control and automation systems environment. Each device has been engineered with over capacity drive components so they can be installed with confidence. Philips Dynalite load controllers are the ideal choice for combining feature rich lighting control requirements with superior build quality to continuously perform problem free.

All load controllers support an industry-standard RS485 port to communicate with other devices on the DyNet network. Other third-party devices can use this same port to communicate with the devices. Each dimmer supports a large range of commands such as panic, room join, mutable area addressing and many others. More information regarding the DyNet protocol can be found in technical documentation. Additional options within load controller devices are available on request. A combination of load controller devices can be selected to work together to achieve common project goals.



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56 Multipurpose Controllers



Relay and Multi-use Controllers

As one of the most popular forms of lighting control, relay and multi-use devices can have the most impact to energy management and lighting control. Available in both DIN rail and wall box configuration, Philips Dynalite supports a vast range of relay controllers with a variety of circuit numbers and sizes to work individually or as part of a system, suiting any project requirement. Each device can store over 170 presets, allowing the recall of complex switching logic from simple network messages. As the required preset scenarios are stored within each relay device, the commissioning process and network messages are simplified.



DMRC210 Relay Controller

The DMRC210 is designed to allow intelligent, networked control of individual lighting fixtures. The compact design enables the unit to be mounted directly within the gear enclosure of many fixtures. Each relay controller incorporates two relay outputs which can be used to control mains supply to the luminaire and to provide an intensity control when used with tapped ballasts. The relays are very robust and are fully rated for difficult lighting loads.

- + 230V \pm 14% 50/60Hz Single Phase at 20A
- $2 \times$ switched outputs at IOA (inductive)
- Relay, Tungsten Carbide pilot contact, 12A inductive, 120A surge
- I x RS485 serial port DyNet & DMX512
- Dimensions: L 185mm W 44mm x D 38mm
- Packed weight: 0.19kg



DDRC810DT-GL – 8 x 10A Multi-use Relay Controller

The DDRC810DT-GL controllers are designed to operate any type of switched load. The DDRC810DT-GL incorporates voltage free changeover SPDT type output relays, making the device ideal for controlling bi-directional motors, such as curtain motors.

The DDRC810DT can also be used for system integration where a low voltage contact interface is required. The devices are DIN rail mountable, designed for installation within a switchboard or next to circuit breakers feeding the circuits to be controlled. The devices can operate as stand-alone units or as part of an integrated system when connected to a DyNet network.



- 230V \pm 14% 50/60Hz Single Phase at 0.1A
- 8 × switched outputs at 10A.Total device load 40A
- Relay outputs are dry contact single pole double throw (SPDT)
- Programmable Logic Controller (8 Tasks)
- Dimensions: H 86mm x W 209mm x D 66mm
- Packed weight: 0.82kg
- Optional MO version also includes:
- Bypass switches (on/off/auto) for each channel
- LED status indicators for each channel
- Diagnostic LED and service switch on front panel

DDRC810GL – 8 x 10A Relay Controller

The DDRC810GL controllers are designed to operate any type of switched load. The DDRC810GL incorporates common supply SPST output relays, suitable for ON/OFF control of all types of mains rated equipment. The device is DIN rail mountable, designed for installation within a switchboard or next to circuit breakers feeding the circuits to be controlled. The devices can operate as stand-alone units or as part of an integrated system when connected to a DyNet network.



- 230V \pm 14% 50/60Hz Single Phase at 20A
- 8 × switched outputs at 10A.Total device load 20A
- Programmable Logic Controller (8 Tasks)
- Dimensions: H 86mm x W 209mm x D 66mm
- Packed weight: 0.82kg

Optional – MO version also includes:

- Bypass switches (on/off/auto) for each channel
- LED status indicators for each channel
- Diagnostic LED and service switch on front panel



- 230V \pm 14% 50/60Hz Single Phase at 0.1A
- 4 x switched feed through outputs at 20A (inductive)
- Override switch and status indicator for each channel
- Programmable Logic Controller (8 Tasks)
- Dimensions: H 93mm x W 105mm x D 75mm
- Packed weight: 0.8kg

DDRC420FR – 4 × 20A Relay Controller

The DDRC420FR is designed to control any type of switched load. The power circuit is of a "feed through" design and is electrically equivalent to a four pole contactor, with the additional advantage of each pole being separately controllable via the DyNet network.

The DDRC420FR is DIN rail mountable, designed to be installed in a switchboard next to the circuit breakers feeding the circuits to be controlled. Each channel is fitted with a hardware override switch which is accessible from the front panel. This switch also provides visual indication of the state of each channel. The relays are very robust, and are fully rated for difficult lighting loads.
DDRC820FR – 8 x 20A Relay Controller

The DDRC820FR is designed to control any type of switched load. The power circuit is of a "feed through" design and is electrically equivalent to an eight pole contactor, with the additional advantage of each pole being separately controllable via the DyNet network. The DDRC820FR is DIN rail mountable, designed to be installed in a switchboard next to the circuit breakers feeding the circuits to be controlled. Each channel is fitted with a hardware override switch which is accessible from the front panel.

- 230V ±14% 50/60Hz Single Phase at 0.1A
- 8 x switched feed through outputs at 20A (inductive)
- Override switch and status indicator for each channel
- Programmable Logic Controller (8 Tasks)
- Dimensions: H 86mm x W 209mm x D 66mm
- Packed weight: 1.0kg



DDRCI220FR-GL – I2 x 20A Relay Controller

The DDRC1220FR-GL is designed to control any type of switched load. The power circuit is a "feed through" design and is electrically equivalent to a 12 pole contactor, with the additional advantage of each pole being separately controllable via the DyNet network. The DDRC1220FR-GL is DIN rail mountable, designed to be installed in a switchboard next to the circuit breakers feeding the circuits to be controlled. Each channel is fitted with a hardware override switch which is accessible from the front panel.

- 230V \pm 14% 50/60Hz Single Phase at 0.1A
- 12 × switched feed through outputs at 20A (inductive). Total device load 180A
- Override switch and status indicator for each channel
- Programmable Logic Controller (8 Tasks)
- Dimensions: H 93mm x W 211mm x D 75mm
- Packed weight: 1.0kg





DRC1205 – 12 x 5A Relay Controller

The DRC1205 is a 12 channel relay controller, with a maximum load of 5A per channel. It is used for switching both lighting and nonlighting loads. In areas where it is beneficial to sequentially switch on large lighting loads, such as factories and indoor sporting arenas, the DRC1205 can be programmed to stagger the switch on of the lights, to minimise peak demand current.

- 400/230V \pm 14% 50/60Hz 3-Phase Y at 20A per phase or 230V \pm 14% 50/60Hz Single Phase at 60A
- 12 x switched outputs at 5A
- 3 blocks of 4 channels, each protected by a 20A MCB
- Programmable Logic Controller (8 Tasks)
- Dimensions: H 450mm x W 225mm x D 75mm
- Packed weight: 4.8kg

DRC810DT – 8 x 10A Relay Controller

The DRC810DT relay controller is designed for operation of general purpose switched loads in applications where facilities for input connection are also required. Incorporating voltage free change-over SPDT output relays, the DRC810DT is ideal for controlling bi-directional motors, such as those used for curtains. The device is also suitable for connection to third-party systems

where a low voltage contact interface is required. Multipurpose programmable dry contact and analogue inputs are also provided for interfacing to other devices. The DRC810DT also incorporates a Programmable Logic Controller that can process comprehensive conditional and sequential logic and arithmetic functions.



- 230V ±14% 50/60Hz Single Phase at 0.1A
- 8 × switched outputs at 10A
- Relay outputs are dry contact single pole double throw (SPDT)
- 8 × multifunction inputs; each programmable to 0-5V, 0-10V or dry contact
- Programmable Logic Controller (8 Tasks)
- Dimensions: H 320mm x W 225mm x D 75mm
- Packed weight: 3.5kg

DRCI2I0 – I2 × I0A Relay Controller

The DRC1210 is a 12 channel relay controller, with a maximum load per channel of 10A.

It is used for switching both lighting and non-lighting loads. The DRC1210 has an optional accessory card for control of electronic dimmable ballasts. In areas where it is beneficial to sequentially switch on large lighting loads, such as factories and indoor sporting arenas, the DRC1210 can be programmed to stagger the light switch on, to minimise peak demand current.

- 230V \pm 14% 50/60Hz Single Phase at 40A
- 12 x switched outputs at 10A
- Each output protected by a 10A MCB
- Programmable Logic Controller (8 Tasks)
- Dimensions: H 457mm x W 252mm x D 126mm
- Packed weight: 10.25kg



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DRCI220GL – I2 x 20A Relay Controller

The DRC1220GL is a 12 channel relay controller, with a maximum load per channel of 20A. It is used for switching both lighting and non-lighting loads. The DRC1220GL has an optional accessory card for control of electronic dimmable ballasts. In areas where it is beneficial to sequentially switch on large lighting loads, such as factories and indoor sporting arenas, the DRC1220GL can be programmed to stagger the light switch on, to minimise peak demand current.

- 400/230V ±14% 50/60Hz 3-Phase Y at 80A per phase
- 12 × switched outputs at 20A
- Each output protected by a 20A MCB
- Programmable Logic Controller (8 Tasks)
- Dimensions: H 457mm x W 252mm x D 126mm
- Packed weight: 10.25kg

Dimmer Controllers

Philips Dynalite support a wide selection of dimmer units that are compatible to most lamp types. By selecting the right dimmer for the different lamp types, an unlimited number of combinations of dimmer units can be chosen, to work together in one project allowing for a spectacular end result. Utilising the very latest in microprocessor technology, every Philips Dynalite dimmer has many built-in dedicated features for the lighting control industry.

With industry leading dimming of 16 bits fading resolution, this allows for ultra smooth dimming in projects where it's critical for flicker-free scene changes. This superior dimming resolution allows the units to be used in any theatrical or architectural lighting application.

Each dimmer can store over 170+ scenes for an unrestricted project flexibility. This allows for complex scenes to be recalled from any user interface and for the whole control system to work together, creating a desired scene or effect. Each stored scene allows the users to paint with light over the project. As each dimmer stores its own scene information, any project can live edit the lighting levels, allowing for lighting designers to push the boundaries of creativity.

The dimmers are capable of fading from one scene to another, between one second to 23 hours triggered from a single network message. This allows for simpler programming and smooth transition from one scene to the next. A feature that is perfect for daylight harvesting in projects that require energy management without disturbing the occupants. Also useful in projects that require long transition between lighting scenes such as lunch – afternoon – evening – dining without the occupants noticing any harsh changes.



Leading Edge Dimmer Controllers

Leading Edge Dimmer Controllers are ideal for lighting circuits with resistive and inductive properties, including mains voltage incandescent fittings, neon and low voltage lamps with a compatible electronic transformer. Available in both DIN rail and wall box configuration, Philips Dynalite supports a vast range of leading edge dimmer controllers with a variety of circuit numbers and sizes to work individually or part of a system, fitting any project requirement. Wall box dimmer controllers have been engineered to achieve rise times of over 100µS producing reduced filament sing, reduced supply voltage noise, resulting in extended lamp life. The dimmers are engineered to be compatible with electronic transformers, requiring less de-rating, therefore allowing full capacity of channel to be utilised. Standard built-in features of the dimmers include:

- power conditioning to protect lamps
- over voltage
- surge protection
- brownout/sag protection

Standard features will increase lamp life, reducing the ongoing project maintenance running costs.



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DDLE802 – 8 x 2A Leading Edge Dimmer Controller

The DDLE802 is an eight channel leading edge dimmer with a maximum load per channel of 2A. It is suitable for use with incandescent, low voltage, neon and selected fluorescent fixtures.

It is also highly recommended for use in residential and hotel applications. The DDLE802 features Philips Dynalite's superior voltage regulation and soft start technologies, which protect low voltage lamps and dramatically increase lamp life.

The front panel of the DDLE802-MO (Manual Override) version includes a rear lit keypad that provides status indication and local control of individual channels. It also features an LED illuminated service switch for diagnostics and local override. Adjacent to the keypad is a network socket for ease of programming. The device is DIN rail mountable, designed to be installed in a switchboard, optionally next to circuit breakers feeding the circuits to be controlled.

- 230V \pm 14% 50/60Hz Single Phase at 16A
- 8 x dimmed outputs at 2A
- Each pair of outputs protected by a 6.3A time delay M205 fuse
- I x programmable dry contact AUX input
- Dimensions: H 96mm x W 211mm x D 75mm
- Packed weight: 0.94kg
- Option Manual Override
- DDLE802-MO
- Rear-lit keypad provides status indication and local control of individual channels





DLE1203 – 12 x 3A Leading Edge Dimmer Controller

The DLE1203 is a 12 channel leading edge energy management controller with a maximum load per channel of 3A and a total device load of 32A.

It is suitable for use with incandescent, low voltage and neon. It is especially suitable for residential applications. The unit can be integrated into a total smart home solution including security, HVAC, home theatre, blind control and exterior lighting. The DLE1203 protects low voltage lamps and dramatically increases lamp life, through utilisation of Philips Dynalite's superior voltage regulation and soft start technologies.

- 230V ±14% 50/60Hz Single Phase at 32A
- 12 × dimmed outputs at 3A.Total device load 32A
- 2 blocks of 6 channels, each protected by a I6A MCB
- Rise time >100µS @ 230V
- Dimensions: H 450mm x W 225mm x D 75mm
- · Packed weight: 6.0kg

DLE405 – 4 × 5A Leading Edge Dimmer Controller

The DLE405 is a four channel energy management controller with a maximum load per channel of 5A. It is suitable for use with incandescent, low voltage, neon and selected fluorescent lighting. Where retail merchandise is on display, the DLE405 protects low voltage lamps and dramatically increases lamp life. This is achieved through Philips Dynalite's superior voltage regulation and soft start technologies.

- 230V ±14% 50/60Hz Single Phase at 20A
- 4 × dimmed outputs at 5A
- Each output protected by a 6A MCB
- Rise time >200µS @ 230V
- I x programmable dry contact AUX input
- Dimensions: H 320mm × W 225mm × D 75mm
- Packed weight: 4.2kg



Load Controllers

DLE1205 – 12 x 5A Leading Edge Dimmer Controller

The DLE1205 is a 12 channel leading edge dimmer with a maximum load per channel of 5A and a total device load of 60A. It is suitable for use with incandescent, low voltage, neon and selected fluorescent fixtures.

The combination of load capacity, sub circuit protection and attractive pricing makes it especially suitable for residential and small commercial applications. When used with the Philips Dynalite range of integration accessories, the lighting control system can be integrated into a total smart home solution including security, HVAC, home theatre, blind control and exterior lighting. The DLE1205 protects low voltage lamps and dramatically increases lamp life. This is achieved through Philips Dynalite's superior voltage regulation and soft start technologies.

- 400/230V ±14% 50/60Hz 3-Phase Y at 20A per phase or 230V ±14% 50/60Hz Single Phase at 60A
- 12 x dimmed outputs at 5A
- Each output protected by a 6A MCB
- Rise Time > 100µS @ 230V
- I x programmable dry contact AUX input
- Dimensions: H 626mm x W 255mm x D 176mm
- Packed weight: 14.0kg





DLE410 – 4 x 10A Leading Edge Dimmer Controller

The DLE410 is a four channel energy management controller with a maximum load per channel of 10A. It is suitable for use with incandescent, low voltage, neon and selected fluorescent light sources. In applications where there can be numerous users, such as lecture theatres, the DLE410 can be configured with control panels and an IR Receiver to provide preset scenes for entry, set-up, cleaning and presentations. An override capability for presenters can be provided using Philips Dynalite's IR handset.

- 230V ±14% 50/60Hz Single Phase at 40A
- 4 × dimmed outputs at 10A
- Each output protected by a 10A MCB
- Rise Time >100µS @ 230V
- I x programmable dry contact AUX input
- Dimensions: H 300mm x W 212mm x D 144mm
- Packed weight: 8.8kg

DLE1210GL – 12 x 10A Leading Edge Dimmer Controller

The DLE1210GL is a 12 channel leading edge dimmer with a maximum load per channel of 10A and a total device load of 75A. It is suitable for control of large loads, including incandescent, low voltage, neon and selected fluorescent light sources. The DLE1210GL is the ideal choice in applications requiring reliability combined with large power handling. It is DMX512 compatible, making it perfect for use in theatres, shopping centres and auditoriums. The DLE1210GL protects low voltage lamps and dramatically increases lamp life. This is achieved through Philips Dynalite's superior voltage regulation and soft start technologies.

- 400/230V ±14% 50/60Hz 3-phase Y at 25A per phase or 230V ±14% 50/60Hz Single Phase at 75A
- 12 x dimmed outputs at 10A. Total device load 75A
- Each output protected by a 10A MCB
- Rise time >100µS @ 230V
- I x programmable dry contact AUX input
- Dimensions: H 626mm x W 255mm x D 176mm
- Packed weight: 18.0kg





DLE1210 – 12 x 10A Leading Edge Dimmer Controller

The DLE1210 is a 12 channel energy management controller with a maximum load per channel of 10A. It is suitable for control of large loads, including incandescent, low voltage, neon and selected fluorescent light sources. The DLE1210 is the ideal choice in applications requiring reliability combined with large power handling capability. It is DMX512 compatible, making it perfect for use in theatres and auditoriums.

- 400/230V ±14% 50/60Hz 3-PhaseY at 40A per phase
- 12 x dimmed outputs at 10A
- Each output protected by a 10A MCB
- Rise time >200µS @ 230V
- Dimensions: H 600mm x W 345mm x D 187mm
- Packed weight: 30.0kg

Load Controllers

DLE120-S – 1 x 20A Leading Edge Dimmer Controller

The DLE120-S is a single channel energy management controller with a maximum load of 20A. It is suitable for the control of large loads including incandescent, low voltage, neon and selected fluorescent light sources. The DLE120-S is designed for applications where lamp life is critical, such as where lamp maintenance is difficult or expensive. It complements Philips Dynalite's multi-channel dimmers by providing an extra channel when additional load capacity is required.

- 230V \pm 14% 50/60Hz Single Phase at 20A
- I × dimmed output at 20A
- No sub circuit protection feed from 20A MCB
- Robust SCR regulating device
- Rise time >200µS @ 230V
- 8 x multifunction inputs; each programmable to 0-5V, 0-10V or dry contact
- Programmable Logic Controller (8 tasks)
- Dimensions: H 320mm x W 225mm x D 75mm
- Packed weight: 3.5kg





DLE220-S – 2 × 20A Leading Edge Dimmer Controller

The DLE220-S is a two channel energy management controller with a maximum load of 20A per channel. It is suitable for control of large loads, including incandescent, low voltage, neon and selected fluorescent light sources. The DLE220-S is designed for applications where lamp life is critical, such as where lamp maintenance is difficult or expensive. It complements Philips Dynalite's multi-channel dimmers by providing extra channels when additional load capacity is required. It is DMX512 compatible, making it perfect for use in theatres and auditoriums.

- 230V \pm 14% 50/60Hz Single Phase at 40A
- 2 × dimmed outputs at 20A
- Each output protected by a 20A MCB
- Robust SCR regulating device
- Rise Time >100µS @ 230V
- I x programmable dry contact AUX input
- Dimensions: H 285mm x W 210mm x D 150mm
- Packed weight: 4.2kg

DLE1220GL-S – 12 x 20A Leading Edge Dimmer Controller

The DLE1220GL-S is a 12 channel energy management controller with a maximum load per channel of 20A. It is suitable for control of large loads, including incandescent, low voltage, neon and selected fluorescent light sources. The DLE1220GL-S is the ideal choice in applications requiring reliability combined with large power handling capability. It is DMX512 compatible, making it perfect for use in theatres and auditoriums.

- 400/230V ±14% 50/60Hz 3-Phase Y at 63A per phase
- 12 × dimmed outputs at 20A. Total device load 180A
- Each output protected by a 20A MCB
- Robust SCR regulating device
- Rise time >200µS @ 230V
- Dimensions: H 600mm x W 345mm x D 187mm
- Packed weight: 35.0kg



Trailing Edge Dimmer Controllers

Compatible with main voltage incandescent fittings and low voltage electronic transformers, the Philips Dynalite range of trailing edge dimmer units bring together the very best in lighting control technology. All units support a three phase supply making them ideal for track-lighting dimming applications. Utilising trailing edge dimming techniques can achieve the quietest style of dimming for projects where noise is critical. This makes trailing edge dimmers the perfect choice for art galleries, museums, music hall and lecture rooms. Built-in power conditioning to protect lamps from over voltage, surge protection, brownout/sag protection increases lamp life, reducing ongoing project maintenance costs.





DTE310 – 3 x 10 A Trailing Edge Dimmer Controller

The DTE310 is a three channel energy management controller with a maximum load per channel of 10A. It has a trailing edge output, making it suitable for use with most types of dimmable electronic transformers.

The DTE310 can operate from a three phase or single phase supply and is especially suited for controlling track mounted fixtures on three circuit track. Using a three phase supply when the DTE310 is connected to three circuit track allows the track to be loaded to maximum rating.

Philips Dynalite's superior voltage regulation and soft start technologies protect lamps, dramatically extending their life. Multipurpose programmable dry contact and analogue inputs are provided for interfacing to other systems such as AV controllers. The device also incorporates a Programmable Logic Controller that can process comprehensive conditional and sequential logic and macro functions.

- 400/230V ±14% 50/60Hz 3-Phase Y at 10A per phase or 230V ±14% 50/60Hz Single Phase at 30A
- 3 \times dimmed outputs (trailing edge phase control) at 10A
- Each output protected by a 10A MCB
- Regulating device Dual MOSFET's. 47A, 600V, 141 surge
- 1 x RS485 serial port DyNet & DMX512
- 8 x multifunction inputs; each programmable to 0-5V, 0-10V or dry contact
- Dimensions: H 450mm x W 225mm x D 75mm
- Packed weight: 6.0kg



DTEI2I0 – I2 x I0A Trailing Edge Dimmer Controller

The DTE1210 is a 12 channel energy management controller with a maximum load per channel of 10A. It has a trailing edge output, making it suitable for use with most types of dimmable electronic transformers.

The DTE1210 can operate from a three phase or single phase supply and is especially suited for controlling track mounted fixtures on three circuit track. Using a three phase supply when the DTE1210 is connected to three circuit track allows the track to be loaded to maximum rating.

Philips Dynalite's superior voltage regulation and soft start technologies protect lamps, dramatically extending their life.The power circuit for each channel is contained within plug-in modules for ease of maintenance.The device incorporates a Programmable Logic Controller that can process complex conditional and sequential logic and macro functions. It is DMX512 compatible, making it perfect for use in theatres and auditoriums.

- + 400/230V \pm 14% 50/60Hz 3-Phase Y at 40A per phase
- 12 x dimmed outputs (trailing edge phase control) at 10A
- Each output protected by a IOA MCB
- Regulating device Dual MOSFET's, 47A, 600V, 141 surge
- I x RS485 serial port DyNet & DMX512
- I \times programmable dry contact AUX input
- Dimensions: H 610mm x W 290mm x D 190mm
- Packed weight: 16.7kg

Open Protocol Dimmer Controllers

The Philips Dynalite range of Open Protocol Dimmer Controllers, have been engineered to meet the future demands of projects. They are capable of transmitting all industry standard ballast protocols (I-I0V, DSI, DALI and Broadcast DALI) and support two ranges of install opportunities of both DIN rail and wall box, to allow for flexible install opportunities. The Open Protocol Dimmer Controller range also support a vast range of ballast controllers with a variety of circuit numbers and sizes to work individually or as part of a system, suiting any project requirement.



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DBC905 - 9 x 5A Dimmer Controller



The 9 channel DBC905 high frequency fluorescent dimmer controller is designed for direct installation within ceiling cavities.

Each control output supports DALI Broadcast, DALI Addressed, I-10V and DSI protocols. For ease of installation and maintenance the device incorporates structured wiring connectors, which enables the DBC905WA-WAGO and unit to be readily connected without the use of tools. The DBC905 can be readily integrated with a Building Management System (BMS) via the DyNet control network, making it ideally suited to commercial office installations where a cost effective control solution is required.

The device design provides easy connection without the use of tools and is available for two popular wiring brands; CMS Electracom (Modular Wiring) - DBC905C, Wieland – DBC905W.

DDBCI20-DALI **Dimmer Controller**



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The DDBCI20-DALI is designed for cost-effective control of DALI high frequency fluorescent ballasts, providing a full universe of 64 DALI channels.

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Direct DALI to DyNet mapping means that the DALI-imposed limits, such as the maximum of 16 groups, are seamlessly overcome. The device is DIN rail mountable, designed to be installed in a switchboard next to

the circuit breaker that is supplying power to the controlled lighting circuit. The DDBC120-DALI contains an integral DALI bus power supply, removing the need for the provision of a separate external supply.

- 230V ±14% 50/60Hz Single Phase at 0.1A
- I x DALI control output, supporting a full DALI universe of 64 channels, including diagnostic back channel

Diagnostics include:

- Lamp failure reporting
- Ballast failure reporting
- Ballast run tracking for each ballast
- Device Online/Offline status
- I x programmable dry contact AUX input
- Internal DALI bus power supply
- Dimensions: H 86mm x W 105mm x D 58mm
- Packed weight: 0.324kg

DDBC300-DALI Dimmer Controller



The DDBC300-DALI is designed for cost-effective control of DALI high frequency fluorescent ballasts, providing three full DALI universes comprising 192 DALI channels. Direct DALI to DyNet mapping means that the DALI-imposed limits, such as the maximum of 16 groups, are seamlessly overcome. The device is DIN rail mountable, designed to be installed in a switchboard next to the circuit breaker that is supplying power to the controlled lighting circuit. The DDBC300-DALI contains an integral DALI bus power supply, removing the need for an additional external device.



- 230V ±14% 50/60Hz Single Phase at 0.1A
- 3 × DALI control outputs, each supporting a full DALI universe of 64 channels (192 total), including diagnostic back channel

Diagnostics include:

- Lamp failure reporting
- Ballast failure reporting
- Ballast run tracking for each ballast
- Device Online/Offline status
- I x programmable dry contact AUX input
- Internal DALI bus power supply
- Dimensions: H 86mm x W 209mm x D 66mm
- Packed weight: 0.49kg



DDBC320-DALI Dimmer Controller

The DDBC320-DALI is designed to provide cost effective control of DALI high frequency fluorescent ballasts. It has three DALI outputs, allowing it to control up to 192 DALI devices.

The DALI control signals can be programmed to operate in tandem with the three internal switched outputs, which will automatically isolate the power circuit when all associated DALI channels are at 0%.

This feature is useful for energy saving applications, as DALI ballasts draw a significant amount of power when the lamps are turned off via a DALI command. Direct DALI to DyNet mapping means that the DALI imposed limits, such as the maximum of 16 groups, are seamlessly overcome.

The device is DIN rail mountable, designed to be installed in a switchboard next to the circuit breakers supplying power to the controlled lighting circuits. The DDBC320-DALI contains an integral DALI bus power supply, removing the need for an additional external device.

- 230V ±14% 50/60Hz Single Phase at 0.1A
- 3 x DALI control outputs, each supporting a full DALI universe of 64 channels (192 total), including diagnostic back channel

Diagnostics include:

- Lamp failure reporting
- Ballast failure reporting
- Ballast run tracking for each ballast switched output
- Device Online/Offline status
- 3 x 20A feed through switched circuits for DALI ballast mains supply
- I x programmable dry contact AUX input
- Internal DALI bus power supply
- Dimensions: H 86mm x W 210mm x D 58mm
- Packed weight: 0.8kg

DMBCII0 – $I \times I0A$ Open Protocol and Relay Controller

The DMBC110 is designed to allow intelligent, networked control of individual lighting fixtures. The compact design enables the unit to be mounted directly within the gear enclosure of many fixtures. Each dimmer controller incorporates a relay output which can be used to control mains supply to the fixture, and a $1 \times 10A$ dimmer controller which can provide dimming control of DALI, 1-10V and DSI compatible ballasts and transformers. The relay is very robust and fully rated for difficult lighting loads.

- 230V \pm 14% 50/60Hz Single Phase at 10A
- Relay output at IOA (inductive)
- Relay, tungsten carbide pilot contact, 12A inductive, 120A surge

Output Capacity:

- DALI Ballasts and transformers: 5
- O-10V Ballasts: 10mA source or 20mA sink
- DSI Ballasts and transformers: 15
- Dimensions: L 185mm x W 44mm x D 38mm
- Packed weight: 0.19kg

DDBCI200 – I2 x Channel Control Dimmer Controller

- 230V ±14% 50/60Hz Single Phase at 0.5A
- 12 x control outputs, software selectable to DSI/0-10V or DALI broadcast
- Up to 100 DSI or 0-10V ballasts per control circuit, 1200 ballasts total per unit
- Up to 80 DALI ballasts per control circuit or maximum 500 total per unit
- Can control 1-10V HF ballasts when used with a relay controller
- LED status indicators for each channel
- Programmable Logic Controller (8 Tasks)
- Dimensions: H 93mm x W 211mm x D 75mm
- Packed weight: 0.6kg Option Manual Override
- DDBC1200-MO. Rear-lit keypad provides status indication and local control of individual channels

The DDBC1200 is designed to provide cost effective control of high frequency fluorescent ballasts and dimmable transformers. Each DDBC1200 has 12 independent output channels, each selectable to DALI Broadcast, 0-10V or DSI.

When in 0-10V output mode, the device is suitable for interfacing with equipment with an analogue input port such as air dampers. The device can also be linked to a separate relay module for control of 1-10V HF fluorescent ballasts.

LED indicators reflect the status of each channel. The device is DIN rail mountable, designed to be installed on a switchboard next to the circuit breaker that is supplying power to the controlled lighting circuit.





DBC410 – 4 x 10A Dimmer Controller

The DBC410 is designed for use with electronic dimmable fluorescent ballasts, either 1-10V or DSI. It has four heavy duty 10A relay outputs to switch fluorescent lighting or other loads in a DyNet energy management system. Four control outputs, selectable to I-IOV DC and DSI, are provided for control of HF ballasts. These control outputs can operate in tandem with or separately from the switched outputs.

- + 230V \pm 14% 50/60Hz Single Phase at 40A
- 4 x switched outputs at IOA (inductive)
- $4 \times HF$ ballast control outputs, each selectable to 1-10V or DSI
- Each output protected by a 10A MCB
- Dimensions: H 320mm x W 225mm x D 75mm
- Packed weight: 4.0kg

DBC1205 – 12 x 5A Dimmer Controller

The DBC1205 is designed for use with electronic dimmable fluorescent ballasts, either 1-10V or DSI. It has $12 \times 5A$ relay outputs to switch fluorescent lighting or other loads in a DyNet energy management system. Twelve control outputs, selectable to I-10V DC and DSI, are provided for control of HF ballasts.

- 400/230V ±14% 50/60Hz 3-Phase Y at 20A per phase or 230V ±14% 50/60Hz Single Phase at 60A
- 12 x switched outputs at 5A
- 12 x HF ballast control outputs, software selectable to 1-10V or DSI
- 3 blocks of 4 channels, each protected by a 20A MCB
- Dimensions: H 450mm x W 225mm x D 75mm
- Packed weight: 5.2kg



DBC1210 – 12 x 10A Dimmer Controller

The DBC1210 is designed for use with DALI, I-10V and DSI electronic dimmable fluorescent ballasts and transformers. The unit has a built-in I2 × 10A relay output, to remove power once lamps have been dimmed down, therefore completely removing stand-by current. Each of the twelve control outputs are selectable to DALI Broadcast, I-10V and DSI are provided for control of HF ballasts.

- 400/230V ±14% 50/60Hz 3-Phase Y at 40A per phase
- 12 x switched outputs at 10A
- 12 x Open protocol control outputs, each selectable to DALI, 1-10V or DSI
- Each output protected by a 10A MCB
- Dimensions: H 457mm x W 252mm x D 126mm
- Packed weight: 10.25kg



DBCI220GL – I2 x 20A Dimmer Controller

The DBC1220GL is designed for use with DALI, I-10V and DSI electronic dimmable fluorescent ballasts and transformers. The unit has a built-in 12 × 20A relay output, to remove power once lamps have been dimmed down, therefore completely removing stand-by current. Each of the twelve control outputs are selectable to DALI Broadcast, I-IOV and DSI are provided for control of HF ballasts.

- 400/230V ±14% 50/60Hz 3-Phase Y at 60A per phase
- 12 x switched outputs at 20A
- 12 × Open protocol control outputs, each selectable to DALI, 1-10V or DSI
- Each output protected by a 20A MCB
- Dimensions: H 457mm x W 252mm x D 126mm
- Packed weight: 10.25kg



Load Controllers

LED PWM Controllers

Capable of directly driving LED fittings, the Philips Dynalite LED dimmers use Pulse Width Modulation (PWM) technology to great effect. Perfectly suited to Red, Green, Blue (RGB) colour changing applications, chase sequencing or provision of elegant scene settings. The Philips Dynalite LED drivers come in a range of configurations to meet the compatibility requirements of many of the available LED fittings.

Each device is ready to receive native DMX allowing them to be used in colour mixing or chase sequence applications.



DDLEDC60035 – 6 x 350mA PWM Controller

The DDLEDC60035 is designed to control LED loads in decorative architectural lighting applications where creative colour mixing and sequencing is required.

The controller provides six pulse width modulated common anode current mode outputs suitable for directly driving 350mA nominal current rated high intensity LED sources. Incorporating internal current regulation, the controller is designed to directly operate series connected LED arrays without the need for any additional circuit devices. The device is supplied with a DIN rail mountable housing, designed for installation within a switchboard or suitable electrical enclosure. The DDLEDC60035 is DMX512 compatible and is suitable for the high chase speeds found in display lighting.

- Requires external 2.5A regulated power supply
- Controller supply voltage range selectable with internal link to 18-32V DC (standard) or 12-15V DC
- 6 x 350mA current mode common anode PWM outputs
- Minimum internal voltage drop 200mV
- I x RS485 serial port DyNet & DMX512
- Dimensions: H 86mm × W 209mm × D 66mm
- Packed weight: 1.0kg



DDLEDC401 – 4 × 1A PWM Controller

The DDLEDC401 is designed to control four channel (RGBW) LED loads in decorative architectural lighting applications where creative colour mixing and sequencing is required.

The controller provides four pulse width modulated voltage mode outputs suitable for driving high intensity LED sources. Controller nominal output voltage is 24VDC and can optionally be ordered as 12V output. The device is available in two output configurations to accommodate common anode (DDLEDC401-CA) or common cathode (DDLEDC401-CK) loads. The device is supplied with a DIN rail mountable housing, designed for installation installed within a switchboard or suitable electrical enlosure. The DDLEDC401 is DMX512 compatible and is suitable for the high chase speeds found in display lighting.

- 230V \pm 14% 50/60Hz Single Phase at 130 watts
- 4 × 1A constant voltage PWM outputs
- Outputs selectable to 12V/24V/Common Anode/Common Cathode
- I x RS485 serial port DyNet & DMX512
- Dimensions: H 86mm x W 209mm x D 66mm
- Packed weight: 1.0kg



DDLEDC605 – 6 × 5A PWM Controller

The DDLEDC605 is designed to control LED loads in decorative architectural lighting applications where creative colour mixing and sequencing is required.

The controller provides six pulse width modulated common anode voltage mode outputs suitable for directly driving high intensity LED sources. The controller is designed for connection to an external DC power supply enabling the unit to deliver a range of nominal output voltages. The device is supplied with a DIN rail mountable housing, designed for installation within a switchboard or suitable electrical enclosure. The DDLEDC605 is DMX512 compatible and is suitable for the high chase speeds commonly found in display lighting.



- Requires external 20A regulated power supply, enabling a range of nominal output voltages
- Controller supply voltage range selectable with internal link to 18-32V DC (standard) or 12-15VDC.
- 6 × 5A voltage mode common anode PWM outputs
- 1 x RS485 serial port DyNet & DMX512
- Dimensions: H 86mm x W 209mm x D 66mm
- Packed weight: I.0kg

Multipurpose Controllers

Within any project there can be found many different lighting load types required to achieve a desired result. Each of these different lighting load types may require a different style of control. The Philips Dynalite range of multipurpose controllers allows customisation of the output types via different output module units.

When using the DIN rail multipurpose controllers, a control type choice for each circuit can be made from relay, leading edge dimmer, trailing edge dimmer, ballast control, fan control and blind/screen control. In any combination, multiple load types can be controlled from a single device. This can help reduce installation complications and stop wasted capacity of circuits that are not required.

The DMC810 multipurpose controller combines leading edge dimming, ballast control, and relay switching into one device. With 10A sized channels this device is perfectly suited as a standalone device for lecture theatres, board rooms and meeting rooms or working with other load controllers as part of a larger system.



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DDMC802GL – 8 x 2A Multipurpose Modular Controller

The DDMC802GL is an eight channel controller with a nominal load per channel of 2A. A variety of output modules are available to suit different types of loads and the DDMC802GL can accept up to four plug-in modules, which by their removable design also facilitate ease of servicing.

Available module types include:

- Trailing edge phase control dimmer, suitable for use with most types of dimmable electronic transformers.
- Leading edge phase control dimmer, suitable for incandescent lamps and some types of dimmable electronic transformers.
- HF Ballast controller, suitable for controlling DALI Broadcast, I-IOV and DSI ballasts and transformers.
- Relay module, suitable for most types of switched loads.
- Fan control module.
- Curtain control module.

The device is DIN rail mountable, designed to be installed in a switchboard, optionally next to circuit breakers feeding the circuits to be controlled.

Available output modules include:

- 1 x 5A Leading Edge Dimmer module (DGLM105)
- 4 x 2A Leading Edge Dimmer module (DGLM402)
- 4 x 2A Trailing Edge Dimmer module (DGTM402)
- 1 x 5A Trailing Edge Dimmer module (DGTM105)
- 2 x DALI Broadcast, I-10V, DSI Controller module (DGBM200)
- 2 × 4A Relay Controller module (DGRM204)
- I x 2A SPDT Curtain Controller module (DGCM102)
- 1 × 400VA Fan Controller module (DGFM102)



DDMC802 – 8 x 2A Multipurpose Modular Controller

The DDMC802 is an eight channel controller with a maximum load per channel of 2A. A variety of output modules are available to suit different types of loads and the DDMC802 can accept up to eight plug in modules, which by their removable design also facilitate ease of servicing.

Available module types include:

- Trailing edge phase control dimmer, suitable for use with most types of dimmable electronic transformers.
- Leading edge phase control dimmer, suitable for incandescent lamps and some types of dimmable electronic transformers.
- HF Ballast controller, suitable for controlling 1-10V and digital ballasts and transformers (a relay module should be paired with the HF ballast module when controlling 1-10V ballasts).
- Relay module, suitable for most types of switched loads.
- Fan control module.
- Curtain control module.

The device is DIN rail mountable, designed to be installed in a switchboard, optionally next to circuit breakers feeding the circuits to be controlled.



- 230V \pm 14% 50/60Hz Single Phase at 16A
- 8 × output slots at 2A each
- Dimensions: H 93mm x W 211mm x D 75mm
- Packed weight: 0.94kg

Available output modules include:

- 1 x 2A Leading Edge Dimmer module (DDLM102)
- I × 4A Leading Edge Dimmer module (DDLM104)
- 1 × 2A Trailing Edge Dimmer module (DDTM102)
- I x DALI Broadcast, I-10V, DSI Controller module (DDBM100)
- I x 4A Relay Controller module (DDRM104)
- I x 2A SPDT Curtain Controller module (DDCM102)
- I x 400VA Fan Controller module (DDFM102)

DDLE6RC202 – 6 x 2A Leading Edge 2 x 2A Relay Multipurpose Controller

The DDLE6RC202 is an eight channel controller with six leading edge dimming outputs and two switched outputs with a maximum load per channel of 2A. It is suitable for use with incandescent, low voltage, neon and selected fluorescent fixtures and any small switched load. It is also highly recommended for use in residential and hotel applications.

The DDLE6RC202 features Philips Dynalite's superior voltage regulation and soft start technologies, which protect low voltage lamps and dramatically increase lamp life. individual channels. It also features an LED illuminated service switch for diagnostics and local override. Adjacent to the keypad is a network socket for ease of programming.

The front panel of the DDLE6RC202-MO (Manual Override) version includes a rear lit keypad that provides status indication and local control of The device is DIN rail mountable, designed to be installed in a switchboard, optionally next to circuit breakers feeding the circuits to be controlled.



DMC810GL – 4 x 10A Leading Edge 4 x 10A Open Protocol Multipurpose Controller

The DMC810GL multipurpose controller offers control of both incandescent lamps and electronic dimmable and switched ballasts and transformers. Four 10A circuit breakers protect eight channels rated at 10A each for control of dimmable loads. Four control outputs, selectable to 1-10V DC, DSI and DALI Broadcast, are provided for control of HF ballasts. These control outputs can operate in tandem with, or separately from, the switched outputs. The ability to control mixed load types from the one controller provides savings on initial capital costs, as well as installation.



Integration Devices

Within any modern project, many third-party systems can be found performing different roles. Each separate system may use a different protocol for communication. To unite the efforts of these different systems, Philips Dynalite has developed a range of gateway devices that can be used to synchronise their functions together into one integrated system solution. By utilising the correct gateway, different systems can be integrated together allowing end-users to have access to a fully automated site from one interface. By successfully integrating third-party systems with Philips Dynalite, repetitive interaction from end-users is reduced. A range of different gateways have been developed to provide different integration opportunities and network management options.



DNG100BT / DDNG100BT / DMNG100BT Ethernet Gateways

The Philips Dynalite Ethernet gateway range, offers costeffective integration between Philips Dynalite control systems and Ethernet networks. The gateways are designed to provide remote control of sites and link multiple sites together, using the Internet for control opportunities or a project network management in a LAN backbone.

Ethernet gateways supports the TCP/ IP protocol, with static or DHCP assigned IP addressing. Routing Mode links multiple Ethernet gateways together for

network management solutions. The interface incorporates a Programmable Logic Controller that can process comprehensive conditional and sequential logic and arithmetic functions. The Ethernet gateways are capable of routing DyNet to third-party systems, such as audio-visual and building automation systems, providing an integrated approach to total building control and energy management. Philips Dynalite supports the Ethernet gateways in three different mounting configurations - Wall box, DIN rail mount and Modular.





- Provides a TCP/IP gateway for controlling a Philips Dynalite network
- Allows custom GUIs to be created in HTML and Flash and run on smart phones, PCs and touchscreens
- Integral webserver for browser-based control
- I x RS485 serial port DyNet
- I × 10/100 Base T ethernet port
- Supports static and DHCP IP addressing
- Programmable Logic Controller (64 Tasks)
- Dimensions: H 225mm x W 165mm x D 59mm
- Packed weight: 1.0kg

Available in three different mounting options:

- Wall box mounting DNG100BT H 225mm x W 165mm x D 59mm 1.0kg Mains powered
- DIN Rail mounting DDNG100BT
 H 86mm × W 209mm × D 66mm 0.86kg
 Mains powered
- Modular mounting DMNG100BT
 H 30mm x W 80mm x D 150mm 0.15kg
 Network powered



DACI00BT Ethernet Gateway

The Philips Dynalite DAC100BT Area Controller is a network interface that also provides a range of area management and user control functions. The DAC100BT is ideal for commercial applications incorporating a common building services 100BaseT LAN backbone.

The device supports the TCP/IP protocol, with static or DHCP assigned IP addressing. Routing Mode links multiple DAC100BTs together in point-to-point or broadcast modes. An integral webserver allows browser-based control scenarios. The interface incorporates a Programmable Logic Controller that can process comprehensive conditional and sequential logic and arithmetic functions. The DAC100BT is also capable of routing DyNet to third-party systems, such as audio-visual and building automation systems, providing an integrated approach to total building control and energy management. Key features include OLED panel display highlighting panel status, along with local area overrides, integrated user front panel and a range of test buttons and maintenance switch indicators. A mechanical key lock is provided for secure access.



DNG232 / DDNG232 / DMNG232 DyNet RS485 <-> 232 Network Gateway Devices

The Philips Dynalite 232 <-> 485 gateway range is designed to enable cost-effective serial port integration between the Philips Dynalite control system and third-party systems such as AV systems, lighting desks, data projectors, HVAC, BMS and security systems.

Each RS232 interface incorporates a powerful possessor, allowing for conditional logic functions to be performed between two different network systems or trigger a sequence of task and events. A library of data formats is available for the systems integrator to choose from, allowing for faster set-up and commissioning time. Alternatively, a format can be created using the Envision commissioning software to assemble and transmit user-defined data strings. Macro-functions are available to simplify the control of multiple devices. Philips Dynalite supports the 232 <-> 485 gateways in three different mounting configurations – Wall box, DIN rail mount and Modular.

- DyNet RS485 to RS232 Gateway
- I x RS485 serial port DyNet
- 1 x RS232 serial port can be programmed to transmit custom data strings
- Pre-programmed "Plain English" text interpreter mode
- Pre-programmed Remote Access Modem mode
- RS232 Baud rate: 600 460800
- RS232 Max packet length: 254 bytes
- Programmable Logic Controller (64 Tasks)

Available in three different mounting options:

- Wall box mounting DNG232 H 225mm x W 165mm x D 59mm 1.0kg Mains powered
- DIN Rail mounting DDNG232
 H 86mm × W 209mm × D 66mm 0.86kg Mains powered
- Modular mounting DMNG232
 H 30mm × W 80mm × D 150mm 0.15kg
 Network powered





DDNG485 Network Gateway

The Philips Dynalite DDNG485 is a flexible network communications gateway designed for DyNet RS485 networks. The two opto-isolated RS485 ports enable the DDNG485 to implement a trunk and spur topology on large project sites, with the device providing a high-speed backbone opto-coupled to many lower speed spurs.

It also provides isolation of electrical faults to individual spurs. The device is also designed to enable cost effective integration between the Philips Dynalite control system and third-party devices. The DDNG485 has a DMX mode that can transmit or receive up to 64 channels of DMX512, with automatic DyNet conversion and task triggering. This is a popular method of allowing a lighting operator temporary control of the house lights from the DMX lighting console in an auditorium scenario.

The on-board Programmable Logic Controller can assemble and transmit user-defined data strings.

Product is SOMFY ready.



- Communications gateway from DyNet RS485
 networks
- 2 × RS485 serial ports DyNet
- 3.75KV RMS optical isolation between ports
- Programmable message filtering
- DMX512 receive & convert to DyNet (64 channels)
- Programmable Logic Controller (64 Tasks)
- DyNet to DyNet II Translation
- Powered from the DyNet network
- Can be mounted on DIN rail, also has provision for screw fixing to a wall without the use of DIN rail
- Dimensions H: 86mm x W 105mm x D 58mm
- Packed weight: 0.25kg

DDNI485 Network Passive Gateway



The Philips Dynalite DDNI485 is designed for cost-effective optical isolation of DyNet RS485 networks. The two opto-isolated RS485 ports enable the DDNI485 to implement a trunk and spur topology, with each spur being electrically isolated from the others so a fault in one section of the network will be contained. It is a "passive" device that does not require programming.

DNG485 RS485/DMX Gateway



The Philips Dynalite DNG485 is a flexible network communications bridge designed for RS485 networks. The two opto-isolated RS485 ports enable the DNG485 to implement a trunk and spur topology on large project sites, with the bridge providing a high-speed backbone opto-coupled to many lower speed spurs.

It also provides isolation of electrical faults to individual spurs and augments network security and robustness through the definition of packet filtering rules for each direction.The DNG485 is capable of routing DyNet to third-party systems, such as audio-visual and building automation systems, providing an integrated approach to total building control and energy management. The DDNG485 has a DMX mode that can transmit or receive up to 64 channels of DMX512, with automatic DyNet conversion and task triggering.

Product is SOMFY ready.

- 2 × RS485 serial ports DyNet
- 3.75KV RMS optical isolation between ports
- Programmable message filtering
- Programmable Logic Controller (64 Tasks)
- DMX512 receive & convert to DyNet 64 channels
- DyNet to DyNet II translation
- DyNet network power supply 630mA
- Dimensions: H 320mm x W 225mm x D 75mm
- Packed weight: 3.1kg

DTK622-232 RS232 Bidirectional Gateway

Provides a simple passive translation between the native DyNet RS485 to RS232. Useful for linking with AV and airconditioning systems that support RS232 communication protocols.

- I x RS485 serial port DyNet
- I x RS232 serial port
- Full duplex passive device
- Powered from the DyNet network
- Dimensions: H 25mm x W 50mm x D 90mm



DDNI-LON LON Gateway

The DDNI-LON is designed to provide a LON single point gateway to a Philips Dynalite control system. The DDNI-LON is based on Echelon Corporation's Neuron 3120 chip, which supports 63 SNVT's and will support preset control of 100 presets per area for 30 areas. Multiple DDNI-LON devices can be cascaded together to accommodate larger or more complex DyNet networks. The device is configured to operate on the LON network with Echelon Corporation's LonMaker.



- DyNet to LON interface
- I × RS485 serial port DyNet
- I xTP/FTT10A twisted pair LonWorks port
- Supports 63 SNVTs
- Powered from the DyNet network
- Dimensions: H 86mm x W 105mm x D 70mm
- Packed weight: 0.6kg

DDNG-KNX KNX Gateway

The DDNG-KNX allows for high level integration between the Philips Dynalite system and BMS using the KNX protocol.This gateway between the two systems allows high level communication, opening up a number of integration



opportunities. When using the DDNG-KNX gateway, the BMS systems can trigger tasks and timed based events and the Philips Dynalite system can report back current system statuses.

DDNI-BACnet BACnet Gateway



The DDNI-BACnet allows for high level integration between the Philips Dynalite system and BMS using the BACnet protocol. This gateway between the two systems allows high level communication, opening up a number of integration opportunities. When using the DDNI-BACnet gateway, the BMS systems can trigger tasks and timed based events and the Philips Dynalite system can report back current system statuses. This Philips Dynalite gateway can support 1000 BACnet addressable points that can be adjusted by either system for full transparency of communications.

DDMIDC8 Low Level Input Integrator

The DDMIDC8 is designed to enable cost-effective input integration to the Philips Dynalite control system from third-party systems such as security, HVAC and BMS.

The interface incorporates a Programmable Logic Controller that can process comprehensive conditional and sequential logic and arithmetic functions.

Eight digital inputs are provided, each of which can be individually configured as a dry contact input or a 0-24V AC/DC input. Each input has an LED indicator to provide visual status indication and all inputs are individually optically isolated for high noise immunity. In addition to the digital inputs, four 0-5V/0-10V (software selectable) analogue inputs are provided.

The DDMIDC8 is housed in a six unit wide DIN enclosure for installation into switchboards and also has internal fixing points that allow the device to be fixed to a surface without the use of a DIN rail.The device is powered from the DyNet network and does not require a separate mains voltage supply.

- 8 × opto-isolated inputs, each configurable to dry contact or 0-24V AC/DC inputs
- 4 x 0-10V DC analogue non-isolated inputs
- I x RS485 serial port DyNet
- LED status indicators for each opto isolated input
- Programmable Logic Controller (8 Tasks)
- Powered from the DyNet network
- Can be mounted on a DIN rail, also has provision for screw fixing to a wall without the use of a DIN rail
- Dimensions: H 86mm x W 105mm x D 58mm
- Packed weight: 0.324kg



DPMI940 Dry Contact Gateway

The DPMI940 is a four way dry contact gateway designed to allow mechanical switches and relays to interface to the DyNet network.

The function of each input is programmable and the small size of the product combined with the inputs being presented on flyleads makes it perfect for installation behind multi-gang switch grids. In addition to use as a simple dry contact interface, the DPMI940 has a "motion detector" mode that turns a third-party motion detector into a fully featured DyNet sensor. The flylead that connects to the motion relay and tamper switch also has a 0V and +12V DC pair for powering the motion detector from the DyNet network power supply. The small size of the DPMI940 allows it to be fitted completely inside many brands of motion detectors.



DIR-TX8 Infra-red Transmitter

The DIR-TX8 is designed to provide cost effective integration and control of all types of infra-red controllable devices, such as AV equipment. User-friendly PC software is used to program the DIR-TX8 with common IR codes from the supplied library. The DIR-TX8 also has an integral IR receiver that is used to learn and save previously unknown IR codes. Multiple IR codes can be arranged into macros and played back at any time with a single DyNet command. The device includes an internal programmable logic controller and supports all Philips Dynalite IR script commands.



- 8 independent, individually controllable outputs
- 4 × 3.5mm stereo jack connector, accepts stereo & mono plugs
- I × IR input, used for learning & saving unknown IR codes
- I x RS485 serial port DyNet
- I x programmable dry contact AUX input
- Programmable Logic Controller (64 Tasks)
- Powered from the DyNet network
- Dimensions: H 30mm × W 80mm × D 150mm
- Packed weight: 0,15kg
- DIR-EM2 supplied separately

DDFCUC024 and DDFCUC010 Fan Coil Unit Controllers

The DDFCUC024 and DDFCUC010 are Fan Coil Unit controllers designed for direct connection to components commonly found in airconditioning systems.

The control units use TRIAC's outputs for controlling hot and chilled water valves, relay outputs for driving fan motors and a high capacity relay output is available for electrical heaters. Inputs are provided for a resistive analogy type temperature sensor or the device can use data from a networked temperature sensor such as the Philips Dynalite DTS900. Programmable auxiliary inputs are provided for peripherals such as smoke detectors, motion detectors, window open/close sensors and airflow detectors to help the DDFCUC0204 coordinate the different elements of airconditioning

together in one unit. The devices can be networked with other equipment to form part of a system, such as Philips Dynalite Revolution DRP wall stations and DTP170 & DTP100 touchscreens.




Envision Software

EnvisionProject and EnvisionManager software delivers powerful functionality, time saving and user-friendly benefits to ensure success through the life of a project. This fully integrated end-to-end solution is the next generation software, to deliver advanced lighting control commissioning and management.

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EnvisionManager

EnvisionManager is a sophisticated software package that allows building owners and managers to manage, modify and expand their lighting control systems. This intuitive, easy-to-use and powerful computer-based interface allows access to all the control features within a lighting control system, in one software package.

With EnvisionManager, even the most advanced Philips Dynalite lighting control solutions can be easily accessed and managed giving building owners and facility managers the ability to control, modify and customise their building, whether this be for increased energy savings, greater facility productivity or for user comfort. With a complete overview of a building's lighting control system, it is possible to navigate to any location and make adjustments to network devices and functions including controlled areas or zones, re-channeling and presetting of loads, task editing and building automation maintenance programs.

Multiple operators can access and view the lighting control system to override specific functions, adjust specific timer events and edit system settings from different or remote locations. The software also has both notional and metered energy management reporting capability that accurately details lighting consumption, which assists operators to set and meet energy management targets and reduce operational costs.

EnvisionManager at a glance

- Global energy management, facility optimisation and user comfort with the click of a mouse
- Multiple operators can access the lighting control system to monitor the system or make adjustments
- Software can be accessed from different on-site or remote locations
- Multiple complex functions can be performed from a pre-programmed icon buttons
- Real time status and energy management reporting capability
- Easy to navigate interface
- Helpful software button presets to shortcut complex network site functions and settings
- Powerful scheduling and time clock engine to perform actions at a specified time or date
- A virtual control panel (Tray Pan) that allows individual users to control their local lighting



EnvisionProject

EnvisionProject provides a rapid programming platform that allows system installers and integrators with user-friendly and intuitive software, to fast-track lighting control commissioning.

The user can select from a range of pre-programmed templates that meet the lighting control requirements of most projects and then make the required small adjustments to make the system features perfect. The operator can also be led through a logical sequence of well defined programming steps, thereby simplifying the process of delivering a lighting control system to the project requirements. EnvisionProject brings together such functions as area addressing, (including DALI & extended groupings), scene setting, human interface configuration and third-party configuration into one easy-to-use software platform. Complex or infrequently performed programming tasks have all been streamlined and simplified, which allows system integrators and installers to bring the different systems components of the system together sooner and delivering your project online faster.



- Faster commissioning possess
- Increased programming flexibility
- Icon driven menus and commissioning templates
- Ability to import and export data
- Programming replication for use elsewhere on your project
- Faster commissioning tools
- Automatic project documentation generation

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Network Devices & Commissioning Tools

To bring all the different devices together, Philips Dynalite supports a range of network devices that are useful in creating a problem free installation.

Network Devices & Commissioning Tools

DDNPI501 Network Power Supply

The DDNPI501 is a 15V DC 1.5A regulated power supply, designed to supplement the DyNet network DC supply. The switchmode design allows the device to be used with a wide range of supply voltages without the need for a manual selector setting.

Normally a DyNet network is self-powered by the built-in DC supplies integrated within all mains powered devices. However, in certain applications this supply may need to be supplemented with the DDNP1501 when using peripherals with a high supply requirement, such as edge-lit touchscreens. The DDNP1501 is housed in a six unit DIN rail mount enclosure that has aa circuit breaker profile. This enables the device to be installed in all types of electrical equipment enclosures, including those with cover apertures specifically designed for circuit breakers.

- Supply 110-240V 50/60Hz single phase at 0.25A
- Output 15V DC @ 1.5A (@ 230V supply), 15V DC @1.0A (@ 110V supply)
- Self-resetting overload protection, automatic thermal shutdown and short-circuit proof
- DIN rail enclosure (circuit breaker profile), 6 units wide
- Perfect for supplementing DyNet DC supply when using touchpanels
- Dimensions: H 94.5mm x W 105mm x D 75mm
- Packed weight: 0.2kg



DDPB22RJI2 Network Junction Box

Allowing installers to have onsite flexible networking options, the DDPB22RJ12 allows for the 22 DyNet flat cables of the Philips Dynalite system, to be terminated together in one location. Acting as a junction box, the DPB22RJ12 takes advantage of the RJ12 connection system allowing for a quick install and use of a network star topology.



DyNet 305m Data Cable Pack



DyNet data cable is specifically designed for high reliability RS485 network wiring. In addition to a twisted pair for RS485 data, conductors are provided to supply DC power to network powered peripherals. Conductors are shielded for maximum data integrity. The data cable is flexible, as all conductors are stranded, which also allows for robust termination into pressure plate style terminals used on Philips Dynalite equipment. The extra thick outer jacket is mains rated for use in switchboards and enhances the robustness of the cable. The cable is supplied in 305m lengths.

- Used to create robust Dynalite RS485 networks
- 100MHz 100 Ω STP 4 pair CAT5E
- Shielded for maximum data integrity
- Conductors are stranded for easy termination on pressure plate screw terminals
- Outer sheath is 250V rated
- Supplied in 305m rolls
- Carton Dimensions: H 425mm x W 212mm x D 425mm
- Carton weight: 15.0kg

DyNetSFLAT6 200m Cable Roll and Cable Kits

Flat data cable is specifically designed for high reliability localised network wiring, as found in any lighting control system environment.

In addition to a conductor pair for data, conductors are provided to supply DC power to network powered peripherals.

Conductors have an overall shield for maximum data integrity. The data cable is flexible, as all conductors are stranded. It is designed for rapid crimp termination into RJ12 plugs for use with Philips Dynalite products with supporting RJ12 sockets.

The cable is supplied in 200m rolls or in pre-crimped leads of 3m, 5m and 10m lengths.



DTK622-USB 485 USB PC Node Adaptor

Providing a useful interface between any PC and the Philips Dynalite system, the DTK622-USB provides complete access to the entire network messages. To be used in conjunction with any of the Philips Dynalite software, this useful tool can be used to commission, diagnose/repair or as a permanent gateway to the system for the head-end software EnvisionProject.

- Used with EnvisionProject software, a PC is able to connect to the Philips Dynalite network
- Supported OS: Windows 98, ME, 2000, XP
- I x RS485 serial port DyNet, accessible via 2 x paralleled RJ12 sockets
- I x USB type B connector, supplied with I m long USB patchlead
- Powered from the DyNet network
- Dimensions: H 25mm × W 50mm × D 90mm





- Programs & overrides control system
- 122 × 32 pixel backlit LCD display
- Controls 256 areas, each up to 255 channels, 170 presets
- Dimensions: H 79mm x W 143mm x D 25mm
- Packed weight: 0.427kg

DPP601 Portable Programmer

The DPP601 is a portable, hand-held programmer designed for making programming changes to a Philips Dynalite system without the use of a computer.

DPP601 plugs into any point on the DyNet network and the LCD display will help guide the user step by step through the programming task. Information such as channel, area and preset scene names are automatically uploaded from the network to assist in programming. The DPP601 programmer can copy individual channel levels and preset scene values to reduce set-up time. It can be used in conjunction with standard control panels to access preset scenes that are not commonly used or that require protection from accidental selection. The DPP601 has an astronomical 365 day timer clock with sunrise/sunset tracking, automatic Daylight Saving adjustment and powerful macro and conditional logic functions. The timer clock interfaces with other devices over the DyNet RS485 network to automate tasks and events.

Philips Dynalite Brochures



Philips Dynalite Sophisticated, productive, reliable and energy efficient lighting control solutions

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Networked Controls Product Catalogue

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Envision software Advanced lighting controls made easy - save energy increase productivity and optimize user comfort

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