FUTRONIX BROCHURE



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INTRODUCTION

FROM THE SMALLEST RESIDENTIAL SCENE DIMMER TO THE WORLD'S LARGEST DIMMING SYSTEMS...

Established in 1989, Futronix has evolved into one of the world's leading manufacturers of lighting control systems. With installations in over 50 countries, Futronix is recognized by leading architects, designers, engineers and private customers as the product of choice.

Futronix has established itself as a market leader through constant commitment to product innovation, technical excellence, and superb customer support and service.

Futronix produces the only truly digital range of residential and commercial dimmers. These dimmers have no analogue content, making them smaller, more accurate and more reliable.

Dedicated to quality above all else, Futronix products are designed from the installer's position that a product should be easy to fit – and from the customer's position that lighting is essential and should never fail.

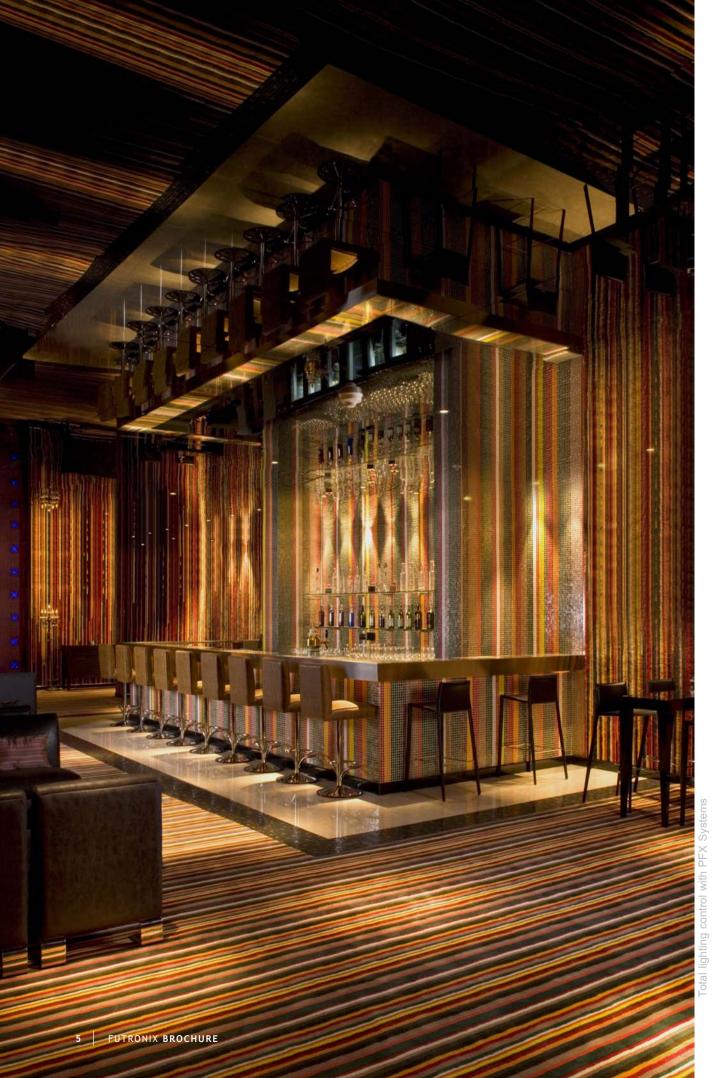
Futronix genuinely cares for its' customers. Purchasing a product from Futronix is only part of the story – we constantly strive to fulfil and exceed your highest expectations. Whether you are a lighting consultant, architect, electrical engineer, electrician or end user, you can expect first class service with professional advice and technical support.

All Futronix products since 1994 – when Futronix first introduced the digital dimmer – are designed to be fully compatible both backwards and forwards. This means that any Futronix

dimming system will retain its value over many years, with maintenance, service and spare parts always available.

Futronix designs and manufactures its own products,

ensuring that quality is built in and maintained at every stage. All Futronix dimmers are extensively tested prior to shipment, guaranteeing that the dimmer you specify or buy works perfectly, from the day it's fitted and for years to come.



PFX SYSTEM

THE LATEST IN HIGH-END LIGHTING CONTROL SYSTEMS

The PFX is one of the most sophisticated hi-end dimming systems available today. It is used in some of the world's most prestigious building projects including the largest single architectural dimming system ever made.

The PFX System is an unlimited channel lighting control and whole-building automation system that manages lighting usage, increases functionality and saves energy. A modular range of standard sized chassis (with 4, 6, 8, 12, 16 or 32 channels of dimming), each with its' own intelligence, means that systems can be built of unlimited size.

The inherent flexibility of the PFX system means that it is an easy system to specify, install and commission.

The totally digital nature of the PFX makes it a quiet, accurate and very reliable system. No matter how complex the requirements are, the system can be easily configured to meet any customer's needs.

Installed in a concealed location, PFX dimmers feature total operational flexibility, security, and ease of programming

and master operation via remote control. PC. laptop, or Home-Icon TouchS

control, PC, laptop, or Home-Icon TouchScreen Controller.

User operation of the PFX System is by remote control or wall-mounted switch panels. Elegant hand-finished switch panels – in standard sizes – feature solid-metal face plates to complement any decor. Ultra-slim Eclipse switchplates are crafted of frosted glass with polished stainless steel.



Golden Screen Cinema





Sofitel Hotel

The PFX's in-built 24/7 timer can schedule selected scenes for atmosphere, special events or security. Multiple functions and helpful macros to run pre-set environments are available when a Home-Icon controller is connected to the PFX System. The TouchScreen controller's in-built 365-day astronomical timer can program lighting and automation events up to one year in advance.

PFX SYSTEM - FEATURES

- All digital control each PFX dimmer contains the latest generation hard-fired digital dimmer circuits
- Programmable scenes (20 per area standard, expandable to 120 with Home-Icon[®])
- 3-phase dimming or switching
- 4 selectable dimming curves
- Each channel can be set to be a switching only (non-dimming) circuit
- 1024-step fade resolution for all fade and cross-fade functions
- Variable fade rates from 0.5 seconds to 2 hours
- · 4 databuses including:
 - X-Bus
 - RS485
 - RS232
 - BMS
 - DMX (option)
- · No minimum load on any channel
- Multi-zoning
- Multi-room partition control
- Mains voltage compensation
- Voltage stabilization
- 24-hr 7-day in-built event timer (battery backed)
- Occupancy detection
- Davlight balancing
- Low noise operation audible noise from a 16 channel 10A dimmer fully loaded at 50% is less than 30db @ 1m
- Energy saving 98% efficiency
- · Programming and operation from:
 - remote control handset (infra-red)
 - PC or laptop
 - touch screen controller
- Permanent memory in the event of a power blackout pre-set scenes are not lost and re-programming is not necessary
- Temporary circuit adjustment without save
- Exit Delay
- Sleep Timer
- Security Settings
- Virtual I/O for control of:
 - non-lighting equipment
 - curtains, shades, blinds
 - water features
 - security and alarm systems, etc.
- Electrician-friendly installation

Shanghai Tobacco 0

LIGHTING BRINGS AN ARTISTIC SENSIBILITY TO INTERNATIONAL PROJECTS OF EVERY TYPE AND SCOPE...



Large areas such as ballrooms or conference rooms can be partitioned into smaller function rooms, each with its own independent controls and partition-panel position switches. Lighting for each smaller area or combination of areas can then be controlled as though it was one room, with full scene setting capability.

The PFX System's X-Bus[®] protocol is an especially useful feature for lighting

control for large pillarless areas such as ballrooms or exhibition halls.

X-Bus protocol allows all system power and data to be sent down a single multi-stranded cable, daisy-chained to each switch plate in turn. This means less cabling and installation, greater

reliability due to fewer components and connections, easier terminations, and more robust cable.



The PFX creates aesthetically pleasing, energy efficient spaces in diverse applications . . .

Hotels

Convention centers & exhibition venues Shopping malls & theme parks

Movie theaters

Restaurants

Airports

Hospitals

Cruise ships

Control rooms

Places of worship

Residential properties & developments Exterior & landscape illumination . . .











IMAX cinema



PFS SYSTEM

COMPLETE SWITCHING CONTROL SYSTEMS



The PFS switching unit is available in 8, 12 or 16 channel formats and is designed for controlling dimmable fluorescent ballasts, curtain/drape/window shade motors and other motorized equipment such as swimming pool covers and sky lights. The unit has motor interlocking, for operating dual-motor curtain and drapes.

Inputs and outputs are easily configurable according to function,

and can be switched independently, or as part of a scene, an event or macro.

Adjustable voltage level triggering, which switches fluorescent ballasts ON or OFF at a pre-set point in the dimming curve, can be used

PFS - FEATURES

- Available in 8, 12 or 16 channel formats
- Adjustable voltage level triggering for switching fluorescent ballasts
- Arc-free relay switching
- AC dual-motor interlocking
- Synchronization compares a logic level input 0-5v from other equipment with the selected level, and switches accordingly
- Pulse switching for operating switches on AV equipment
- X-Bus protocol
- 10A @ 220-240v AC or 20A @ 220-240v AC or 20A @ 110-120v AC



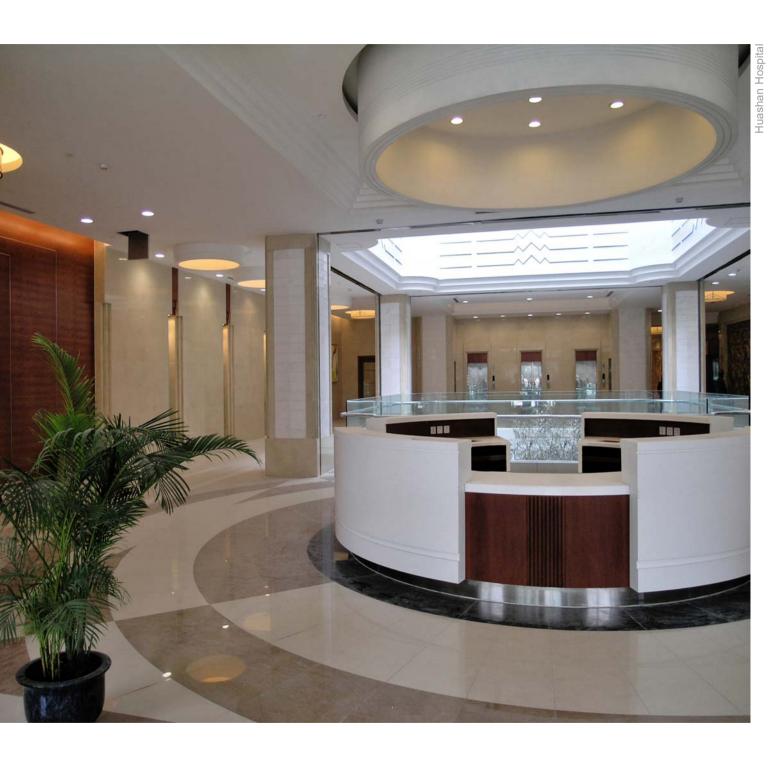




Switched lighting brightens an Indoor Pool & Spa

for switching the ballast's power rail, in conjunction with the integral 1-10v converter card.

It can be configured to operate low level control loads such as intruder/fire alarms and AV equipment. Easily configurable features include comparison-switching, where switching only takes place when a logic level input from AV/air conditioning equipment doesn't match the desired status. The output can mimic a switch-press that requires a pulse contact closure of variable duration.



Executive Offices





Conference Room

Switching exterior lighting



Automated controlled landscape lighting

PFR SYSTEM

The PFR is a chassis mounted relay switching panel available in 8, 12 or 16 channel formats, with MCB and isolator switch protection.

It is primarily intended for high powered switching mainly of lighting loads such as metal halide, sodium, SON and other non-dim loads.



The PFR can be used wherever there are non-dimmed lighting loads – in offices, hospitals, foyers, educational establishments, and for both exterior and landscape lighting. Features include long-life arc-free relay switching.

PFR - FEATURES

- Switches all load types incl: resistive, inductive and capacitative
- Arc-free relay switching
- Heavy duty terminal connections for live, earth and neutral
- Separate control & power wiring sections
- MCB and Isolator switch protection
- Individual channel bypass to full MCB protection
- X-Bus protocol
- 10A @ 220-240v AC or 20A @ 220-240v AC or 20A @ 110v-120v AC



FUTRONIX HAS PROVIDED LIGHTING CONTROLS FOR SOME OF THE MOST PRESTIGIOUS HOTEL AND BUILDING PROJECTS AROUND THE WORLD

THIS INCLUDES THE BURJ AL ARAB – SEVEN STAR HOTEL IN DUBAI

There are many hotels in the world which can be described in superlatives, but there are few, if any, which can touch the Burj Al Arab for its stunning opulence and dynamics.

The world's tallest hotel, it stands on its own manmade island, and has the largest atrium in the world at 60 levels. It consists of 202 luxury double floor suites that range from 6 to 30 rooms.

From rooftop helipad to the 100ft fire-and -water entrance displays, the Burj Al Arab combines the ultimate display of luxury with the latest in technology.

Futronix was proud to be the manufacturer of the lighting control system for the balconies, corridors and all suites in the hotel. With over 14,000 channels, it is the largest architectural lighting control system ever made.

A total of over 500 dimmer racks control corridor, balcony and suite lighting throughout the entire hotel. Over 400 PFX-32 system racks were installed for suite lighting. A further 100 PFX-12 and PFX-16 systems control public area lighting. These are networked together and operated via a custom graphical interface.

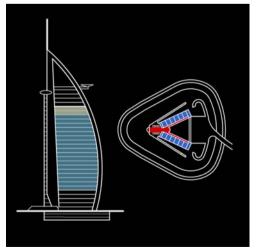
Each suite has one or more PFX-32 dimming control systems, which operate the lighting in every room; the largest suites have five systems each, giving a total of 160 channels of lighting.

Scenes in each room can be selected from the switch panels and additionally from master panels located at main entrances. In the bedrooms, there are dedicated control panels on either side of the beds. These feature innovations such as 'path of light', which provides a trail of illumination at night.

Guest reception at each floor is equipped with a Futronix Floor Master Controller. When a guest arrives, the receptionist selects the room number and turns all the lighting in the guest's room to a pre-programmed 'welcome' scene.







Dimmer location - Floor plan

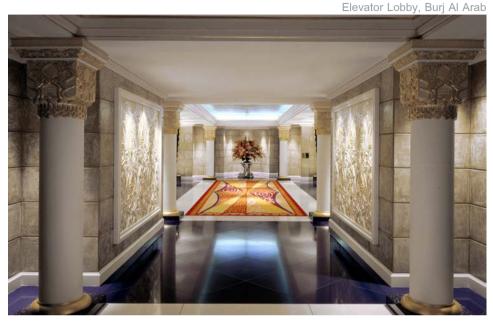


Similarly, when room occupants leave, all lights can be turned off. There

is a master panel by the front door of each suite for guests to turn all lighting to a 'welcome' scene, or to an 'exit' scene that excludes any important areas possibly still occupied, such as bedrooms and bathrooms.

The hotel building has the energy requirements of a small city, and is fitted with back-up generators for emergencies. If the back-up generators are activated, the BMS (Building Management System) sends a signal to the floor controllers, which switch the lighting in each suite to energy saving levels, taking into account the levels already selected by the room guest.

In service, the Futronix PFX System's all-digital design has demonstrated the ability to operate with the greatest of long term reliability.









THE BURJ AL ARAB IS TESTIMONY TO THE FLEXIBILITY OF THE PFX SYSTEM

TO ADAPT TO THE MOST COMPLEX OF REQUIREMENTS AND MEET THE HIGHEST OF STANDARDS



heric lighting for Restaurants





ENVIROSCENE

... A POWERFUL LIGHTING CONTROL SYSTEM DESIGNED FOR BOTH COMMERCIAL AND RESIDENTIAL USE

The Enviroscene is an affordable intelligent lighting control system, designed to create an aesthetically pleasing environment on any scale.

Ideal for restaurants, bars, cinemas and luxury residences, its rugged reliability guarantees the atmosphere will always be there.

Offering much more than just intelligent dimming, the versatile Enviroscene system can control a host of other programmable automation features – including curtains, drapes, TV and screen lifts, even water features - and can interface with security and alarm systems.

The Enviroscene unit links to a modular system of dimmers and switchpanels throughout the property, and can operate lighting in more than one area. Up to 16 different rooms can be wired to the Enviroscene and then configured at installation time using the remote control.

Each circuit can be set to be in any room and each room (zone) then works – with full scene setting – independently of any other. Once set up, lighting 'scenes' are recalled simply by touching a single button on either the switch panel or the supplied remote control unit.

Residential systems are often programmed for entertaining, watching TV, or relaxing and reading, as well as for energy saving and security. Commercial installations typically are set up for programming and operating daily lighting schedules and special event lighting.

The Enviroscene is installed out of view and operated by remote control or switch panels. These are available in white metal, brass, and polished or brushed stainless steel.

The system is easily programmed using the remote control handset, a laptop or a PC. This keeps switchplates simple and attractive. A convenient master switch panel is typically located beside an entrance, with additional master switch panels installed wherever desired. Switchpanels use the X-Bus protocol

St. Peter's Church





Conrad Restaurant



Welcoming ambience for a Hotel Lounge

ENVIROSCENE - FEATURES

- Enviroscene Master units (ENV410 & ENV805)
 provide 16 control channels; actual power
 dimming is available in 4 or 8 channel
 versions. Remaining spare control channels
 can be utilized by adding Enviroscene Slave
 Units with in-built dimming of 4 or 8 channels.
- Master units can be added as required
- Up to 128 circuits lighting or switching
- Operates on a variety of mains inputs
- · Controls most types of lighting
- Output
 - 4 x 10A channels
 - 8 x 5A channels
- No minimum load on any channel
- 20 programmable scenes available per zone/area:
 - gradually turn lights on/off
 - variable fade rates (0.5 seconds to 2 hours)
 - temporary adjustment without save
 - master raise & lower
 - exit delay & sleep timer
- Lighting display creation
 - link scenes, program fade rates & duration
 - highlight an area or an item
- Timer (optional)
 - battery backed
 - recall up to 70 scenes per week (10/day)
- Communication port
- RS485 interface to PC or touch screen
- Infra-red remote (optional)
- Permanent memory in case of power failure
 pre-set scenes are not lost
- In-built X-Bus databus for system expansion
- Energy efficient saves up to 98% of unused lighting

operating via a low voltage cable 'daisy-chained' throughout the entire installation. Each switch panel can be configured at installation to operate a zone, any number of zones or to act as a master to them all.

The Enviroscene can also be operated remotely from a Home-Icon [®]Color TouchScreen controller. The Home-Icon controller links dimmers together, and adds multiple functions with one-touch macros programmed to run pre-set 'environments' for lighting and for whole-building ambient control.

The Enviroscene Master comes complete with 4 channels of 10A or 8 channels of 5A dimming on board. In addition it has control for up to 16 circuits using a range of add on slaves available in 4 x 10A and 8 x 5A formats. More Enviroscene Masters can be connected together to form larger systems of 32, 48 or more channels.

Eight channels of 1-10v industry standard fluorescent dimming control are available via an optional internal card or a wall-mounted add-on unit. Each of the 8 channels can control up to 30 fluorescent ballasts.



TIMER

A 7-day timer can recall any scene at any time during the week, giving more control over lifestyle and security. Up to 70 of these events can be programmed (up to 10 events per day). Uses range from automatically selecting a welcome scene to operating security settings.

DISPLAY

By linking a series of scenes and programming the duration and fade rate, the Enviroscene can provide lighting displays to draw attention to an area or to highlight certain items. A security lighting sequence can automatically rotate through pre-set scenes for any variable length of time to give the impression that the property is occupied.

RUGGED DURABILITY

For residential or commercial projects, the Enviroscene's all-digital design and commercial build-quality assure extremely reliable, trouble-free operation.

In a commercial environment, a lighting and automation controller must be able to cope with lamp wattage changes, short circuits, overloads and wiring alterations. It must be easy to install and

highly reliable. The Enviroscene encompasses these benefits and more.

ENERGY

The Environment creates a productive energy efficient environment with up to 98% of the corresponding unused lighting energy saved through dimming.







HOME-ICON

Well-designed lighting and intelligent lighting control define the character and style of a space, enhancing the appearance and function of any commercial or residential area. Modern hotels, restaurants, and commercial and residential properties require lighting control systems that are powerful and versatile, while maximizing operator convenience.

Home-Icon[®] automates repetitive everyday tasks such as setting lighting, operating curtains and drapes, or controlling audio/visual equipment.

CONVENIENCE

Home-Icon provides the ultimate in user convenience. The individual commercial and luxury residential lighting control systems made by Futronix provide a host of attractive features. The Home-Icon TouchScreen interface links together these individual dimmers, and can then program, operate and add functionality to any system from a single Enviroscene unit to a complex multiple-rack PFX dimmer system.

Installed dimming systems can be customized to meet the most demanding of lighting requirements. Set up lighting for any occasion or atmosphere, save the settings, and with a single touch of the Home-Icon screen you can recreate exactly that lighting at any time.

The Home-Icon TouchScreen features a large, full-color Thin Film Transistor touch-screen display. The system combines ease of operation and flexibility, with all features set-up from the color touch-screen interface. It has a web-enabled option, with its own website pages and dynamic data display, and the intuitive menu structure is easy for end-users and installers to operate.

Eye-catching graphics represent circuit levels and other programmable settings in a clear and logical user-friendly format. Depending on level of access, the customer can re-program lighting scenes, raise and lower lighting circuit levels and save system changes.

CONTROL

Home-Icon panels can be fitted by main entrances or in control rooms – or for homes, in master bedrooms or hallways. Switch panels in other areas provide local control. Scenes in each room can be selected from the switch panels or touchscreen.



MACROS

Macros – sequences of pre-programmed commands – substantially increase functionality of dimming systems. With macros it is possible to record a complex sequence of events, and recall the sequence with a single command.

Standard macros available with the Home-Icon controller are programmed for numerous residential and commercial uses.

SECURITY

When a commercial property or residence is unoccupied, the lighting can be set to automatically mimic normal patterns of usage; homeowners can return to a welcoming, lit up home in the evening.

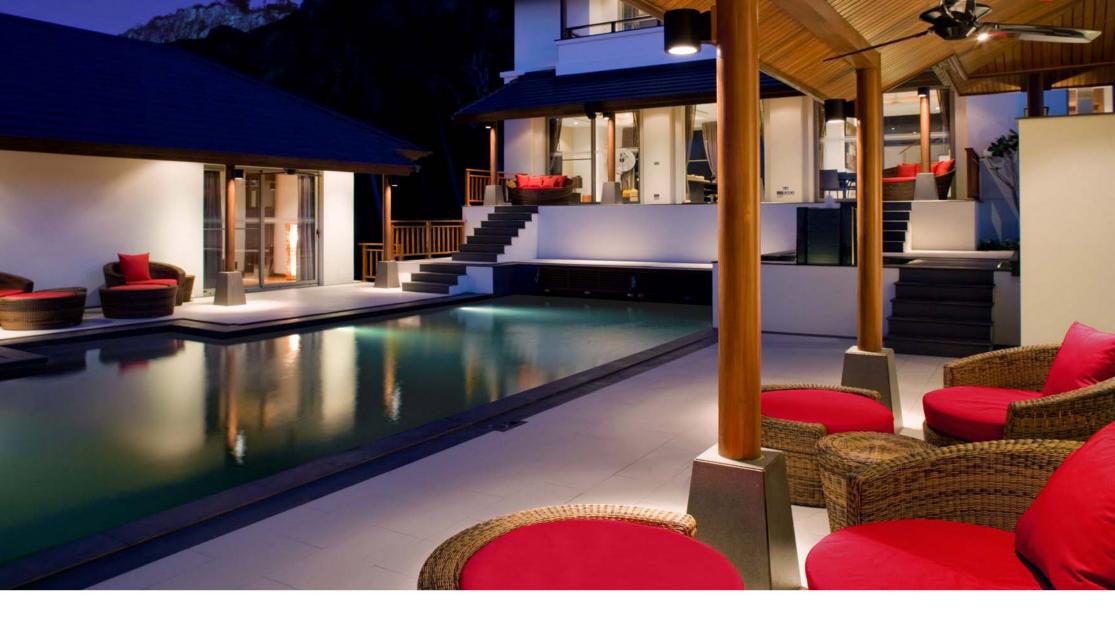
INTEGRATION

The Home-Icon system is easily integrated with AV equipment, personal computers, security and fire alarms, air conditioning, heating, and telephones.



INSTALLATION

Installation is made simpler because the various distributed intelligent control units can be located in different local parts of the house and linked to form a seamless multi-zone system. This results in space reduction as well as simplified wiring and cost savings.



FUTRONIX

HX WIRELESS DIMMERS

COMPLETE CONTROL SYSTEMS FROM FUTRONIX OFFER UNRIVALLED ADVANTAGES

Remotely mounted Futronix Hx Dimmer modules are unobtrusive yet powerful lighting and automation controllers intended for small-to-medium homes, condominium units, hotel guestrooms and offices, conference and seminar rooms. Hx units feather multi-channel switching, combined with sophisticated lighting control and networking options typically offered only by much larger centralized dimming systems.

THE UNIQUE Hx-SERIES WIRELESS DIMMERS

The Hx Dimmer's unique combination of 4 scene dimming 4

channels of relay switching, and 4 channels of 0-10v independent fluorescent dimming can control room as well as most switched devices including mirror demisters for bathroom and energy-saving non-dimming Compact Fluorescent lamps. Hx-2 2 channel dimmers feather 1 scene dimming channel plus1 switching channel.

SMALLER HOMES & CONDOMINIUM UNITS

Homeowners everywhere appreciate the simplicity and convenience of the Hx Dimmer's centralized one-touch control of lighting in several rooms. A master switch panel by the front entrance can switch off selected lighting and switch on security lighting when the owners leave home, or set a 'welcome' scene for evenings. Open-plan condominium design typically feathers a single large area divided into zones for dining, relaxation and

> entertainment, and adjacent kitchen/breakfast bar. Each zone requires different types and levels of lighting – and possibly other home system automation as well. Hx Dimmer units minimize the convenience of getting up repeatedly to alter lights and other systems from inconveniently located manual switchpoints.

HOTELS & SPA RESORTS

Hx Dimmers provide the ultimate in flexible hotel hotel guestroom lighting control. Lounge, bedroom and bathroom lighting for suits and guestrooms throughout a hotel can be

controlled by Hx Dimmer units – either free-standing or networked to the BMS (Building Management System).

Wireless.

In spa resorts Hx Dimmers controlling individual bungalows can be linked to a Futronix Reception Controller at Reception so that lighting, drapes, and other welcoming features can be operated before guests arrive at their bungalow.

OFFICES & CONFERENCE ROOMS

The Hx Dimmer is also suitable for smaller offices and conference rooms, to control compact fluorescent lamps and operate curtains, drapes and AV

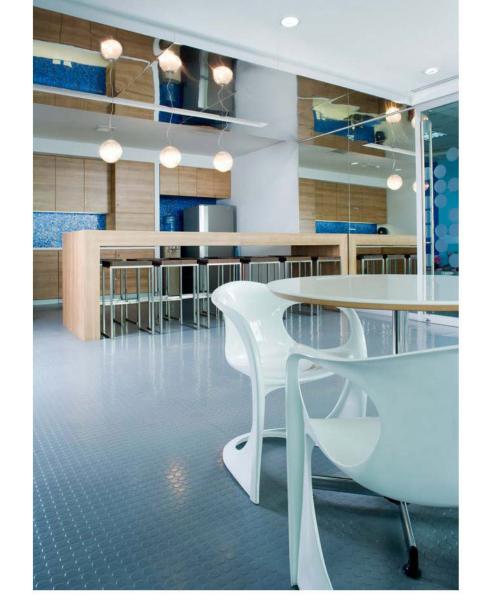


equipment. The Hx Dimmer is the optimum solution for open-plan offices requiring a concealed centralized system with discrete lighting control over individual work areas.

ZONES

The versatile Hx-12 Dimmer's 4 channels of dimming can be simply programmed to any level

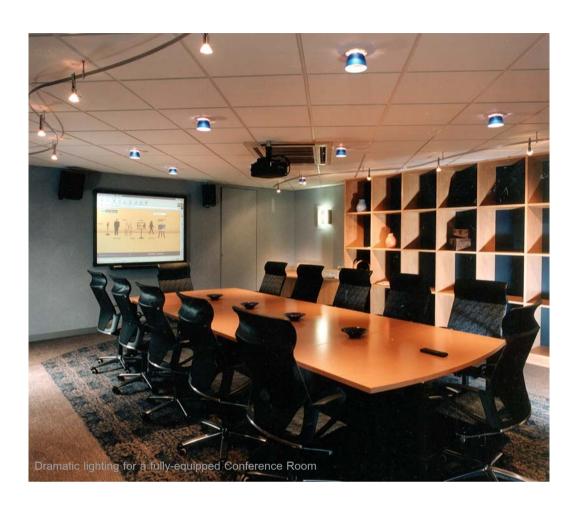
of brightness, with levels automatically stored as one of 20 scenes per zone. Selected lighting levels in up to 12 rooms or areas can be operated from Futronix Eclipse[®] switchpanels, and Hx-12 modules can be linked to provide up to 36 channels of multi-zone lighting control.



ELECTRICIAN-FRIENDLY INSTALLATION

Hx-Series Dimmers are specifically designed for concealed installation with the dimmer unit located above the ceiling or in an electrical cupboard or void. Elegant control switchpanels can be located as required, for maximum user convenience. And compact wireless Hx-2 Dimmers install easily via any ceiling lamp cutout – perfect for retrofit installations.

Hx Dimmers allow full reprogramming and mastering at any time, unlike conventional switching layouts where once lighting is installed no further changes are possible. Contractors appreciate the flexibility of programming for ultimate user requirements, as all parameters are adjustable in software.







OPERATION

Elegant, ultra-thin Futronix Eclipse switch panels – featuring a display with IR receiver – are individually addressable and have programmable group functions. If room decor is altered, a range of easily-changed solid metal switch plates is available in Futronix standard or custom finishes.

REMOTE CONTROL

The supplied remote control handset provides convenient one-touch remote operation. Hx Dimmer units can also be controlled by 3rd party Universal Remote control devices (One-for-All, Pronto, etc.) and touch screens, via the industry standard IR interface.

ENHANCED CONTROL OPTIONS

Hx Series wireless dimmer networked together can connect directly to a PC or laptop computer, or to a Home-Icon[®] TouchScreen controller. The Home-Icon controller can program and operate all lighting scenes with intuitive user-friendly control.

Hx Dimmers also incorporate hard switching inputs from a normal light switch and occupancy detection inputs.

TIMER

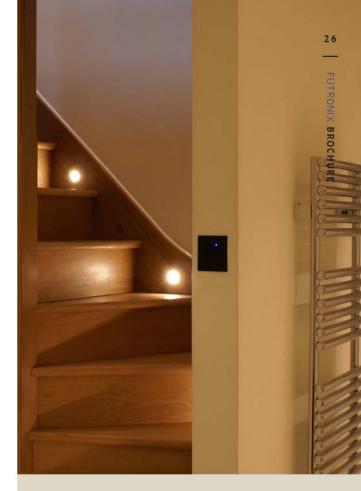
The Hx Dimmer's in-built 24/7 timer can program up to 70 different events each week (10 per day), ranging from 'welcome' scenes to selecting mood settings. There is a convenient exit delay feature, and the 2-hour sleep delay timer is ideal for bedrooms.

QUALITY

Hx Dimmers can be installed remotely with confidence thanks to robust construction, generously rated heatsinks and powerful short circuit protection.

Hx-2 two-channel

Hx-2 two-channel wireless dimmer



Hx Dimmers - FEATURES

- 4 channel scene dimmer (Hx-12)
- 1 channel scene dimmer (Hx-2)
- 4 channels of relay switching (Hx-12)
- 1 channel of relay switching (Hx-2)
- 4 channels of 1-10v LED and fluorescent ballast dimming control (Hx-12)
- System controls 1-36 circuits (channels)
- Multi-zone (can control up to 12 rooms independently) with 20 programmable scenes per area
- Infra-red remote control
- In-built LED information display and infra-red receiver
- Variable fade rates from 0.5 seconds to 2 hours (to gradually turn lights on/off)
- · Temporary circuit adjustment without save
- · Master raise and lower
- Exit delay
- Sleep timer
- In-built 24-hr 7-day event timer (battery-backed)
- Security settings
- Permanent memory (in the event of a power blackout you don't lose pre-set scenes or need to re-program your dimmer)
- · Hard switching inputs from normal light switch
- · Occupancy detector inputs
- · Card & address system
- Designed for electrician-friendly installation

P800

AN 8-CIRCUIT SCENE DIMMER

The P800 is the latest in high performance scene dimmers from Futronix, designed for use in a variety of residential and commercial settings including luxury houses, conference and seminar rooms, boardrooms, small restaurants and bars.

The P800 puts the luxury of multi-room control in your hands. Your favourite lighting levels in four rooms can be operated from the attractive wall mounted switch panels. You can create the mood or set the scene in each area for every purpose. When a new scene is selected, just as in nature, it will gently fade, creating a subtle transition.

The P800 dimmer or additional switchpanels can operate the lighting within a room, and optionally in others as well. This is ideal for luxury houses where a panel by the main entrance can turn the lighting off, or alternatively to a welcome scene. The remote control can select scenes and change levels from within each room.

MULTI-CHANNEL, MULTI-ZONE DIMMER

The P800 8-channel dimmer has a 20-scene memory for each of four different areas. For bigger systems with more flexibility, up to eight P800s can be connected together giving 64 channels of lighting control. The P800 can also be integrated with AV equipment to create a real impression in a conference room.

In addition to 8 channels of dimming, the rear connector built into the P800 as standard provides 4 channels of 1-10v industry-compatible fluorescent dimming control. Up to 30 dimmable ballasts can be connected to each of the 4 control outputs.

REMOTE CONTROL

A full-function remote control comes as standard, providing the convenience of being able to select and program all scenes from the comfort of your chair. For operation and limited programming only, order the reduced-function remote control.

TIMER

Optimum lighting conditions are guaranteed with the integral 24/7 timer. Up to 70 scene changes per week can be programmed. It could be for a wake-up scene in the morning, subtle lighting transitions during the day, or a security scene at night . . . the choice is yours.

Creating exciting, eyecatching sequence changes is simple with exhibition autosequencing scene selection. Program scene levels, duration, fade rate and timing to create scenes for your home theater, or to focus attention on exhibits, merchandise or architectural detail.

COMMERCIAL QUALITY

The P800 has exceptionally high build quality, robust construction with hand-finished 2mm thick solid metal face plates, generously rated heatsinks and highest-in-class protection – making it ideal for light commercial use.







FUTRONIX GIVES YOU MORE ...
AS STANDARD





WALL BACK-BOX SIMPLIFIES INSTALLATION

The unique P800 comes with its own welded steel wall back-box. The box is pre-wired with flexible wiring, color-coded cable markers, large earth terminals, in-built fuse holder and high-quality German-made connectors.

The electrician initially fits the pre-wired wall box and connects the building's wiring to the connector on the back.

Once wall decoration is finished, the P800 dimmer is simply plugged into the back-box connector and screwed into the back-box.

COMPACT SIZE

The P800's all-digital dimming design is so compact that not only does the unit contain 8 channels of dimming, it is approximately 1" (25.4mm) smaller in all dimensions than any comparable product. The P800's pre-wired back-box (supplied) measures a compact 160mm wide x 102mm high x 65mm deep $(6^{1/4} \times 4 \times 2^{5/8} \text{ in.}).$

Specifications

8 channels @ 600W - Max 2.0Kw No minimum load on any channel Controls: tungsten, halogen, low voltage, LED, neon and fluorescent (HF)





Open plan multi-use room



Glass stairs backlit with LEDs

P800 - FEATURES

- Full-featured all-digital dimmer
- Control for up to 8 circuits (channels)
- 4 channels of 1-10v dimming control for LED's and fluorescent ballasts
- 20 programmable scenes per room/area
- Multiple lighting zones
- up to 4 zones/rooms
- Outstation switch plates available
 - control lighting from more than one location
- In-built X-Bus databus provides for
 - multi-point switching & mastering via switchplates
 - multi-room control via connected P800/P400 dimmers
- Infra-red remote control supplied
- Remote control commands can be 'learnt' by any universal learning remote control
- Temporary circuit adjustment without save
- Master raise and lower
- Exit delay
- 24-hr 7-day event timer up to 70 different events each week (10 per day)
 - 'welcome' scenes, security settings, wake-up settings
- In-built blue LED information display and infra-red receiver
- Sleep delay feature
 - up to two hours after selection
- Variable fade rates from 0.5 secs to 2 hours
- Security setting
 - create the impression that the property is occupied
- Lighting displays
 - exhibitions and home theater

Note: See page 46 for specifications





The Futronix P400 scene dimmer puts the convenience of total room lighting control at your fingertips with 4 channels of all-digital dimming and an additional 2 channels of 1-10v fluorescent dimming.

Program your preferred light levels

with a generous 20 scenes, and recall them with just a touch of the remote handset or wall-mounted switch panel. Home theater enthusiasts can create the authentic cinema experience with preset fading rates, repeatability and programmable scene setting.

4 ZONES OF LIGHTING CONTROL

The P400 residential dimmer can create up to 4 lighting zones, normally corresponding to a room – meaning you can set 20 scenes in each of the 4 rooms. For bigger systems providing multiple channels of lighting with even more flexibility, multiple P400 and/or P800 dimmers can be connected together via the in-built **X-Bus** databus.

REMOTE CONTROL

The P400 puts effortless lighting control in your hands with remote control as standard. Simply program your preferred levels and then recall them at the touch of a button. The lighting will gently fade to your new levels. Commands can be 'learnt' into any universal learning remote control, and code sets are available from all major makes of universal remote control including One-for-All and Philips Pronto. The P400 can also accept direct infra-red input from touch screens.

TIMER

Easily schedule convenient wake up, welcome and security scenes with the P400's in-built 24/7 timer, which can be programmed to select any scene at any time and



on any day of the week – up to 70 events each week.



Chelsea House

SLEEP TIMER

The P400 comes fitted with a sleep timer which can be set to automatically switch the lights off up to two hours after being selected.

AUTO-SEQUENCING DISPLAY

Link a series of scenes and program the duration and fade rate to set up architectural lighting displays, or to create a light show before and after a film in your home theater.



COMPACT DIMENSIONS

All P400 models are USA double gang size – only one-third larger than a standard European switch, and the smallest available dimmers in class. Wall box supplied.

SCENE DIMMING

With the P400 Classic you can effortlessly control the lighting in your own home.



In the first illustration, the lighting has been programmed to create a comfortable atmospheric scene.



The second scene has been programmed to create a bright ambience. With the emphasis on highlighting pictures and ornaments, it is ideal for entertaining.



The third scene is set for watching films. The main light and cabinet lights are off while the ceiling and wall lights are dimmed to create a 'home theater'.



In the fourth scene, the user has set up lighting levels suitable for watching television. Main lighting is provided by the spots whilst cabinet lights are dimmed so as not to distract the viewer.

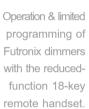
P400 - FEATURES

- Full-featured all-digital dimmer
- Control for up to 4 circuits (channels) of lighting
- 2 extra channels of 1-10v dimming control for LED's and fluorescent ballasts
- 20 programmable scenes per room/area
- Multiple lighting zones up to 4 zones/rooms
- Outstation switch plates available
 - control lighting from more than one location
- In-built X-Bus databus provides for
 - multi-point switching and mastering via switchplates
 - multi-room control via connected P400/P800 dimmers
- Infra-red remote control supplied
- Remote control commands can be 'learnt' by any universal learning remote control
- In-built blue LED information display and infra-red receiver
- In-built 24-hr 7-day event timer up to 70 different events each week (10 per day)
- Temporary circuit adjustment without save
- · Master raise and lower
- Variable fade rates from 0.5 secs to 2 hours
- Exit delay
- Sleep delay feature up to 2 hours after selection
- Security setting create the impression that the property is occupied
- Permanent memory
- Lighting displays for home theater, architectural highlighting, product display and exhibition
 - link a series of scenes
 - program duration & fade rate

Note: For specifications, see page 46

For dining, a fifth scene could provide low level lighting throughout the room with stronger lighting focused on the table area. A sixth scene could act as a minimum level for security at night. The twenty scenes available with the P400 offer a versatile choice of lighting effects suitable for every mood.







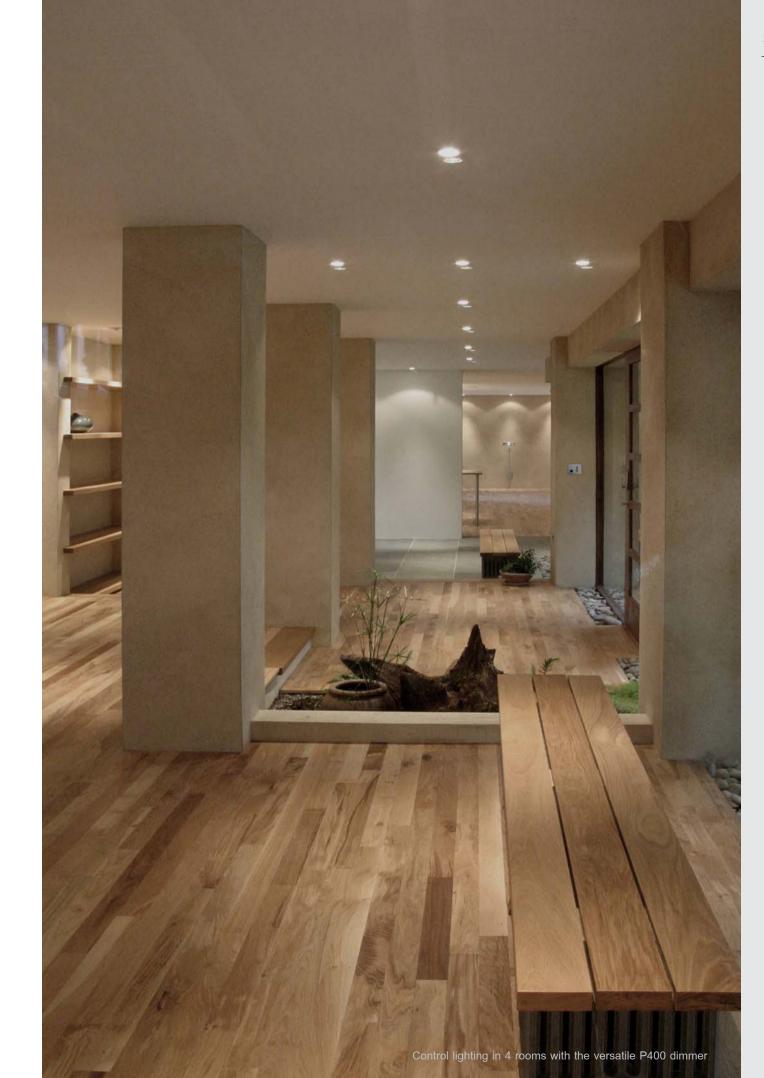
Program and operate all our dimmers with the full-function 48-key remote.

Controls: tungsten, halogen, low voltage, neon and fluorescent (HF) 4 channels @ 300W each. Maximum total dimmer loading: 1.2 Kw. 2 channels 1-10v LED & fluorescent. No minimum load on any channel.

P400 models include infra-red remote control, master raise and lower, exit delay, sleep timer and variable fade rates from 0.5 seconds to 2 hours.

The P400 Classic model is available in white, brass, polished and brushed stainless steel.

Dimensions of the P400 dimmer unit are: $108 \times 88 \times 50 \text{ mm (W,H,D)}$ (standard box) $3^{15/16} \times 3^{1/8} \times 1^{7/8}$ in. (W,H,D) (USA box)





Lighting is always an important part of any interior setting – and dimming lights can transform a space in both ambience and function. By changing the lighting levels, you can create different moods for a variety of pastimes or tasks. Whatever your desire – watching a movie, dining, entertaining, reading, relaxing, ambience or security – each can have its own settings.

Envision . . .

- controlling the atmosphere of your room at the touch of a button
- dimming the lights from the comfort of your chair
- the luxury of having your bedroom lights gently fade up to wake you in the morning
- peace of mind, knowing that your house lights will automatically switch to a security setting at night – even when you are away from home!

The unique P100 from Futronix is the only fully user-programmable scene dimmer manufactured in a standard switch size – ideal for easy replacement of existing switches.

The P100's two circuits can be set to your desired lighting levels. These 2 levels are then stored as one of 20 scenes, with each scene offering a complete 'look' to the room.

Scenes can be programmed for entertaining, relaxing, watching television and reading, as well as for security and energy saving.

Each circuit can dim up to 300W per channel of tungsten, low voltage or halogen lighting.



The P100 features 20 user programmable scenes, a 24/7 timer, variable fade rates, exit delay and sleep timer, auto scene sequencing, security settings, permanent memory and remote control.

The P100 is conveniently programmed by the supplied remote control handset which provides a wealth of extra features. Additionally, the commands can be entered into any universal 'learning' remote control.

The unit controls two circuits of lights at 300W each, and has 20 programmable scenes.

Standard-size switch panels allow easy replacement of existing switches.

A selection of finishes is available to suit all tastes and interiors.

The P100 has an in-built LED information display & infra-red receiver.

P100 - FEATURES

- Controls 2 circuits of lighting
- 300W per channel dimmer
- Drop-in replacement for existing dimmer switches
- 20 programmable scenes per channel
- Infra-red remote control supplied (commands can be 'learnt' by any universal learning remote control)
- In-built 24-hour 7-day timer (with battery backup)
- Temporary circuit adjustment without save
- Master raise and lower
- Exit delay
- Sleep timer
- Variable fade rates from 0.5 secs to 2 hours
- In-built LED information display and infra-red receiver
- Permanent memory
- Security settings create the impression that the property is occupied
- Compact size: 75 x 75 x 47 mm (W,H,D) [standard wall box]

Note: For specifications, see page 46



Sun lounge/conservatory, London



The Futronix P50 is the perfect dimmer to easily replace an existing light switch, as it requires no neutral. The smallest all-digital dimmer available, the P50 gives three programmable levels of dimming, ideal for bedroom, study and living areas. Create and set the looks you prefer for your room, then recall them effortlessly at any time with a touch of the remote control.

The stylish faceplates are superbly hand-finished to match any decor and are available in a variety of finishes. The Futronix P50 dimmer features 3 levels of brightness which can be changed simply to any level. Once programmed, your settings will be remembered – even after the power has been switched off.

In use, with just a single touch, the lighting will fade to your selected level. Press OFF and the lights will gently fade out. The P50 also has an in-built sleep delay – ideal for both adult's and children's bedrooms.

The versatile P50 dims tungsten, halogen lamps or magnetic low voltage with a maximum rating of 600W.

REMOTE CONTROL

The P50 features in-built LED indicators and infra-red receiver. All dimming levels can easily be selected by remote control. The remote handset also provides access to additional features such as master raise and lower, and programming of dimmed levels, fade rate and sleep-timer duration. Either the last level or OFF can be selected as default power-up setting.

SIMPLE TO PROGRAM

To change levels from factory settings, simply press OFF & Level 1 simultaneously for 5 seconds. Select the level to adjust and hold the key to increase the level, or press the OFF key to lower the level – the new levels are then automatically stored.

ENERGY SAVINGS

Dimming lighting saves energy. Bulb life is also prolonged because fading a lamp is gentler on the filament than just switching it on or off.

% LIGHTS DIMMED	% ELECTRICITY SAVED	EXTENDS THE LAMPLIFE
10%	10%	2 times
25%	20%	4 times
50%	40%	20 times
75%	60%	>20 times

TECHNICAL

The P50 unit contains the very latest Futronix digital dimming technology. No neutral is required, only the normal live supply and live out to load rated at 50Hz or 60Hz. It can dim a maximum of 600W tungsten, halogen lamps or magnetic low voltage. The compact P50 unit is less than 35mm deep.

FUTRONIX QUALITY

The P50 – like all Futronix residential dimmers – is built to the same renowned quality standards as our commercial dimming systems. Futronix in-house product design and manufacture provides your ultimate assurance of highest quality and proven reliability.

P50

THE P50 PUTS ADVANCED DIMMING CONTROL IN YOUR HANDS ... AND SAVES YOU MONEY!



SPECIFICATIONS - P50

Single channel @ 600W max. Controls: tungsten, halogen, low voltage magnetic (only)

Note: For full specifications, see page 46

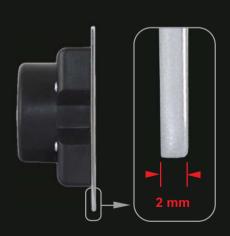
SWITCH PANELS

Stylish, robust and timeless, Futronix wall-mounted switchpanels combine multiplex functionality with simple elegance. The minimalist design, striking yet unobtrusive, is available in finishes of brushed or polished stainless steel, polished brass and white metal.

Innovative ultra-thin Eclipse[®] switchpanels, meticulously crafted from frosted translucent glass and polished stainless, feature our patented interchangeable locking system.

Futronix dimmers and switchpanel outstations are visually designed to complement each other. Combined with the wide variety of switchpanel functions and styles, owners can mix and match mastering and functionality, as well as finishes.

Futronix switchpanels are available with functionality levels ranging from basic 3-button panels up to 8-button panels, all providing an appropriate level of complexity. Easy 'one-touch' commands for most functions means users do not need to search through complex menu trees to operate simple functions.



Decor panels are crafted of robust 2mm solid metal and individually hand-finished.



SWITCH PANEL FUNCTION

We make switchpanels for dual-zone control, 'welcome' scenes, 'trail of light' panels for bedsides - and many other dedicated functions. All switch panels feature ON/OFF switches so even the house guest or cleaner can operate them easily - a much appreciated feature of Futronix switchpanels.

Decor plates and switch operation are fully interchangeable, and all switchpanels (except SP4) can be configured to have the following functionality ...

The SP6 switchpanel

- · keys to select Scenes 1 to 4
- ON key
- OFF key

The SP7 switchpanel

- · keys to select Scenes 1 to 7
- OFF key

The SP8 switchpanel

- · keys to select Scenes 1 to 5
- · Master Raise and Master Lower keys
- · OFF key
- optional IR receiver

The SP10 dual-zone switchpanel controls 2 zones with each zone having

- keys to select Scenes 1 to 3
- · OFF key

The SP12 Welcome switchpanel keys left side selects right side selects

- Welcome scene
- Scenes 1 to 3
- Master OFF key OFF key for any local zone, plus extra zones if required

SP6

The SP4 switchpanel features

- · combined display and infra-red receiver window
- · ON and OFF keys
- 20 Scene Scroll UP & DOWN keys

SWITCH PANELS



















Polished (C) Stainless Steel

Brass (B)

Brushed (BS)

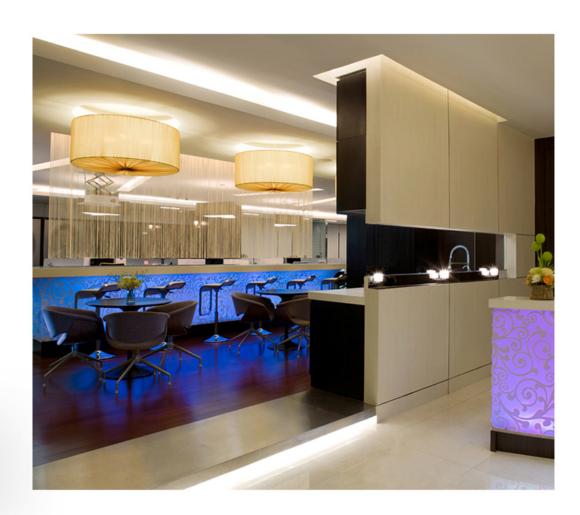
White (W)

The new Eclipse switchplate's screwless locking mechanism utilizes a permanentlybonded composite of plastic and stainless steel to attain ultra-thin, secure, remountable locking.



Sahara















eclipse







Dimming Racks & Accessories

DIMMING RACKS

PFX - DIMMING RACKS COMPATIBLE WITH HOME ICON						
Туре	Channels	Load	Dimensions Height, Width, Depth	Phase		
PFX-32	32	5A	980 X 980 X 150mm	3 phase		
PFX-16	16	10A	750 X 450 X 110mm	3 phase		
PFX-12	12	10A	750 X 450 X 110mm	3 phase		
PFX-8	8	10A	750 X 450 X 110mm	3 phase		
PFX-4	4	10A	750 X 450 X 110mm	3 phase		
PFX-620	6	20A	750 X 450 X 110mm	3 phase		
PFX-720	7	20A	950 X 500 X 110mm	3 phase		
PFX-820	8	20A	950 X 500 X 110mm	3 phase		
PFX-340	3	40A	950 X 500 X 110mm	3 phase		

PFS - SWITCHING RACKS					
PFS - 16	16	10A			
PFS - 12	12	10/20A			
PFS - 8	8	10/20A			
PFS - 6	6	20A			
PFR - RELAY RACKS					
PFR - 16	16	10A			
PFR - 12	12	10/20A			
PFR - 8	8	10/20A			

^{*} Futronix provides in-house and on-site staff training, as well as commissioning through a network of approved engineers

ACCESSORIES

Futronix offers a comprehensive range of accessories and enhancements for all Futronix lighting control systems

PROGRAMMING DEVICES

RS485 Converter PCMCIA - connects a laptop PC computer to a Futronix controller

USB RS485 Converter - connects a PC to a Futronix controller

PC Interface Software - RS232 for PFX - provides installers and users with full system programming and operating capabilities

DIMMING ACCESSORIES

NC30 Neon Controller - combined neon transformer and digital dimmer

Timer Module - integral time clock module provides cost-effective full-function timer control

Key Switch Momentary - can momentarily select a scene or OFF

LED/Fluorescent Dimmer 1-10v Converter - suitable for controlling all makes of 1-10v ballasts; can be factory fitted internally to PFX or Enviroscene dimmers; also available as an external unit

DSD[®] DIGITAL SINEWAVE RANGE OF

DIMMERS - for controlling modern lamp types such as Sodium, SON and Metal Halide

PC Interface Software









Key Switch

See Accessories Brochure for the full range

Electrical Specifications

PFX System
Enviroscene
Hx wireless dimmers
P800 scene dimmer
P400 scene dimmer
P100 scene dimmer
P50 level dimmer

ELECTRICAL SPECIFICATIONS

PFX System

Mains supply input

Dimming output (no minimum load)

Dimming output (0-10v optional) DALI

Switching output

Dimming unit

Interference suppression

Cable termination (incoming) Protection Cable entry - Power Cable entry - Control

Ambient temperature

Network

Approvals

380-415v AC @ 50/60Hz three phase 270v AC @ 60Hz three phase 200-240v AC @ 50/60Hz single or thr

200-240v AC @ 50/60Hz single or three phase

110-130v AC @ 50/60Hz single phase 5, 10, 20 or 40A per channel continuous tungsten, low voltage, halogen, neon/cold cathode, and fluorescent (high frequency) (leading or lagging edge)

LED & fluorescent ballasts

Digital fluorescent ballast interface 5, 10, 20 or 40A per channel continuous HID, non-dim fluorescent, other loads Output devices (alternistors) rated at 1,200v 850A peak (leading edge) or IGBT (lagging edge) Heavy duty, high inductance chokes

200A single or three phase switch disconnector

200uS rise time 1.4 mH

MCB 6A, 10A, 20A or 40A type C
Bottom of chassis: 3 x 51mm + 5 x 25mm
Side of chassis: 20mm + 12mm

40 °C maximum, generously rated heatsinks limit internal temperature rise to less than 25 °C above ambient temperature X-Bus protocol network switch panel bus, BMS, PC network, RS485, RS232 Conforms to relevant UL, BS & EN

safety standards; CE approval

* See the Technical Binder for M&E (Mechanical and Engineering) specification

Enviroscene

Mains supply input voltage & frequency

Mains supply input current Number of dimming channels Output

Dimming output (1-10v)

Zones

Max. number of channels with interconnected Enviroscene units

220-240v AC 50Hz 208-270v AC 60Hz 120v AC 60Hz 40A (max.) incoming supply 4 or 8 channels

4 channels @ 10A (2.4Kw) each, or 8 channels @ 5A (1.2Kw) each

8 channels (1-10v) LED & fluorescent ballasts option

16 zones (areas/rooms)

128 channels

Enviroscene (cont'd)

Switching output (max.)

Load type

Communications Chassis

Dimensions (W,H,D) Network connection Protection

Approvals

4 or 8 channels of switching

4 channels @ 10A (2.4Kw) each, or

8 channels @ 5A (1.2Kw) each, switching

Tungsten, mains halogen, neon/cold cathode, LED & fluorescent high frequency

(1-10v), low voltage (magnetic & leading edge dimmable transformers)

RS485-PC/touch screen interface port

Stainless steel, seam welded

& powder coated

425 x 265 x 110 mm

X-Bus protocol (non-twisted pair)

Fuses - $4 \times 10A$, or $8 \times 5A$, slow blow type

CE, EN, UL

Hx-2 & Hx-12 wireless dimmers

Mains supply input voltage & frequency

Mains supply input current Number of dimming channels Switching output (max.)

Dimming output (1-10v)

Max. number of channels with interconnected Hx-12 units Zones

Dimming output (max.)
Total load (max.)
Load type

Network connection Protection Approvals 220-240v AC 50Hz 120v AC 60Hz

16A (max.) incoming supply Hx-12; 6A Hx-2

4 channels per Hx-12; 1 channel per Hx-2

4 channels of relay switching per Hx-12;

1 channel per Hx-2

4 channels (1-10v) LED & fluorescent ballasts (Hx-12)

36 channels

12 zones (areas/rooms)

600W per channel (max.)

2Kw across all 12 channels (max.) Hx-12

Tungsten, mains halogen, neon &

fluorescent (HF), low voltage (magnetic & leading edge dimmable transformers)

CF compact fluorescent, LED lamps

X-Bus non-twisted pair

Fuses 8 x 5A CE, EN, UL

P800 scene dimmer

Mains supply input voltage

& frequency

Mains supply input current

Channels

Max. number of channels with interconnected P800 systems

Zones

Switch panels

Dimming output (max.)

Total dimmer load (max.)

Dimming output (min.)

Dimming output

(1-10v optional)

Switching output (max.)

Load type

Network connection

Protection

Wallbox size (W,H,D) mm

Wallbox size USA (W,H,D) in.

Approvals

220-240v AC 50Hz

120v AC 60Hz

16A (max.) incoming supply

8 channels per P800

8 x P800's can be interconnected

= 64 channels

4 zones (areas/rooms)

3 switch panels per P800

600W per channel (max.)

2Kw, (1.6Kw USA) across all 8 channels (max.)

No minimum load on any channel

4 channels (1-10v) LED & fluorescent

ballasts

600W per channel (max.)

Tungsten, mains halogen, neon &

fluorescent (HF), low voltage (magnetic

& leading edge dimmable transformers)

X-Bus non-twisted pair

Fuses 2 x 8A

160 x 102 x 65 mm (pre-wired wallbox supplied)

 $6^{1/4}$ x 4 x $2^{5/8}$ in. (pre-wired wallbox supplied)

CE. EN. UL

P400 scene dimmer

Mains supply input voltage

& frequency

Mains supply input current

Number of channels

7ones

Dimming output (max.)

Dimming output (min.)

Dimming output (1-10v)

Switching output (max.)

Load type

Network connection

Wallbox size (W,H,D) mm

Wallbox size USA (W,H,D) in.

Approvals

220-240v AC 50Hz or 60Hz

120v AC 60Hz

6A incoming supply

4 channels per P400

4 zones (areas/rooms)

300W per channel (1.2Kw max.)

no minimum load

2 channels (1-10v) LED & fluorescent

300W per channel (max.)

Tungsten, mains halogen, neon &

fluorescent (HF), low voltage

(magnetic & leading edge dimmable

transformers)

X-Bus non-twisted pair

108 x 88 x 50 mm wallbox supplied

 $3^{15/16} \times 3^{1/8} \times 1^{7/8}$ in. (US double gang size)

CE, EN, UL

P100 scene dimmer

Mains supply input voltage

& frequency

Mains supply input current

Number of channels

Dimming output (max.)

Dimming output (min.)

Switching output (max.)

Load type

Wallbox size (W,H,D) mm

Approvals

220-240v AC 50Hz or 60Hz

120v AC 60Hz

6A incoming supply

300W per channel (600W max.)

no minimum load

300W per channel (600W max.)

Tungsten, mains halogen, low voltage (magnetic & leading edge dimmable

transformers), fluorescent (HF)

75 x 75 x 35 mm

CE, EN

P50 level dimmer

Mains supply input voltage

& frequency

Mains supply input current

Number of channels

Dimming output (max.)

Dimming output (min.) Switching output (max.)

Load type

Wallbox size

(W,H,D) mm Wallbox size USA (W,H,D) in.

Approvals

220-240v AC

50Hz or 60Hz autodetecting

3A incoming supply

600W per channel (max.)

20W minimum load

600W per channel (max.)

Tungsten, mains halogen, magnetic low voltage (magnetic/wirewound transformers only)

Single gang BS standard wallbox

75 x 75 x 35 mm

1^{7/8} x 2^{1/4} x 1^{7/8} in. (USA model)

CE. EN. UL

* For detailed specification and wiring diagrams please contact your Futronix distributor or visit our website at www.futronix.com

* Futronix products conform to relevant UL, BS & EN safety standards and have CE approval

www.futronix.com

DISCLAIMER

'Futronix' is a registered trademark.

'GET in the MOOD' is a registered trademark.

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CONTACT DETAILS

USA

Futronix USA 501 Darby Creek Road Lexington, KY

Email: sales@futronix.us

Europe

Futronix House 143 Croydon Road Caterham, Surrey CR3 6PF UK

Tel: +44 1883 373 333 Fax: +44 1883 373 335 Email: sales@futronix.com

Asia

Futronix Center 100 A. Hangdong, Chiang Mai, Thailand

Tel: +66 53 338 222 Fax: +66 53 339 411

Email: asiasales@futronix.com