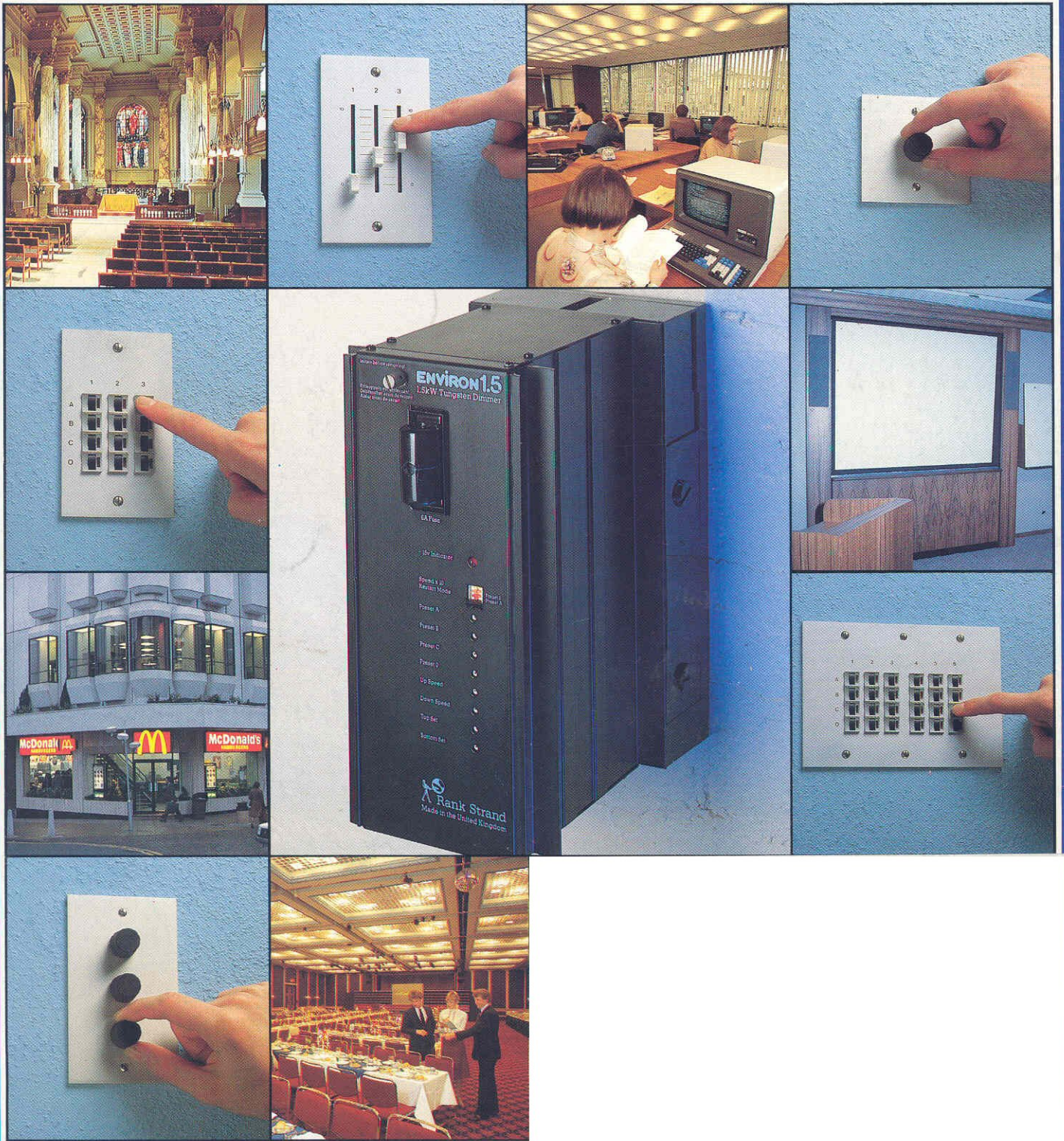


ENVIRON2

LIGHTING CONTROL SYSTEM

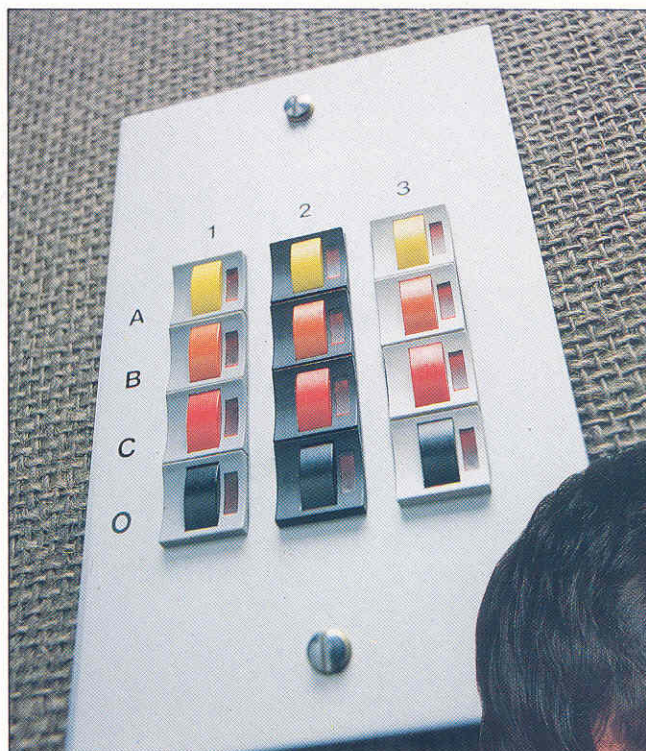


Rank Strand

A COMPLETELY NEW CONCEPT IN ARCHITECTURAL DIMMERS...

Environ 2 dimmers are offered in six capacities. 1.5kW, 4.0kW and 8.0kW for tungsten loads and 6A, 16A and 32A for fluorescent loads (25A with Diazed fuses).

Selected dimmers can be used in any combination to build up the dimming required for a project. This new system is economic because dimmers can be matched to capacity and quick because they can be drawn from stock. So there is no longer any necessity for long delays while special racks are manufactured.



New 'Plug and Socket' Concept

Environ 2 dimmers are in two parts – an injection moulded base unit which is mounted on the wall and a dimmer which is 'plugged-in' to the base.

Base Units

The strong bases (or 'sockets') are injection moulded from Noryl. They incorporate the supply busbars as well as the load and control cable connections. Two separate runs of trunking are formed in the base units themselves. Where several dimmers are to be used supply cables can be run via the upper moulded trunking between the terminals provided. Alternatively, and for heavy loadings, special clip-on

busbar connectors are available.

The lower moulded trunking in the bases carries the low voltage control cables. Thus mains and low voltage control wiring segregation is built into Environ 2.

Special termination chambers are offered for multi dimmer and for three phase installations.

Dimmer Units

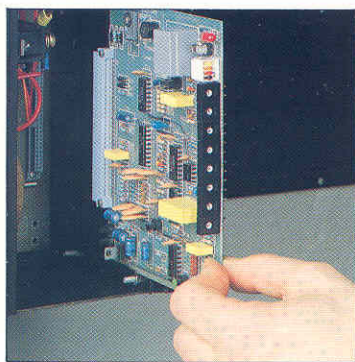
Environ 2 dimmers have aluminium housings with extruded sides, finned for heat dissipation in the larger capacities. No fans are necessary because less than 2% of the connected load is dissipated as heat. Sturdy power connection pins on the

dimmers slide into shuttered sockets in the base units to contact the supply busbars. Multi pin two part connectors carry the control signals. Polarising keys on each dimmer prevent large capacity dimmers from being plugged into base units which may have been wired for a lower current capacity.

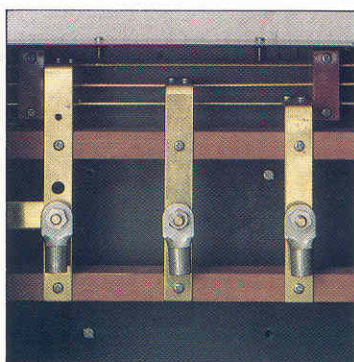
A captive jack screw holds the two parts of the unit securely together to prevent casual removal.

Fusing

Environ 2 dimmers are available with Reyrolle or Diazed fuses for world markets. Control circuits are protected by self-resetting electronic devices.



All electronics on single PCB.



Interior of mains connection box.

Note on Fluorescent Dimming

Tubes

T12 38mm tubes up to six feet (1800mm) length can be dimmed with Environ dimmers. T8 tubes are not suitable for dimming.

Ballasts

All fluorescent fittings to be dimmed must be fitted with dimmable ballasts to obtain good results.

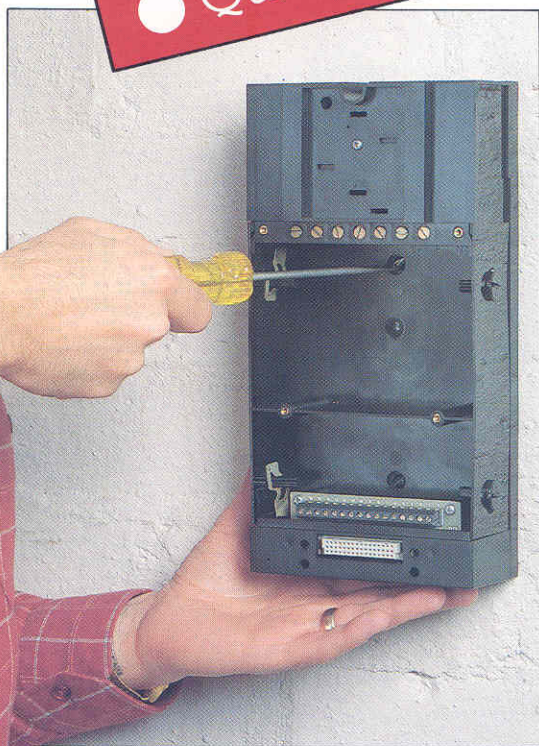
We offer the Environ range of dimmable ballasts. See special leaflet for details. These ballasts contain all gear necessary for starting and running the tubes.

- New 'Plug & Socket' concept
- Fluorescent and tungsten dimmers available
- Three dimmer load capacities
- Quick and easy to install

WHERE ENVIRON IS RECOMMENDED

- Hotel Dining Rooms and Foyers
- Conference Suites and Halls
- Lecture Rooms
- Picture Galleries
- Restaurants
- VDU Viewing Areas
- Theatre and Cinema Auditoriums
- Hospital Wards

in fact any situation where sophisticated control of light levels is needed.



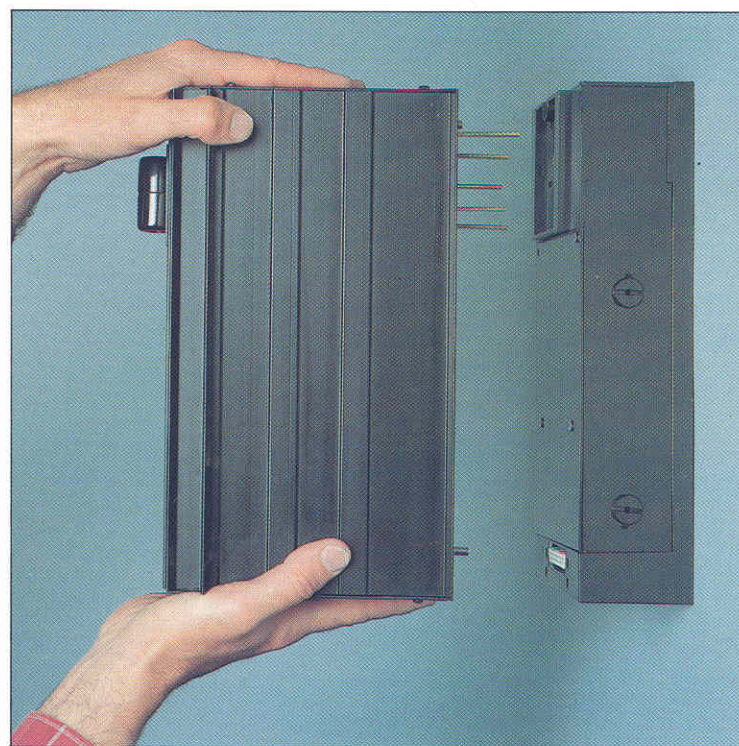
The ENVIRON 2 Range

Tungsten (Incandescent) Dimmers

Three ratings, 1.5kW, 4.0kW and 8.0kW are offered, with Reyrolle or Diazed fuses to meet local requirements. All dimmers are available in pushbutton (pre-set automatic) or manual versions operated by sliding or rotary faders.

Fluorescent Dimmers

Three ratings, 6A, 16A and 25A/32A are offered with Reyrolle or Diazed fuses to meet local requirements. All dimmers are available in push-button (pre-set) automatic or manual versions.



Easy Installation

- *Strandrail* – pre-formed steel backing plates to take dimmer sockets.
- *Busbar connecting set* – special "push on" links to go between individual dimmers.
- *Mains connection boxes* – main input chambers for multi dimmer and three phase installations.
- *Three phase link kit* – busbar straps for linking neutral and earth terminals between connection boxes.

'Slave' Dimming

When more than one preset automatic dimmer is needed to control a large load – for example a 12kW lighting circuit then one preset automatic

8.0kW dimmer and one non preset 4.0kW dimmer can be linked together. This is known as "slaving" a dimmer. The controlling preset dimmer is known in this situation as the "master" dimmer.

This arrangement means that only one presetting dimmer is needed for any one circuit. Up to six "slave" dimmers can be run with one "master" dimmer.

Fluorescent and Tungsten dimmers can be used together i.e. a tungsten 'master' can control a fluorescent 'slave' and vice versa.

ENVIRON 2 Features

Installation

Quick and easy to install. No heavy cabinets to be man-handled into position. Each installation is made up from individual dimmer modules in any combination required for the particular project.

Controllers

We offer our range of special Environ well designed outstation controllers. One, two, three and six gang controllers with either rotary knobs or slider faders. For preset automatic dimmers one, two, three and six gang four pushbutton preset level controllers are available as standard giving three preset light levels and "off". Also available is a special three pushbutton controller 'up' - 'stop' - 'down'. The top button increases light, the centre button holds the required level, the third button lessens the light.

Controllers are supplied already fitted in UK standard contractors recessed metal boxes.

Controller face plates are matt satin finished anodised aluminium. They can be inscribed as required and non standard plates can be supplied to designer's requirements.

"Take Control"

For lecture theatres, cinemas etc. we offer Environ "Take Control" outstations. Each outstation unit has a slider fader and an illuminating pushbutton. When the button is pressed control of the lighting passes to that outstation. If control is required from a different outstation pressing the button on that outstation takes control to that position. When pressed the button lights up, confirming that the circuit has been taken under control.

Typical use would be in lecture theatres where one "Take Control" outstation would be for the lecturer to use and a second would be in the projection room for the technician to use.

Two or more 'Take Control' outstations can be used on a circuit.

Photocell Control

Automatic control of the output of Environ 2 dimmers can be arranged using Environ photocells and amplifier panels. This means that constant light levels can be provided, irrespective of the available daylight.

The photocell can be set to operate in a positive or negative mode.

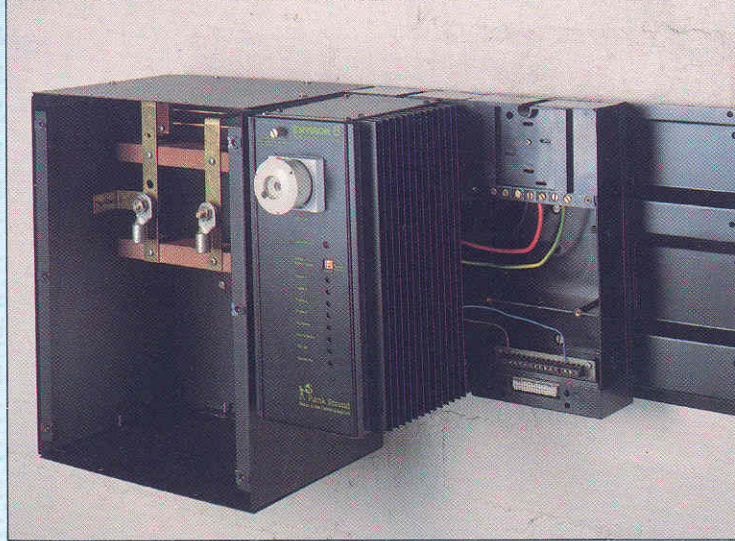
Interference Suppression

All international radio interference suppression requirements are met or bettered.

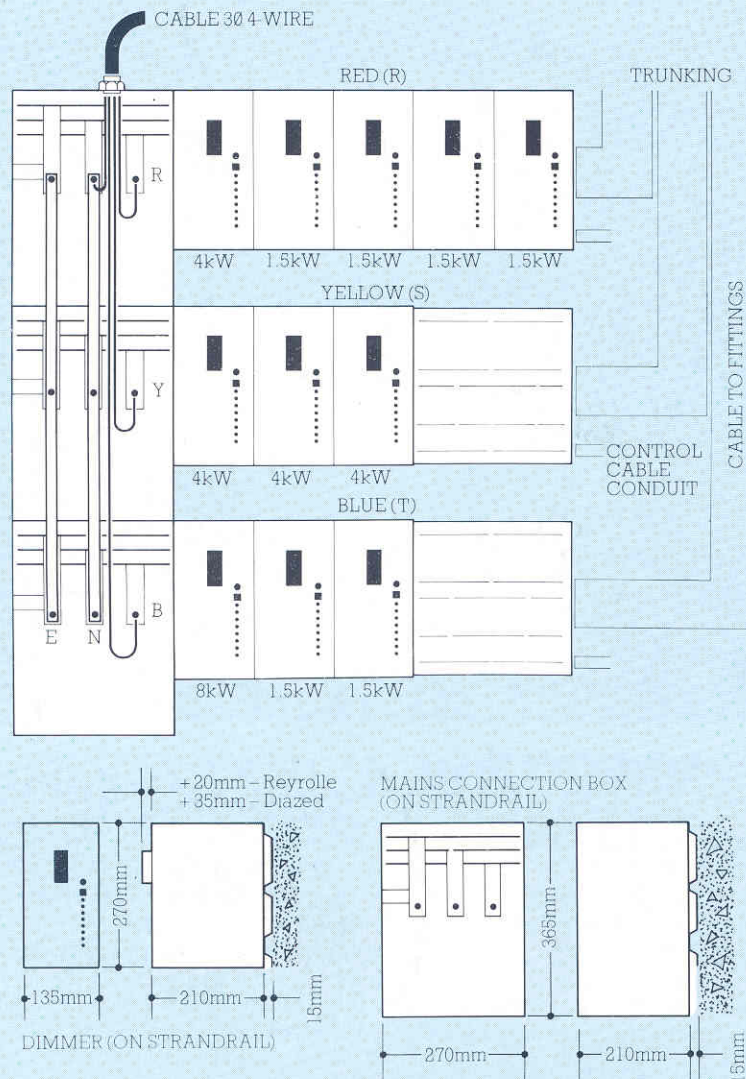
Setting

The levels of the three pre-sets and the dual range dimmer timing can all be set externally on the front of the dimmers.

Connection Box, Dimmer, Base Socket and Strandrail.



TYPICAL LAYOUT FOR 3-PHASE ENVIRON 2 INSTALLATION



Timed Dimming

Dual range timing is a standard Environ 2 feature. This means that the lights 'up' time can be different from the lights 'down' time over two ranges. 0.3 to 40 seconds or 30 seconds to 7 minutes.

Visual checking

Pilot LED's are on the front of every dimmer unit for instantaneous visual checking.

Fusing

Front mounted fuse carriers for easy fuse replacement. Both HRC Reyrolle and Diazed fuses are offered for all world markets.

Recognition

Modules are colour coded and labelled by dimmer capacity and type for easy recognition.

Energy saving

Dimmed lights use less current. Environ 2 fluorescent dimmers incorporate special electronics which automatically turn off tube heaters when the lighting is set to full, and bring them back into circuit when the dimmer is operated at a low level.

Lamp Saving

All tungsten lamps have their life substantially lengthened by being turned on gradually through dimmers thus eliminating thermal shock to the lamp filaments.

Transformers and Neon

Environ 2 will control suitable low voltage transformer fed lights as well as cold cathode or neon tubes.

Ripple Rejection

Mains borne signalling. The optional special Environ 'Ripple Rejection Card' can be incorporated into the dimmer electronics to eliminate any unwanted triggering of dimmers by spurious mains borne impulses.

Servicing

Easy servicing and module replacement by simple unplugging with no live connections exposed, or by changing the single pluggable control printed circuit board.



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