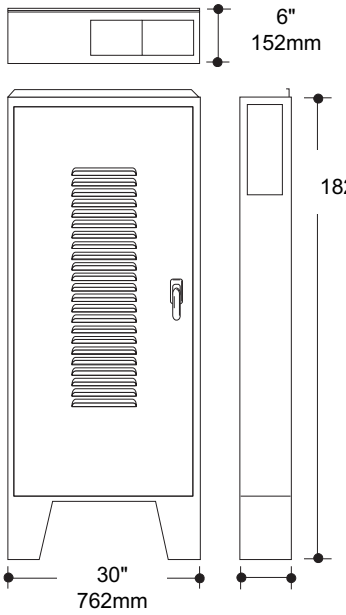
Digital Environ

Strand Dimming Systems

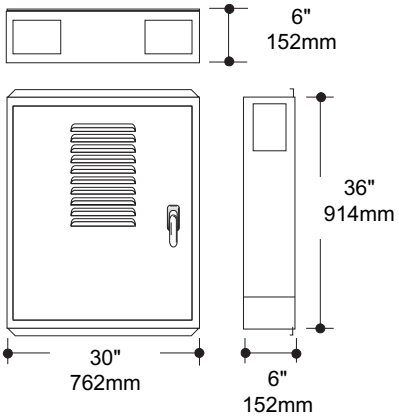
Modular Dimming System

- ❑ Self contained pre-wired digital dimmer cabinet
- ❑ Modular construction for added flexibility
- ❑ Power modules suitable for incandescent, fluorescent, low voltage, cold cathode, neon and non-dim loads
- ❑ Digital processor with advanced programmable features
- ❑ "Panic" facility for turning selected dimmers to full in an emergency
- ❑ Power modules complete with primary circuit breaker protection
- ❑ Branch breaker options available
- ❑ Hinged access door for ease of installation
- ❑ Accepts both analog and digital control signals
- ❑ Compatible with Microcontrol, Outlook and Premiere control systems
- ❑ Suitable for entertainment and architectural applications
- ❑ Offers System Wide Control (SWC) capability
- ❑ UL listed and CSA approved

Digital Environ is a versatile dimming system that can be tailored to the varying needs of architectural or entertainment applications. Typical applications include:conference and meeting rooms, restaurants, reception and lobby areas, bars, schools, hotels and entertainment facilities such as theaters and clubs



Weight175lbs (79.4kg)



Weight100lbs (45.4kg)

Strand LIGHTING

Digital Environ

Strand Dimming Systems

A Guide to the Digital Environ System

Digital Environ is a versatile dimming system that can be tailored to the varying needs of architectural or entertainment applications and is based on three basic elements:

Cabinet:
The cabinet is a pre-wired enclosure that contains the power modules, a control processor module, internal wiring and load, supply and control terminations.

Two cabinet sizes are available for either 6 or 12 power modules. Each cabinet can provide up to 24 ways of dimming depending on the combination of power modules chosen.

Power Modules:
Single, dual and quad power modules are available in a variety of ratings for incandescent/inductive (low voltage, neon and cold cathode), fluorescent and non-dim loads. Power modules can be combined within a cabinet to match differing load sizes and types.

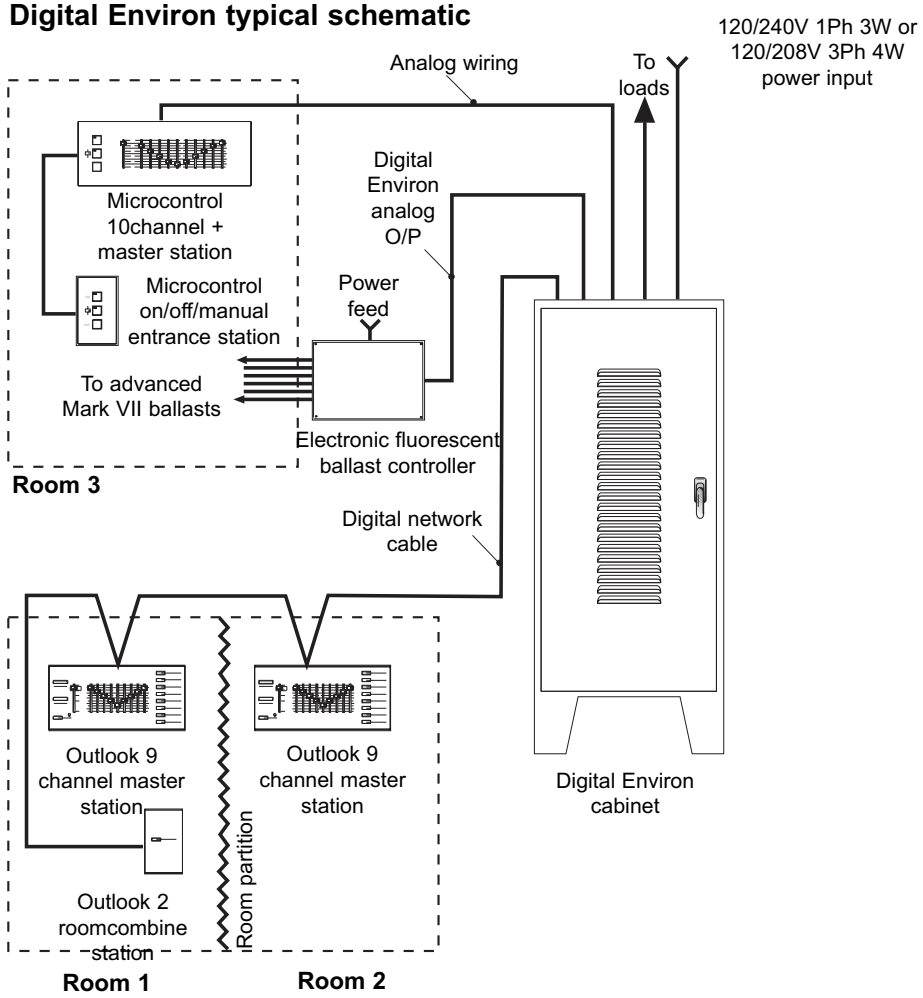
Note: Quad power modules are used with the small cabinet only.

All power modules have primary circuit breaker protection per dimmer, and either terminal block or branch breaker outputs.

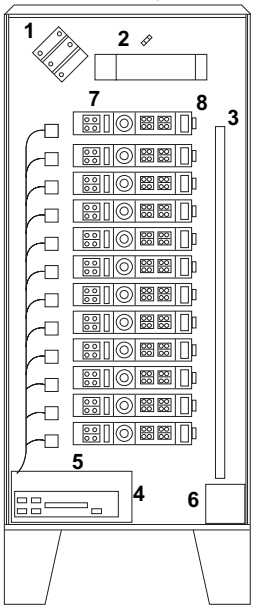
Refer to "Ordering Information" for details.

Processor Module:
The Processor Module forms the heart of the Digital Environ Cabinet. Using digital processing techniques for accuracy and reliability, the processor provides the firing signals for the power Modules. A membrane keypad and LCD enables the user to program numerous advanced features and options such as dimmer to room assignments, dimmer curves, minimum and maximum levels and many more.

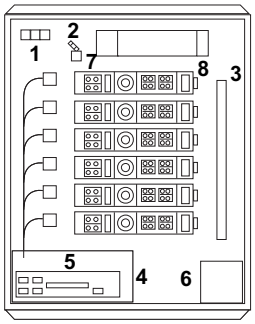
Digital Environ typical schematic



Internal layout



1 Power feed lugs (1 or 3 phase)
2 Grounded lug
3 Neutral lug
4 Processor termination board
5 Control termination board
6 Power supply (Outlook/Microcontrol)
7 Power module
8 Load terminals (terminal or branch breakers)



Digital Environ control

Analog Control

Digital Environ accepts 0 to +/- 10 volts dc control signals for direct connection to an analog control system such as Strand Lighting's Microcontrol Stations.

Digital Network Control

Outlook Control Stations use a digital communications network to directly access preset lighting scenes stored within Digital Environ. Using this approach, several Digital Environ Cabinets can be connected to distributed Outlook Stations via a common network cable forming an integrated system for controlling up to 16 independent rooms.

During installation and commissioning, each dimmer is assigned to a room (in the range 1–16) and a channel number for that room (in the range 1 - 12) using the Processor Module membrane keypad and LCD display. Two analog outputs per processor are similarly assigned, and may be used to control external equipment such as Electronic Fluorescent Ballast Controller (EFBC) units.

Multiplex Control

Digital Environ Cabinets accept DMX 512 control protocol for direct connection to a Premiere architectural system or entertainment console. The multiplex control input operates on a highest level takes precedence basis with the analog and Digital Network control inputs. An optional second multiplex card can be added for when a cabinet is to be controlled from two separate DMX control systems.

Example: Premiere house lighting control and a Mantrix MX stage console. Dimmers and analog outputs are patched to the multiplex control channel numbers during installation, from the keypad.

System Wide Control

In addition to the presets accessed by the Digital Network, there are 99 programmable presets per cabinet which can be recalled from either the keypad, from System Wide Control 8 and 16 Pushbutton Stations, an LCD Display Station the hand held SWC Programmer or from SV90 Dimmer Supervisory PC. The presets are independent of dimmer to room allocations used with the Digital Network Control. When selected, all dimmers and analog outputs fade to the levels recorded for that preset on a highest level takes precedence basis with all other control inputs.

This facility is intended for general lighting states or back-up cues in entertainment venues when a control console may not be available. Up to 20 Digital Environ Cabinets may be interconnected via a serial link for system wide, individual or grouped control.

Power Modules - Incandescent/Inductive

		Branch Breakers			Terminal Block	
Part No.	Description	Kit (per dimmer)	No.	Type	Kit	Note
72001	1 x 2.4kW Inc/Ind 110/120V TB	76801	6 6	76803 76805	-	1
72002	2 x 2.4kW Inc/Ind 110/120V TB	-	-	-	-	2
72003	2 x 2.4kW Inc/Ind 110/120V BB	-	3 3	76803 76805	-	4
72004	4 x 1.8kW Inc/Ind 110/120V TB	-	-	-	-	2,5
72005	1 x 6.0kW Inc/Ind 110/120V BB	-	6 6	76803 76805	76800	3
72021	1 x 2.2kW Inc/Ind 220/240V TB	*	6 6	* *	-	1
72022	2 x 2.2kW Inc/Ind 220/240V TB	-	-	-	-	2
72023	2 x 2.2kW Inc/Ind 220/240V BB	-	3 3	* *	-	4
72025	1 x 5.5kW Inc/Ind 220/240V BB	-	6 6	* *	*	3
72002-0001	2 x 20Amp Inc 277V TB	-	-	-	-	-
72001-0002	1 x 20Amp Inc 277V TB	-	-	-	-	-

Power Modules - Non Dim

Part No	Description	Kit (per dimmer)	No.	Type	Kit	Note
72009	1 x 20Amp Non-Dim 110/120V TB	76801	6 6	76803 76805	-	1
72010	2 x 20Amp Non-Dim 110/120V TB	-	-	-	-	2
72011	2 x 20Amp Non-Dim 110/120V BB	-	3 3	76803 76805	-	4
72012	1 x 50Amp Non-Dim 110/120V BB	-	6 6	76803 76805	76800	3
72029	1 x 2.2kW Non-Dim 220/240V TB	*	6 6	* *	-	1
72030	2 x 2.2kW Non-Dim 220/240V TB	-	-	-	-	2
72031	2 x 2.2kW Non-Dim 220/240V BB	-	3 3	* *	-	4
72032	1 x 5.5kW Non-Dim 220/240V BB	-	6 6	* *	76800	3

Power Modules - Fluorescent

Part No	Description	Kit (per dimmer)	No.	Type	Kit	Note
72006	1 x 2.4kW FL 110/120V TB	76802	3 (2P) 3 (2P)	76804 76806	-	1
72007	2 x 2.4kW FL 110/120V TB	-	-	-	-	2
72008	1 x 6.0kW FL 110/120V BB	-	3 (2P) 3 (2P)	76804 76806	-	3
72026	1 x 2.2kW FL 220/240V TB	*	3 (2P) 3 (2P)	* *	-	1
72027	2 x 2.2kW FL 220/240V TB	-	-	-	-	2
72008	1 x 5.5kW FL 220/240V BB	-	3 (2P) 3 (2P)	* *	-	3

Constant On Modules

Part No.	Description (per dimmer)	Kit	No.	Type	Kit	Note
72013	1 x 50Amp Con - On 110/120V BB	-	6 6	76803 76805	76800	3

Ordering information

Dimmer Cabinets

Cat. No	Description - Dimmer Cabinets
74016	Digital Environ Cabinet (Small) with Processor 90-240 Volts AC 60/50 Hz
74012	Digital Environ Cabinet (Large) with Processor 90-240 Volts AC 60/50 Hz
74012-0011	Digital Environ Cabinet (Large) with Processor 277 Volts AC 60 Hz
74016-0004	Digital Environ Cabinet (Large) with Processor 277 Volts AC 60 Hz
79100	Spare Processor Module 90-240 Volts ac 60/50 Hz
76309	Optional Second DMX 512 Input Card

Circuit Breakers and Mounting Kits

Cat. No	Description
76800	Digital Environ Terminal Block Kit
76801	Branch Breaker Kit for 6 x 1 pole breakers
76802	Branch Breaker Kit for 3 x 2 pole breakers
76803	15 Amp 1 pole Breaker (GE THQP115)
76804	15 Amp 2 pole Breaker (GE THQP215)
76805	20 Amp 1 pole Breaker (GE THQP120)
76806	20 Amp 2 pole Breaker (GE THQP220)

Accessories

Cat. No	Description
66100	Microcontrol/Outlook Supplementary PSU with Enclosure
76807	Quad Module Kit (Cable Assembly)

Note: TB = Terminal Block output format. BB = Branch Breaker output format.
Branch breakers are not supplied as standard
110/120 Volt Power Modules may be used on 100 volt supplies

Note 1: Terminal block output provided as standard. If branch circuit breakers are required, order mounting kit and breakers as listed.

Note 2: Primary fully magnetic circuit breaker serves as branch breaker

Note 3: Circuit breaker mounting provided as standard. If a terminal strip output is required, order the Terminal Block kit listed.

Note 4: Up to 3 branch breakers per dimmer.

Note 5: 4 x 1.8kW Incandescent module can only be used with the small (6 module) cabinet. Supplementary control cable assembly is required Part No. 76807

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