

Twilite System Controls

Features

- Supports 1024 Channels
- 576 System-wide Presets
- Up to 24 Presets per Room
- Up to 48 Stations on the Network
- 3.5" Disk Drive for Off-line Storage
- Full DMX512 Pile-on Capacity
- 24-Room System Capacity
- User Programmable Controls
- Windows Off-line Editor

Twilite System Controls XL

Dual LAN Processing Power

More Power

More Flexibility

More Intelligent

For large-scale multiple room applications.

Description

The new Twilite System Control-XL Dual LAN Processor Control Module provides added capability to EDI's existing large-application architectural control system. With increased ability to program more rooms and stations within a single system, major venues can now have easy-to-control lighting and other compatible automatic systems with a familiar, user-friendly interface and trusted reliability.

The XL Control Module can address up to 576 system-wide presets. It is designed to address up to 24 discrete control stations on two integrated local area network (LANs) wiring configurations. The module and accompanying wall stations operate identically to existing TSC products, only with increased performance ability.

Control System Riser Diagram

Remote Stations Up to 16 Stations per LAN Up to 2 LANS per System		MX output Iden 9842 Dimmer Rack
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Ordering Information: Twilite System Control

TSC-XL supports the following Stations;			Faceplate:	Optional:	Custom:	
Display Station	(A412)	Linear Slider Controls	(A417)	Brushed Aluminum	Anodized Pewter	Plate Color
☐ Remote Station	(A415)	LSC with Presets	(A418)	☐ Black Frame	Anodized Bronze	☐ Frame Color
Entry Station	(A416)	☐ IR Remote Controls	(A420)	Anodized Black		
Playback Station	(A414)	☐ RDI Interface	(A419)			

JOB NUMBER: APPROVAL STAMP

JOB NAME: CUSTOMER:

P. O. #

Electronics Diversified, Inc.

PRODUCT DATA SHEET

Physical Data

Twilite System Controls

Electrical Data

Power Input: 120,220, or 240VAC @ 60/50Hz. (47 to 63Hz.)

Consumption: 160 watts maximum (measured).
Control Voltage: Class II Multiplex (Low Voltage).

UPS Option: Blackout, brownout protection with indicators.

Transfer Time: 2 ms (milliseconds minimum).

Backup Time: 28 minutes operation with full charge.
Alarm: Visual and audio, local or remote.

Diagnostics Pgm: Internal, power up with feedback (200 item checks).

Notes: Stations are connected via Daisy-Chain. Backbox

ground via metal conduit network.

Control Cable: Tinned copper, PVC insulated, color coded twisted pairs, PVC jacket, Alpha 1133 cable.

Note: Stations are connected via Daisy-Chain.

Backbox must be grounded to system conduit.

Performance Data

Output Port

Off-Line Storage: 3.5" disk drive, IBM format, 1.44MB.

LAN Capacity: 16 individual or 24 combination addresses.

LAN Formation: 2 LANS up to 16 stations each.

Data Out Speed: 256

LAN Scan Speed: MPP, 84.0 KBPS minimum.

Control Cable: Alpha 1133 cable (or equivalent), 18 ga. tinned

copper, PVC insulated, color-coded, twisted pairs,

PVC jacket.

Environment

Ambient temp range: Recommended 64° -77° (18° -25°C). Relative Humidity: 10% - 90% non-condensing. General Conditions: Interior use only, general office level.

Specifications

- A. The Twilite System Control Module shall be a fully enclosed, self contained, microprocessor based control unit capable of high speed bidirectional data transmission specifically designed for solid state management of electrical dimmed and switched load circuits. The Control Module shall support a series of low cost, network compatible control stations for single of multiple room operations. All data necessary for system operation shall be resident in the Control Module.
- B. The Control Module shall support a system address of up to 512 dimmers on 1024 discreet channel outputs. All system dimmers can be assigned direct channel output or grouped proportionally assigned levels on a room by room basis. The system shall support up to 576 system wide presets with a capacity of 24 rooms. Up to 24 presets can be assigned in any room. To assure maximum memory capacity, the program shall support a dynamic memory allocation process which configures the system memory to specific site requirements.
- C. The control module shall be available to support either a single or dual output LAN configuration. All LAN connections between the control module and the remote stations shall be of Class II low voltage electrical wiring based on a daisy chained, three-twisted pair cable. Each LAN shall support up to 16 individually addresses with a maximum of 24 stations per LAN. Slider stations may only be assigned to the first LAN, with 16 slider stations per system. The Control Module shall direct a high speed, bidirectional polling protocol which monitors, updates and executes commands entered on the network. All connections are made to the remote stations on a single removable, keyed connector with labeled terminals. Network cable runs shall be limited to 1000 feet (330 meters) on standard output ports.
- D. The system program shall be based on user addressable conditions accessed through a display station or off line editor. The program shall be stored in read only memory. Conditions set shall be stored in battery protected random access memory as well as stored off line on a standard 3.5" disk drive. Under interrupt conditions, the control module shall review system memory and automatically reload the disk information if the system memory has been corrupted at any level. Systems equipped with an optional un-interruptible power supply will offer both audio and visual alarms during a fault condition.
- E. The Control Module shall support the capacity for a direct USITT DMX512 input "copy active" command. This command will allow an independent source to set levels which can be captured and assigned to a preset. The control module shall allow the user to select the system general mode of operation which would include, but not be limited to:
 - Stand alone as a control source
 - 2. Pile on memory to existing DMX signal
 - 3. Pass through DMX information without interruption
- F. The control program shall allow the user to restrict access to information stored by the station. All access can be controlled by a user-assigned

five-digit password configured from a display station. Restrictions shall be available to control preset selection, edit functions and configuration settings.

- G. The Control Module shall support a menu driven operating program with simple commands and illuminated button prompts. System access buttons allow the user to set and review selections in the following menu fields:
 - The System Menu establishes a location for installation based information to include:
 - a. Software version number.
 - b. Position for facility name.
 - c. Operation mode set for input port.
 - d. Select character set for display.
 - 2. Configuration Menu includes a location for assignments to include:
 - a. Assign dimmers with patch to channel in room information.
 - b. Assign rooms with name and preset information.
 - c. Assign stations with names, rooms and lock assignments.
 - d. Establish password functions.
 - e. Configure combine inputs for master and slave room combinations.
 - Assign functions for remote device interface remote inputs to system.
 - g. Set the astronomical clock for sunrise, sunset based calculations.
 - h. Establish slider controls by assigning channels or groups.
 - Features Menu shall access assignments within the display station for the remote controls:
 - a. Set current time and date information.
 - b. Create and apply exceptions schedules to daily event operation.
 - c. Create and assign event clock schedules for room assignments.
 - d. Install and Update system password assignments.
 - e. Access system disk routines for save and load requirements.
 - Preset Menu shall access room information based on inputs controlled by the display station:
 - a. Access to alpha numeric labels for channels and presets.
 - b. Access to remote lock assignments for remote stations.
 - c. Access to preset with channel and numeric level and time.
 - d. Capacity to copy and store active outputs function.
 - e. Access to preset link and delay functions.
- H. The control module electronics shall be housed in a single wall mount enclosure. The enclosure shall be self contained with alignment pins to insure correct mating of connectors. All control terminations are secured independent of the control module. Optional mounting enclosures include locking covers when necessary.
- The system shall be the Twilite System Control-XL as manufactured by Electronics Diversified, Inc., 1675 NW Cornelius Pass Road, Hillsboro, OR 97124 U.S.A.

