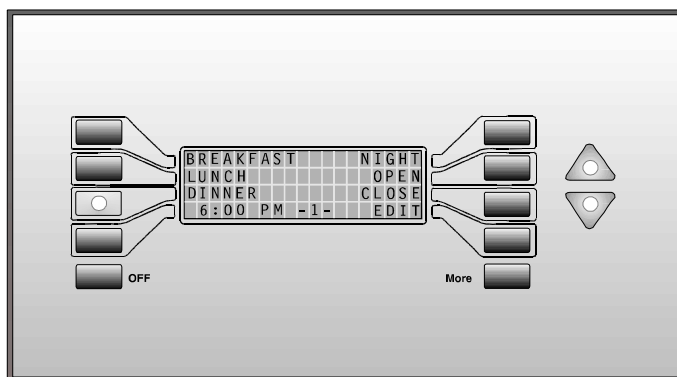


Twilite System Control



User Manual



INTRODUCTION

In general, any system is only as useful as the controls which interface to the system. The controls, by their nature, are the primary path to the system's features. However, if the controls are not clearly identified, or are difficult to use or understand, chances are the features of the system will never be accessed or incorporated into day to day operations.

For these reasons, the user interface designed to support the Twilite System Controller and peripheral stations specifically targets the user and daily use routines. Twilite System Control is designed to clearly indicate the status of the controls at all times. The use of illuminated rubber buttons mapped to the screen helps the user understand which item is addressed when a button is depressed. The idea of selecting a feature and having the control interface illuminate the options available can assist the user in simple routine operations as well as complex configuration issues. The Twilite System supports these features.

Perhaps the real advantage of this user interface is the ability to program all the features and capacities of the system through the simple routines offered by the menus displayed in the Twilite System. The user has the capability of addressing the alphanumeric screen and labeling both the presets and the channels available to reflect the actual site conditions of the facility. These labels are then stored on the disk and become part of the system configuration. The labels can be changed at any time without the need for any additional hardware or software interfaces.

The Twilite System offers one additional characteristic unmatched in the field. The Station has the capacity to "copy active" inputs into the system from a separate USITT standard DMX512 controller. This means that proportional levels generated from a separate console can be "piled-on" to the existing channel levels and recorded into the preset for immediate replay. With this capacity, level setting takes on a whole new meaning when programming the system.

HOW TO READ THIS MANUAL

To assist you through these steps, this Manual offers:

BOLD TITLES: In the upper left and right corner to tell the reader which section he is using.

KEY LINES: Subheads which describe indexed categories.

BUTTON STROKES:  Illuminated button presses required to complete the instruction.

ARROW STROKES:  Directional commands.

COMMENTS: *Comments about operation in italics.*

EXAMPLES: Common instructions used in normal operation.

SUPPORT: 24 hour Service/Support network.

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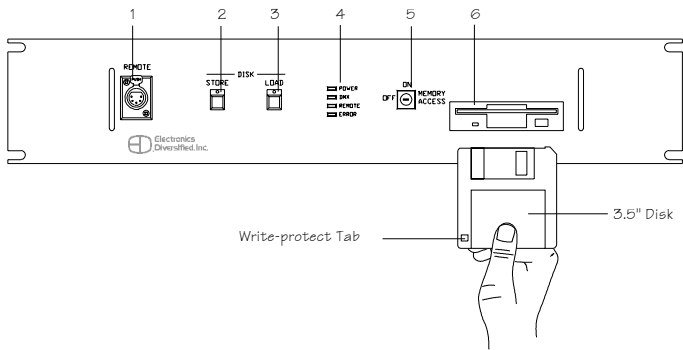
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TABLE OF CONTENTS

OVERVIEW			
System Control	4		
TSC Chassis	4		
Control Interface	5		
SYSTEM SETUP			
Power Up			
Power Up Default Menu	6		
Password Menu	6		
Feature Menu	6		
Configure Menu	6		
Memory Menu	6		
Memory Allocation			
Allocate Number of Rooms	7		
Select Room	7		
Allocate Channels	7		
Repeat Room/Channels	7		
Save Changes? Menu	7		
Memory Transfer			
Save to Disk	8		
Confirm Message	8		
CONFIGURATION			
Configure Rooms			
Configure Menu	9		
Configure Rooms	9		
Select Room	9		
Name room	10		
Select Characters	10		
Select Size	10		
Set Preset Capacity	10		
Configure Dimmers			
Select Dimmers	11		
Select Room	11		
Select Channel	11		
Maximum Level	11		
Configure Stations			
Select Station	12		
Name Station	12		
Select Characters	12		
Select Room	13		
Select Remote Lock	13		
Set Password	13		
Set Entry Station	13		
Select Test	14		
Configure Sliders			
Select Sliders	14		
Slider Stations Menu	15		
Assign Channels	16		
Remove a Channel	16		
Clear Channels	16		
Configure System			
System Configuration	17		
Name Facility	17		
Set DMX Mode	17		
Set Character Mode	17		
Save to Disk	18		
Configure Time/Date			
Set Time/Date	18		
Set Time	18		
Clock Display	18		
Set Date	18		
Change Password			
Password Menu	19		
New Password?	19		
Repeat Password	19		
START-UP			
Load/Change from TSC			
To Load a Program	20		
Press Load Button	20		
Preset menu	20		
Load from Display Station			
Power Up Pre-programmed Menu	21		
Access Buttons	21		
Password Menu	21		
Feature Menu (access to:)	21		
Load from Disk	21		
Confirm Load from Disk	21		
Confirm Message	22		
Preset Menu	22		
DAILY OPERATION			
Selecting a Preset			
Press Default Preset	23		
Adjust a Preset	23		
Restore a Preset	23		
More Button	23		
Edit Active Channels			
Edit Presets	24		
Enter Password	24		
Preset Edit Screen	24		
Press Rate Button	24		
Select Channel	24		
Name Preset or Channel	25		
Set Levels	25		
Blind Edits			
To Edit Blind	25		
Press Rate Button	26		
Select Channel	26		
Set Levels	26		
Save Level Changes	26		
Remote Lock			
MORE Selection	26		
Remote Lock	27		
Copy Active			
Confirm Copy Active	27		
Copy Active Error	27		
Preset Link			
Link Presets	28		
Link Presets (with Delay)	28		
Copy/Paste Cue			
Copy a Preset	28		
Copy a Preset	29		
Storing Presets			
Save to Disk	29		
Confirm Save to Disk	29		
FEATURES MENU			
Time/Date			
Set Time	30		
Clock Display	30		
Set Date	30		
Time Clock			
Program Time Clock	31		
Select Event	31		
Set Day of Week	31		
Select Time	31		
Select Room	31		
Select Preset	32		
Set Astronomical Time Mode	32		
Holiday Schedule			
Program Holiday	33		
Set Date	33		
Set Holiday	33		
Clear Schedule	33		
Disk Access-Save			
Disk Functions	34		
Disk Access-Load			
Disk Access	34		
Change Password			
Password Menu	34		
ADVANCED OPERATION			
Combine/Partition			
Configure Combine	35		
Set Master	35		
Set Slave	35		
Set Room	36		
Save Changes	36		
Configure Remote Device Interface Input			
Select Station	37		
View Type	37		
Select Input	37		
Select Room	38		
Select ON Action	38		
Select OFF Action	38		
Configure Remote Device Interface Output			
Select Output	38		
Select Room	39		
Select ON Action	39		
Select Polarity	39		
Configure Astronomical Time Clock			
Configure Clock	40		
Enable Clock	40		
Set Latitude	40		
System Controls			
System Menu	40		
Press More	41		
Select EL Timeout	41		
Select Count	41		
Select Menu Timeout	41		
Select Coount	41		
ACCESSORIES			
Playback Station	42		
10-Button Remote	42		
2-Button Remote	43		
Linear Slider Station	43		
Linear Slider with Presets	44		
P-10 Programmable Station	44		
Room Hopper Feature	45		
Room Partition Panel	45		
Remote Programming Outlet	46		
IR Remote Control	46		
Off-Line Editor	46		
APPENDIX			
Message Screens	47		
SERVICE			
Nationwide Service and Support	50		
Registration Card	51		

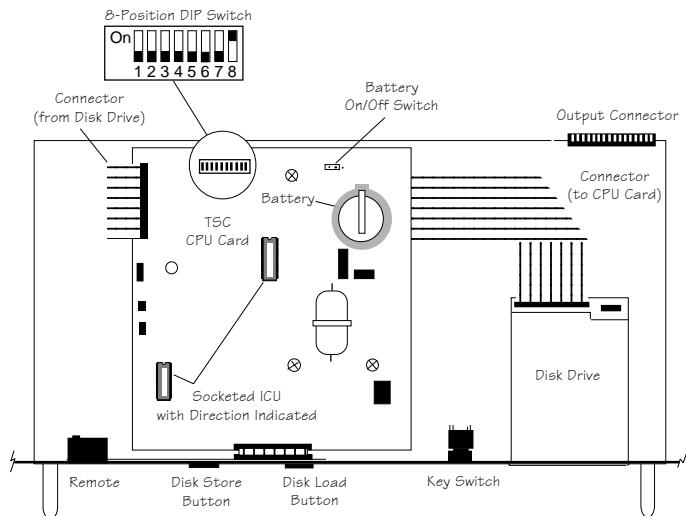


OVERVIEW



SYSTEM CONTROL

1. Program Access.
2. Disk Store Button:
Transfers memory from TSC RAM to disk.
3. Disk Load Button:
Transfers program from disk to TSC memory.
4. Indicator Package:
Power--system power ON.
DMX--DMX active input.
Remote
Error--disk error light.
5. Key Switch:
Key switch on the front panel has three positions for control:
OFF: Control Electronics power off condition.
Random Access Memory is active.
ON: Electronics powered up.
Random access memory is active and write-protected.
MEMORY ACCESS: Opens access to all system edit & record features.
(Position key and remove to ensure consistent operation).
6. Disk Drive:
3.5" IBM format, 1.44MB.
Indicator light active when drive engaged.
(Do not eject when indicator is active).



TSC CHASSIS

This view shows the primary components and their placement on the printed circuit board for general reference.

TSC DIP SWITCH Settings:

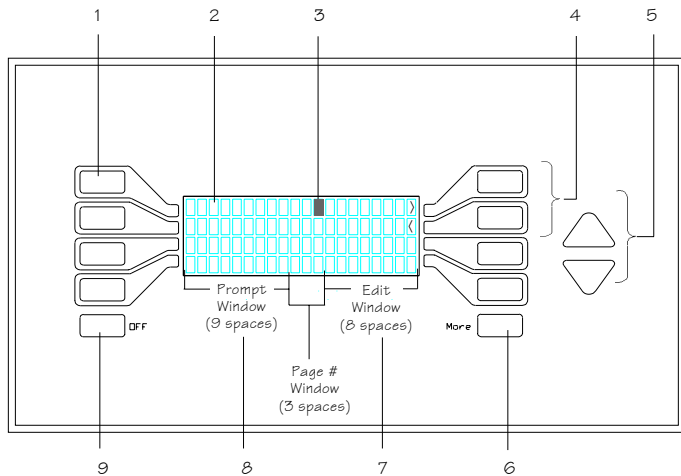
** = Default

1. ** OFF - No Action--preserves memory on Power Up.
ON - Clear memory on Power Up.
2. ** OFF - LCD backlight (EL) turns off after time-out.
ON - Leaves LCD Backlight (EL) on all the time.
3. ** OFF - No Action.
ON - Loads disk on Power Up.
4. ** OFF - Factory use--diagnostics - Position *OFF*.
5. ** OFF - Not used - Position *OFF*.
6. ** OFF - Not used - Position *OFF*.
7. ** OFF - Factory use - Must be in *OFF* Position.
8. ** ON - LCD Communications - Must be in *ON* position.

System Reset:

To reset the TSC Control Electronics;
Switch Key from ON to OFF position.
Pause--
Switch Key to ON.
System will reset.

OVERVIEW

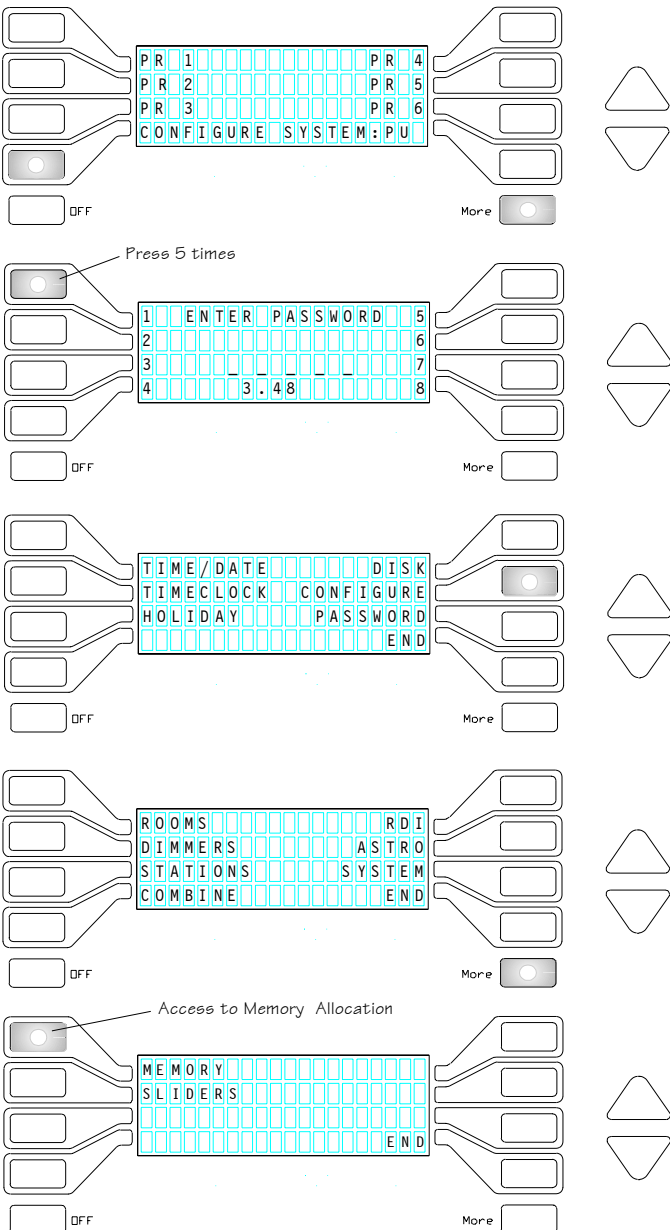


CONTROL INTERFACE

- Mapped Buttons:**
 Illuminated conductive rubber buttons mapped to the display. Any button press results in illuminated buttons mapped to the FEATURE selected in the Display window.
- Display Windows:**
 The display is divided into 5 distinct display windows. The top three lines, left and right, are Preset display windows. Pressing a button mapped to the Preset display will select the labeled Preset.
- Cursor:**
 Each square of the Preset window can be addressed by the cursor. The cursor is the blinking field at the point of selection. Access this field by:
- Left & Right Buttons:**
 < (LEFT) or > (RIGHT) arrows position the cursor in the field.
- Up & Down Arrows:**
 ▲ (UP) or ▼ (DOWN) arrows allow the numbers field to scroll.
 Number fields default to the right, or One's column.
 During the label process, if < or > is selected, ▲ (UP) or ▼ (DOWN) arrows allow the selected character field to scroll.
 Character fields available:
 Letters: A through Z
 Numbers: 0 through 9
 Symbols: # \$ % & * () - + = ! ? < >
- Next Page (MORE) Button:**
 MORE button prompts the next page. The page number is displayed in the lower center of the screen (Page # window).
- Edit Window:**
 The Select window accesses the EDIT screen or the END condition. If END is selected, the display will return to the previous menu.
- Prompt Window:**
 Prompt window can display default instructions for operation or the TIME display. If default instructions appear, the mapped button will light.
- LCD Screen Off Button:**
 OFF button switches the backlighted LCD to an "OFF" condition.



SYSTEM SETUP



POWER UP

Before programming and daily operation can occur, the system memory must be assigned the facility requirements. This process is identified through MEMORY ALLOCATION.

The procedures indicated in this section will establish the maximum number of rooms as well as channels in each room in the system.

Once the MEMORY ALLOCATION is complete, the normal set-up and configuration procedures can begin. Any capacity of the system can be set at an equal or lesser value than the memory allocation level.

NOTE: Increasing or decreasing the values inside the memory allocations after MEMORY ALLOCATION is complete will reset all established names, values, and assignments entered in the system.

POWER UP (Default Menu):

Default Preset screen appears when first turned on.

Fourth and MORE buttons flash.

Press the fourth and MORE buttons at the same time, and the PASSWORD screen will display.

Default power setting for DMX (1-512) is set at 60%.

PASSWORD Menu:

When Password Menu appears, press the #1 button 5 times to access secured menus. This code will allow entrance to the FEATURE menu.

(Password protection is set in CONFIGURE STATION menu).

FEATURE Menu will appear.

FEATURE Menu:

Options available on left or right of screen.

Press CONFIGURE to access next menu.

CONFIGURE Menu:

Options available on left or right of screen.

Press MORE to access MEMORY screen.

MORE button will stay lit.

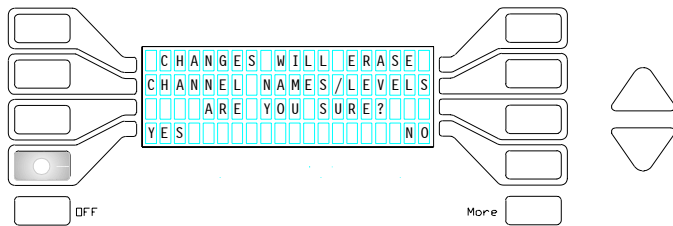
MEMORY Menu:

Press MEMORY button to access MEMORY ALLOCATION screen.

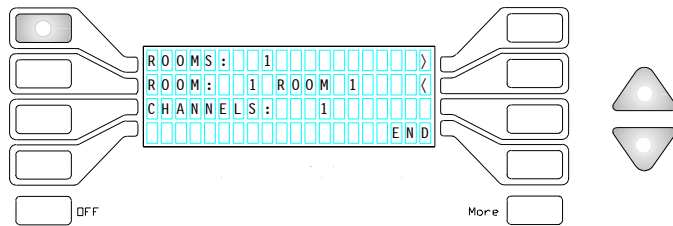
(END button reverts to FEATURE menu; MORE button reverts to CONFIGURE menu.)



SYSTEM SETUP



Press YES to set Room/Channel allocations.
A ROOM screen will appear showing number of rooms, names, and channels.
(Pressing NO reverts to MEMORY screen.)

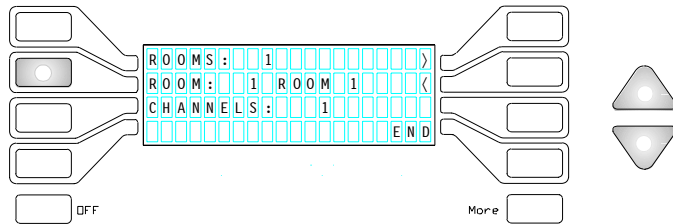


MEMORY ALLOCATION

Allocate Number of ROOMS:

Press ROOMS. UP/DOWN arrows will light.
Use the UP/DOWN arrows to set the maximum number of rooms independently controlled by TSC.

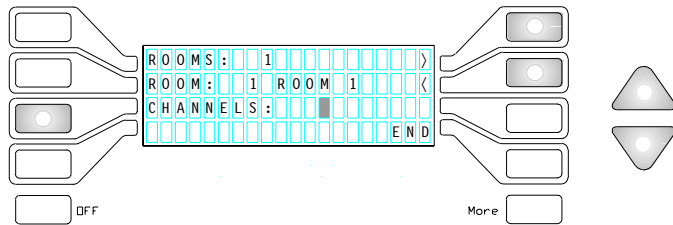
*If ROOMS number is changed, CHANNELS menu defaults to 1.
DO NOT ADJUST this number after setting.*



Select ROOM:

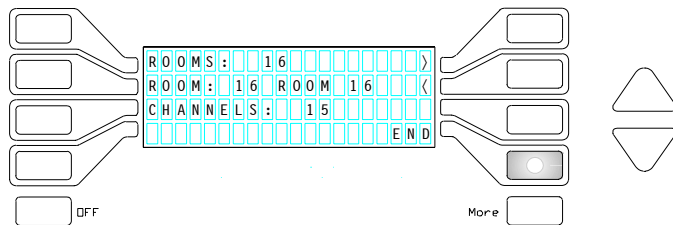
Press ROOM. UP/DOWN arrows will light.
Use the UP/DOWN arrows to set the 1st room number to be assigned.

(Version 3.41, 3.47, 3.48 have a 16-room capacity. Version 5.0 has a 36-room capacity)



Allocate CHANNELS:

Press CHANNELS button. Cursor buttons and UP/DOWN arrows will light.
Use the < > buttons to position cursor.
Use the UP/DOWN arrows to set maximum channel capacity for the room.



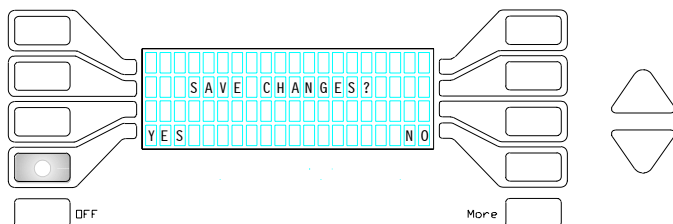
Repeat ROOM / CHANNELS Allocation:

Repeat this assignment process until each independently controlled room in the system is listed under ROOMS and has a maximum channel assignment.

NOTE: It is generally advised to program an additional "Phantom Room" in your system for later use.

To save settings, press END.

(Pressing END closes the room menu and stores the settings established to system memory.)

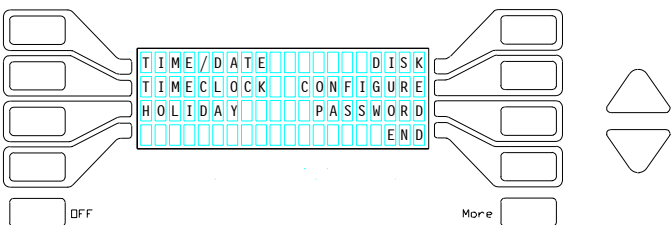
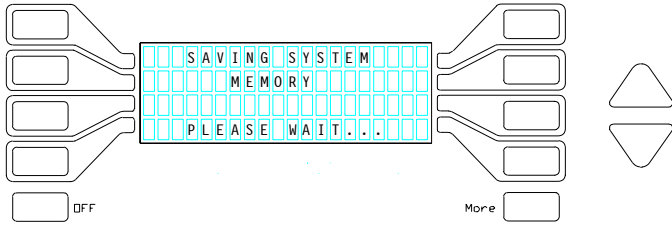
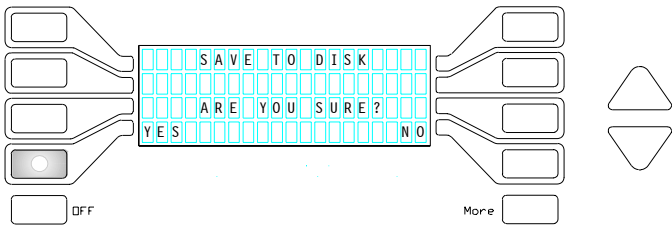
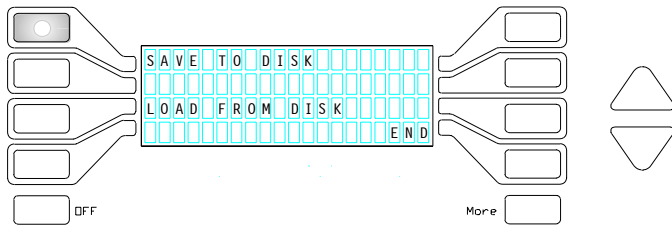
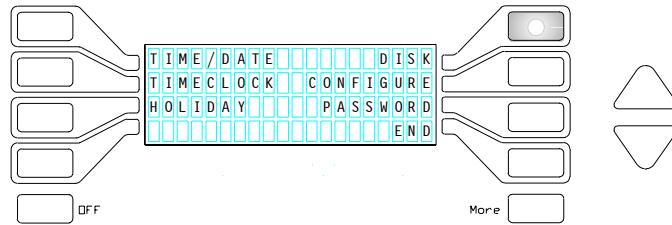
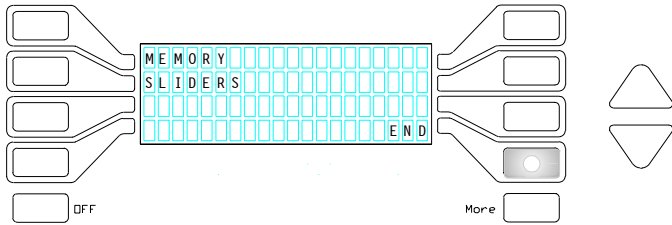


SAVE CHANGES? Menu:

Press YES to save MEMORY ALLOCATION.
Press NO to review or reset MEMORY ALLOCATION.



SYSTEM SETUP



MEMORY ALLOCATION

MEMORY Menu:

After saving settings, screen reverts back to MEMORY menu.

(First Time set-up should complete ROOMS, DIMMERS, STATIONS and SLIDERS (if slider stations are included in your system) sections to make TSC operational. If this process is interrupted, record all selections to disk for record copy).

Press MORE to continue First Time start-up.

Press END to return to FEATURE menu.

FEATURE Menu:

From the FEATURE menu, select DISK function and press SAVE TO DISK to store changes.

MEMORY TRANSFER

Pressing SAVE on any screen, or YES to an "Are You Sure?" message will record changes to Random Access Memory.

For a record copy of any changes, save to disk.

Daily Operations should include permanent changes in the program recorded to disk.

SAVE TO DISK:

Press SAVE TO DISK button to store settings made in MEMORY ALLOCATION.

Confirm SAVE TO DISK:

An ARE YOU SURE? message will display before the function is executed.

Select YES to store settings from RAM to the system disk.

Confirm Message:

When DISK is active, display reads:

SAVING SYSTEM MEMORY:

PLEASE WAIT

(Message will disappear in about 12 seconds and screen reverts back to SAVE TO DISK screen)

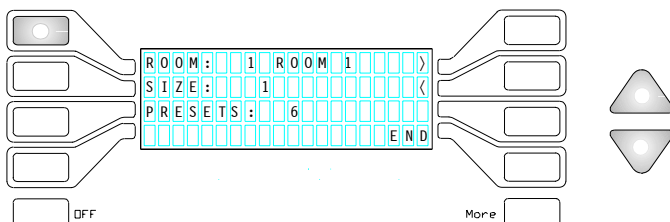
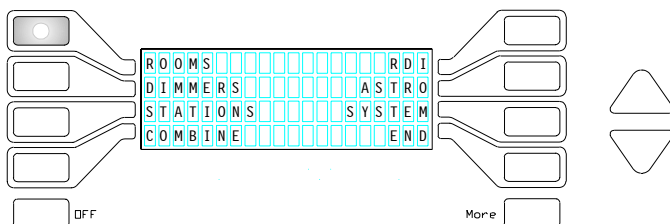
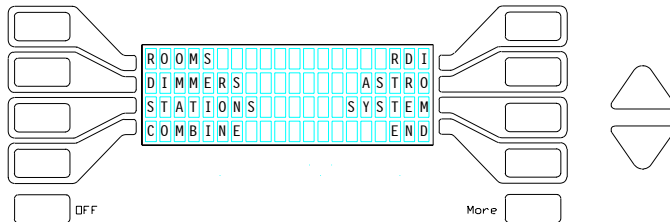
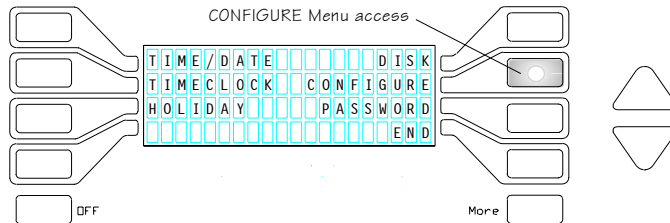
Press END to return to FEATURE menu.

(Pressing END closes the menu and stores the settings established to system memory.)

FEATURE Menu:

System is now ready to configure, utilizing the capacities established in MEMORY ALLOCATION.

CONFIGURATION



CONFIGURE ROOMS

The second step in the set-up procedure is to set the exact number of control channels available in each room, as well as select the number of Presets available for each room.

The Configure Rooms menu also allows the operator to label each room with a name for ease of identification.

To CONFIGURE:

- From the FEATURE menu:
- Press CONFIGURE to access menu.

CONFIGURE Menu:

The CONFIGURE Menu will be displayed with access to:

- ROOMS:** Room Assignment
- DIMMERS:** Access to Dimmer Patch
- STATIONS:** Station Set-up
- COMBINE:** Partition Set-up
- RDI:** Remote Device Interface
- ASTRO:** Astro Clock Setting
- SYSTEM:** DMX response & letter case
- END:** Returns to previous menu
- SLIDERS:** Configure LP and LS stations

(The Slider menu is accessed by pressing the MORE button.)

NOTE: First time Start-Up must complete assignments in ROOMS, DIMMERS, STATIONS, SLIDER and SYSTEM screens prior to any daily operations.*

Operators who change programs or edit configurations may review any settings by following the next steps.

**(If LP or LS-type stations are included in the system.)*

Configure ROOMS:

- Press ROOMS button.
- The CONFIGURE ROOMS screen will be displayed.
- (ROOMS must be configured before Dimmers can be assigned).*

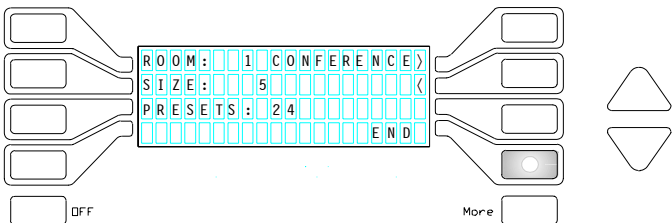
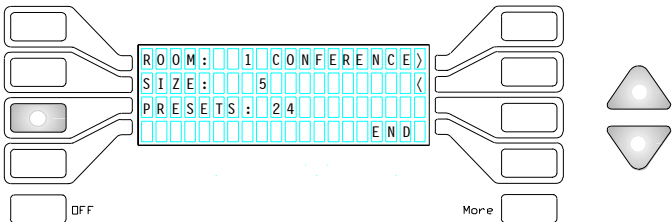
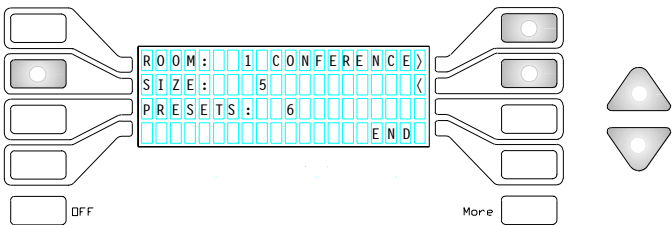
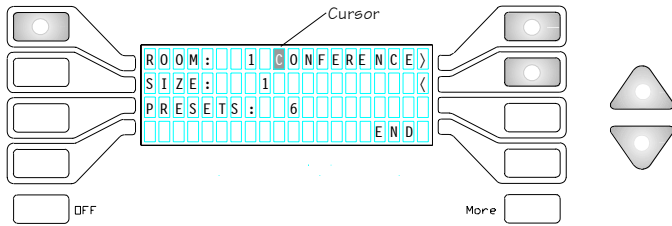
Select ROOM:

- Press ROOM button.
- Button will light when active, and the UP/DOWN arrows will light.
- Use the arrows to select room number.

NOTE: Operator cannot access rooms or sizes greater than what is defined in Memory Allocation.



CONFIGURATION



CONFIGURE ROOMS

Name ROOM:

Press the < > buttons to activate cursor.
Buttons will light.

Select CHARACTERS:

Use the lighted < > buttons to position cursor.
Use the UP/DOWN arrows to scroll character field.

Character fields available:

Letters: A thru Z

Numbers: 0 thru 9

Symbols: # \$ % & * () - + = ! ? } {

Select SIZE:

Press SIZE button to select number of Channels (Zones) to be assigned in each room.

Use the < > buttons to position cursor.

Use the UP/DOWN arrows to scroll columns.

Set PRESET Capacity:

Press PRESETS button.

Use the UP/DOWN arrows to select the number of presets available in the room.

Options: 6 / 12 / 18 / 24 Presets.

END:

Press END to return to CONFIGURATION menu.

(Pressing END closes the Room menu and stores the settings established to system memory.)

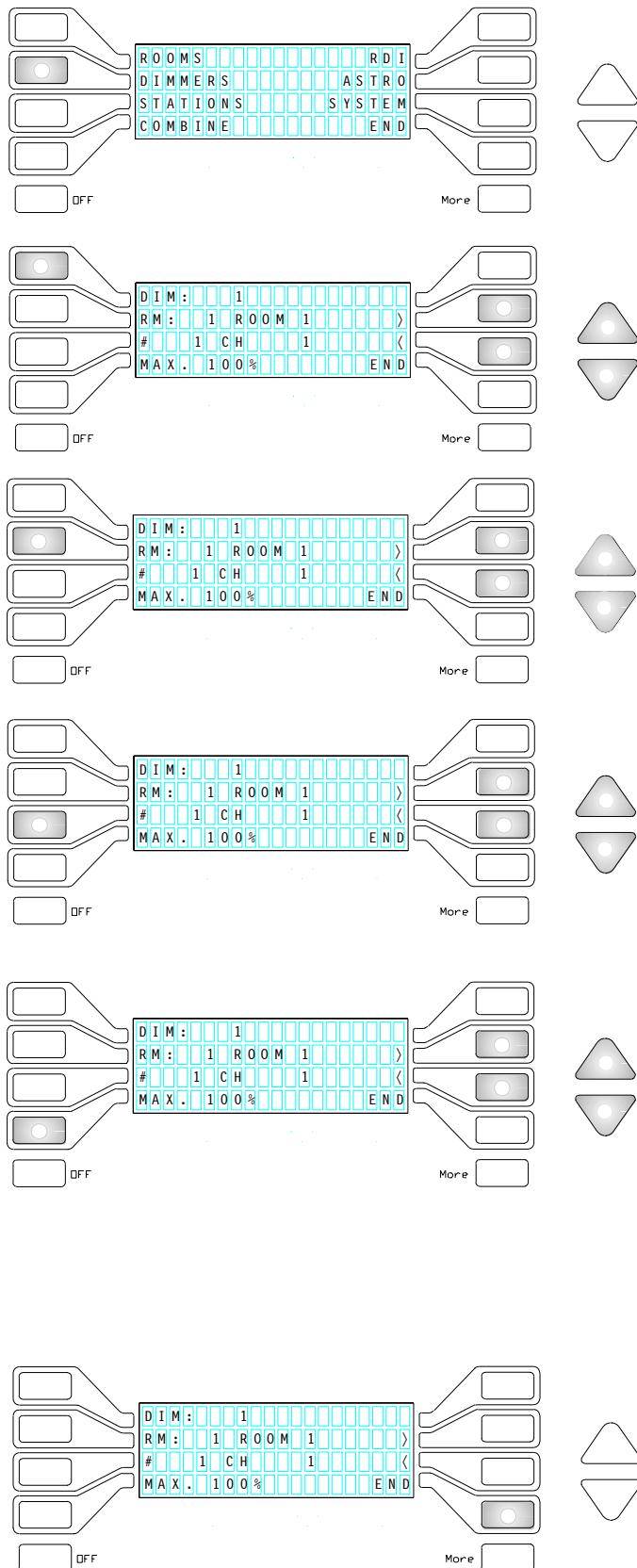
CONFIGURE DIMMERS

The 3rd step in the set-up procedure is to patch each system dimmer with a level to a specific channel in each room.

The recommended method is to assign each dimmer to an individual channel in ascending order in a room. When a room is complete, assign the next dimmer number to channel number 1 in the second room.

Repeat this process until each system dimmer is assigned.

CONFIGURATION



CONFIGURE DIMMERS

Configure DIMMERS:

Press DIMMERS button.

The CONFIGURE DIMMERS screen will be displayed.

Select DIMMERS:

Press the DIM button.

Button will light when active, the < > buttons and arrows will light.

Use the < > buttons to position cursor.

Use the UP/DOWN arrows to select dimmer.

Select ROOM:

Press RM button to select room number.

Button will light when active, and the UP/DOWN arrows will light.

Use the UP/DOWN arrows to select room.

Select CHANNEL:

Press # button.

Button will light when active, the < > buttons and UP/DOWN arrows will light.

Use the < > buttons to position cursor.

Use the UP/DOWN arrows to scroll channels set in Memory Allocation.

MAXIMUM Level:

Press MAX button to select maximum output.

Button will light when active, the < > buttons and UP / DOWN arrows will light.

Use the < > buttons to position cursor.

Use the UP/DOWN arrows to select maximum dimmer output when addressed at FULL.

(Repeat steps until each Dimmer in the system is patched with a maximum level to a channel for each room independently controlled by TSC. Dimmers which are not assigned can be controlled by other DMX control sources; however, levels assigned to dimmers not assigned by the TSC system cannot be captured in "Copy Active" functions.)

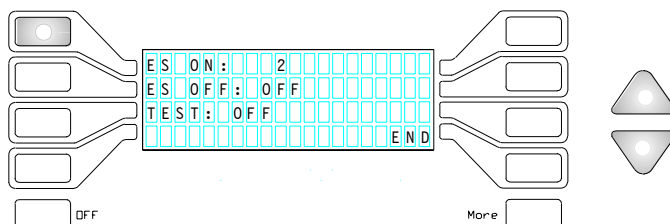
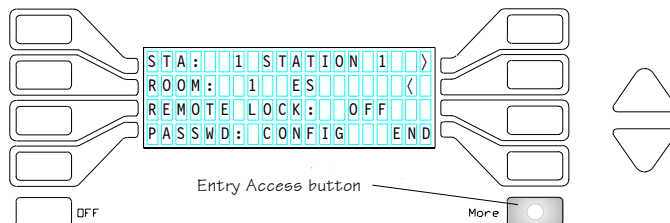
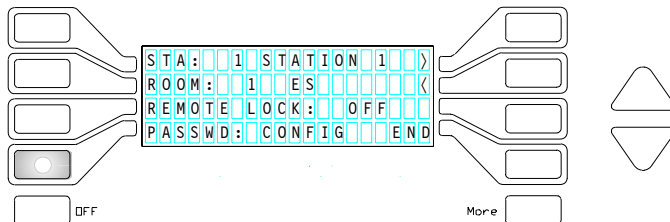
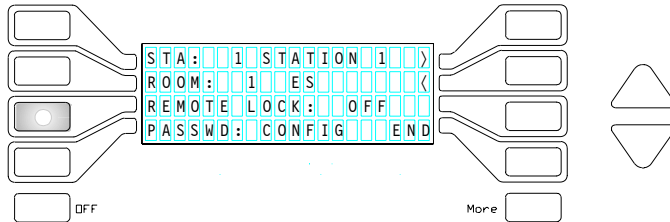
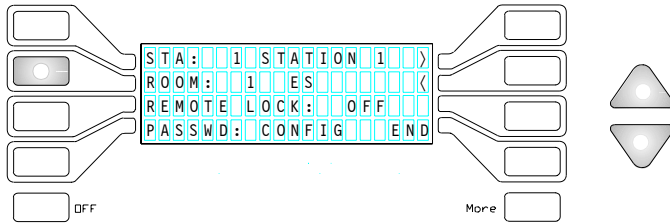
To review the dimmer assignments, press the DIM button and scroll with the UP/DOWN arrows)

END:

Press END to return to CONFIGURATION menu.

(Pressing END closes the Dimmer menu and stores the settings established to system memory.)

CONFIGURATION



CONFIGURE STATIONS

Select ROOM:

Press ROOM button to select.

Use the UP/DOWN arrows to assign station to room. Room number will indicate station type configured in room.

Select REMOTE LOCK:

Press REMOTE LOCK button to restrict station access to presets with Remote Lock feature selected on the display edit screen.

Select OFF or ON to control feature.

Set PASSWORD:

Press PASSWD button to assign password protection to station.

PASSWORD has three positions:

- CONFIG:** Requires password to access FEATURE menu.
- EDIT:** Requires password to access Preset EDIT.
- PRESET:** Requires password to access any individual PRESET.

Set ENTRY Station:

An Entry Station is a two-button, single-gang station which can be programmed to select any room preset established by the display station.

Presets may be stored for both the ON button as well as the OFF button.

Press the MORE button to configure Entry Stations and access the test feature.

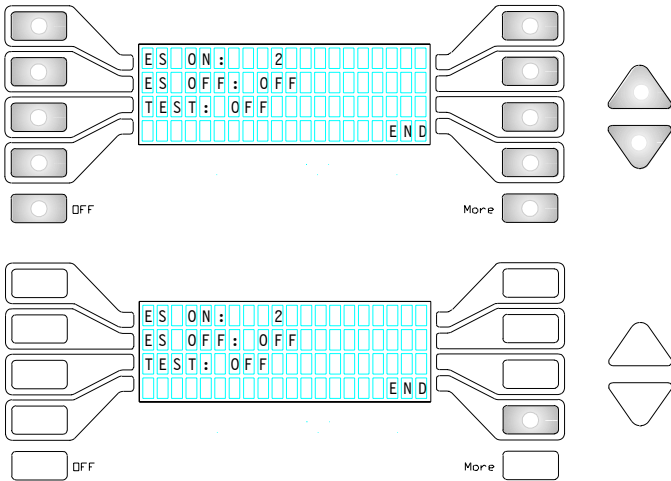
Press ES button:

Button will light when active, the UP/DOWN arrows will light.

Use the UP/DOWN arrows to assign Entry "ON" preset. Use the UP/DOWN arrows to assign Entry "OFF" preset.



CONFIGURATION



CONFIGURE STATIONS

The TSC control stations each operate with a distinct address number established by a rotary encoder on each station. The station number that appears on the configuration screen matches the rotary encoder number.

Select TEST:

To identify the position of each station operating on the data line, select the station number to be identified from the previous page.

Press the MORE button to access TEST.

Press TEST to flash all LED's on the selected station.

Press TEST again to release the Test feature.

END:

Press END to return to CONFIGURATION menu.

(Pressing END closes the Station menu and stores the settings established to system memory.)

SAVE TO DISK.

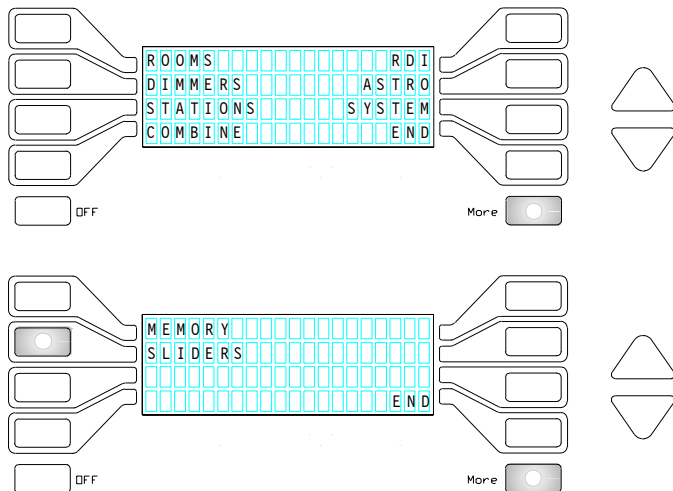
CONFIGURE SLIDERS

TSC Slider Stations have the capacity to control any channel assigned to the system through the dimmer patch under the Configure menu. The steps outlined below offer the path to assign a channel or group of channel numbers to a slider on a Linear Slider or Linear Slider with Presets Control Station. Once the channel is assigned to the Station number and the slider position, the linear slider will control the channel (whenever the station is active.)

Configure SLIDER CONTROL STATION:

From the CONFIGURE screen, press MORE.

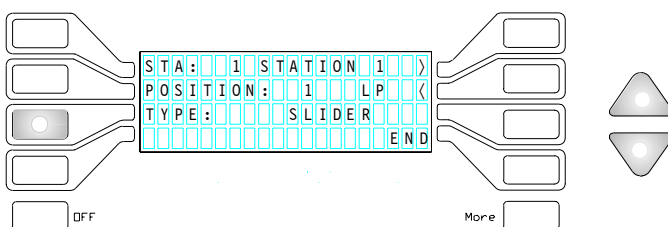
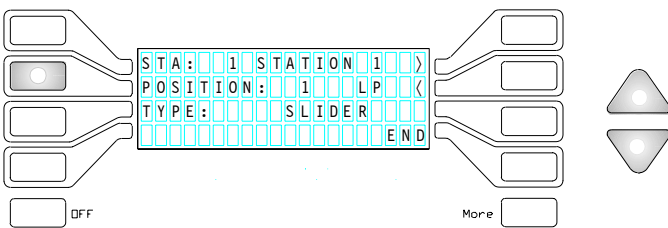
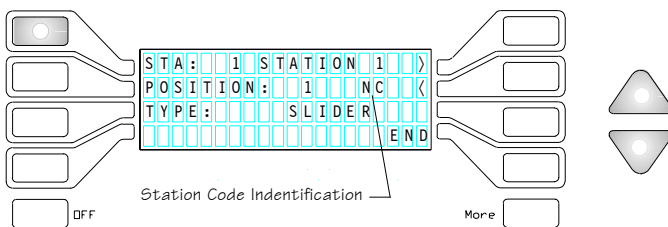
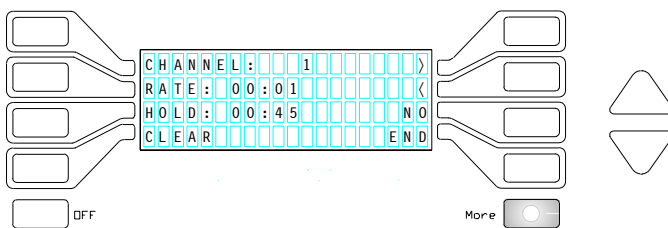
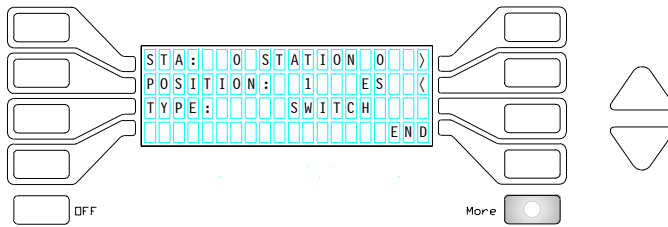
MEMORY/SLIDERS menu will appear. MORE button will stay lit.



Select SLIDERS:

The CONFIGURE SLIDER STATIONS menu will appear.

CONFIGURATION



CONFIGURE SLIDERS

SLIDER STATIONS Menu:

The SLIDER station menu has two pages: On the first page you will find--

- STATIONS:** Identifies the station address you are configuring.
- POSITION:** Identifies the individual slider to address and the station type.
- TYPE:** Identifies the slider location as a Slider (dimnable source) or a Switch (Non-dim, relay activation.)

Pressing MORE again will access the second menu page where you will find--

- CHANNEL:** Identifies the channel to be assigned to the slider position on the first page. A * indicates that the channel is assigned to another slider location.
- RATE:** The fade time to go from an active preset to manual control on the slider station.
- HOLD:** Used to set the hold time (take control) on a PS station.
- YES/NO:** Identifies if the channel is assigned to a slider or not.
- CLEAR:** Eliminates all channel assignments.

Press STA:

The UP/DOWN arrows will light.

Use the UP/DOWN arrows to scroll Station numbers.

The station number which appears on the screen will match the number assigned on the rotary encoder on the station. An NC at the station number position means No Connection, or no station is assigned the number which appears on the screen.

Press POSITION:

UP/DOWN arrows will light.

Use the UP/DOWN arrows to select the slider number to be configured.

The station position number must match the physical appearance of the station being configured. Assignments made to position numbers which do not appear on the station will not function.

Press TYPE:

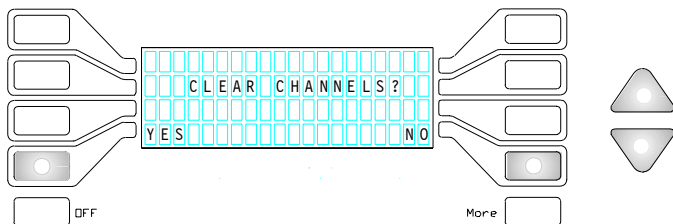
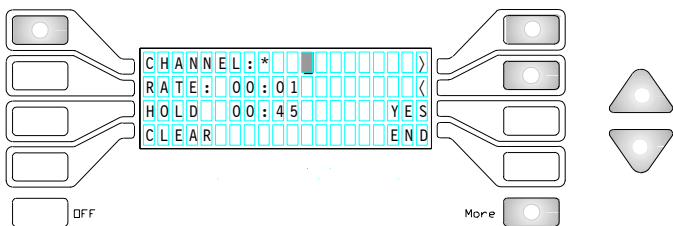
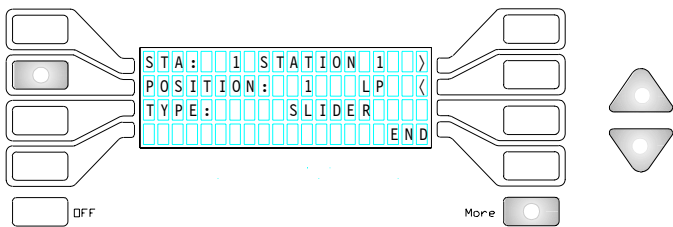
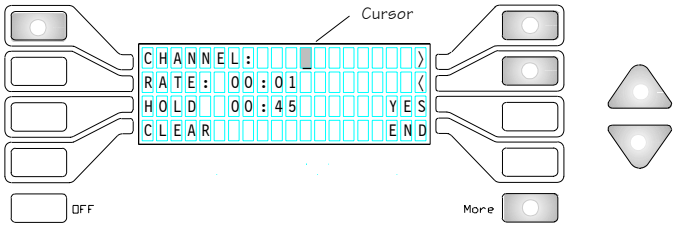
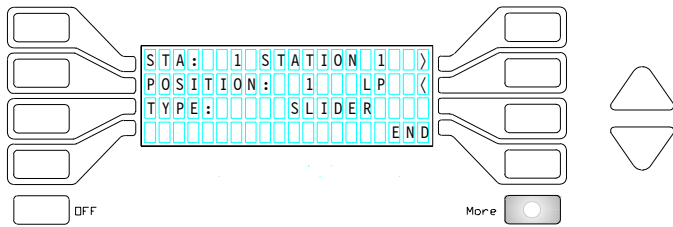
Button and UP/DOWN arrows will light.

Use the TYPE button to select either Slider or Switch

NOTE: This is used for Slider Stations with Switch buttons installed in that Slider position. It can also be used for making a slider position into a Non-Dim. The ON function will activate when the Slider reaches 50% or more.



CONFIGURATION



CONFIGURE SLIDERS

To Assign Channels to the Slider Position:

Press MORE from the SLIDER STATION menu.

The screen will appear with the Channel button illuminated and the cursor blinking on the channel line. The < > cursor positions and the UP/DOWN arrows as well as the MORE button will all be illuminated.

Assign Channel Numbers:

Use the UP/DOWN arrows to scroll the available channel numbers.

Use the lighted < > buttons to position cursor in the 1's, 10's or 100's column.

Press YES when the correct channel number is in position.

(Repeat this process for each channel number to be assigned in the selected slider position.)

Select the next Position:

Press the MORE button. This will restore the previous screen.

The POSITION button will be illuminated.

Use the UP/DOWN arrows to advance or descend position.

Assign a Channel to the next Position:

Press MORE. The previous screen will be restored.

(An asterisk () may appear next to a channel number. This means the number is already assigned a position. A channel number cannot be assigned to more than one position.)*

Select the next available channel number to be assigned to the position.

Press YES to accept the number.

Remove a Channel:

With the CHANNEL button illuminated, Press the UP/DOWN arrow to scroll the status of the Channel numbers. A YES/NO condition will appear per channel assignment.

CLEAR all assigned Channels:

Press CLEAR. A warning will appear asking for a confirmation.

Press YES to continue. All channels assigned to the station will be removed.

Press NO to stop the Clear action

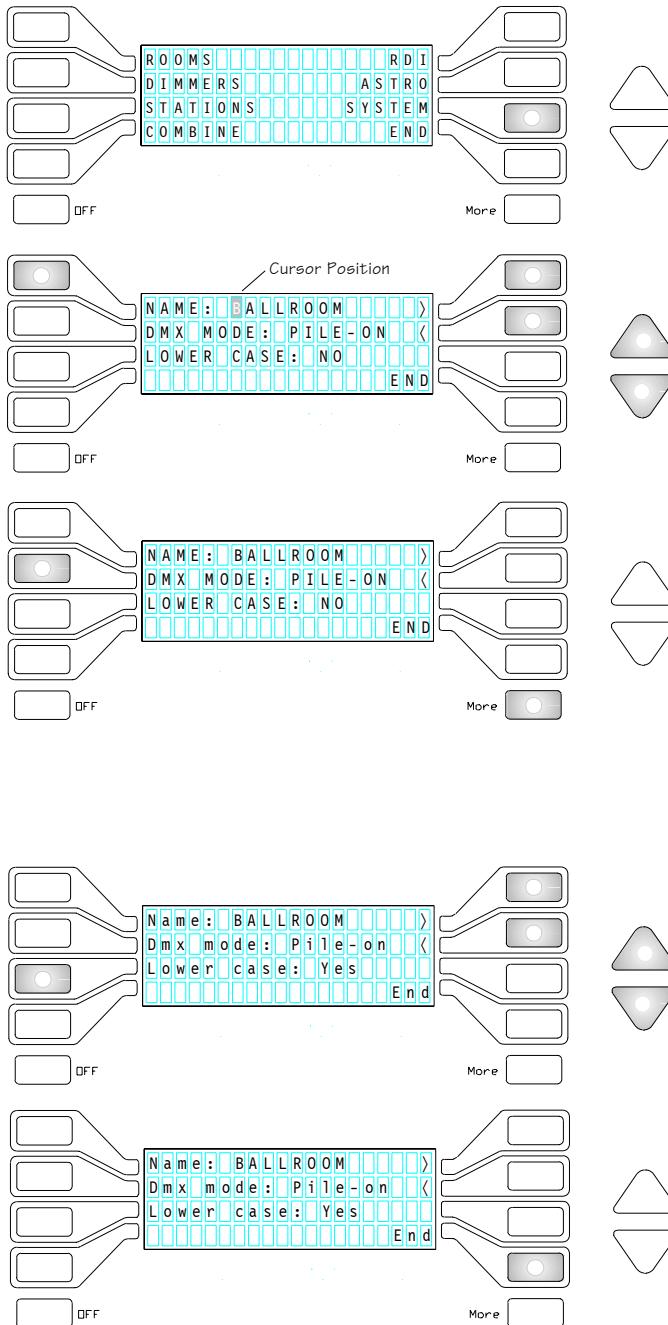
END:

Press END twice to return to CONFIGURATION menu.

(Pressing END closes the Station menu and stores the settings established to system memory.)

To SAVE TO DISK, See MEMORY TRANSFER, Page 8.

CONFIGURATION



CONFIGURE SYSTEM

The fifth step in the set-up procedure is to name the system and select the mode of operation. System settings affect how another control signal can be integrated into normal operation.

SYSTEM Configuration:

To access menu, press the SYSTEM button .
The SYSTEM CONFIGURATION screen will display.

NAME Facility:

Press NAME button to name system.
Press the < > buttons to position cursor.
Use the UP/DOWN arrows to select characters.

Set DMX MODE:

Press the DMX MODE button to select:

- PILE-ON:** will add the TSC levels to the incoming DMX signal HTP.
(*"Highest Level takes Precedence"*).
- PASS-THRU:** will inhibit levels from the TSC stations, asserting incoming DMX levels.
- SOLO:** will prevent other DMX inputs from affecting TSC outputs.

Set CHARACTER MODE:

Press the LOWER CASE button to toggle between YES and NO.
When enabled, TSC displays will appear in upper or lower case in ALL display windows.

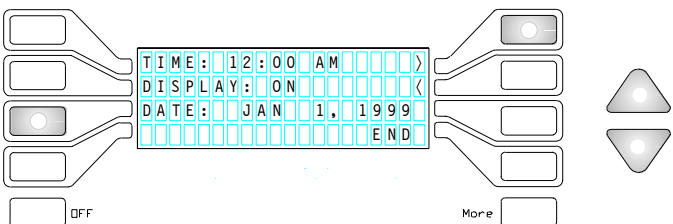
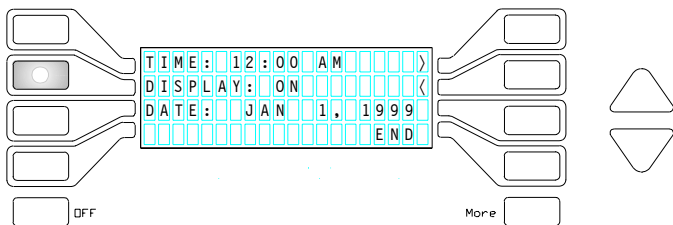
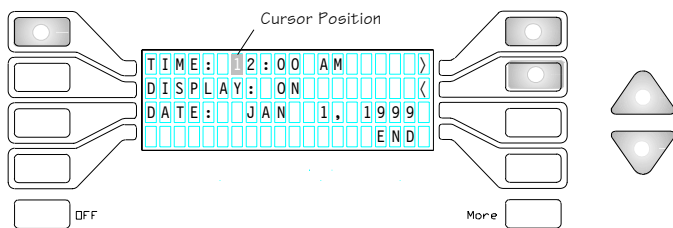
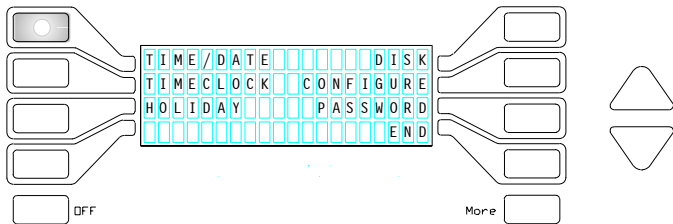
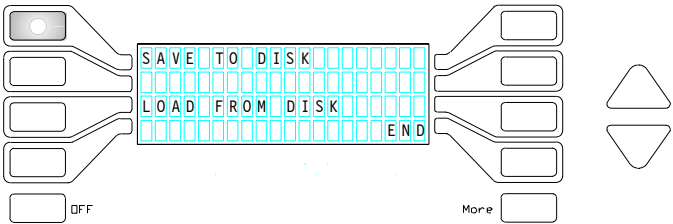
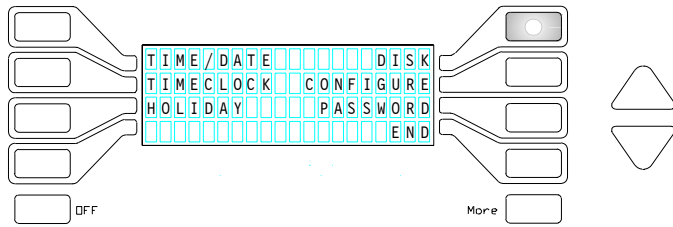
END:

Press the END button to return to CONFIGURE screen.
(*Pressing END closes the System menu and stores the settings established to system memory*)

Save Changes:

Press END again to return to FEATURE menu.

CONFIGURATION



CONFIGURE SYSTEM

FEATURE Menu:

From the FEATURE menu, press DISK .

SAVE TO DISK

Press SAVE TO DISK button to store settings.

(Follow MEMORY TRANSFER procedure described on page 8.)

Press END to return to FEATURE menu.

CONFIGURE TIME/DATE

The Time & Date feature sets system time and date for daily operation. Time Clock and Holiday features are controlled by system time and date.

Set TIME / DATE:

From the FEATURE menu, press the TIME/DATE button.

The current Time and Date will be displayed.

Set TIME:

Press the TIME button.

Use the < > buttons to position cursor.

Use the UP/DOWN arrows to select Hours, Minutes, or AM/PM.

Clock DISPLAY:

Press Display.

Use the DISPLAY button to select Clock display on Preset screen.

Set DATE:

Press the DATE button to access display.

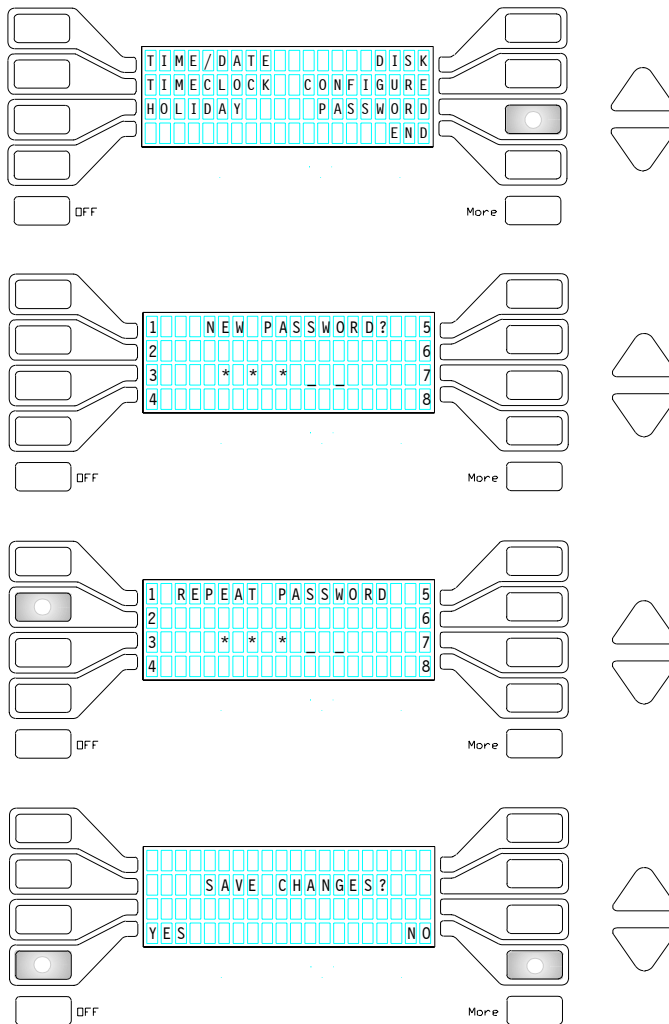
Use the < > buttons to position cursor

Use the UP/DOWN arrows to adjust Month, Day, Year.

Press END to return to FEATURE menu.

END automatically saves changes to system memory.

CONFIGURATION



CHANGE PASSWORD

The operating program can be easily accessed for updates and changes from the display station. To restrict access to the operating programs (EDIT, FEATURES, or PRESET selection), a Password restriction can be selected at the Configure Station menu, and can be changed monthly, weekly, or daily to control access to the program.

PASSWORD Menu:

From the FEATURES menu, Press the PASSWORD button to enter NEW PASSWORD screen.

NEW PASSWORD?:

Enter a new 5-digit numerical password. Numbers can be in any order. As digits are pressed, asterisks (*) are displayed. After the password is entered, the REPEAT PASSWORD SCREEN displays.

REPEAT PASSWORD:

Again, enter the same 5-digit numerical password. As digits are pressed, *'s are displayed.

SAVE CHANGES?:

If the passwords match, answer:
 YES - Adds new password.
 NO - Original password retained.
 Screen will revert to FEATURE menu.

SAVE TO DISK:

Follow procedure described in MEMORY TRANSFER, page 8.

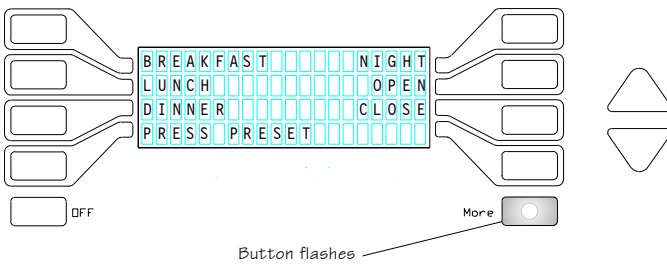
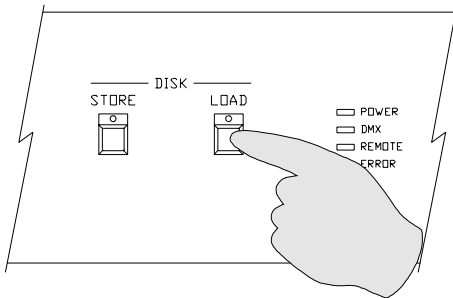
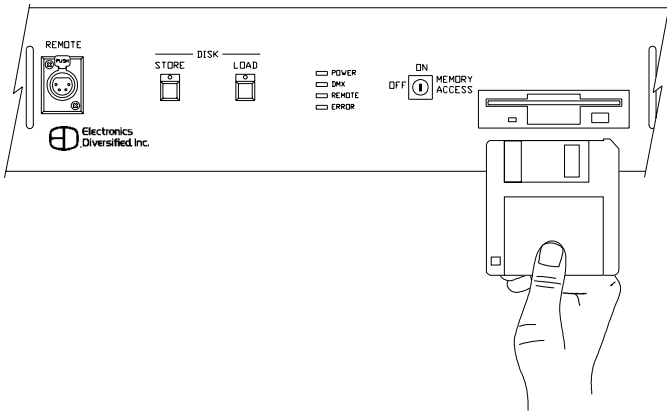
Press END to return to FEATURE menu.

(Pressing END closes the Password menu and stores the settings established to system memory.)



START-UP

from CONTROL MODULE



LOAD/CHANGE FROM CONTROL MODULE

The Twilite System Control electronics is a disk-based unit. The System memory can be loaded or changed at the electronics module by changing disks and following the procedure indicated below.

To Load a Program:

Press eject button to remove program disk in drive. Label disk envelope with date and program name. Review write-protect position. If system disk is programmed and changes are not intended to be recorded, use write-protect tab to protect disk.

NOTE: To restrict general changes in the program, reposition the key switch from Memory Access to the ON Position.

Press LOAD Button:

Disk indicator light will illuminate during disk read process.

When Load process is complete, Preset selections made prior to disk load will remain until a new Preset is selected. However, the display screen will update to the new program. A display station will show a message stating "PRESS PRESET."

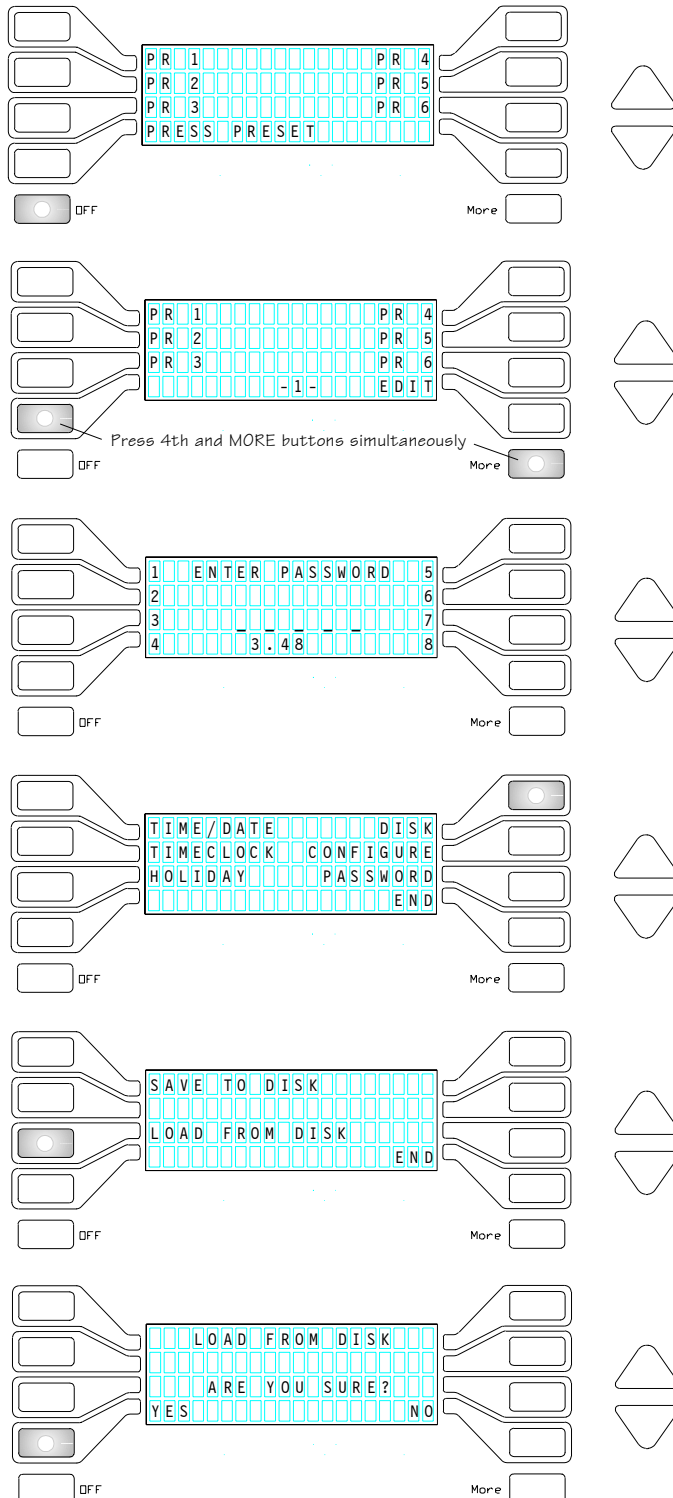
NOTE: A system disk should be present in the TSC electronics at all times. In an event where random access memory is lost, the TSC will automatically reload the program if a disk is resident in the control electronics.

PRESET Menu:

MORE button flashes to indicate memory was updated with disk contents. This is a special message (See Appendix A, page 48).

(To change settings in a configured system, follow CONFIGURE procedures beginning on page 9.)

START-UP from DISPLAY



LOAD FROM DISPLAY STATION

The Twilite System Control electronics allows a change in program to be initiated from the display station. After the disk has been changed in the controls electronics, follow the steps outlined below.

POWER UP (Pre-programmed Menu):

Pre-programmed Preset Screen appears when LCD is first turned on.

OFF button flashes (only during a power cycle and memory did not get corrupted.) This is a special message (See Appendix A, page 48).

*ACCESS Buttons

From the Preset screen:

Press the 4th and MORE buttons at the same time.

Password screen will display.

**(Access to the FEATURE menu is available only through the PRESET and PASSWORD screen).*

PASSWORD Menu:

Type in correct password for access to FEATURE menu.

(Password protection is set in CONFIGURE STATION menu).

FEATURE Menu will appear.

FEATURE Menu:

From the FEATURE menu, press DISK to access LOAD function:

LOAD FROM DISK:

Press LOAD FROM DISK button to load TSC.

Press END to return to FEATURE menu.

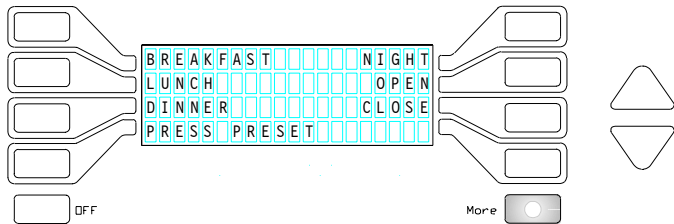
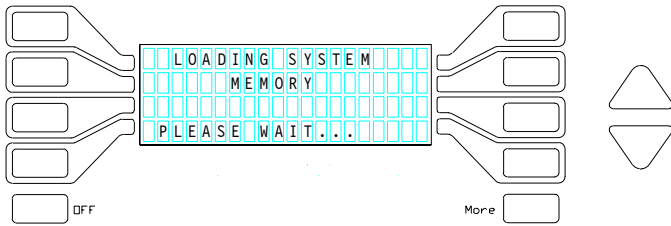
Confirm LOAD FROM DISK:

An ARE YOU SURE? message will display before the function is executed.

Select YES to load disk information.



START-UP from DISPLAY



LOAD FROM DISPLAY STATION

Confirm Message:

When DISK is active, display reads:

SAVING SYSTEM MEMORY

PLEASE WAIT. . .

(Message will disappear in about 12 seconds and screen reverts back to SAVE TO DISK screen)

Press END to return to FEATURE menu.

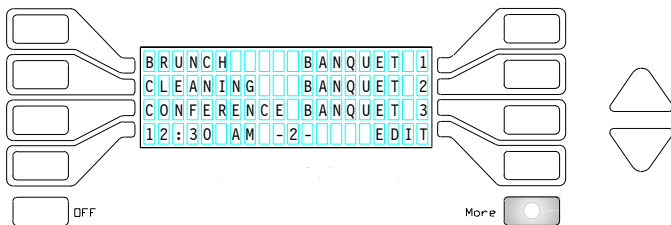
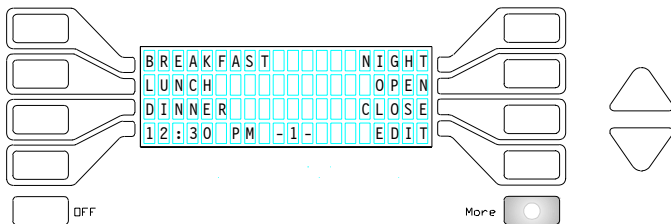
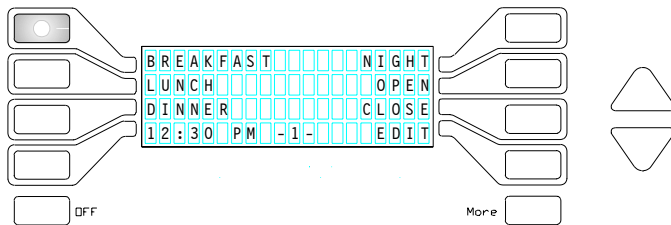
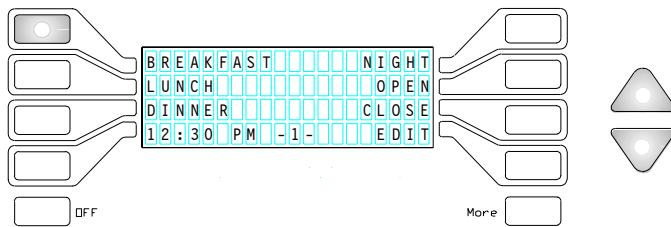
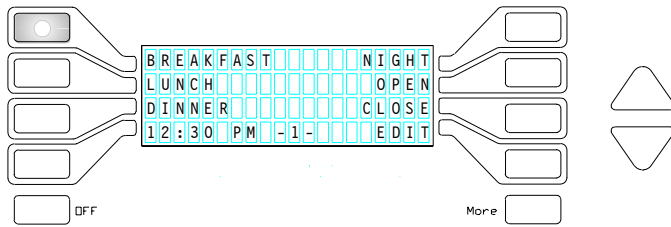
(Pressing END closes the menu and stores the settings established to system memory)

PRESET Menu:

MORE button flashes to indicate memory was updated with disk contents.

(To change settings in a configured system, follow CONFIGURE procedures beginning on page 9.)

DAILY OPERATION



SELECTING A PRESET

Each button is routed to a position on the display screen. Selecting or pressing the button causes the system to execute the labeled selection.

Press default PRESET:

Preset light will flash when fading, then stay illuminated when fade is complete.

If a Preset button is pressed twice, the fade will snap to the end.

Time and Date, page number, and EDIT will appear on the last line.

Adjust a PRESET:

With a Preset active, press the UP/DOWN arrows to adjust the output level of the Preset.

UP/DOWN arrows act as Grand Master.

If a fade is in progress, it will stop.

UP or DOWN arrow will light to indicate adjustment.

Station will hold level until next selection.

Restore a PRESET:

Press PRESET button to restore unmodified Preset.

Press MORE:

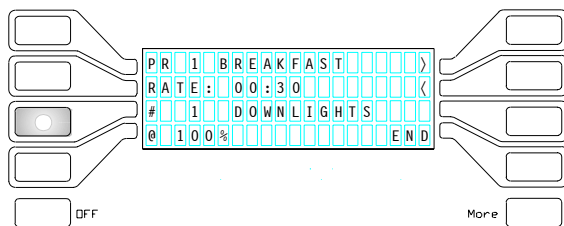
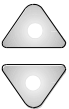
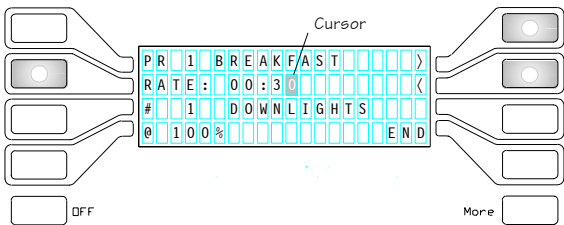
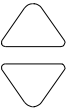
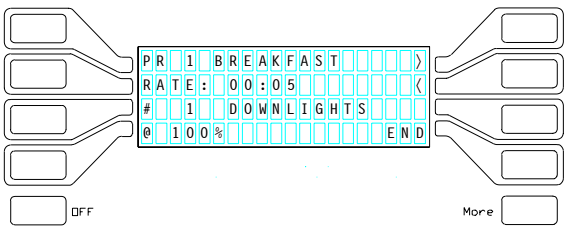
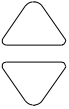
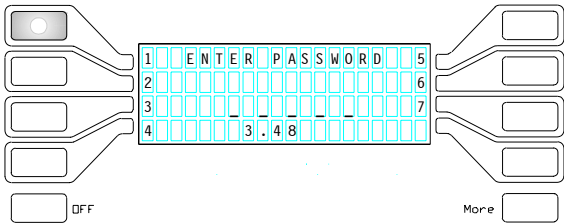
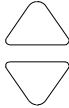
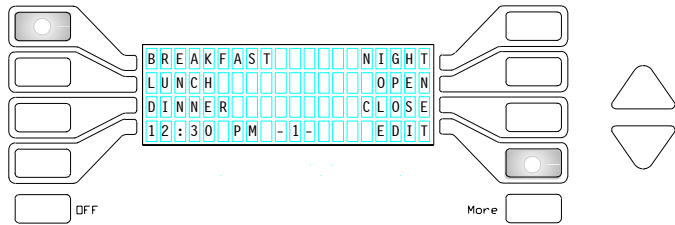
MORE button displays next configured page.

Active preset is displayed when button is illuminated.

MORE key is illuminated when display page is not on active preset page.



DAILY OPERATION



EDIT ACTIVE CHANNELS

The display station allows the operator to edit or review any channel or level information stored inside a preset.

Based on selections made in the CONFIGURE STATION menu, pressing EDIT may require a password to gain access to the edit menu.

To EDIT Presets:

With (any) preset active:

Press EDIT button to access Preset Edit screen.

Enter PASSWORD:

When Password Menu appears, enter the pre-determined 5-digit code to access secured menus.

(Password protection is set in CONFIGURE STATIONS menu. See Page 12.)

Preset EDIT Screen:

Active Preset is default for Edit screen.

Press RATE Button:

This will establish or change the Preset crossfade time.

Button will light when active, the < > buttons and the UP/DOWN arrows will light.

Use < > buttons to position cursor.

Use the UP/DOWN arrows to scroll field.

Select CHANNEL:

Press # button to select Channel.

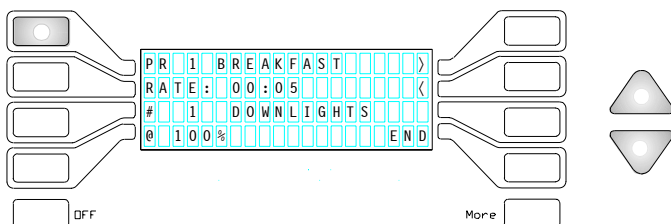
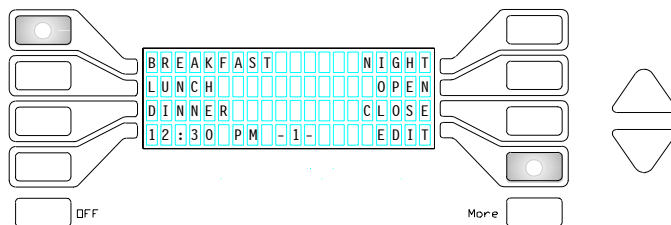
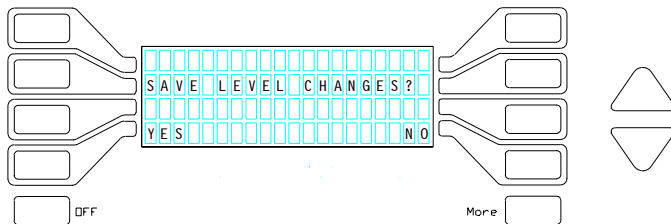
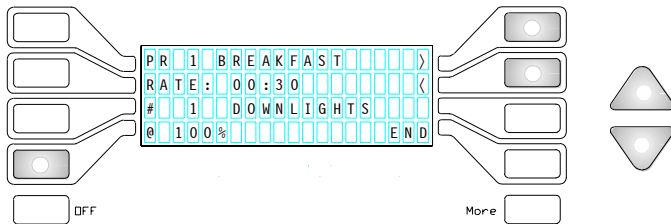
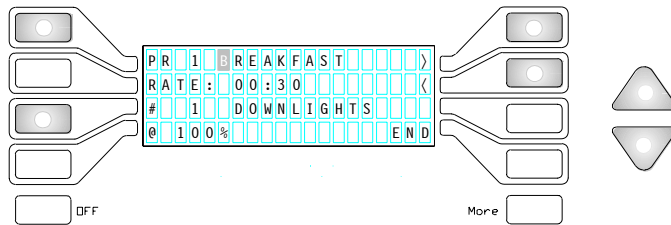
button and the UP/DOWN arrows will light.

Use the UP/DOWN arrows to select Channel.

Press < > arrows to position cursor.

When < > arrows are active (illuminated), UP/DOWN arrows scroll at the cursor position.

DAILY OPERATION



EDIT ACTIVE CHANNELS

Name PRESET (PR) or CHANNEL (#):

Press < or > button. Cursor will appear on the first character of the name.

Use the UP/DOWN arrows to scroll character field.

(Available characters listed on page 5.)

Set LEVELS:

Press @ button to select Level.

Use the lighted < > buttons to position cursor.

Use the UP/DOWN arrows to set or modify levels.

SAVE LEVEL CHANGES:

If changes have been made to Channel Levels, the display will prompt:

SAVE LEVEL CHANGES?

If NO is selected, the screen will revert to PRESET menu.

(To store changes for record, access SAVE TO DISK from FEATURE menu.)

BLIND EDITS

The display station will allow the operator to edit information in a preset which is not currently active. While an active preset is selected, the operator may enter the EDIT mode and review or change levels in another preset without affecting the current preset.

This condition is commonly referred to as "Blind" or "Passive" editing.

To EDIT:

With (any) preset active:

Press EDIT button to access Preset Edit screen.

To EDIT Blind:

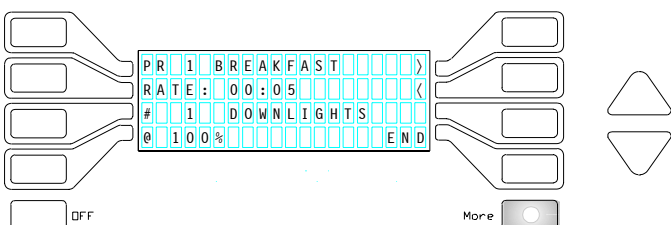
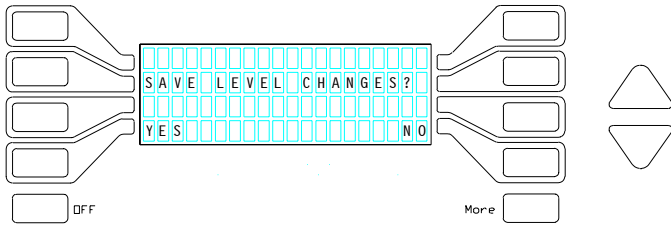
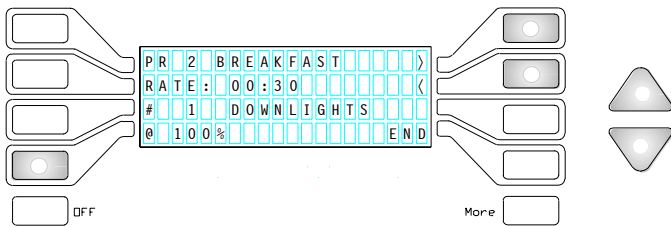
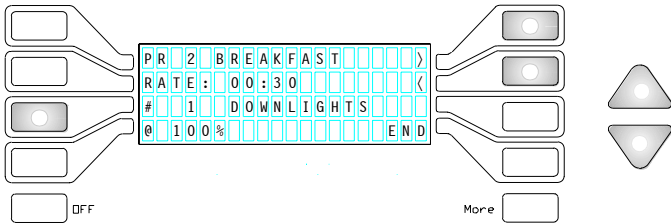
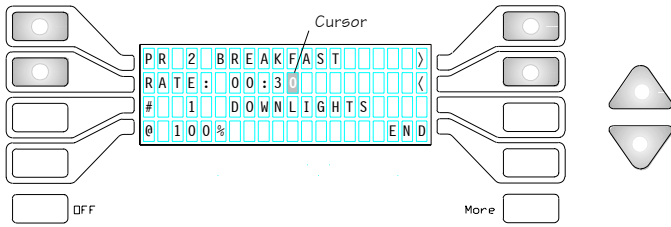
Press PR button

Button will light when active and UP/DOWN arrows will light.

Use the UP/DOWN arrows to access blind preset number to be edited.



DAILY OPERATION



BLIND EDITS

Press RATE Button . . .

. . . to establish or change the Preset crossfade time.
The PR button, the < > buttons, and the UP/DOWN arrows will light when active.
Use the < > buttons to position cursor.
Use the UP/DOWN arrows to scroll field.

Select CHANNEL(#):

Press # button.
button and UP/DOWN arrows will light.
Use the UP/DOWN arrows to select Channel.
Press < > arrows to position cursor. Arrows scroll at the cursor position.

Set Levels:

Press @ button to select Level.
Use the lighted < > buttons to position cursor.
Use the UP/DOWN arrows to set or modify levels.

SAVE LEVEL CHANGES:

If changes have been made to Channel Levels, the display will prompt:

SAVE LEVEL CHANGES?

If NO is selected, the screen will revert to PRESET menu.

To store changes for record, access SAVE TO DISK from FEATURE menu.

REMOTE LOCK

The second page of EDIT allows the operator access to electronic lock-out features which can restrict a station's ability to select a preset under certain conditions. If a preset is assigned REMOTE LOCK: ON, and the station is configured with remote lock ON, other stations in the same area cannot access any system setting when the preset with this feature is active.

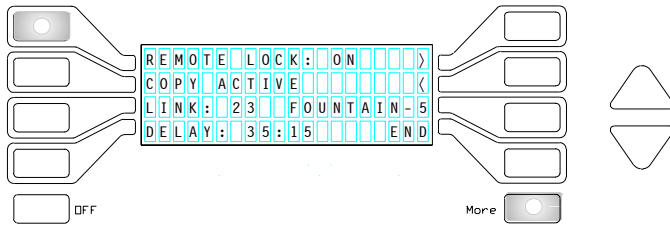
This capacity is useful when more than one station is active in a room.

NOTE: In order for this feature to be active, the station must have it's REMOTE LOCK ON in the CONFIGURATION Menu. NEVER enable the Remote Lock of the Designated Master Station.

MORE Selection:

Press MORE to access second edit page.
MORE button will stay illuminated to indicate second page.

DAILY OPERATION



REMOTE LOCK

Press REMOTE LOCK button to toggle between ON or OFF.

When switch ON, this preset attribute restricts other stations from changing the preset established from this station.

When switched OFF, presets can be recalled from any station.

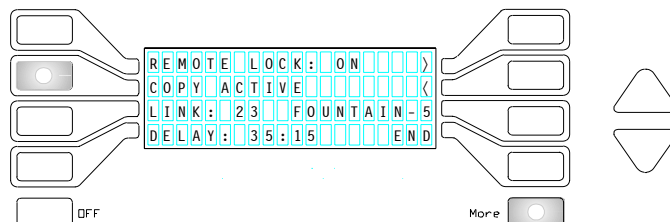
(See Configure Stations, page 12.)

COPY ACTIVE

The Twilite System Control has the capacity to allow an independent DMX signal source to merge with the existing levels created by the Display Station. This mode of operation is controlled by the System Menu. When the system menu is set in the "Pile On" mode, and an independent DMX source signal is present, the system dimmers will respond on a 'highest takes precedence' basis.

When the channels and levels addressed are active, the Twilite System Control can "learn" this information and record the information into a Preset. This procedure is called COPY ACTIVE.

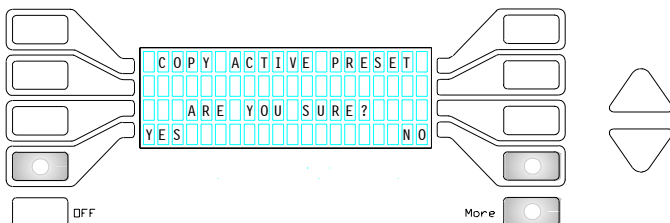
The COPY ACTIVE feature is designed to work with a dimmer-to-channel patch of one-to-one. Not all channels will copy if the dimmer-to-channel patch is grouped.



COPY ACTIVE:

Press COPY ACTIVE button to capture all pile-on channel addresses which may be generated by an independent DMX source.

COPY ACTIVE will record levels into active presets.

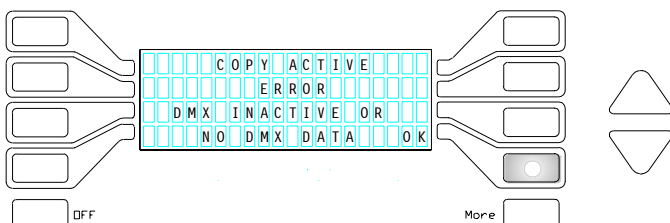


Confirm COPY ACTIVE:

Press YES or NO button to confirm or restore screen.

Copy Active is complete.

Pressing END automatically forces all changes to Random Access Memory



COPY ACTIVE ERROR:

If no DMX signal is active, the message

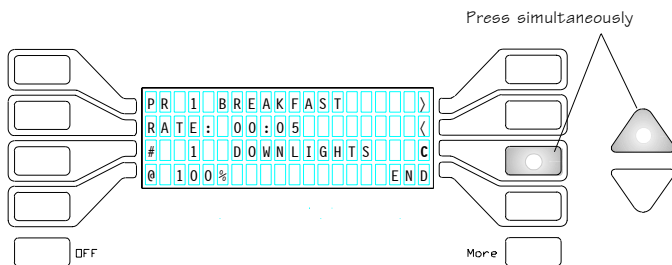
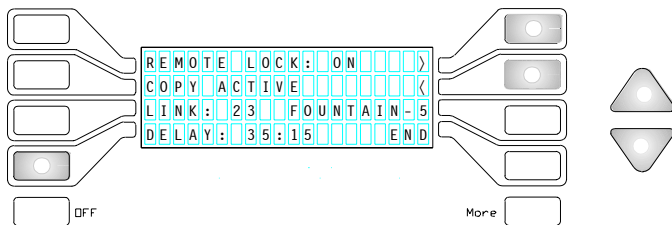
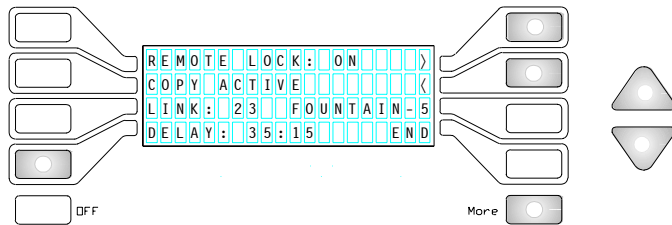
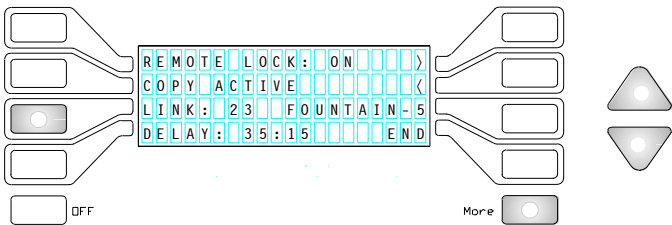
COPY ACTIVE ERROR

appears. check for improper hookup, or a bad wire.

Press OK to return to screen.



DAILY OPERATION



PRESET LINK

The second page of EDIT allows the operator the ability to link presets together.

LINK will force the system to automatically execute the preset assigned, based on the delay time entered.

LINK Presets:

Press LINK button to select.

Use the UP/DOWN arrows to select Preset to Link.

Preset name will be displayed as selected.

To disable, press the DOWN arrow until no preset is selected.

Linked Presets are connected by the time in the delay window. The Time is the duration after the start preset has ended.

Presets can be linked to any preset number and OFF.

LINK Presets (with DELAY):

Press DELAY button to select.

Cursor defaults to one-second position.

Use the UP/DOWN arrow to select Link Delay.

Use the < > buttons to select Minutes or Seconds.

(After delay time, the preset will automatically link to the specified preset. Delay count begins after the first preset fade time is complete. If no link is selected, the Delay cannot be accessed.)

Pressing END returns to Preset screen, and forces all changes to system memory.

To store changes on disk, press SAVE TO DISK function from FEATURE menu.

COPY / PASTE CUE

The "Copy Preset" feature facilitates a set of presets without having to redo presets that are the same or similar. The copy/paste ability for presets spans all rooms. This means that a preset can be copied from one room and pasted into another room with little effort.

The Copy/Paste feature is found on the first page of the Preset Edit menu.

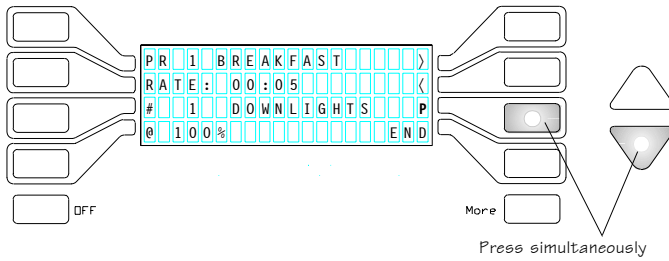
COPY a Preset:

Press the #7 Preset and the UP arrow together.

(The copied preset is the currently selected preset in the edit menu.)

If the COPY was successful, the letter 'C' will appear just next to the #7 button.

DAILY OPERATION



COPY / PASTE CUE

PASTE a Preset:

Press the #7 Preset and the DOWN arrow together.
(The preset copied to is the currently selected preset in the preset edit menu.)

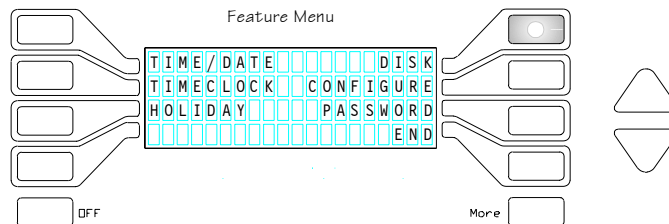
If the PASTE was successful, the letter 'P' will appear just next to the #7 button.

Pressing any button will clear the 'P' or 'C' after it is displayed.

STORING PRESETS

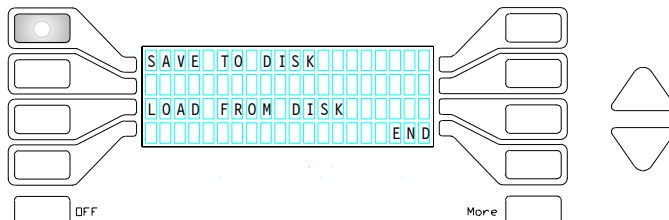
Any changes to channel or level information or advance edit features will be stored in Random Access Memory when the response is selected on the save changes screen.

To insure an accurate record copy of the system program, follow the procedure outlined below to store to the system disk.

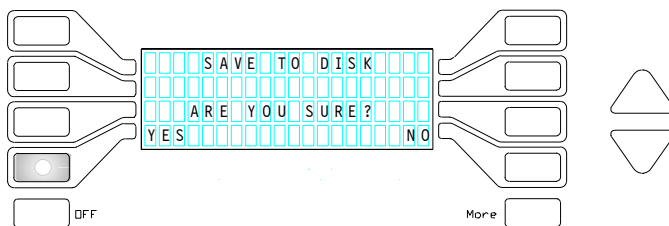


SAVE to DISK:

Select DISK function from FEATURE menu.



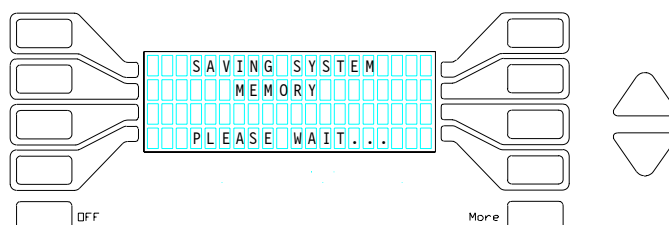
Press SAVE TO DISK to store any permanent changes.



Confirm SAVE TO DISK:

An ARE YOU SURE? message will display before the function is executed.

Select YES to store settings from RAM to the system disk.



Confirm Message:

When DISK is active, display reads:

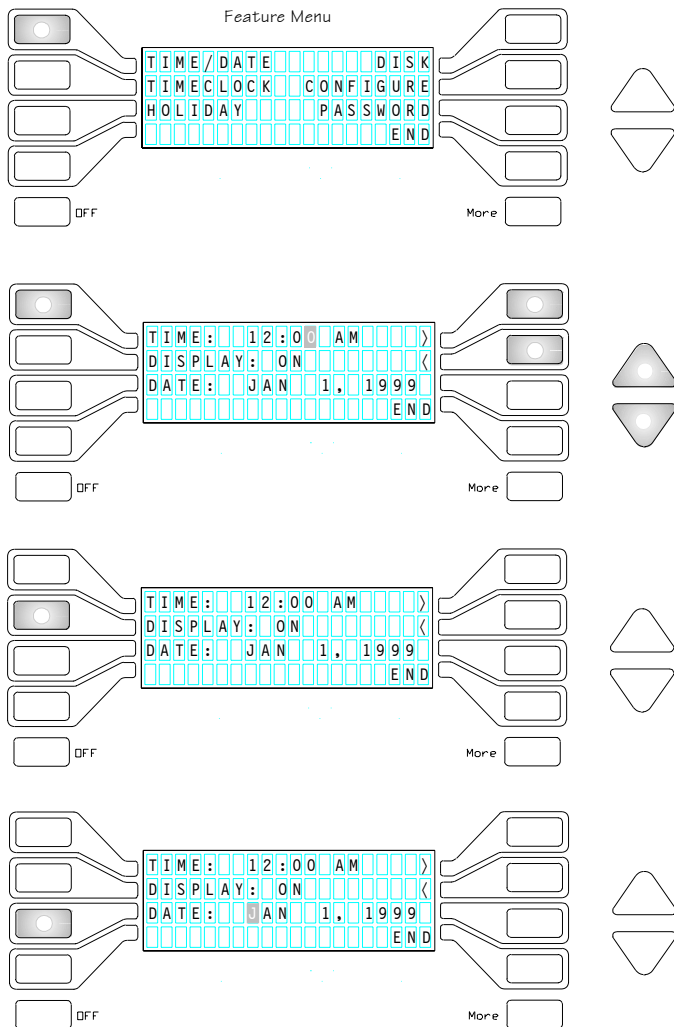
SAVING SYSTEM MEMORY
 PLEASE WAIT . . .

(Message will disappear in about 12 seconds and screen reverts back to SAVE TO DISK screen)

Press END to return to FEATURE menu.



FEATURES



TIME / DATE

The Display Station supports a Time & Date feature to allow events to be controlled automatically by the Timeclock.

To take advantage of these features, the Twilite System Control requires a frame of reference. Once the time, date and year have been established, the system can perform routine functions on a daily basis.

Set TIME / DATE:

Press the TIME/DATE button to access function.
The current Time and Date will be displayed.

Set TIME:

Press the TIME buttons to access function.
Use the < > buttons to position cursor.
Use the UP/DOWN arrows to select Hours, Minutes, or AM/PM.

Clock DISPLAY:

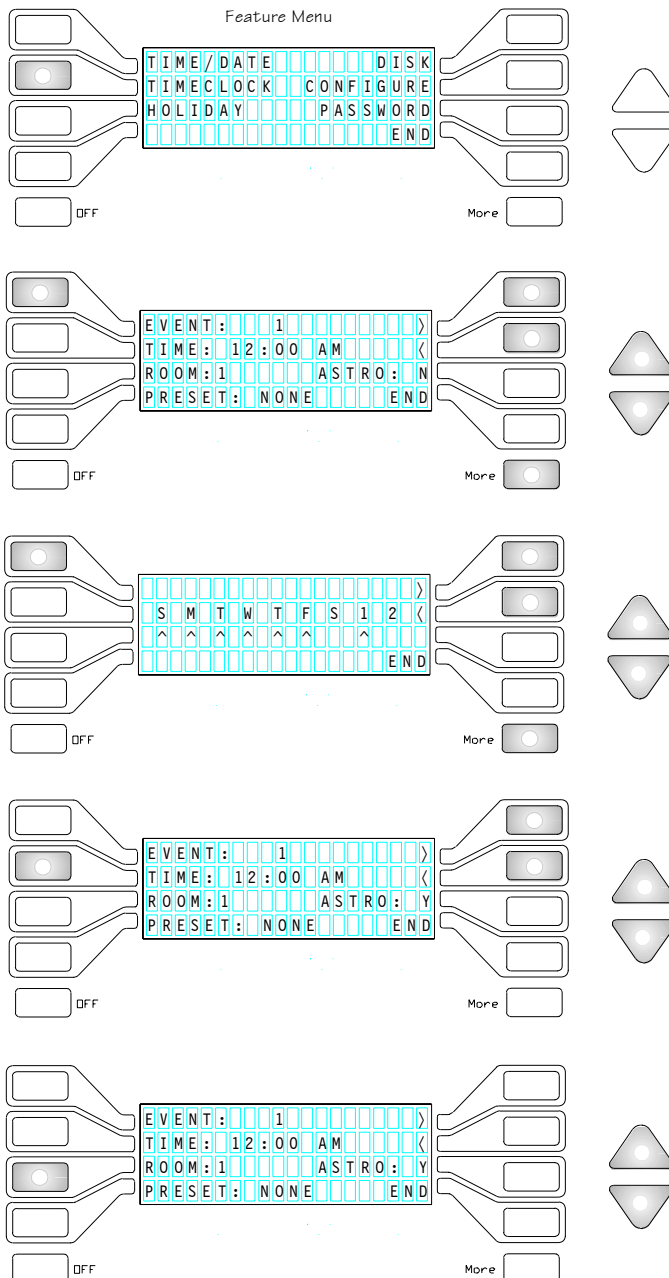
Press Display.
Use the DISPLAY button to toggle ON or OFF clock display on Preset screen .

Set DATE:

Press the DATE button to access function.
Use the < > buttons to position cursor.
Use the UP/DOWN arrows to adjust Month, Day, Year.
Years will scroll from 1990 to 2079.
Press END to access Save Changes screen.
Press YES to return to Features menu.

(Pressing YES closes the Time/Date menu and stores the settings established to system memory.)

FEATURES



TIMECLOCK

The Display Station has the capacity to control events through preset selection based on time of day. The TIME CLOCK feature allows the system to start or stop events based in separate room assignments, with the capacity to select standard or astronomical time (based on sunrise or sunset) as the basis for the event.

Time Clock events can be linked to additional presets through the Link & Delay features on the second page of the EDIT screen.

Program TIMECLOCK:

Press TIMECLOCK button to access feature.

The first screen of the Timeclock will be displayed.

Select EVENT:

Press the EVENT button to access function.

Use the < > buttons to position cursor for a text label.

Use the UP/DOWN arrows to scroll.

Up to 100 events may be programmed.

Press MORE to set days of week.

Set Day of Week (EVENT menu only):

Use the < > buttons to select day.

Use the UP/DOWN arrows to enable or disable day.

Press MORE again to return to EVENT menu.

(Pressing END automatically forces changes to system memory and returns to the FEATURE menu.)

Select TIME:

Press the TIME button to access start time.

Use the < > buttons to position cursor.

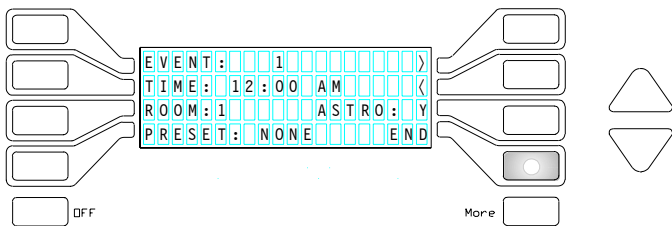
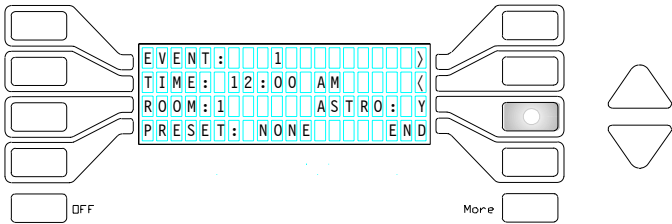
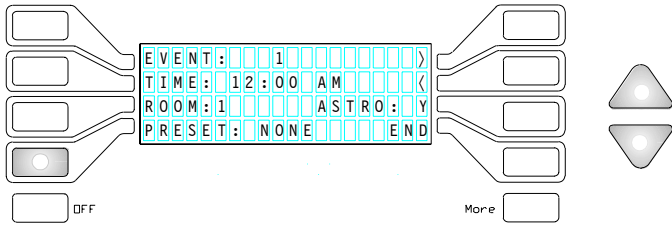
Use the UP/DOWN arrows to set time.

Select ROOM:

Press the ROOM button.

Use the UP/DOWN arrows to select the room for the timed event.

FEATURES



TIMECLOCK

Select PRESET:

Press the PRESET button to select preset.

Use the UP/DOWN arrows to select preset.

Preset will show: OFF, ON, NONE, or may be adjusted for up to "room" capacity.

Set Astronomical Time Mode:

Press the ASTRO button to select mode.

When pressed, the mode will toggle from YES to NO. When in ASTRO mode, the time will be adjusted every day for changes in sunrise and sunset.

(Astro is a control option and must be configured to operate properly. It is configured by pressing the MORE button from the FEATURE Menu, pressing the ASTRO button and entering the approximate latitude in degrees.)

END:

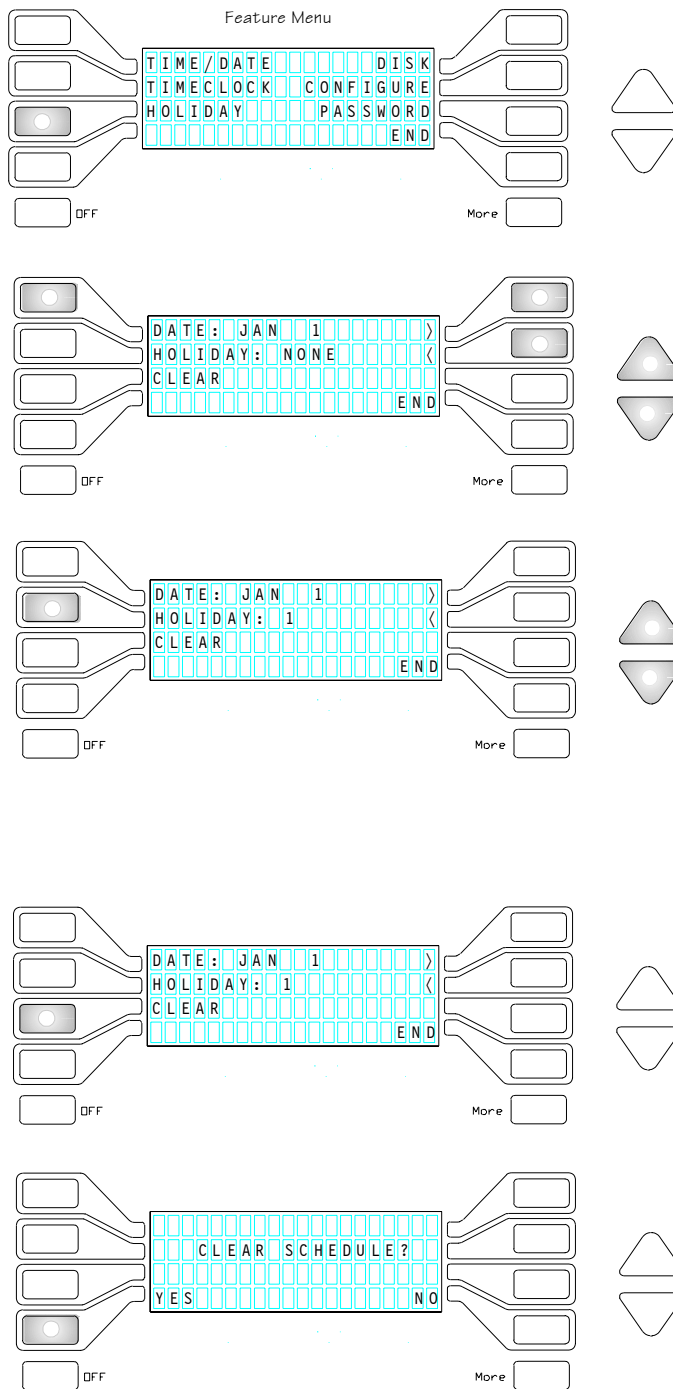
Press END to return to FEATURE menu.

(Pressing END closes the Timeclock menu and stores the settings established to system memory)

To Save Changes:

Select DISK function from FEATURE menu, press SAVE TO DISK to store any changes.

FEATURES



HOLIDAY SCHEDULE

The Display Station supports two independent schedules which allow Time Clock events which may be different from the normal daily schedule.

These schedules are detailed under the HOLIDAY Schedule menu.

Program HOLIDAY:

From the FEATURES Menu, press the HOLIDAY button to access function.

The Holiday Schedule screen will be displayed.

Set DATE:

Press the DATE button to access function.

Use the < > buttons to position cursor.

Use the UP/DOWN arrows to select Month and Date.

Set HOLIDAY:

Press the HOLIDAY button.

Use the UP/DOWN arrows to select between Holiday 1, 2, or NONE.

(Must also be programmed in TIMECLOCK EVENT to become active.)

To Set Schedule:

Follow programming instructions for TIMECLOCK EVENT on page 31.

CLEAR Schedule:

Press the CLEAR button.

CLEAR SCHEDULE? will appear.

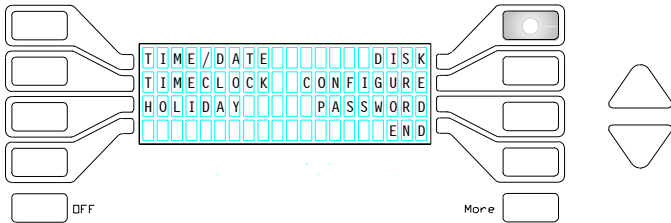
Press YES to clear Holiday 1 and 2 settings.

(TIMECLOCK EVENT settings become inactive if Holiday schedule is cleared)

Press NO to retain schedules



FEATURES



DISK ACCESS - SAVE

Pressing SAVE on any screen, or YES to an "Are You Sure?" message will record changes to Random Access Memory.

For a record copy of any changes, save to disk. Daily Operations should include permanent changes in the program recorded to disk.

DISK Functions:

From the FEATURE menu, select DISK function and press SAVE TO DISK to store changes.

(Follow procedures in MEMORY TRANSFER, page 8.)

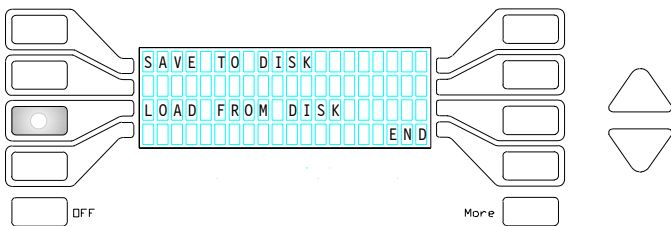
DISK ACCESS - LOAD

The Display Station supports a manual 'load' feature directly from the display.

The Load command will automatically introduce new disk information into system memory whenever the "LOAD FROM DISK" button is selected.

DISK Access:

From the FEATURE menu, select DISK function. Press LOAD FROM DISK to store changes.



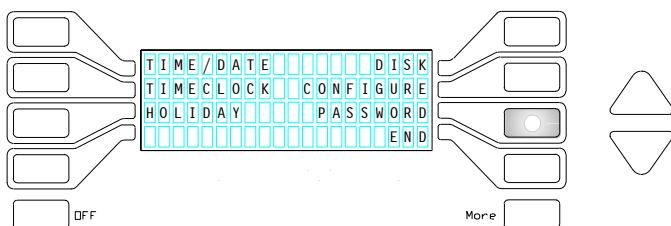
CHANGE PASSWORD

To restrict access to the operating programs, (EDIT, FEATURES, or PRESET selection), a Password restriction can be selected at the Configure Station menu, and can be changed monthly, weekly, or daily to control access to the program.

PASSWORD Menu:

From the FEATURES menu, Press the PASSWORD button to enter NEWPASSWORD screen.

Follow procedures listed on page 24.



ADVANCED OPERATION

COMBINE / PARTITION

The Display Station offers the capacity to combine or partition rooms for separate or joined control.

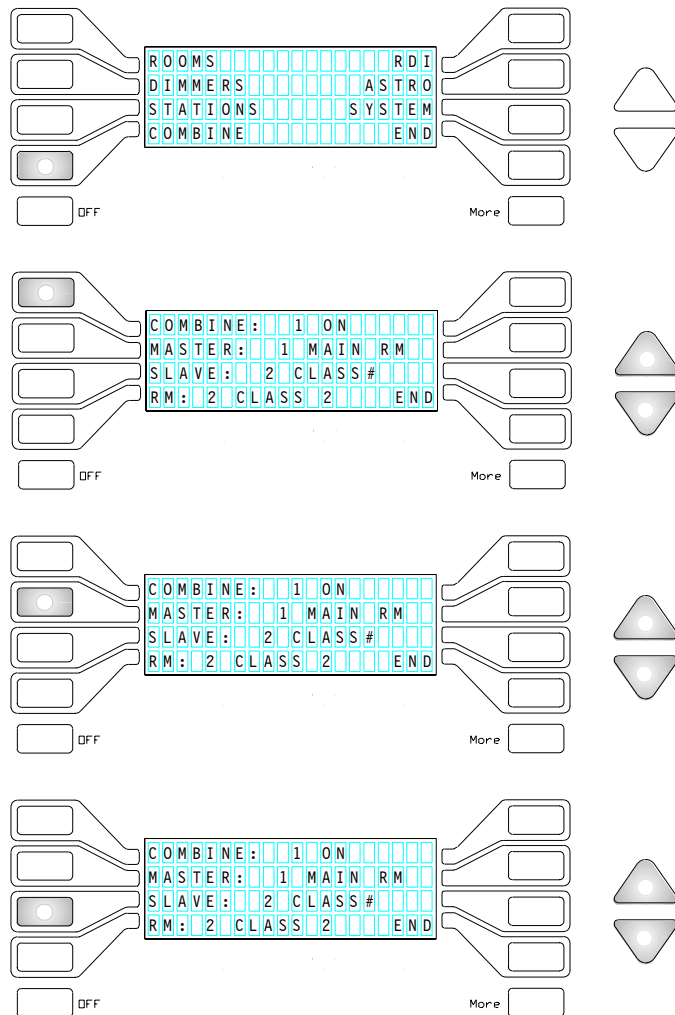
Common applications for this feature would be found in Meeting Rooms and Ballroom configurations where wall partitions literally separate the rooms.

Any station assigned the master position will hold the presets for the room. Stations assigned to a slave position will operate the Master's presets when the combine switch is active.

During this combined state, Master and Slave stations share the same memory and take control from one another.

When the COMBINE switch is deselected, stations restore to the requirements of the individual rooms where concurrent operation may take place.

Access to COMBINE/PARTITION switches should be controlled in order to insure correct operation of partitioned rooms.



Configure COMBINE:

From the CONFIGURE menu, press the COMBINE button to access switch selection.

Button will light when active, and the UP/DOWN arrows will light.

Use the UP/DOWN arrows to address the switch number which will reflect the combination.

Set MASTER:

Press the MASTER button to select station to control the room combination.

Button will light when active, and the UP/DOWN arrows will light.

Use the UP/DOWN arrows to set the address number.

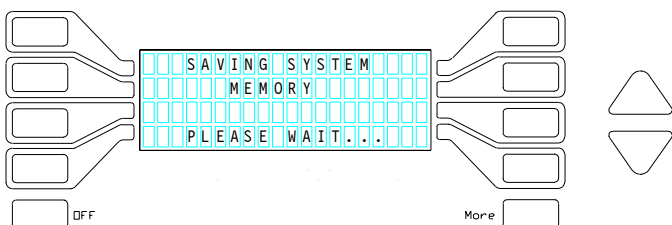
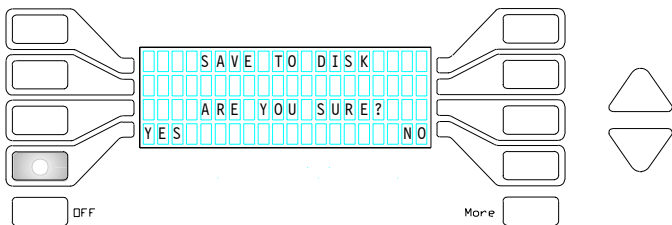
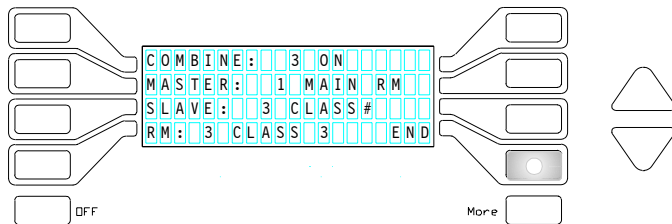
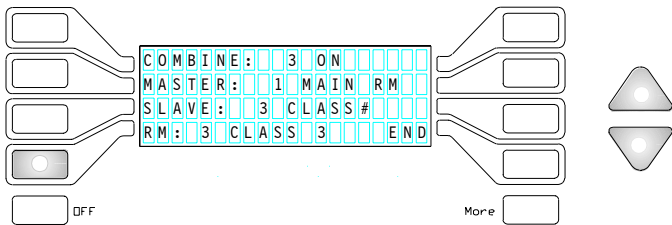
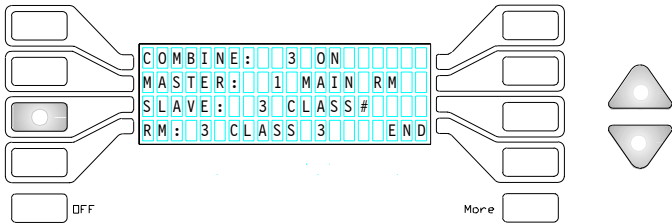
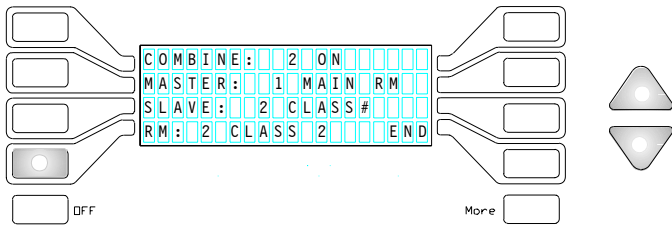
Set SLAVE:

Press the SLAVE button to access slave number which defaults to Master.

Use the UP/DOWN arrows to address number.



ADVANCED OPERATION



COMBINE / PARTITION

Set ROOM:

Press the RM button to access room number which defaults to Master.

Use the UP/DOWN arrows to address number.

(To set more than one room as Slave, repeat process Set SLAVE, Set ROOM as Memory Allocation allows, minus the designated MASTER room. See below.)

(Repeat) Set SLAVE:

Press the SLAVE button again to access second station number which defaults to Master.

Use the UP/DOWN arrows to address number.

(Repeat) Set ROOM:

Press the RM button again to access second room number which defaults to Master.

Use the UP/DOWN arrows to address number.

END:

Press END to save changes, return to CONFIGURATION menu.

Press END again to return to FEATURES menu.

SAVE CHANGES:

From the FEATURES menu, select DISK function and press SAVE TO DISK to store any changes.

Confirm Message:

When DISK is active, display reads:

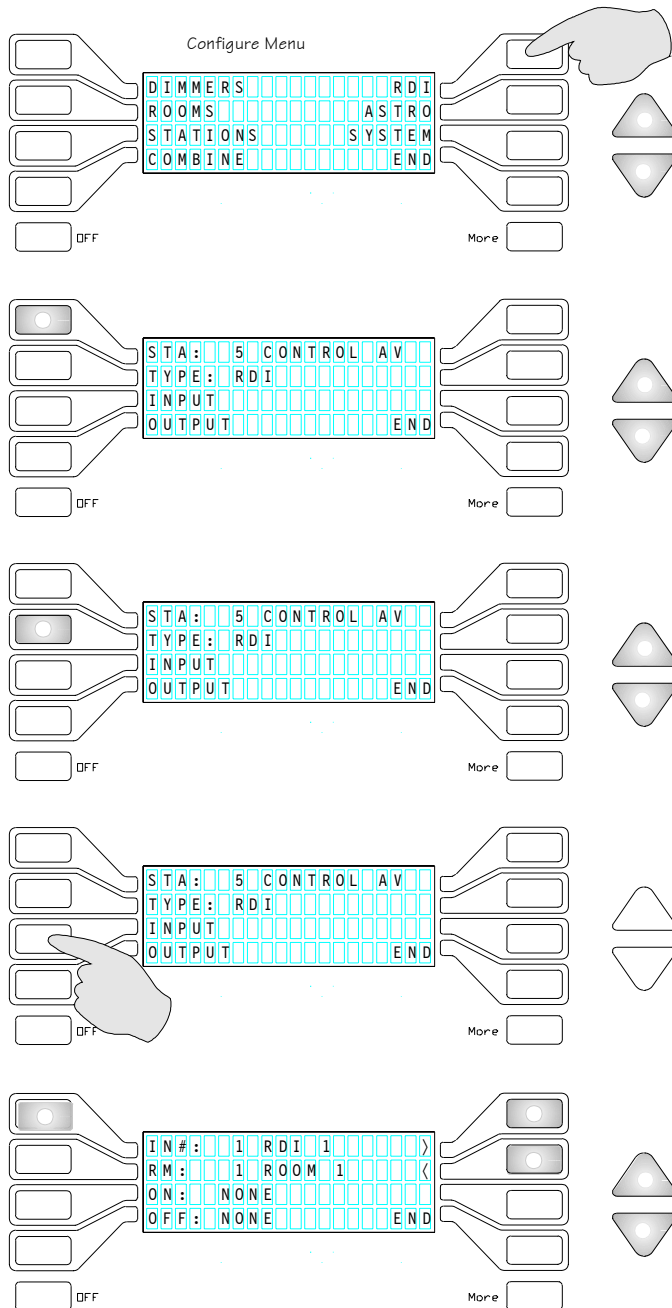
SAVING SYSTEM MEMORY
PLEASE WAIT

(Message will disappear in about 12 seconds and screen reverts back to SAVE TO DISK screen)

Press END to return to FEATURE menu.

(Pressing END closes the menu and stores the settings established to system memory)

ADVANCED OPERATION



CONFIGURE RDI INPUT

The display station can support a remote device input card which allows a common closure, Form C momentary or maintained, to make program selections.

When a system is outfitted with an RDI, the user can select the action the closure will activate from the display screen.

Configure Remote Device Interface:

Press the RDI button to select.

The CONFIGURE RDI screen will be displayed.

Select STATION:

Press STA button to select.

Button will light when active, and the UP/DOWN arrows will light.

Use the UP/DOWN arrows to select RDI.

(Station name is set in CONFIGURE STATION screen)

View TYPE:

The TYPE button shows what station type is configured in the room.

Select INPUT:

Press the INPUT button.

The INPUT screen will appear.

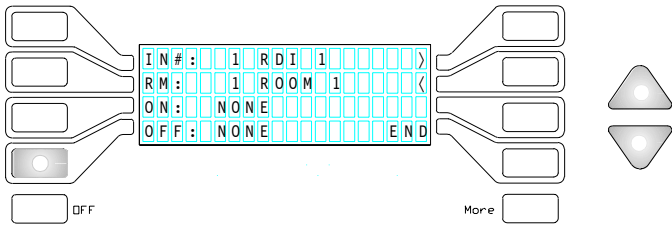
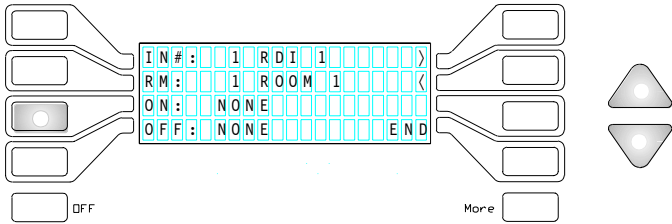
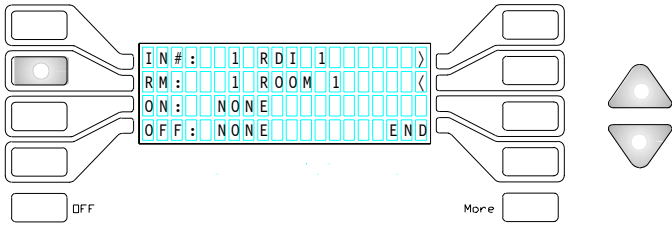
Press the IN# button to access the input port number. Button will light when active, the < > buttons and the UP/DOWN arrows will light.

Use the < > buttons to position cursor.

Use the UP/DOWN arrows to scroll character field.



ADVANCED OPERATION



CONFIGURE RDI INPUT

Select ROOM:

- Press the RM # button.
- Button will light when active, and the UP/DOWN arrows stay lit.
- Use the UP/DOWN arrows to scroll rooms.

Select ON Action:

- Press the ON button to select.
- Button will light when active, and the UP/DOWN arrows stay lit.
- Use the UP/DOWN arrows to select ON, OFF, NONE, or a valid preset number.

Select OFF Action:

- Press the OFF button to select.
- Button will light when active, and the UP/DOWN arrows stay lit.
- Use the UP/DOWN arrows to select ON, OFF, NONE, or a valid preset number.

END:

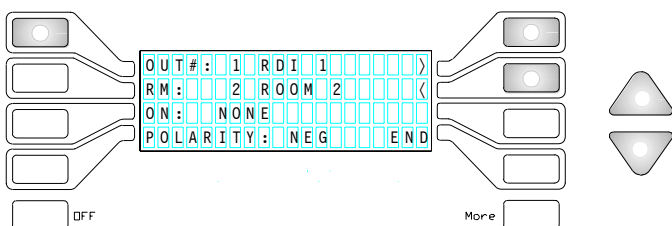
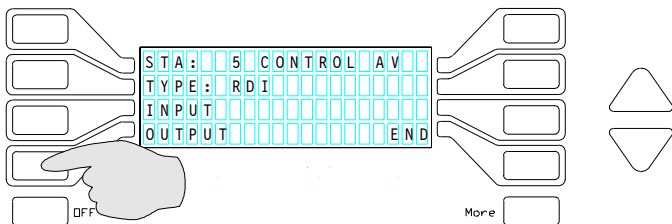
- Press END to save all changes and return to the CONFIGURE RDI screen.

CONFIGURE RDI OUTPUT

A system equipped with a Remote Device Input card can also provide an output closure for each programmed action. The output closure can be used as an active feedback circuit to control pilot light, mimic panels, or other devices which reflect the active condition of the system.

Select OUTPUT from the RDI screen:

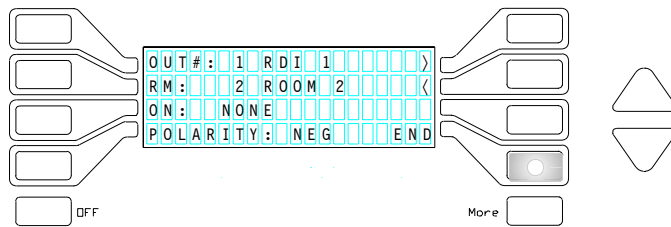
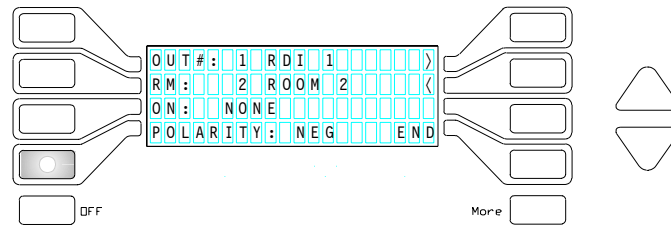
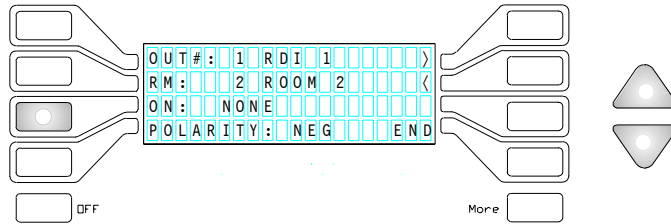
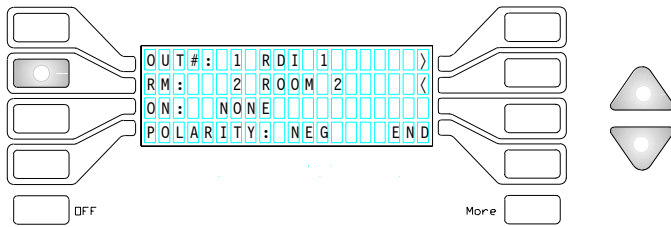
- Press the OUTPUT button.
- The OUTPUT screen will appear.



- Press the OUT# button to access the input port number.
- Button will light when active, the < > buttons and the UP/DOWN arrows will light.
- Use the < > buttons to position cursor.
- Use the UP/DOWN arrows to scroll character field.



ADVANCED OPERATION



CONFIGURE RDI OUTPUT

Select ROOM:

Press the RM # button.

Button will light when active, and the UP/DOWN arrows stay lit.

Use the UP/DOWN arrows to scroll rooms.

Select ON Action:

Press the ON button to select.

Button will light when active, and the UP/DOWN arrows stay lit.

Use the UP/DOWN arrows to select ON, OFF, NONE, or a valid preset number.

Select POLARITY:

Press the POLARITY button to select between POS and NEG.

POS is active when output action is active.

(Triggered by Trailing edge of signal.)

NEG is active when output action is inactive.

(Triggered by Leading edge of signal.)

Standard setting for RDI units is NEGATIVE.



END:

Press END to save and return to CONFIGURATION menu.

Press END again to return to FEATURES menu.

To SAVE TO DISK, follow procedures on page 8.

CONFIGURE ASTRO

The Display Station may offer an optional Astronomical Time Clock feature for control of all time clock events with astronomical time.

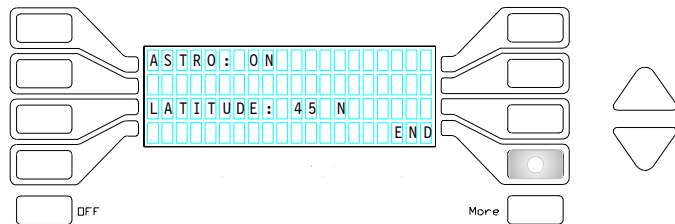
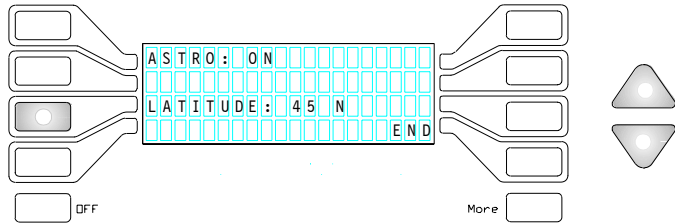
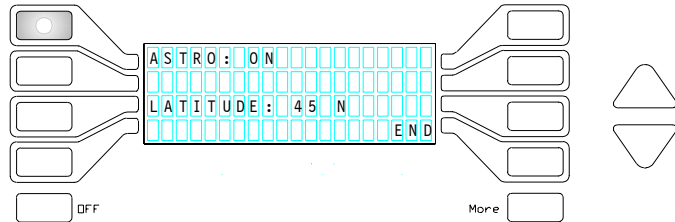
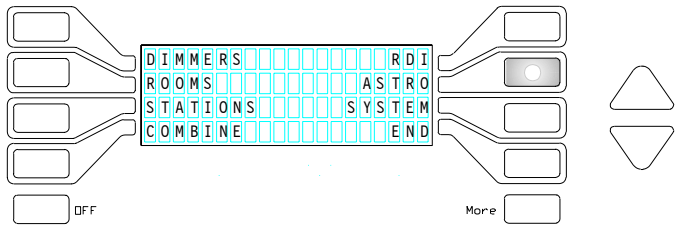
Astronomical Time establishes the time action based on the latitude of the installation. Astronomical Time differs from standard time by maintaining a consistent relationship to sunrise and sunset.

If a timed action is set to start ten minutes after sunset, astronomical time, the display station maintains the 10 minute interval even though the sunset time changes each day.

Astronomical time is switched off or on in the Time Clock display in the FEATURE menu.



ADVANCED OPERATION



CONFIGURE ASTRO

Configure Clock:

Press ASTRO button to select.

The Astronomical time clock configuration screen will be displayed.

Enable Clock:

Press ASTRO button ON and OFF to globally enable/disable all Astro events.

Set LATITUDE:

Press LATITUDE button to select exact North or South position.

Button will light when active, and the UP/DOWN arrows will light.

Use the UP/DOWN arrows to select latitude.

END:

Press END to return to ASTRO screen.

(Pressing END closes the menu and stores the settings established to system memory)

SAVE CHANGES:

Press END to return to CONFIGURATION menu.

Press END again to return to FEATURE menu.

Select DISK function and press SAVE TO DISK to store system memory changes.

SYSTEM CONTROLS

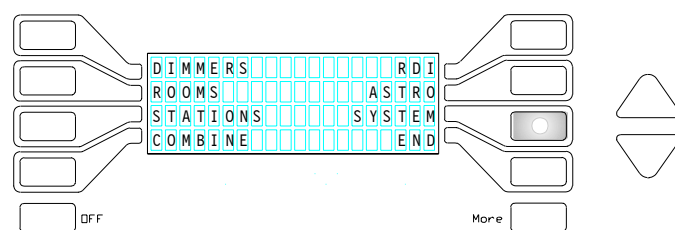
The Twilite System Control electronics will be located in or adjacent to the main dimmer bank. The System Control electronics operate as the heart of the system, with all stations communicating directly with the processor.

The Display backlight and Time-Out issues can be defined from the System menu.

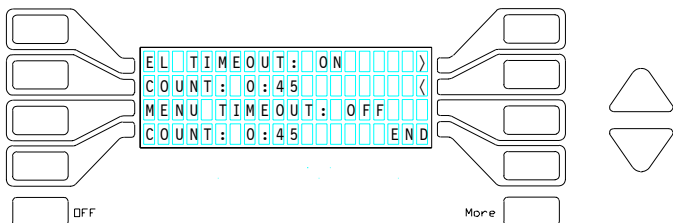
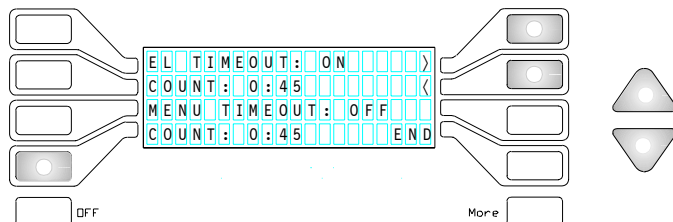
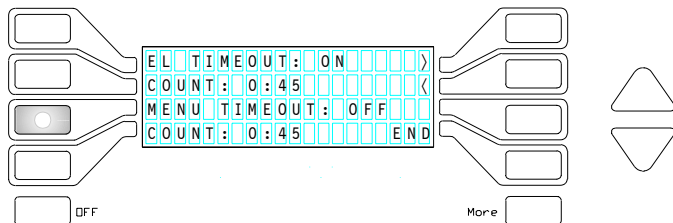
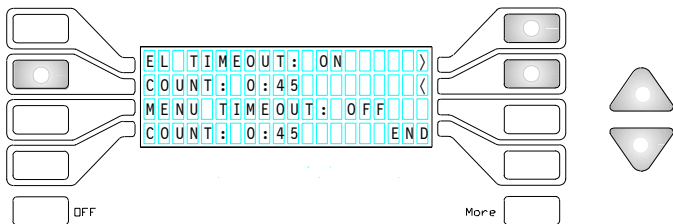
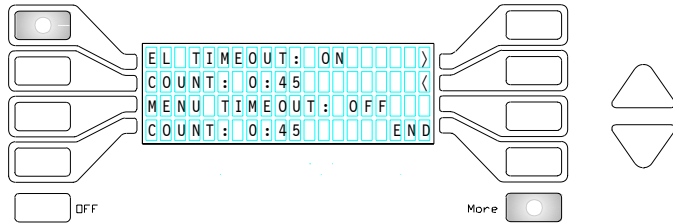
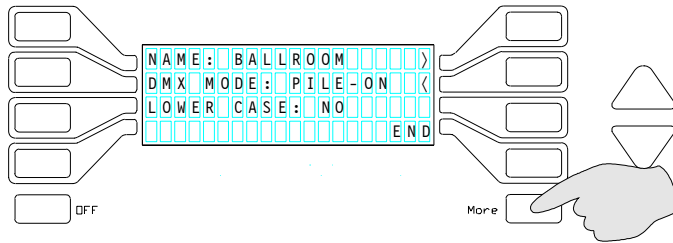
To Access SYSTEM Menu:

Press the SYSTEM button .

The SYSTEM CONFIGURATION screen will display.



ADVANCED OPERATION



SYSTEM CONTROLS

Press MORE:

Press MORE button to access control system.

Select EL TIMEOUT:

Press EL TIMEOUT button to select Backlight control. Count feature only operates when EL Timeout is ON. Button selection operates as alternate action, OFF or ON.

Select COUNT:

Press COUNT button to access the time for the Backlight. Press the < > buttons to position cursor in seconds or minute fields. Use the UP/DOWN arrows to scroll the number fields.

Select MENU TIMEOUT:

Press the MENU TIMEOUT button to select the timeout function. Count feature operates only when MENU TIMEOUT is ON. Button selection operates as alternate action, OFF or ON.

Select COUNT:

Press COUNT button to access the time for the return to the Preset menu. Press the < > buttons to position cursor in seconds or minute fields. Use the UP/DOWN arrows to scroll the number fields.

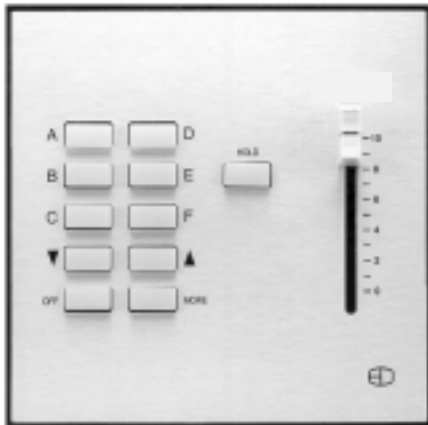
END:

Press END to return to the CONFIGURE screen.
(Pressing END closes the menu and stores the settings established to system memory)

SAVE CHANGES:

Press END again to return to FEATURE menu.
(Select DISK function and press SAVE TO DISK to store changes.)

ACCESSORIES



Playback Station



PLAYBACK STATION

The Play Back Remote Station adds a Master Slider function to the 10-button Remote.

To Operate the Station:

Press the top three buttons in the left or right column. Button will flash during preset crossfade.

Press Preset button a second time to snap the preset into position.

Use the UP/DOWN arrows to proportionally raise or lower the Preset.

Press MORE key to access the next page. Pressing the HOLD button will transfer control of the active preset to the manual slider.

Press OFF to access off condition.

To Configure REMOTE LOCK:

Identify Station # in display station's CONFIGURE STATION Menu.

Use TEST buttons to confirm station number.

Select REMOTE LOCK feature ON.

10-BUTTON REMOTE

Twilite Display Presets are available through Remote Stations. The 10-button station can be used as a remote control station for any room.

To Select a PRESET:

Press the top three buttons in the left or right column. Button will flash during preset crossfade.

Press Preset button a second time to snap the preset into position.

Use (UP) or (DOWN) arrows to proportionally raise or lower the preset.

Press MORE key to access the next page.

Press OFF to access Off condition.

To Configure REMOTE LOCK:

Identify Station # in display station's CONFIGURE STATION Menu.

Use TEST buttons to confirm station number.

Select REMOTE LOCK feature ON.

ACCESSORIES



2-BUTTON REMOTE

Twilite Display Presets are available through Remote Stations. The 2-button Remote is commonly used as an Entry Station.

To Select a PRESET:

Press the ON button to select a dedicated preset on the 2-button station.

(See Configure Station, page 15 for selection.)

Press the button twice to snap the preset to position without the time fade.

Press the OFF button to select an off condition. The station button will blink during crossfade.

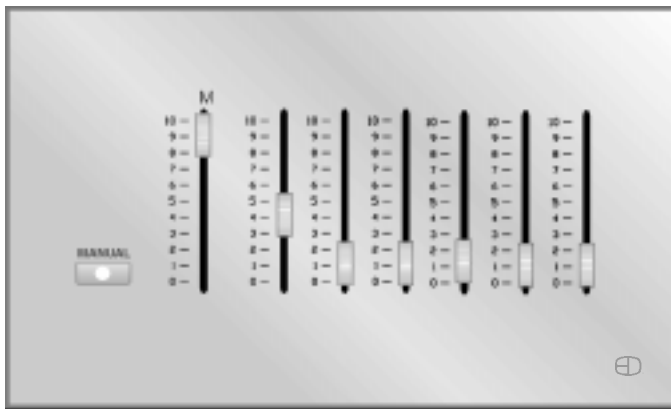
(See Configure Station, page 16 for Page ON/OFF buttons.)

To Configure REMOTE LOCK:

Identify Station # in display station's CONFIGURE STATION menu.

Use TEST buttons to confirm station number.

Select REMOTE LOCK feature ON.



Linear Slider Station

LINEAR SLIDER STATION

The Twilite System LS, or Linear Slider Station offer traditional manual slider control for mixed-use systems.

To adjust a Preset:

Press the Manual button to take control of the active Preset. Move the associated sliders to their designated levels.

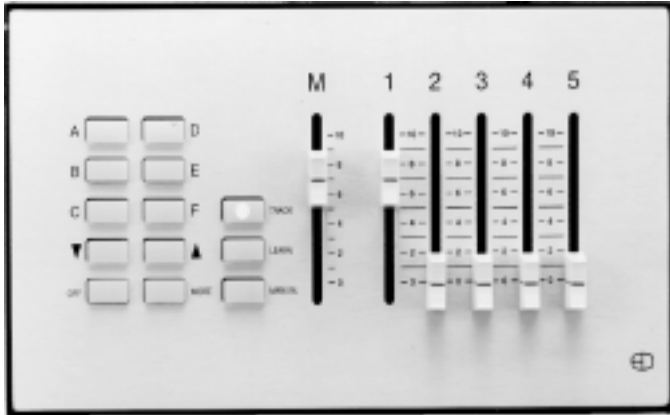
To Configure REMOTE LOCK:

Identify Station # in display station's CONFIGURE STATION Menu.

Use TEST buttons to confirm station number.

Select REMOTE LOCK feature ON.

ACCESSORIES



Linear Slider with Presets Station



Custom nomenclature available

LINEAR SLIDER with PRESETS

The Twilite System LP, or Linear Slider with Presets Station offer traditional manual slider control and up to 12 presets for ease of programmability and daily operation.

To adjust a Preset:

Press the Manual button to take control of the active Preset. Move the associated sliders to their designated levels.

Press the TRACK button to adjust a single slider's channel assignments in an active preset.

(Pressing the preset button returns the sliders channels to their saved levels.)

To Record a Preset:

Press the LEARN button and then a Preset (A - F) button.

To Configure REMOTE LOCK:

Identify Station # in display station's CONFIGURE STATION Menu.

Use TEST buttons to confirm station number.

Select REMOTE LOCK feature ON.

P-10 PROGRAMMABLE STATION

Twilite offers specialty RDI-based remote stations which offer system customization for daily operation. The P10 programmable Station comes in three options; 10-button, 5-button and 2-button. Each button can be configured to Preset Recall, Combine Open, Combine Close, Time Clock event (On/Off), Alternate Action, and On/Off.

To Configure the Station:

Select RDI from the CONFIGURE Menu and follow the procedures as outlined on pages 37-38.

NOTE: Each button of the P10 station must be configured in order to operate properly!

To Configure REMOTE LOCK:

Identify Station # in display station's CONFIGURE STATION Menu.

Use TEST buttons to confirm station number.

Select REMOTE LOCK feature ON.

ACCESSORIES

ROOM HOPPER FEATURE

Twilite offers specialty RDI-based remote stations which offer system customization for daily operation. The Room Hopper Programmable Station comes in three options; 10-button, 5-button and 2-button. It is designed to act as a Global Action station in situations where both local and global actions need to occur.

To Configure the Station:

Select RDI from the CONFIGURE Menu and follow the procedures as outlined on pages 37-38.

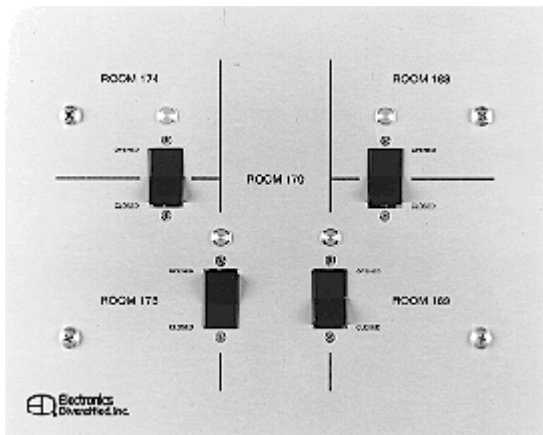
NOTE: Each button of the P10 station must be configured in order to operate properly!

To Configure REMOTE LOCK:

Identify Station # in display station's CONFIGURE STATION Menu.

Use TEST buttons to confirm station number.

Select REMOTE LOCK feature ON.



ROOM PARTITION PANEL

The Twilite System Control incorporates a Room Partition Panel as a direct network accessory designed for facilities where partitioned rooms can be separated or combined for flexible lighting control. All TSC stations terminate on the same simple local area network wiring configuration.

ACCESSORIES

REMOTE PROGRAMMING OUTLET

Twilite offers a Remote Programming Outlet.

To Configure the Station:

In the STATION Menu, the Remote Programming Outlet will be identified as an LCD Station. It has its' own room address allowing you to use a portable programming station to set levels and presets in any room of the system.

To Configure REMOTE LOCK:

Identify Station # in display station's CONFIGURE STATION Menu.

Use TEST buttons to confirm station number.

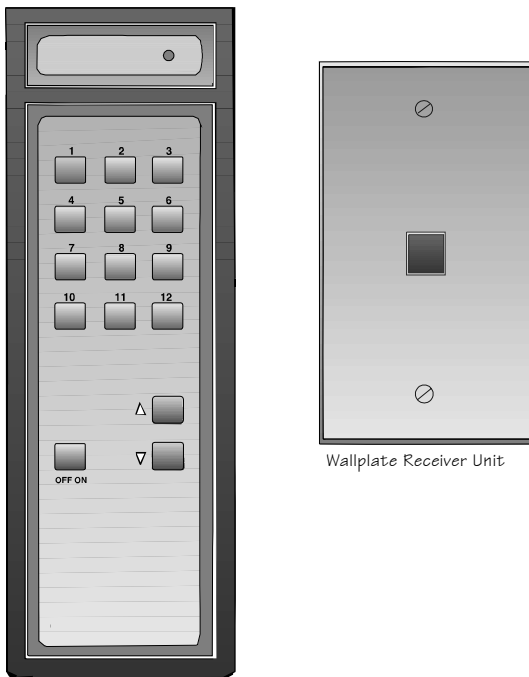
Select REMOTE LOCK feature ON.

IR REMOTE CONTROL

Twilite can be outfitted with a hand held IR Remote, which is packaged in a slim line case for ease in placement and operation. The receiver terminates directly to the TSC network, and can be programmed by any Twilite LCD station. Twelve individual preset buttons and two master raise/lower buttons are included for overall proportional preset control.

The IR Receiver is mounted on a single-gang face plate for easy installation in any environment.

The line of sight transmission range is 300' maximum.



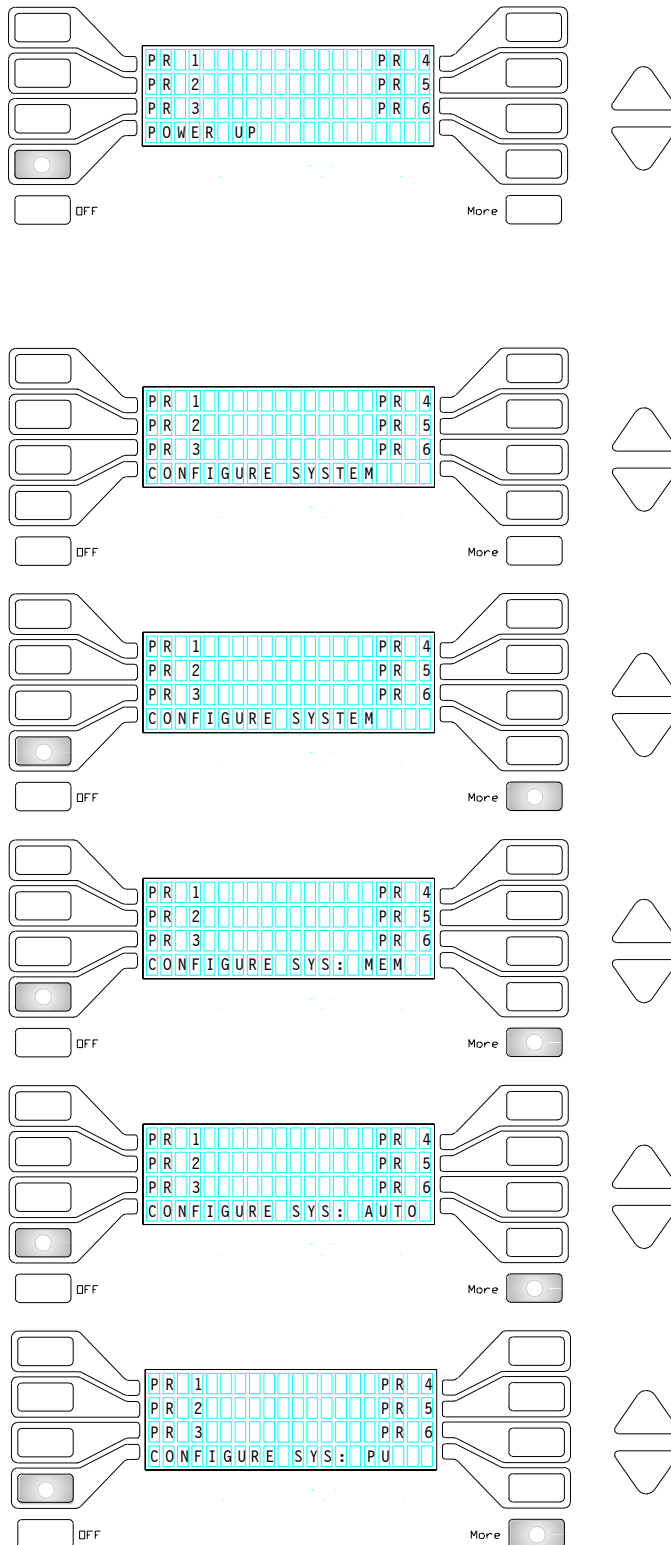
IR Remote available with 12 presets

Wallplate Receiver Unit

OFF-LINE EDITOR

Off-Line Editor is a complete Manual, separate from the TSC. To order, call or E-mail EDI.

APPENDIX



MESSAGES

The Display Station will announce certain conditions to the operator through the prompt window located in the lower left-hand corner of the display screen. These messages are detailed below.

POWER UP:

(Station LED behavior with Power-Up messages):
 Number 4 LED button will blink when TSC power is cycled and room was in a standard preset state.

(Room is patched and Preset is active.)

NOTE: Power-Up will change to Page Number and Edit only after any button is pressed on any type of station.

All messages can be removed by pressing a Preset button.

Messages will persist if the removing action was not done and you are returning to the Preset menu from Preset Edit or Features menus.

When CONFIGURE SYSTEM-type messages are displayed, the #4 button and the MORE button will blink on any LCD station.

When CONFIGURE SYSTEM derivatives are active, the remote ten-button stations and the walk-thru stations will display nothing.

CONFIGURE SYSTEM:

Number 4 and MORE access buttons blink when power-up detects an unconfigured system.

Load configured disk, or follow System Set-Up directions outlined on pages 6-19.

CONFIGURE SYS: MEM

Message displays when the TSC is powered up, memory was corrupted, Disk load was successful, and room data was not patched.

CONFIGURE SYS: AUTO

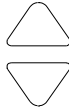
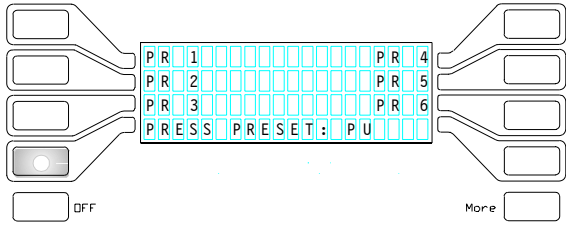
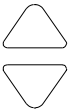
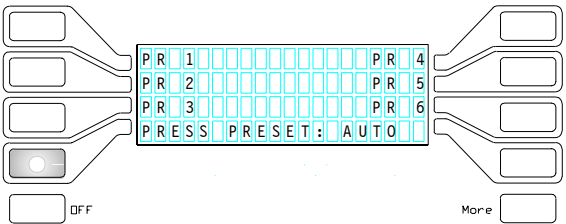
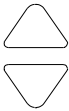
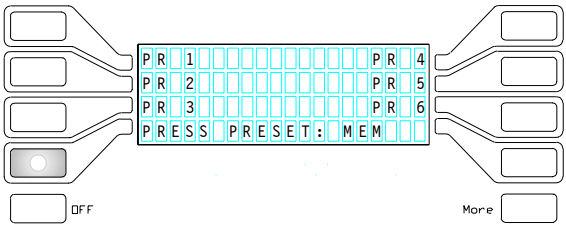
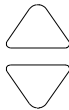
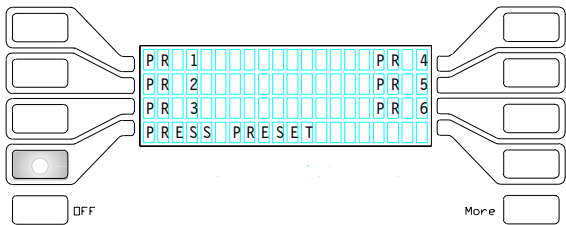
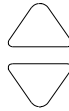
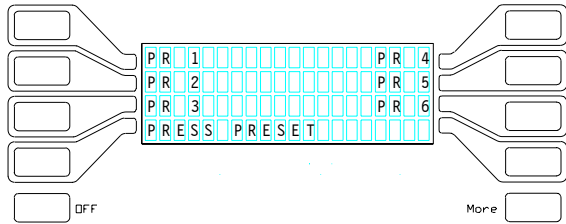
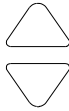
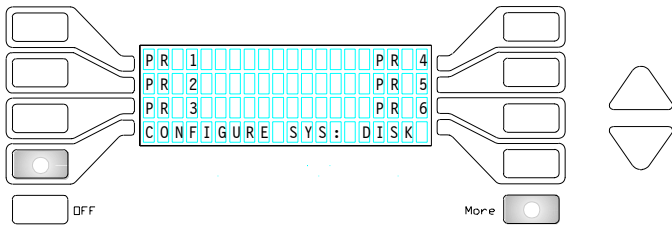
Message displays when the TSC is powered up, Disk was auto-loaded, and room data was patched.

CONFIGURE SYS: PU

Message displays when the TSC powered cycled while room was in a "Press Preset" state.



APPENDIX



MESSAGES

CONFIGURE SYS: DISK

Message displays after TSC Disk load operation , and room data was not patched.

NOTE: CONFIGURE SYSTEM-type messages will change to PRESS PRESET only after the room is patched.

When PRESS PRESET-type messages are displayed, *only* the number 4 LED button will blink on any LCD station. When PRESS PRESET derivatives are active, the remote ten-button stations will flash all preset LED's. The entry stations will flash both LED's.

PRESS PRESET:

Number 4 button blinks.

Message is displayed when returning from FEATURES menu and room was patched.

Press a PRESET to start program

PRESS PRESET: MEM

Message is displayed when the TSC is powered up and DIP 1 is set to default system memory.

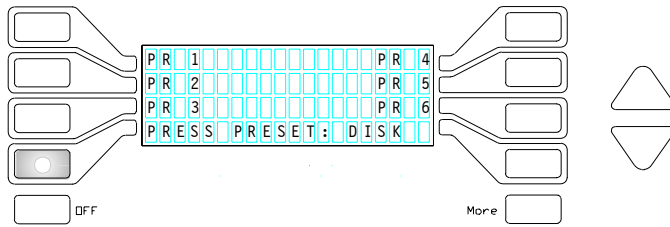
PRESS PRESET: AUTO

Message is displayed when the TSC is powered up, disk was auto-loaded and room was patched.

PRESS PRESET: PU

Message is displayed when the TSC powered cycled while room was in a "Press Preset" state.

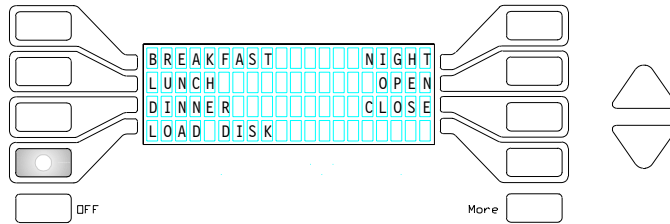
APPENDIX



MESSAGES

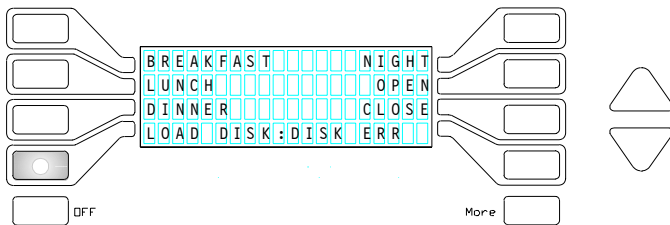
PRESS PRESET: DISK

Message is displayed after TSC disk load operation, and room was patched.



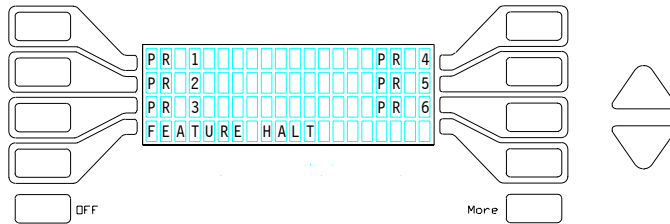
LOAD DISK:

#4 LED is blinking.
System Power-Up detected memory corruption. Disk was not detected in TSC drive.
Load Disk.



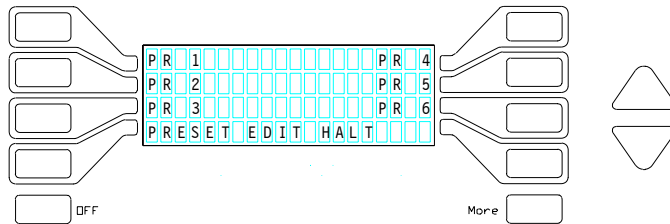
LOAD DISK: DISK ERR

#4 LED is blinking.
Disk load was attempted and disk error occurred.



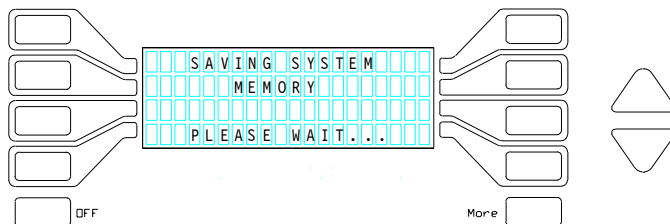
FEATURE HALT:

FEATURE HALT is globally displayed in all rooms because an active edit is in progress.
Operation will resume when EDIT is complete.



PRESET EDIT HALT:

PRESET EDIT HALT is locally displayed within a room because an active edit is in progress.
Operation will resume when EDIT is complete



MESSAGES

SAVING SYSTEM MEMORY:

No buttons blinking.
Message is displayed on Display screen when disk is reading or writing information. Screen will restore to previous condition when access is complete.



SERVICE

EDI offers a 24 hour Service / Support Network.

For technical questions about this product or operational assistance, ask for Customer Service at: 1-800-547-2690

You may communicate by FAX: 1-503-629-9877

After Hours Emergency contact: 1-503-645-5533

Ask for Emergency Assistance.

Internet: www.edionline.com

Internet E-Mail: service@edionline.com

If your TSC needs repair, call 503-645-5533 for a Return Materials Authorization number, and a **shipping address** will be furnished.



Electronics Diversified, Inc.
1675 N.W. Cornelius Pass Road
Hillsboro, Oregon, 97124
Ph: (503) 645-5533
Fax: (503) 629-9877

Attention Twilite System Control owners!

Please return this registration card immediately.

Your prompt attention to this matter will ensure your receiving updated technical information for this product as it becomes available. Please complete all information. Look for acknowledgment of your registration within 6-8 weeks.

Name: _____

Title: _____

Facility and/or Company: _____

Street Address: _____

City: _____ State: _____ Zip: _____

Phone: _____

Fax: _____

E-mail: _____

Web site: _____

CUT ALONG DOTTED LINE



Mail to:
EDI User Manual Registration
1675 NW Cornelius Pass Road
Hillsboro, Oregon 97124

or FAX to: (503) 629-9877



