



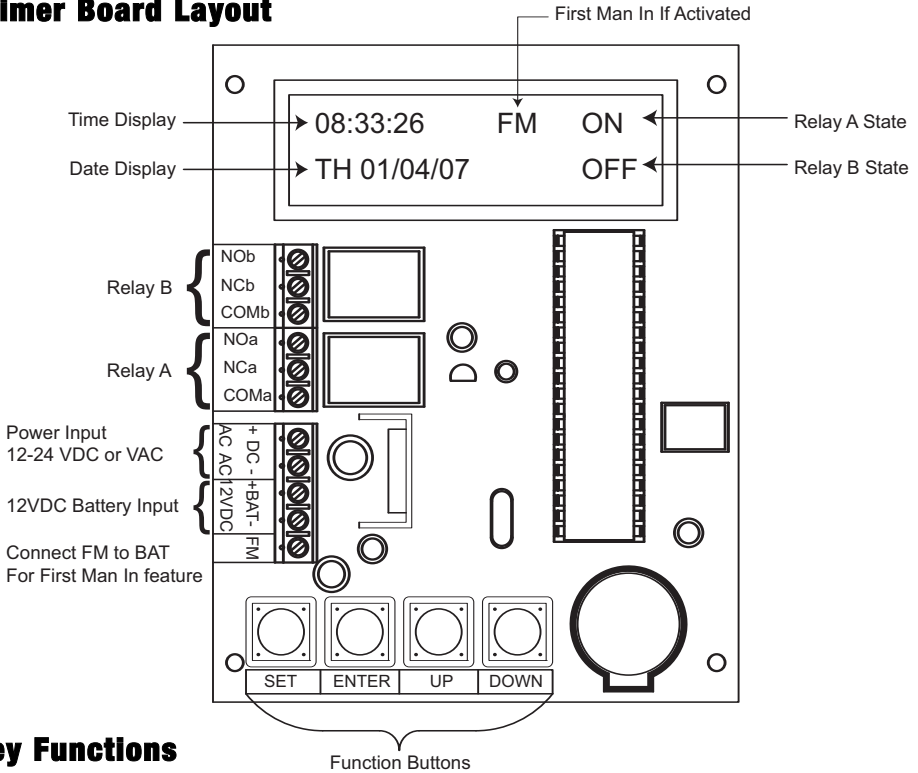
RUTHERFORD CONTROLS

In or Out... we make it Easy!®





INSTRUCTIONS

For TD365 Timer Programming

Timer Board Layout



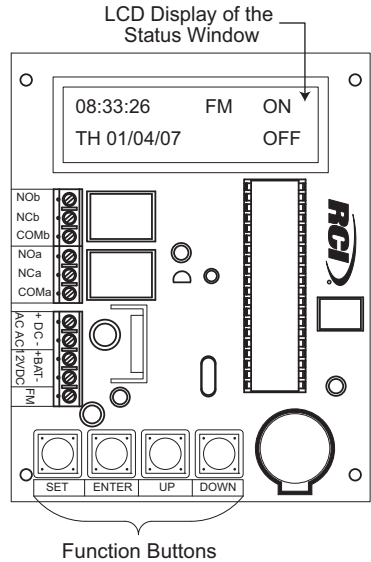
Key Functions

- SET**  Enters system setup Main Menu and backspaces in Sub-Menu
- ENTER**  Enters Sub-Menu or accepts current value above underline cursor
- UP**  Changes Main Menu selection or value above underline cursor
- DOWN**  Changes Main Menu selection or value above underline cursor

QUICK PROGRAMMING SET-UP

Please Read Pages 2 & 3 In Full Before Starting The Quick Program Set-Up

- 1) With the Status Window displayed, press SET to access the Main Menu.
- 2) Scroll through the Main Menu Items, with the UP & DOWN buttons.
- 3) When the Main Menu Item has been found, the ENTER Button will take you to the Sub-Menu Items.
- 4) Within the Sub-Menu an underscore will appear under the item that is selected.
- 5) Again the UP & DOWN arrows will scroll through the selected item values.
- 6) When the correct information is visible, the ENTER button will accept and advance you to the next item, or to the Main Menu.
- 7) When programing user events, the first item is the event number, the second item is the relay, the third item is the action, the fourth is the day and the final item is the time in 24 hr format.



The **Status Window** is the normal screen that will display the time, date, relay state and if the FM function* has been activated.

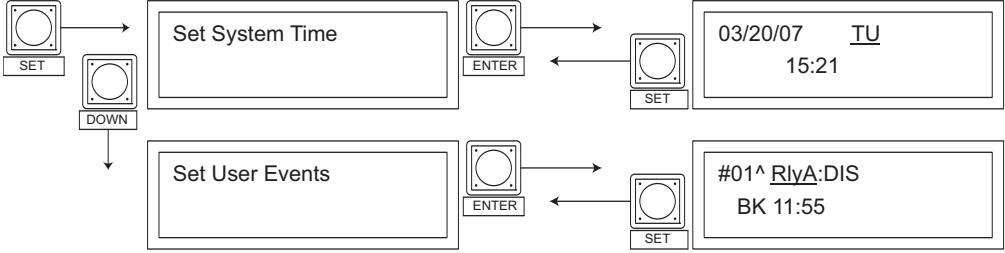
* The "First Man In" feature is activated when BAT- and FM are connected. When activated, this will prevent any programmed events to change relay A from occurring. When de-activated, the last programmed event will occur.

NOTE:

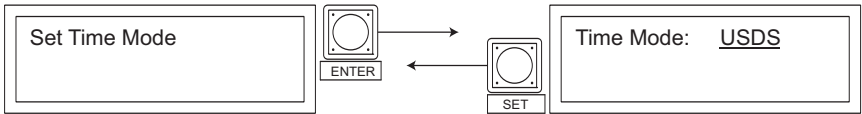
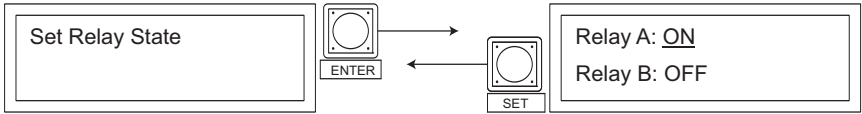
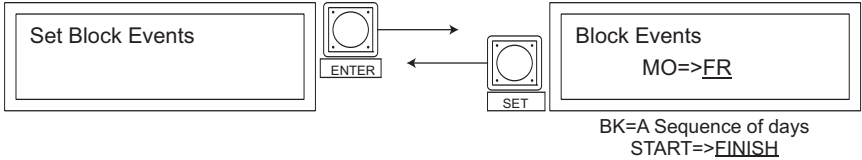
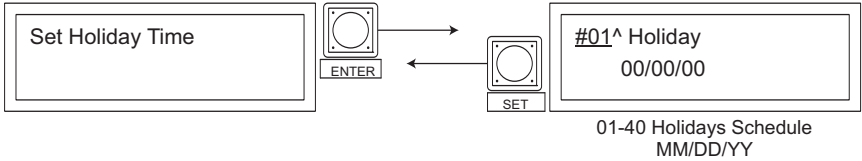
The SET button will act as a backspace and the ENTER button will advance one item. Once all menu items have been programmed use the SET button to return to the Status Window. For the timer to work it must not be left in program mode. THE STATUS WINDOW MUST BE VISIBLE.

Main Menu Items

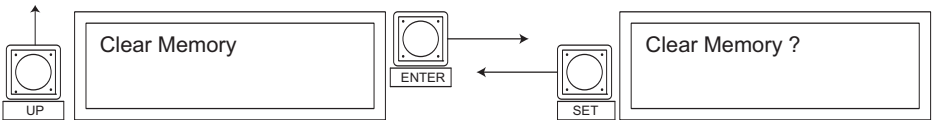
Sub-Menu Items



01-99 Events
 Relay A, B, C= Both
 Actions: ON, OFF
 PL= Pulse relay ON 0-40 seconds
 DIS=Disable Event
 Date: SU-MO-TU-WE-TH-FR-SAT
 BK= Block as set in Block Events
 HL= Event that overrides a Set Holiday



ST= Standard Time
 DS= Daylight Saving
 USDS= New Daylight Saving



Status Window Feature Description

Time Display: This shows the Hours: Minutes: Seconds in 24 Hour Time.

Date Display: This shows the Day of Week, followed by the Month / Date / Year

Relay A State: This shows the state of Relay A, ON / OFF

Relay B State: This shows the state of Relay B, ON / OFF

FM: This displays when the “First Man In” feature is activated. This will prevent any programmed events from changing the status of relay A. Once the “First Man In” feature is de-activated, the last suspended event for relay A will occur.

For example, until the first authorized employee arrives and de-activates the “First Man In” feature the relay A programmed event to unlock the doors cannot occur.

NOTE: This feature affects relay A only and includes the A portion of events programmed for relay C.

Function Buttons: These buttons are used to navigate within the Menus and Sub-Menus

Navigating within the Menus and Sub-Menus

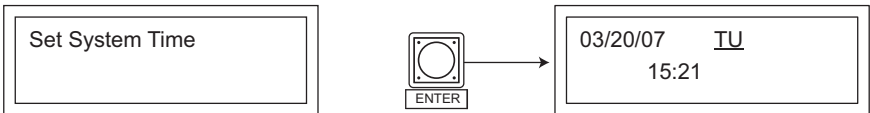
From the Main Menu press ENTER to access the Sub-Menu of that item.

An underscore will indicate the item that will be changed.

Using the UP/DOWN buttons will scroll through the values.

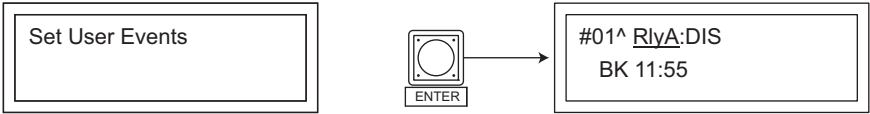
Once the proper value is visible, press the ENTER button to accept the value and advance to the next item or return to the Main Menu.

If an error is made use the SET button to backspace to the item and reset the value.

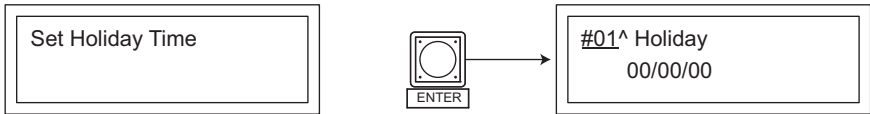


From the Set System Time menu press ENTER to access the System Time sub-menu.

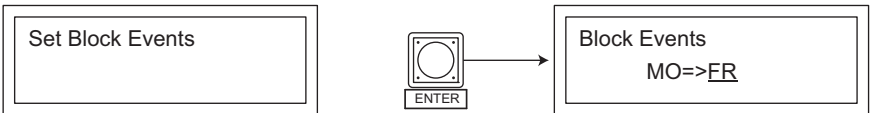
The first item is the Month, next is the date followed by the year. Next, set the proper day of the week. The last setting is the hour followed by the minutes.



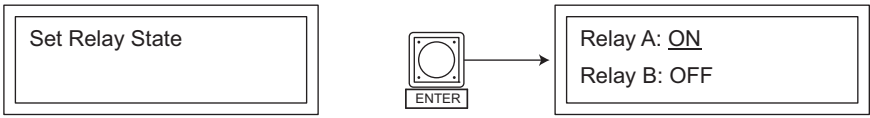
From the Set User Events menu press ENTER for the Events sub-menu. The first item is the Event number which may be 01 – 99. Next select the relay A or B (for both relays choose C) followed by the desired action. This may be ON or OFF or PL to pulse the relay on for up to 40 seconds or DIS to disable the event. The bottom line sets the day code of SU, MO, TU, WE, TH, FR or SA. A BK day code will run the program as set in the block events menu. Events scheduled for a day of the week that falls on a date set in the holiday time menu will not occur. To set an event to occur only on a holiday, use HL as the event day code and remember to define the date as a holiday.



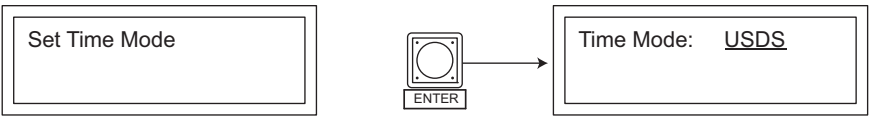
From the Set Holiday Time menu, press ENTER for the Holiday sub-menu. The first item is the Holiday number which may be 01 - 40, followed by the month/date/year. Events scheduled for a day of the week that falls on a defined holiday date will not occur. To set an event to occur only on a holiday, use HL as the event day value and remember to define the date as a holiday.



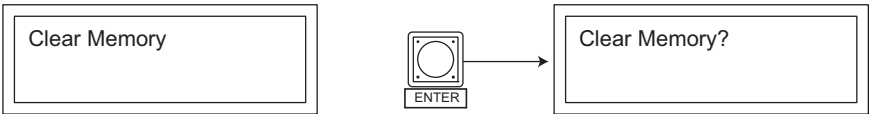
From the Set Block Events menu press ENTER to access the Block Events sub-menu. The first item defines the first day of the week an event will happen and the second item defines the last day of the week the event will occur. Only one block can be defined. By setting a Block Event as a User Event, that event will occur on every day defined by the Block Event.



From the Set Relay State menu press ENTER to access the Relay State sub-menu. From this menu you can toggle the relay ON/OFF. Events only occur at the beginning of each programmed minute. Events that have passed will not occur until the next scheduled event.



From the Set Time Mode menu press ENTER to access the Time Mode sub-menu. The choices within this sub-menu are:
ST= Standard Time, no changes throughout the year
DS= Daylight Saving, clock advances 1 hour at 2am on the first Sunday of April and goes back 1 hour at 2am on the last Sunday of October.
USDS= New United States Daylight Saving, clock advances 1 hour at 2am on the second Sunday of March and goes back 1 hour at 2am on the first Sunday of November.

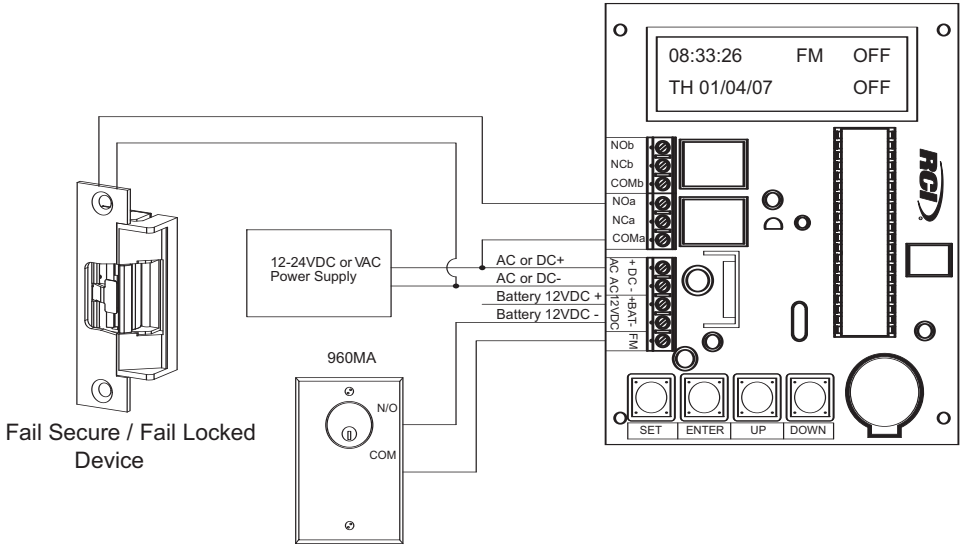


From the Clear Memory menu press ENTER to access the Clear Memory? sub-menu. To reset all programming to factory defaults, press ENTER. The only thing that will be retained is the date and time, all other menus will be set to default.

NOTE:

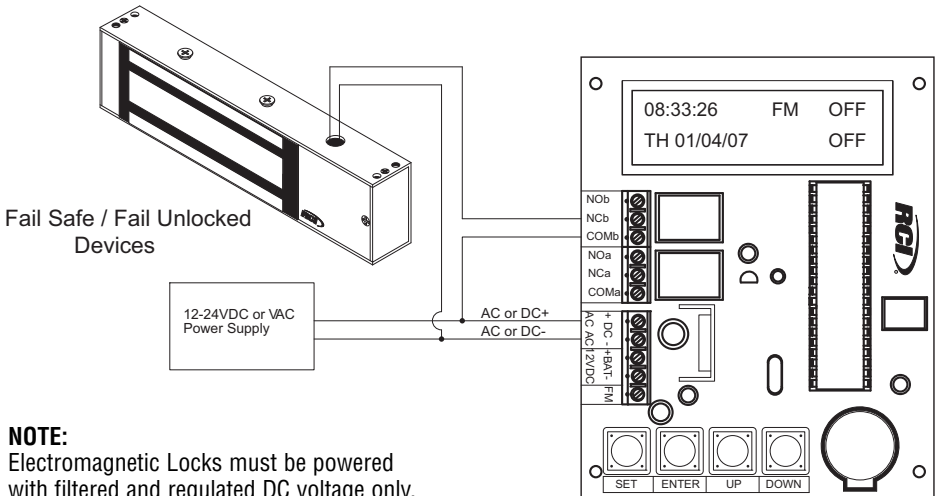
Remember to exit the programming mode after setting up the timer. No events will take place while programming. Events will only happen when the Status Window is displayed as on page one.

Typical Wiring of a Fail Secure Device and FM Feature



NOTE: FM feature will only effect devices attached to Relay "A"

Typical Wiring of a Fail Safe Device



NOTE:
 Electromagnetic Locks must be powered with filtered and regulated DC voltage only. If timer is powered with AC voltage a separate DC power supply will be required.

Notes and Important Considerations:

Relays in the “ON” state at a power failure will still be in the “ON” state when power is returned. Events occurring during a power failure will not occur except if a backup battery is attached to the Battery Terminals, then normal operation will occur.

The event detection only happens at the beginning of each “MINUTE” and when the system displays the status window. No events will happen while system is in the programming mode.

Event Numbers

Block Events and Regular Daily Events have the same priority. Regular Daily Events or Block Events with a higher event number will over-ride the Regular Daily Event or a Block Event with a lower event number even if both event times are set the same.

Examples:

- Regular Daily Event number 10 is set for Sunday at 09:00 with both relays set to “ON”. Regular Daily Event number 20 is set for Sunday at 09:00 with relay A “OFF”.
Result: On Sunday at 09:00, relay A is “OFF” and relay B is “ON”.
- Holiday Events will over-ride any Regular Daily Event and/or Block Event.
Holiday Events with a higher event number will over-ride Holiday Events with a lower event number even if both event times are same.

Daylight Savings

Daylight saving occurs on the first Sunday in April and the last Sunday in October. New US Daylight Saving occurs on the second Sunday in March and the first Sunday in November.

With either daylight saving mode “ON”, any event between 02:00 and 2:59 on the start date would never occur as the clock moves forward to 3:00 from 1:59 and skips all the time in between.

Lithium Battery

If the power fails and the lithium battery is missing or discharged then only the date and time will be erased.

The Lithium battery should be changed every two years to prevent an accidental loss of program memory. This should be done with the power applied to prevent data loss.