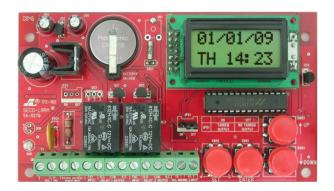


# 365 Day Schedule Timer MD-T365



The SS-365 365 Day Schedule Timer can be programmed to operate two relays 365 days, 24 hours per day. These relays can be used to control devices in many applications such as Security, Access Control, Lighting, and Environmental Control. The 2 form C relays can be programmed to operate in shunt or momentary mode for up to 50 unique events each. Each event can be programmed on a weekly or daily schedule. Block Coding can be programmed to repeat the operation of the relays on consecutive days. 10 programmable holidays disable the timer for a single day, or the same day every year.

#### **FEATURES**

- Two N.O. or N.C. form "C" relays 10A@120VAC / 28VDC
- Each relay can be programmed for 50 events, total of 100 individual programmable events
- 100 programmable events can be set weekly, daily or hourly 365 days a year
- Password protection can be turned ON or OFF
- Block programming allows events to be repeated on consecutive days.
- Event output can be shunt or momentary, momentary output programmable for 1~99 seconds
- 10 programmable holidays
- EEPROM memory for data safe storage protection when power failed
- Build-in clock back-up battery
- Built-in backup battery charger for external back-up battery use
- Can be set for standard or Daylight Savings Time
- Alpha-numeric and back lit LCD display for easy programming



# **CAUTION**

# RISK OF ELECTRIC SHOCK DO NOT OPEN!



TO REDUCE THE RISK OF ELECTRICAL SHOCK,
DO NOT OPEN COVERS (OR BACK).
NO USER SERVICEABLE PARTS INSIDE.
REFER SERVICING TO QUALIFIED
SERVICE PERSONNEL.



# Disposal of Old Electrical & Electronic Equipment (Applicable in the European Union and other European countries with separate collection systems).

This symbol on the product or on its packaging indicates that this product shall not be treated as household waste. Instead it shall be handed over to the applicable collection point for the recycling of electrical and electronic equipment. By ensuring this product is disposed of correctly, you will help prevent potential negative consequences for the environment and human health, which could otherwise be caused by inappropriate waste handling of this product. The recycling of materials will help to conserve natural resources. For more detailed information about recycling of this product, please contact your local city office, your household waste disposal service or the shop where you purchased the product.

### **CAUTION**

#### 1. Handle this product with care

Avoid any shock or bumping of the product. Improper handling could damage the product.

#### 2. Requires a proper operating environment

This product should be mounted within an enclosure.

#### 3. Check the power source voltage

The power source voltage should be within the specified range. (Product must meet the specifications).

### 4. Objects and liquid entry

Never push objects of any kind into this product as this may touch dangerous voltage points of short out parts that could result in a fire or electric shock. Never spill any kind of liquid on the product.

#### 5. Servicing

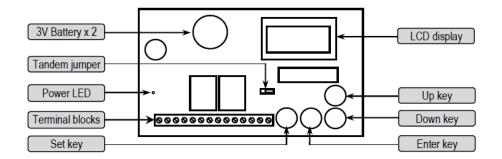
Do not attempt to service this product by yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all service to qualified servicing personnel.

# 6. Damage requiring service

Unplug this product from the power source and refer service to qualified servicing personnel under the following conditions:

- a. When the power supply cord or plug is damaged.
- b. If liquid has been spilled, or objects have fallen into the product.
- c. If the product has been exposed to rain or water.
- d. If the product has been dropped or the cabinet has been damaged.

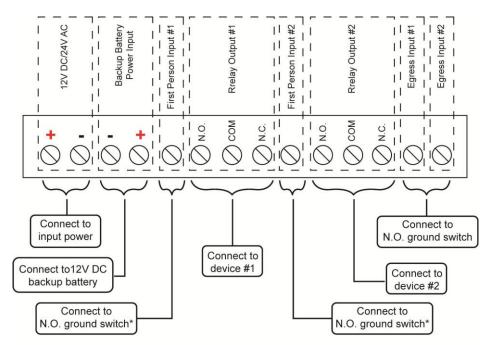
## **PARTS & FUNCTIONS**



The MD-T365 has 4 function keys that control the programming features

SET	Enter into the main menu, move cursor back in submenu	
ENTER	Enter submenu, accept current setting, move cursor forward in	
	submenu	
UP	Change menu selection, change underlined value, check O/C status	
	of relays	
DOWN	Change menu selection, change underlined value, check O/C status	
	of relays	

#### APPLICATION DIAGRAM



\* The first person input function suspends the operation of the MD-T365 timer. If a relay is turned on before the first man feature is activated, the relay will remain on until the first man feature is deactivated. Once deactivated, the timer will turn on the last programmed function prior to the first man activation.

# **Sample Applications**

- Allow "day mode" and "night mode" operation of a security system (e.g. siren output at night, strobe output during the day.)
- When combined with a voice annunciator, a "welcome" message can play during the day while a "warning" message plays at night using the same trigger sensors.
- Using the pulse output, the relays can be used to control a factory shift bell or school bell system.
- Control HVAC, low-voltage lighting, access control, sprinkler systems, etc. on a schedule.

#### PROGRAMMING ABBREVIATION KEY

Code	Meaning	
ON	Relay will activate	
OFF	Relay will deactivate to normal state	
DIS	Relay will not change states	
PL#	Relay will activate for # seconds	
DS	Timer will operate on Daylight Savings	
	Time	
ST	Timer will operate on Standard Time	
R1	Relay 1	
R2	Relay 2	
HOL	Holiday	
МО	Monday	
TU	Tuesday	
WE	Wednesday	
TH	Thursday	
FR	Friday	
SA	Saturday	
SU	Sunday	
ВК	Consecutive Day Block (SU-SU Default)	

A convenient feature of the SA-027Q Annual Timer is the ability to program it before installation. The EEPROM memory stores and protects programming instructions. Programming the SA-027Q is easier and faster if you know exactly how you want to use the Annual Timer, as well as functions it will perform.

To make programming simpler, the following information should be determined and noted:

Determine which relay will operate the devices that are being controlled.

Determine if Tandem Output (both relays operating at the same time) will be used. (To enable tandem operation, place the jumper on the circuit board labeled JP01 to the left and center pins labeled ON, otherwise place the jumper on the center and right pin labeled OFF)

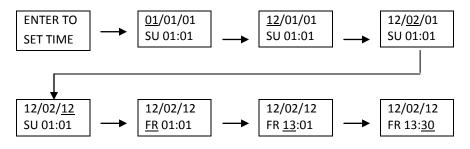
Determine whether a password will be used or not, and what the password will be.

Using the separate piece of paper, write down the following:

- The days to be block coded. (e.g. Monday to Friday or Sunday to Thursday)
- All the events you want to program, as well as their duration up to 50 per relay.
   (An event is a command to turn a relay on or off on a particular day of the week or block of days.)
- Any holidays you wish to program to override the programmed events (up to 10 days).

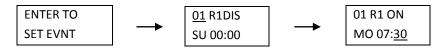
#### **SETTING TIME AND DATE**

To set the time and date press the SET key on the unit until "ENTER TO SET TIME" appears, then press the ENTER key.



## PROGRAMMING EVENTS

To set events, press the SET key on the unit until "ENTER TO SET EVNT" appears, then press the ENTER key.



Using the function keys, press UP or DOWN to enter the event number, select the relay, select the operation and set the date/time the event is scheduled, advancing the cursor with ENTER for next and SET for previous.

#### **EXAMPLES OF HOW EVENTS CAN BE PROGRAMMED**

01 R1PL60 TH 08:55

Relay 1, event #1, relay will engage for 60 seconds, Thursdays at 8:55AM 23 R2ON MO 20:00

Relay 2, event #23, relay will engage on Mondays at 8:00PM 30 R1OFF BK 07:05

Relay 1, event #30, relay will disengage on all days within the block at 7:05AM 50 R2DIS SU 00:00

Relay 2, event #50, relay will retain status quo during this event (use this setting for unused events)

#### PROGRAMMING HOLIDAYS

To set holidays for suspending normal operation, press the SET key until "ENTER TO SET HOL" appears, then press ENTER.

Using the function keys, press UP and DOWN to enter the holiday number (1-10) and set the date of the holiday. To suspend operation on the same date every year, set the year to "XX".

#### SETTING BLOCK PROGRAMMING AND TIME SETTINGS

To set the days to be included in the block ("BK") selection, press the SET key until "ENTER TO SET BK" appears, then press ENTER.

Using the function keys, press UP and DOWN to enter the first of the consecutive days in the block and confirm by hitting enter. Next select the last day in the consecutive block.

Finally, chose Standard Time or Daylight Saving Time on this screen.

#### **CLEARING MEMORY**

Clearing the memory will set all programming to the factory default including events and holidays. To clear the memory, press the SET key on the unit until "ENTER TO CLR MEMO" appears, then press the ENTER.

Press the ENTER key to confirm you want to clear the memory when the screen prompts "CLEAR MEMORY?"

When the screen prompts "PRESS UP TO CLEAR" press the UP key to clear the memory.

#### PROGRAMMING PASSWORD

To set the password, press the SET key until "ENTER TO SET CODE" appears, then press ENTER.

Select YES to turn on password protection or NO to turn off password protection on the screen that prompts "PASSWORD YES/NO".

On the screen that prompts "PASSWORD CHNG Y/N" select Y to change the password or N to go back. Hit ENTER on the "ENTER PASSWORD" screen and the next screen prompts for the "OLD CODE 0000", use the UP and DOWN keys to enter the unit's current password followed by ENTER. On the "NEW CODE 0000" screen, use the UP and DOWN keys to enter a new password, then press ENTER to accept the new password on the "NEW CODE ACCEPT?" screen.

#### USING PASSWORD PROTECTION

If password protection is enabled, you will need to enter the code every time the unit enters programming mode.

#### RESETTING THE PASSWORD

This function will only reset the password and will not make any other programming changes or clear the memory.

Disconnect the power and remove any back-up batteries connected.

Reconnect the power and within 30 seconds of powering on, press all four function keys SET, ENTER, UP, DOWN simultaneously for 5 seconds. (If not pressed within 30 seconds, the password cannot be reset. Disconnect power then connect it again.)

The "PASSWORD RESET" screen will appear for one second, followed by a "NEW PASSWORD 0000" prompt. If no new code is entered at this point, the unit will automatically exit password reset mode.

#### **SPECIFICATIONS**

Model	MD-T365
Input Voltage	12~24V DC / AC
Number of Relays	2
Relay Rating	10A @ 120V AC / 28V DC
<b>Current Draw</b>	70mA
Number of Prog. Events	50
Blue LED	Power On / Off
Number of Prog. Holidays	10
<b>Battery Charging Current</b>	90mA
Security Code	4-digits, numeric, On/Off

<sup>\*</sup> Specifications are subject to change without notice

#### LIMITED WARRANTY

#### LIMITED ONE (1) YEAR WARRANTY AND EXCLUSIONS

Manufacturer warrants to the original consumer purchaser and not for the benefit of anyone else that this product at the time of its sale by Manufacturer is free of defects in materials and workmanship under normal and proper use for one (1) year from the purchase date. Manufacturer's only obligation is to correct such defects by repair or replacement, at its option, if within such one (1) year period the product is returned prepaid, with proof of purchase date, and a description of the problem. This warrant excludes and there is disclaimed liability for labor for removal of this product or reinstallation. This warranty is voided if this product is installed improperly or in an improper environment, overloaded, misused, opened, abused, or altered in any manner, or is not used under normal operating conditions or not in accordance with any labels or instructions. There are no other implied warranties of any kind, including merchantability and fitness or a particular purpose, but if any implied warranty is required by the applicable jurisdiction, the duration of any such implied warrant, including merchantability and fitness of or a particular purpose, is limited to one (1) year. Manufacturer is not liable for incidental, indirect, special, or consequential damages, including without limitation, damage to, or loss of use of, any equipment, loss sales or profits or delay or failure to perform this warranty obligation. The remedies, provided therein are the exclusive remedies under this warranty, whether based on contract, tort or otherwise.

### **RELATED PRODUCTS**

# **Timer Relay Module**

#### MD-TR



# 4 Channel Recordable Siren & Voice Annunciator Module MD-SVOICE4



# 8 Channel Recordable Voice Annunciator Module MD-VOICE8



High Voltage Relay MD-HVR



16.5V AC 1.5A Battery Power Charger MD-BPC612



24V AC 7A Battery Power Charger MD-BPC61224

