



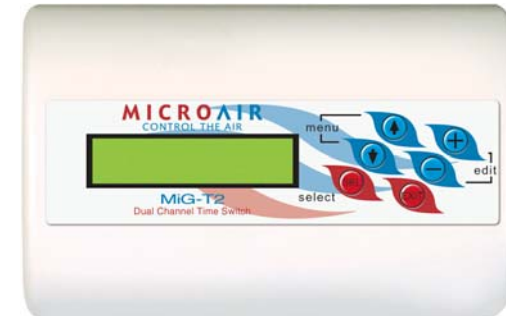
## INPUT CONFIGURATION

The **T2** is pre-configured for resistive inputs and cannot be changed. The resistive inputs allow for thermistors and also the pushbutton overrides.



## T2


### 2 CHANNEL TIME SWITCH



### PRODUCT DESCRIPTION

The **MiG T2** is a dual channel programmable 365-day time switch, with daylight saving, single and block holidays, temperature optimisation start, after hour's pushbutton override and temperature override. The **T2** can accept up to two temperature and two pushbutton inputs at a time. The **T2** is able to be programmed via the six front panel buttons and has an easy to follow menu. Alternatively the **T2** it can be programmed by using the PC Interface Software. All **MiG**'s have a controlled temperature range of between -30°C to 110°C.

It is recommended that the **T2** not be mounted in direct sunlight or within 500mm of contactors, large power cables or any other devices that create an arc when switching. It is recommended that they not be mounted outdoors or in direct sunlight. They should be mounted in a well-ventilated area where the ambient air temperature is between +5°C & 40°C. They should also be operated with a maximum relative humidity of 80% for temperatures up to 31°C (decreasing linearly to 50% at 40°C at altitudes above 2000 metres) and in an atmospheric pressure of between 86kPa (860mbar) and 106kPa (1060mbar).

The **T2** is rated at 24/230V~; 300mA/30mA @ 50/60Hz. 

The **T2** is covered by a 2-year warranty on parts only.

(Ver 1.1)

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## MOUNTING INSTRUCTIONS

The **T2** can be wall or DIN Rail mounted. However, if removing the snap out section of the lid, the **MiG must** be installed in a switchboard.

WARNING: The *MiG* products must be installed and maintained by qualified service personnel. The installer should follow **all** relevant building and electrical compliance codes when installing the *MiG* range.

*If wall mounting outside an electrical switchboard or switch room, the MiG must ONLY use and switch low voltage power – 24v.*

1. To remove the cover, insert a small flat head screwdriver into the retaining clips at each end to release the catch mechanism.
2. Locate the two hollow stems in diagonally opposite corners (top left & bottom right.) These stems allow the mounting screw to be tightened without placing pressure on the printed circuit board, while keeping the head away from live components or tracks.
3. Position the *MiG* and mark the screw holes on the wall. The screws must be 32mm 7-gauge pan-heads.
4. Mark a location for the wiring. If concealed wiring is preferred, ensure the hole is wide enough to allow the cables to be pulled through without damage. This may require a series of smaller holes to be cut side by side.
5. Drill the holes in the surface as required.
6. Pull through wiring as required.
7. Attach the base using the required screws and wall plugs if necessary.
8. Connect wiring as required.
9. Replace cover ensuring buttons align with the holes in the cover while sliding into place.

*To attach the MiG to 35mm DIN Rail;*

1. Position the top two catches on the base onto the top edge of the DIN Rail.
2. Locate and pull down the DIN Rail Clip while pushing the bottom edge of the base onto the DIN Rail. Then release the Clip and ensure the base has been retained correctly.
3. Then follow the concealed or conventional wiring installation as previously described.



## TO CHANGE INDIVIDUAL SETTINGS:

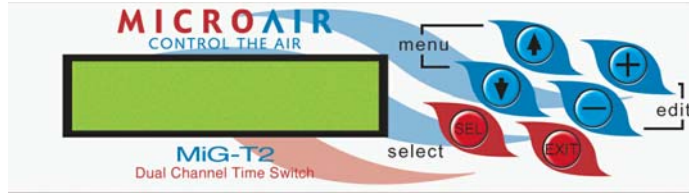
1. For safety reasons, any programming changes should be done with the cover on.
2. Press the **Select** button. The Main Menu items will then be displayed.
3. Scroll up or down through these items using the Menu [↓] & [↑] buttons until the correct Menu item is displayed.
4. Press the **Select** button to enter that Sub Menu.
5. Use the Menu [↓] & [↑] buttons to scroll up and down until the required parameter is displayed.
6. Press the **Select** button to start editing the parameter.
7. Use the Edit [+ ] & [- ] buttons to make changes to the parameters.
8. Press the **Select** button to save the change and return to the Sub Menu item.
9. Press the **Exit** button to exit from that parameter without saving the change OR
10. Press the **Exit** button to return back to the Main Menu items and again to return to the default screens OR
11. Press the Menu [↓] & [↑] buttons to find another parameter within that Sub Menu and repeat steps 3 to 9.

If no button is pressed for 2 minutes the **T2** will return to the default screens without saving any changes.

To view the outputs, enter the View Logs and scroll through to see pushbutton override and extreme temperature run time logs.



# PROGRAMMING



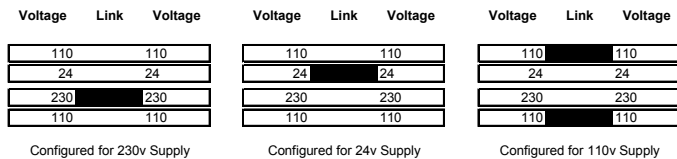
The *MiG*'s are easily programmed as the buttons have the same function throughout the menu.

- The Menu [↓] & [↑] buttons allow you to move up and down through the screens.
- The [Exit] key will move back up one menu level, without saving changes.
- The [Select] button will move down one menu level and also move the cursor within screens. It also saves changes.
- The Edit [+] & [-] buttons change the values when editing.

While the *T2* is not pre-programmed it does have a number of parameters pre-set in the memory. These settings only appear when certain parameters are activated. Eg: When Daylight Saving is activated, it defaults to start on the Last Sunday of October and finish on the Last Sunday of March.

# VOLTAGE SELECTION

While the *T2* is rated at 24/230 @50Hz but can also run on 110 volts @ 60Hz. They are pre-configured 230 volts. However they can be easily changed to another voltage by moving the location of the links located on the top left side of the circuit board. Care must be taken when removing the link to heat both ends at the same time to avoid damaging the circuit board. The links must be placed in the correct locations as shown in the diagram.



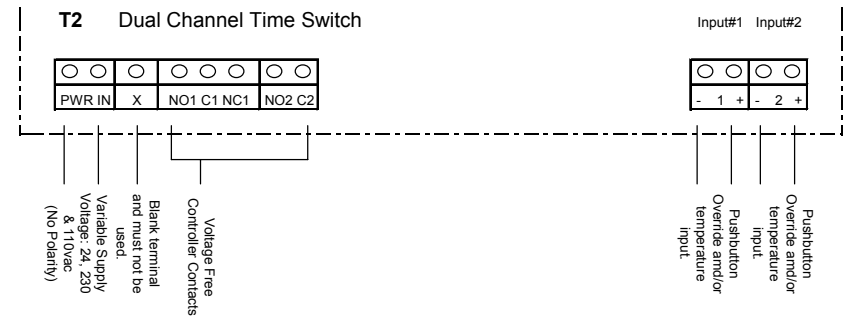
# WIRING GUIDE

*Note:* The cables to be connected to the terminals must be at least single insulated wires, with a rating higher than 240V~. Either solid wires are to be used or wires are to be tied up after installation to prevent loosening out from the terminals.

*Note:* The same phase should be used for the *MiG*'s supply (PWR IN) as the voltage supply to all relay contacts.

*Note:* As there is no ON/OFF switch on the *MiG*'s, the installer must ensure that there is a switch or a circuit breaker provided in the building installation. It shall be in proximity to the equipment and within easy reach of the operator. The switch or the circuit breaker shall be marked as the disconnecting device for the equipment. The circuit breaker shall be rated at 1A 240Vac with a breaking capacity of 500A. If using an isolating switch, a fuse with a 1A 250V rating is to be incorporated.

The *T2* has 2 voltage free contacts. See terminal guide below.



## ***MiG T2* - MENU STRUCTURE**

The **T2** has a number of default screens that continuously show the current 'time and date', 'Update/Confirm Holiday Settings' and 'Channel Status'. The channel status includes the override timer if running in override mode. The guide below shows the locations of the various parameters and by using the buttons as shown, the menu can be accessed and changed. Depending upon individual settings, some of these parameters may not be shown.

### **Calendar**

- Clock
- Holiday Select
- Single Holidays
- Block Holidays

### **Temperature Optimisation**

- Channel 1 Enable/Disable
- Occupy Temperature Heating
- Occupy Temperature Cooling
- Channel 2 Enable/Disable
- Occupy Temperature Heating
- Occupy Temperature Cooling

### **Switching Times**

- Channel 1 Start Time, Days of the week & Finish Time
- Channel 2 Start Time, Days of the week & Finish Time

### **Override**

- Button 1 Override Channels
- Button 1 Override Time
- Button 2 Override Channels
- Button 2 Override Time)
- Channel 1 Extreme Temperate Enable/Run Time
- Channel 1 Extreme Temperature Minimum
- Channel 1 Extreme Temperature Maximum
- Channel 2 Extreme Temperate Enable/Run Time
- Channel 2 Extreme Temperature Minimum
- Channel 2 Extreme Temperature Maximum

### **Miscellaneous**

- Temperature Units
- Password
- Firmware Version (display only)

### **View Logs (display only)**

- Channel 1 Manual Override Run Time
- Channel 2 Manual Override Run Time
- Channel 1 Extreme Temperature Run Time
- Channel 2 Extreme Temperature Run Time

### **UPDATE/CONFIRM HOLIDAYS**

When a holiday date has passed, an asterisk will be shown against that date. By selecting the holiday it can either be confirmed (to occur on the next occasion) or it can be modified or it can be deleted. If it is not confirmed or updated it will continue to be a legitimate holiday.