





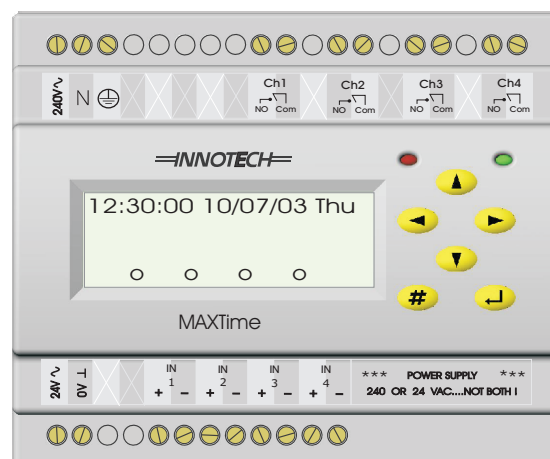



# MT01 & MT02 USER INSTRUCTIONS

## Button Function

-  ENTER stores or selects
-  ESCAPE exits or cancels
-  UP increases values or navigates up
-  DOWN decreases values or navigates down
-  LEFT navigates left
-  RIGHT navigates Right



## Default Display

The Default Display of the MAXTime shows the current time and the status of each Relay. From here, pressing  will display the Main Menu. The display will return to the Default display if no keys are pressed for two minutes.

## Edit Mode


When in edit mode, the value being edited will flash.


Use the  and  to change the value.

Holding down  or  while editing a value will cause the number to change at a faster rate.

## After Hours Function

Press  to display the Main Menu.

Press  again to select the "Schedules" option.

Press  to select the "A/Hours" option.


Use  and  to select the desired Channel.

Use  and  to select between "Remaining", "Accumulated" and "A/Hrs Timer".

The Remaining time displays the countdown to when the selected channel will be switched off if the after hours timer has been activated.

## After Hours Run Log (Accumulated Time)

The Accumulated time shows the total time in hours that the selected channel has been used in after hours. This time does not accumulate during scheduled periods.

To reset the accumulated time, press and hold  for 5 seconds. The After hours run log will be reset for the selected channel only.

## After Hours Timer

Press  to select "A/Hrs Timer".

The screen will display the After Hours timer for the selected channel.

Press  to edit the After Hours timer.

Use  and  to increase or decrease the After Hours timer.

The Timer can be adjusted from 15 minutes to 8 hours in 15 minute increments.

Press  to save the new timer value or  to exit without saving changes.

Note: When any channel is running in After Hours The Green LED on the front of the unit will flash.

## Daylight Saving Time

Press . The Menu screen is displayed.

Press to select "Clock" and then press .

The System Time will then be displayed, press until "DL Saving Start" is displayed. Press to edit.

The Date will flash. Press and to adjust the start date. When the correct date is reached, use to scroll across to the Month, press and to adjust the Month. Press to edit the year using and . Note, you can use to go back to the Day and Month if required.

When the correct date is entered, press to accept the changes.

Press to show the stop date and repeat the steps above.

To return to the Main Menu, press to Exit.

## Setting the weekly Time Clock

Press . The Main Menu is displayed.

Press to select "Schedules". You will have a selection of "Weekly", "Yearly" or "A/Hours".

The "Weekly" option is already selected. Press .

You then have the choice to "Add" a weekly schedule, "Edit" a weekly schedule or "Delete" a weekly schedule. Use , , and to choose the desired function and then press to select.

Use and to select the desired channel.

To edit existing schedules, Press or to select the required schedule to edit and press to select.

The hour will flash to indicate edit mode.

Press and to change to the required "On" time.

Use and to select between hour, minute and day for Start and Stop times whilst in edit mode.

Use or to increase and decrease each setting and press to save.

Use and to select another weekly schedule to edit, and repeat the steps above. Remember to save your settings by pressing when you have finished.

Press to escape back to the "Weekly" menu.

To add a weekly schedule go to the "Add Wkly" mode and press . (Repeat the steps above)

When you have added your schedules and pressed to save changes, then press to escape back to the "Weekly" menu. When you have finished programming, press until the Default screen is displayed.

## Setting the Yearly (Exception) Schedule

Press . The Main Menu is displayed.

Press to select the "Schedules" option.

Press to select the "Yearly" option and press .

You then have the choice to "Add" a yearly schedule, "Edit" a yearly schedule or "Delete" a yearly schedule.

Use , , and to choose the desired function, and then press to select.

Use and to select the desired channel.

To edit existing schedules, press and to select the required exception schedule and then press . The Stop Date will flash. Press or to change to the required date.

Use and to select between the month and year for both Stop and Resume dates. Press to accept the edited schedule. Do the same with any other schedules you would like to edit.

To "Add" a schedule, press until the display shows "Add Yrly", "Edit Yrly" and "Del Yearly".

Use , , and until the "Add Yrly" is selected (flashing) and press .

Press  again to add the schedule and commence editing.

The Date will flash. Press  and  to change to the required date.

Use  to edit the month and year. Press  to accept the new schedule or  to cancel.

To add another schedule, Press  and repeat above procedure.

When finished adding schedules, press  to return to the "Yearly" menu.



### Optimum Start Function






The Optimum Start function aims to reduce energy consumption by estimating the time required to reach target conditions and enabling air conditioning systems by the estimated time prior to the scheduled start time.

### Changing Optimum Start Settings

Press . The Main Menu is displayed.

Use , ,  and  to navigate to the "OptStart" option and press .

Use  and  to select the optimum start settings for the desired channel.

To Enable or Disable the Optimum Start function, Use  and  to select "Enabled" and press  to edit. Then use  and  to change the setting.


Press  to save the new setting.

Press  to go to the next setting (Setpoint) and press  to edit.

The Setpoint is the desired temperature at the scheduled start time.

Change the setpoint to the desired value using  and  and press  to save.

The Setpoint range is 10 to 30 degrees C.

Press  to select the "Alpha" setting.


The Alpha value acts as a filter to dampen the response of the optimum start affect.

Edit the Alpha value as above. The range is 1 to 100%.

Press  to select "Deadband". Edit the Deadband value as above.

Deadband provides a temperature tolerance in conjunction with the Setpoint e.g. If the Setpoint is 22dgC and the Deadband is 4dgC then the target temperature is 20 to 24dgC.

The Deadband range is 0.5 to 5.0 degrees C.

Press  to select "Heat Value". Edit the Heat value as above.

Heat Value reflects the ability of the air conditioning plant to heat the room or building.

This is measured in Degrees C per hour. A large value means the room will reach target temperature sooner. The Heat value is updated by the Timeclock each time the Optimum Start runs and reaches the target temperature (or within the deadband).

If target conditions are never obtained within the Scheduled time then the Heat value is not updated.

The Alpha value affects the rate of change to the Heat value.

The Range is 0.1 to 90.0 Degrees C per Hour.



Press  to select "Cool Value". Edit the Cool value as above.

The Cool Value functions the same as the Heat value except it affects Cooling only.

The Range is 0.1 to 90.0 Degrees C per Hour.

Press  to select "Max Prestart". Edit the Prestart value as above.

The "Max Prestart" setting limits how long prior to Scheduled time the Optimum Start can activate the output. The Max Prestart range is 1 to 120 Minutes.

When finished editing the settings for the selected channel, Use  or  to select another channel and repeat steps above.

The Calibration function provides an easy way of correcting for inaccuracies in temperature readings from thermistors. Thermistor readings can be adjusted by entering an offset value as required.

Use ▲, ▼, ◀ and ▶ to navigate to "Calibrate" and Press ↩.

Press  to calibrate the temperature input.

The Display will show "Measured" and "Reading" and the Measured value will flash.

Use ▲ and ▼ to adjust the Measured value to show the correct value.

Press  to save the new offset.

The Display will show the new calibrated result and the offset value that is applied to the actual input.

TITLE	MT01 & MT02 USER INSTRUCTIONS
MODEL NO	MAXTIME 365-Day Timeclock
DATE	11/08/2005
DRAWN	REV NO: B
APPROVED	