### Digital Time Switch

Model: NTT06 24 Hour General Purpose Digital Timer

Model: NTT07

7 Day General Purpose Digital Timer





### NTT06 – 24 Hour General Purpose Digital Timer NTT07 – 7 Day General Purpose Digital Timer



#### 1. General:

This time switch is an easy to use digital timer, designed for wall mounting. It can control outputs of up to 16A which makes it suitable for domestic immersion heaters.

The NTT06/7 comes with a link in place which can be removed to provide volt free contacts if required, making it suitable for a wider range of switching applications. If volt free is not required, the link must be left in place.

The NTT06 is a 24 hour programmer only, whilst with the NTT07 programming can be 7 day, 5 + 2, or 24 hour.

### 2. Features:

4 ON/OFF switching programmes, which for NTTO7 can be made to operate over all 7 days (24 hour operation), 5 weekdays 2 weekend days, or any individual day (7 day operation). For the NTTO6, 24 hour programming is the only option. Advance feature advances to next programmed operation.

Boost feature provides 1 or 2 hour boost. Battery back up retains programmes and clock times during loss of mains.

Option of automatic summer time update (ASCO). Shortest switching time of 1 minute. Programme review.

### 3. Installation:

## Important: Switch off mains electricity before commencing work.

Remove the terminal cover. Fix the unit to the wall with the mounting screws provided. Fix the top screw first and leave 2.5mm proud, place the key hole in the top of the product over the screw head and slide down. Then mark and drill the lower fixing. Secure unit to the wall.

The wiring can enter through the rear knock outs or the cable entry ports provided. If the wiring is not through the knock outs, use the cable clamps provided to secure the cables.

Connect the installation wiring to the terminals provided, according to the legend on the terminal.

The terminals are marked as follows:

- E Earth continuity.
- N Neutral supply.
- L Live supply.
- 1 Live Input for volt free output (if required, if not, leave wire link in place).
- 2 Normally open switch live output to heater or other appliance.
- 3 Normally closed switch live output to heater or other appliance.

### 4. Battery:

The time switch has a factory fitted rechargeable battery to give clock operation and programme memory back up during loss of mains supply.

Before programming for the first time, connect the unit to the mains for at least 15 minutes prior to pressing the Rst button and programming the unit. If the display is not visible or very faint, charge for 4 hours prior to pressing Rst and programming.

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### 5. Reset:

The time switch must be reset before programming for the first time, or after subsequent discharge for more than 5 days, and following a 4 hour period of charging.

Press Rst using a pointed object, eg: a pencil. The display will show all the segments, and then clear to show: Use the Adv/Ovr button to change between on and off for the automatic summer time adjustment and proceed to section 6.



### 6. Setting the clock:

Press and hold down the Time button for 3 seconds. The word hold will show on the screen.



After 3 seconds, the screen will show a year.

Use the Adv/Ovr or Boost buttons to change the year to the correct year.

Press Time to set the year, and then the month will show.



Use the Adv/Ovr or boost button to adjust the month to the correct month.

Press Time to set the month, and then the day will show.
Use the Adv/Ovr or boost button to adjust the day to the correct day.

Press Time to set the day, and then the time will show, hours first.



Use the Adv/Ovr or boost button to adjust the hour to the correct hour. Press Time to set the hour, and then the time will show the minutes. The hour is a 24 hour clock.



Use the Adv/Ovr or boost button to adjust the minutes to the correct minutes.

23:07

Press Time to exit the Time/date entry mode. The display should now show the correct time/day of the week.

# 7. Modifying the date and time of day:

Normally the only change required will be to the time of day minutes, in which case press and hold Time for 3 seconds, during which hold will show on the display. After 3 seconds the display will show the year:



Press Time repeatedly until the minutes are shown.
Use Adv/Ovr or Boost to change the minutes to the correct value. Press Time to return to operating mode.

Other changes can be made the same way, but the Time button must be pressed to return to operating mode after any changes. There is no automatic exit from Time/date entry mode.

## 8. Programming ON/OFF times:

The NTT06/07 has 4 independent ON/OFF periods available for programming each day. For the NTT07 there is a choice of programming options, including 7 days the same (24 hours), 5+2 days (where the weekdays are the same, and the two weekend days are the same), and 7 individual days. For the NTT06, 24 hours is the only option, so all 7 days will be the same. Press and hold the Prg button for 3 seconds. Whilst

Press and hold the Prg button for 3 seconds. Whilst holding, the word Hold should show on the display.

After 3 seconds, the mode screen will show.

For the NTT07 use Adv/Ovr or Boost to change the day grouping mode. This will step through the following options:



24hr – Mo Tu We Th Fr Sa Su

5 day — Mo Tu We Th Fr followed automatically in programming by 2 day — Sa Su.

Individual day — Mo followed automatically in programming by each of the other days.

For the NTT06, Mo Tu We Th Fr Sa Su is the only option.

Once the desired day grouping is selected, press Prg to move onto programming ON/OFF times. The display will show Prog 1, with dashes for the

will show Prog 1, with dashes for the hours and minutes.

Example shown is for 5 + 2 programme.

Use Adv/Ovr or Boost to set the hour for the first on period. Press Prg to change to setting the minutes. Use Adv/Ovr or Boost to set the minutes.

Press Prg to change to programme 1 OFF time.

Press Prg to scroll through programme 2 ON, programme 2 OFF, programme 3 ON, programme 3 OFF,



programme 4 ON and programme 4 OFF, adding in times as required.

If times are not required, just leave the dashes in place, and scroll past that programme.

After programme 4 has been entered, the day will index to the next day to be programmed, or in the case of 5 + 2 it will change to Sa Su. Programme the ON/OFF times as before.

After the last off time for programme 4 has been set, press Prg to exit programme mode.

At any stage in programming, if the Prg button is pressed and held for 3 seconds, the timer will return to operating mode.



The display will now show:

Where the day and time are correct, but the ON/OFF indicator may not reflect the current programme accurately, in which case press the Adv button to correct the indicator.

In the same way as for individual programmes, days or groups of days can be omitted either by leaving dashes in all the locations for ON/OFF times for that day or group of days. Alternatively, leaving the programme entry mode before filling in all the ON/OFF times will leave the remaining times blank.

The only way to re-enter a blank time is to reset the unit.

# 8.2 Programming across midnight:

Enter the required programme ON time.

Enter the programme OFF time as 00:00

Enter the first programme ON time for the next day as 00:00

Enter the required programme OFF time.

**Note:** for 24 hour the ON period for programme 1 must start 00:00.

# 9. Modifying or adding programmes:

Press Prg and hold for 3 seconds. Whilst holding, the word hold will appear on the display.

After 3 seconds the display will show the programming mode screen. This will be in the mode in which it was last programmed. For instance if it was programmed in 5 + 2, then it will show Mo Tu We Th Fr. Either accept this, press Prg, and review the times programmed for this mode by pressing Prg, or press Adv/Ovr or Boost to change the mode, and then press Prg to review the times. In this case, either to Sa Su, or to 7 day or to individual days.

Note: If the unit was programmed as a 5 + 2 then changing the mode to any other mode other than Sa Su may blank any previous programming.

The same applies for changing from any other mode, changing from the mode it was last programmed in may blank the previous programme.

Review times and adjust as necessary as described in section 8.

### 10. Advance/Override:

In operating mode Adv/Ovr advances the programme to the next change. If the output is OFF, it will change the output to ON, until the next programmed off time. If the output is ON, it will change the output to OFF, until the next programmed on time.

A second push of the Adv/Ovr button selects a permanently ON mode, where the output is ON, irrespective of the programming.

A third push of the Adv/Ovr button selects a permanently OFF mode, where the output is OFF, irrespective of the programming.

A fourth push of the Adv/Ovr button returns the unit to operating mode, where the output will conform to the programming.

### 11. Boost:

One press of the boost button will provide 1 hours boost, after which the output will turn off. Two presses will give 2 hours boost. A third press of the boost button will cancel any boost period.

### 12. Specifications:

Operating temperature:  $0^{\circ}\text{C}$  to  $40^{\circ}\text{C}$  Operating voltage: 230V 50Hz

Switch rating: 16A resistive, 4A inductive.

0.55 HP,

750W incandescent, 750W halogen, 750W fluorescent.

100W compact fluorescent.

Switch type: 16A relay

Volt free contact:

Yes, if wire link is

removed

Contact type: Normally open and normally closed

Yes

Power ON light: Yes
Output Light: Yes

Time period: 24 Hr NTT06,

7 day NTT07.

Note:

Product not suitable for discharge lighting.

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### 3 Year Guarantee

In the unlikely event of this product becoming faulty due to defective material or manufacture within 3 years



of the date of purchase, please return it to your supplier in the first year with proof of purchase and it will be replaced free of charge. For years 2 and 3 or any difficulty in the first year telephone the helpline on 020 8450 0515.

For assistance with the product please contact:

# HELPLINE **020 8450 0515**

or email helpline@timeguard.com



For a product brochure please contact:

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