North East Time Recorders Limited



Auto Bell Timer

Automatic Bell Timer

Please read the manual before use.

Function & Application

This product is designed with a high performance microcomputer chip. It can automatically switch on at a fixed time, with a maximum of 40 groups (80 times) per day. It has an automatic calibration function for time keeping, and is easy to operate. It is widely used in schools and factories etc.

Specification

Working voltage: AC240V 50/60Hz Scope: 85% ~ 110%

Consumed power: 4W

Dimensions: 126x88x51mm

Weight: 400g

Timing Range: 23h 59m 59s
Condition temperature: -10 to +50°C
Load capacity: Resistance 25A

Timing error: 0.5s per day (with automatic error adjust function)

2s per day (without automatic error adjust function)

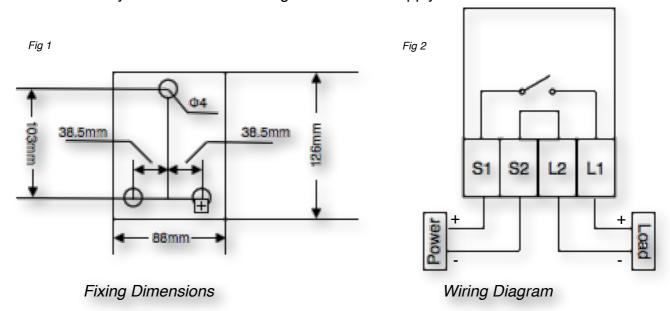
Fixing to the Wall

Insert 2xAAA batteries into the rear of the unit. This is the battery backup, should there be a power failure. Mark the 3 mounting holes on the wall and drill the 3 holes. Using suitable fixings, screw the unit to the wall. See Fig 1 below.

Open the terminal safety cover. Please refer to the wiring diagram in Fig 2 before proceeding with the below instructions.

Connect a 230VAC supply to the two left hand terminals, marked 'Power S1 and S2'. Connect a 230VAC sound unit (e.g. siren or bell) to the two right hand terminals marked 'Load L1 and L2'.

Close the safety cover before switching on the mains supply.

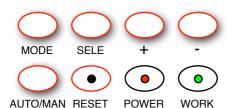


Display Indications



Operating Instructions

There are 6 function keys. MODE, SELE, +, -, AUTO/MAN and RESET



The POWER light will be on if there is power to the unit. As the program activates, the WORK light will be lit. To restore the entire unit back to factory defaults, use a pen tip to press the RESET button.

The MODE key is used to step through the four functions. The functions are:

To set the time. See section 1 - Setting the Time.

PROG
 ER
 To set the program. See section 2 - Setting the Program.
 To set the time correction. See section 3 - Clock Calibration.
 To set the duration of the contact. See section 4 - Bell Duration

NOTE:- If the unit is left in any mode for 30 seconds without pressing a key, it will automatically revert to the normal display.

Section 1 - Setting the Time

1. Press the MODE key **once**. **TC** will appear in the display.

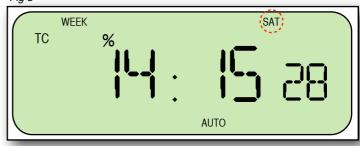
2. Press the SELE key and the HOUR will flash. Using the + and - keys, set the hour and press the SELE key. Fig 3

3. The MINUTES will flash. Using the + and - keys, set the minutes and press the SELE key.

4. The SECONDS will flash. Again, using the + and - keys, set the seconds and press the SELE key.

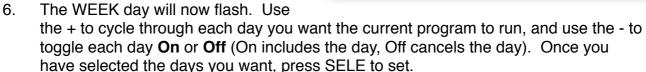
5. The WEEK DAY will now flash (See Fig 3). Set the current day using the + and - keys, then press the SELE key.

6. The time is now set. Press the MODE key four times to exit the menus to the normal display.



Section 2 - Setting the Program

- 1. Press the MODE key **twice**. **PROG** will appear in the display.
- 2. Press the SELE key and the program location will flash in the right hand of the display (See Fig 4). Each program location holds time you want the bells to go off each day.
- 3. Use the + and keys to find which program location you want to use/edit and press SELE.
- 4. The HOUR will flash. Use the + and keys to change the hour, then press the SELE key to proceed.
- 5. The MINUTES will now flash. Again, using the + and keys, set the minutes, then press the SELE key.



7. To add more times (locations), press SELE, then follow steps 3-6 again. To exit, press the MODE key **three** times. Ensure the rocker switch on the right of the unit is set to **AUTO** (II) and the display shows AUTO in the Control Selection.

NOTE:- To delete a ring time (program location), follow steps 2 and 3, selecting which program to delete with SELE, then press the AUTO/MAN key. The display should revert to Fig 4, depending on which location is selected.

Section 3 - Clock Calibration

Based on the actual clock error, work out how much time the clock is losing or gaining per day.

- 1. Press the MODE key **three** times to show **ER** in the display and press SELE.
- 2. Use the + or keys to adjust the preset value.

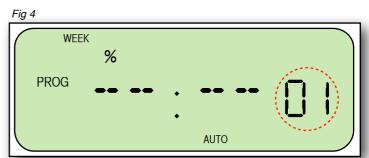
Positive error means adjust the clock to gain time. Negative error means adjust the clock to lose time

3. Press the MODE key twice to exit to the normal display

Section 4 - Bell Duration

This is used to set the length of the ringing times. The setting range is 0 to 23h59m59s and the default is 10s.

- 1. Press the MODE key **four** times, until **TL** shows in the display, then press SELE.
- 2. The HOURS will flash. Use the + and keys to set the hours, then press SELE again.
- 3. Now the MINUTES will flash. Again, use the + and keys to set the number of minutes, then press the SELE key.
- 4. The seconds will now flash. Using the + and keys, set the seconds and press the SELE key.
- 5. Press the MODE key **once** to exit to the normal display.



Manual Operation

This model has two methods of manual control:

- 1. AUTO/MAN key. When it is pressed, you can switch from **ON**, **OFF** or **AUTO**.
 - If set to **ON**, the unit will ring for the preset duration, then return to Auto Mode. If set to **AUTO**, it will ring at the pre-programmed times for the duration set. If set to **OFF**, the unit will not ring until reset to **AUTO**.
- 2. On the right of the unit, there is a 3-way rocker switch, marked **AUTO** (II), **OFF** (O) and **ON** (I). It can directly control the drive circuit of the unit. When it is switched to **AUTO**, the unit will ring at the pre-programmed times. If it is switched **OFF** the unit will not ring at all. If switched **ON**, the unit will ring for however long the switch is in the **ON** position.

TROUBLESHOOTING

Symptom	Reason and Debug method
Not ringing, power indicator is off.	1. Check AC power is on.
Power indicator is on but not ringing.	 Program is not set: In the clock state, check if the bell symbol is flashing. If not, refer to Section 2. Error in settings: Check each ringing time and day is correct. The control state is not set: Check whether both the display and manual rocker switch are set to AUTO.
Display is blurred or no display.	The battery power is low: Open the back cover and change the batteries (2xAAA) The temperature is too low: It will come back on when the temperature rises.
Ringing at the wrong time.	Check the ringing program location. Cancel/ delete any redundant program times as ':' (Don't think that 0:00 is cancelled, it will ring at midnight)
Key failure or no display.	The unit may have had an electromagnetic pulse or "spike", to cause a system failure: Press the reset key to reset the unit.