

# InteliTimer Pro® Logger

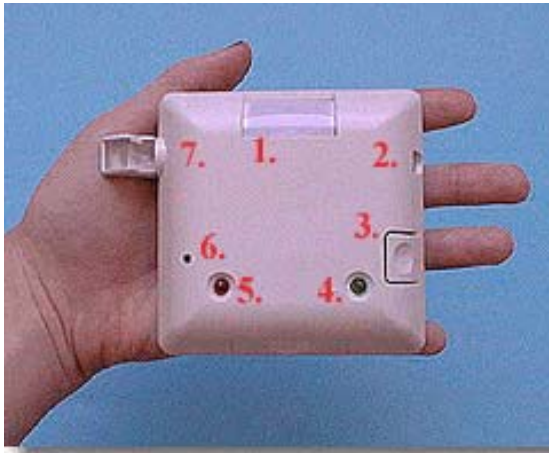


Figure 1: Logger with numbered parts.

The InteliTimer Pro Logger by WattStopper is an occupancy sensor, lighting sensor, and data logger combined in one device. It will record the time, date and status of lighting and occupancy each time there is a change in lighting or occupancy. The InteliTimer Pro Logger can monitor a space as large as 150 square feet and hold up to 2000 data points. This device is ideal for determining which spaces are best suited for occupancy controlled lighting systems and it can help calculate potential energy savings from the use of such controls.

- |                                 |                          |
|---------------------------------|--------------------------|
| 1. occupancy sensor             | 5. occupancy LED         |
| 2. light sensitivity adjustment | 6. recessed reset button |
| 3. test button                  | 7. light tube            |
| 4. light LED                    |                          |

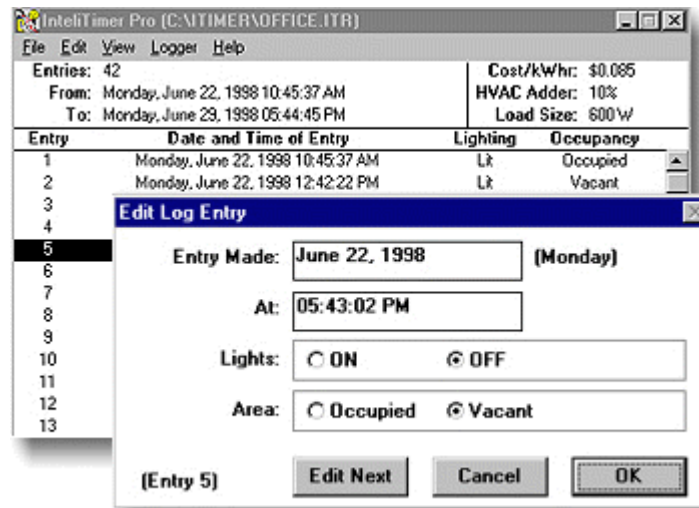
## Setting Up the InteliTimer Pro Logger

1. **Connect the logger to a computer with the 9-pin serial cable.**
2. **Open the InteliTimer Pro software.** Becoming familiar with the Help menu before beginning is recommended.
3. **Make sure that the date and time on the computer are correct.** Under the Logger menu heading, choose Reset Logger. Reset the logger, clear its memory and name the study. (If the computer cannot recognize the logger, check to see if the correct COM port has been selected under the Logger menu heading.)
4. **Disconnect the logger from the communication cable.** Replace the cover for the COM port on the logger.
5. **Place and secure the logger with the T-bar clip or double-sided tape.** Make sure that it is positioned so that it "sees" only the occupants in the area being studied. Placing the sensor where it can easily detect hand motion or walking motion is an effective approach. (See *Figure 2* for the InteliTimer Pro Logger's field of vision.) The sensor's range also varies slightly with its height above the floor.
6. **Rotate the light sensor so that it points directly at the light source and away from daylight.**

7. **Test to see if the IntelliTimer Pro Logger is sensing correctly by pressing the indented button.** Two LED's are activated. The green LED will blink when light is detected. If necessary, adjust the light sensor's sensitivity by turning the recessed adjuster with a Phillips head screw driver. The red LED turns on or blinks when an occupant is detected. (Note that the IntelliTimer Pro Logger must not detect an occupant for at least 5 minutes in order for it to record the space as vacant.) The test period lasts for 90 seconds. For a longer test period, press the test button again. If both LED's do not work, the logger must be returned so the batteries can be replaced.
8. **Use a Phillips head screw driver to press the recessed button to begin data collection.** This will clear the data the logger has recorded so far!
9. **Leave a note with a contact number near the sensor.** The sensor should be left to collect data for at least a week. This is enough time to identify usage patterns in most spaces.

## Retrieving Data from the IntelliTimer Pro Logger

1. **Connect the device to a computer via the 9-prong serial cable.**
2. **Open the IntelliTimer Pro software. Under the Logger heading, choose Retrieve Log Entries.**
3. **If extraneous data has been left in the logger along with the collecting session, it is possible to delete individual entries during download.** Highlight the entries and then *Clear* under the *Edit* menu heading. Data points may also be inserted using the Edit menu. Data points can be altered by double clicking on the entry. (See *Figure 3* below)



*Figure 3* Sample screen showing data and the Edit box for individual data points.

4. **Under the *Edit* menu heading, choose Set Defaults to adjust the price per kWh, approximate percent increase load for heating, ventilating and air conditioning of the space due to waste heat from the lighting in the space, and the wattage of the lighting system being studied.**
5. **For potential energy savings calculations and a graph showing lighting and occupancy patterns (See *Figure 4* below), look under the *View* menu heading.**

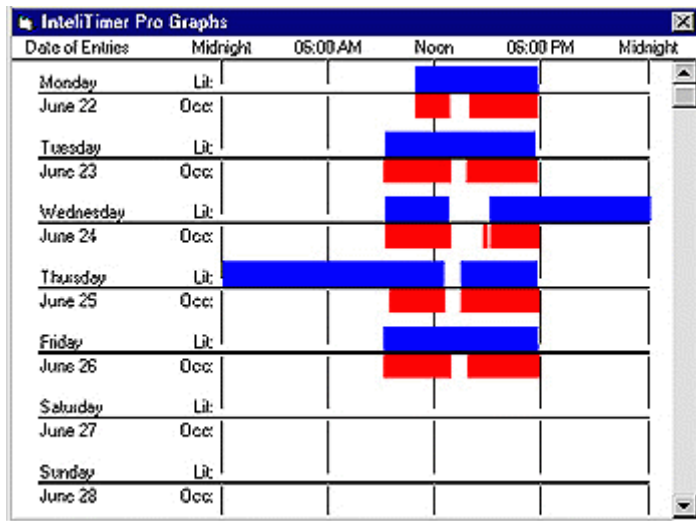


Figure 4 Sample screen showing graph of lighting and occupancy patterns.

- It is possible to view the data in a spreadsheet such as Excel by saving the data as a text file using the Save As function under the File menu heading. Open a new spreadsheet with the data through Excel. In Excel, "-1" denotes true, as in the lights are on or the room is occupied. "0" denoted false: the lights are off or the room is vacant.