

BHM Electronics

WATCH ALARM

Contents

- 1 Watch Alarm display
- 1 mounting bracket
- 2 knobs for mounting bracket
- 2 keys
- 1 siren (with 5 metre lead)

Mounting

Dash Mounted - Use the mounting bracket as supplied.

Overhead Mounted - Loosen the four Philips-head screws in the extreme corners of the front panel until the front panel can be lifted off the case. Rotate the front panel 180 degrees so that the bracket is at the top. Screw the front panel back on.

Wall Mounted - Remove the bracket, loosen the four Philips-head screws in the extreme corners of the front panel until the front panel can be lifted off the case. Underneath the front panel are four mounting holes in the corners of the case. Mount the case using these holes then screw the front panel back on.

Siren - The siren should be mounted where it can be heard by other people if the watch keeper fails to clear the alarm. *Caution:* Do not position it too close to a person, for example don't aim it at the head of a bunk. The siren is very loud and if positioned too close could damage a person's hearing when it sounds.

Connections

Power - Connect the lead to a DC power supply of between 10 and 30 volts. Red wire to positive, black to negative.

Siren - The orange wire is the siren positive output, connect it to the red wire on the siren cable. The brown wire is the siren negative output, connect it to the black wire on the siren cable.

Autopilot Option - If the Watch Alarm is fitted with the autopilot interface option, connect the green and yellow wires to the clutch output from the autopilot. The clutch output from the autopilot is used to switch on the Watch Alarm, so the output must be on whenever the autopilot is engaged. This is used to operate a relay inside the Watch Alarm. The relay will operate from 12 or 24 volts. Polarity does not matter, either wire can be connected to positive.

Operation

Key switch in off position, autopilot off (if connected): operates as a clock.

Key switch in on position, or autopilot on (if connected): watch alarm is active. After the pre-set alarm interval has passed the alarm sequence will start. Each stage lasts 30 seconds.

stage 1 red light on Clear Alarm button flashes

stage 2 internal alarm sounds

stage 3 internal alarm sounds louder

stage 4 external siren sounds

Pressing the Clear Alarm button at any time will reset the alarm countdown. It will also display the alarm interval that the Watch Alarm is set to.

Setting the Clock

Make sure the key switch is in the off position, and the autopilot is off (if connected). The clock uses 24 hour time.

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|------------------------|--|
| <i>setting minutes</i> | hold hours/minutes toggle switch down, press Clear Alarm button, each press will advance the time by one minute. |
| <i>setting hours</i> | hold hours/minutes toggle switch up, press Clear Alarm button, each press will advance the time by one hour. |

Setting the Watch Alarm

Make sure the key switch is in the off position and that the autopilot is off (if connected). Then turn the key to the on position or engage the autopilot (if connected). The display will change to show the alarm interval. The alarm interval can be set for any time from 1 to 60 minutes. The Watch Alarm will beep until the alarm interval has been set.

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|--------------------------------|--|
| <i>setting minutes</i> | hold hours/minutes toggle switch down, press Clear Alarm button, each press will advance the watch time by one minute. |
| <i>setting tens of minutes</i> | hold hours/minutes toggle switch up, press Clear Alarm button, each press will advance the watch time by 10 minutes. |

The Watch Alarm will stop beeping once you start to set the alarm interval. If the alarm interval is already correct just press the Clear Alarm button. If it has not been set after one minute the Watch Alarm will default to a five minute alarm interval.

When no further change has been made for five seconds the alarm will be locked on and the display will return to showing the time of day. To change the alarm interval again the key switch and the autopilot (if connected) must be turned off, then on again.

If the key is removed in the on position the watch alarm can not be disabled, whether or not the autopilot is engaged.

Power Usage

When in the clock mode the Watch Alarm uses very little power and can be left permanently running without fear of draining the ship's battery.

If the power is removed from the Watch Alarm the display will turn off but a super capacitor inside will keep the correct time for several days.

Security Features

To prevent the power or external siren from being disconnected by an unauthorised person the cable connectors can be concealed behind a secured panel.

If the power is removed with the Watch Alarm in the on mode the alarms will sound for five seconds after power is returned. This is to warn of possible tampering. The Watch Alarm will then enter watch alarm mode with no chance to change the alarm interval.

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|---------------|--|
| POWER SUPPLY | 10V to 30V DC <1mA in clock mode 30mA in alarm mode 200mA maximum with siren on |
| SIREN OUTPUT | 8V DC 250mA maximum |
| INTERNAL FUSE | 250mA M-205 |

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287 Dee Street, Invercargill, New Zealand

Postal: PO Box 787, Invercargill

Phone or Fax +64 3 218 3495