



Watchdog2 Fire Sprinkler Controller USER Guide

This document provides essential information for the owner/user/householder on the Watchdog2.

INTRODUCTION

The Watchdog2 sits at the heart of the fire sprinkler system, monitoring sensors and performing periodic tests to help ensure that the system is fully functioning and ready at all times.

This document is intended to provide essential information for the user or householder in the event that a problem arises.

The Watchdog is only one part of the fire sprinkler system, and other parts such as sensors pumps and valves are required to create a complete system, but are not covered here. Please refer to the fire sprinkler system installer for full details of your installation.



WARNING – Users/householders should not attempt to perform maintenance themselves. This document is intended to provide basic guidance to users on the appropriate action in the event of an unexpected situation. Always seek professional advice from a sprinkler installer or qualified electrician.

WARNING – Watchdog2 is a safety critical device and MUST be installed by a qualified electrician/electrical engineer and serviced by a qualified sprinkler engineer in accordance with relevant electrical installation regulations and relevant fire sprinkler regulations.

Failure to correctly install, configure and maintain the system as a whole, may result in the fire sprinkler failing to operate when required, resulting in loss of life or severe injury.

Risk of Electric Shock. Do not open or remove the cover on the Watchdog2. There are no user serviceable parts inside, and there is a risk of electric shock or loss of life due to live mains voltages (230Vac) inside.

Coda Octopus Martech Ltd. (Martech) accepts no responsibility for failure of any kind resulting from incorrect installation or failure to maintain the system or from installation or maintenance by unqualified installers

For the latest version of this manual and additional resources and technical support, please visit www.firesprinklerwatchdog.com or scan the QRcode:



COMMON PROBLEMS AND FREQUENTLY ASKED QUESTIONS

1. The Watchdog2 makes a beeping sound
 - a. This is usually because there is a fault or it requires attention. An LED should also be illuminated/flashing to indicate the nature of the problem.
See below for LED functions.

The sounder can be temporarily silenced by pressing the RESET button, until the next periodic test.
 - b. If there is NO green LED illuminated AND the Watchdog 2 is fitted with an optional rechargeable battery, the sounder will beep every 10 minutes to alert to a power loss.
 - c. A continuous alarm tone, accompanied by the FIRE! LED indicates that it is in Fire Mode because water flow has been detected. This normally means that a sprinkler head is open and implies there is a fire.

2. LEDs are illuminated/flashing.
 - a. Refer to LED table below for more information.

3. The pump runs occasionally when there is not a fire.
 - a. The pump may run occasionally for a short period to maintain the pressure in the system.
This is normal.
 - b. The pump will run periodically (typically weekly) as part of the system's automatic self-test.
This is normal. The time can be reset to run at your preferred time.
 - c. The pump runs for more than a few minutes or multiple times a week when no sprinkler head is open,
THIS IS NOT NORMAL. Seek advice ASAP.

4. Running water can be heard or seen coming from the sprinkler system.
 - a. The sprinkler system is fitted with a valve which opens as part of the automatic periodic self-test to discharge a small amount of water.
This is normal.
 - b. Other unplanned water discharge or leaking of the system will result in a fault alarm being raised.
THIS IS NOT NORMAL. Seek advice ASAP.

NOTE – Sprinkler heads ONLY open when heat is applied, such as during a fire. The Watchdog2 cannot cause the sprinkler system to operate unless there is a fire and a sprinkler head has opened.

BASIC CONTROLS AND INDICATORS



All user input is via the 2 front panel push buttons 'TEST' (top) and 'RESET' (bottom). 6 LEDS indicate the system status.

AUDIBLE AND VISIBLE ALARMS

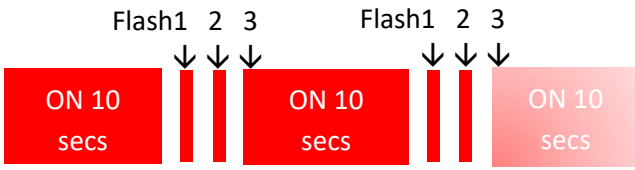
The Watchdog2 has an internal sounder to alert to a problem. The sounder is always accompanied by an LED indicator.

In the event of an alarm sounder or fault LED, you should always refer to the sprinkler system installer for further advice. See also below for LED indicator details.

The FIRE! LED indicates the flow sensor has detected water flow, which may indicate that a sprinkler head has opened and therefore that there may be a fire. Take immediate action to evacuate the premises if necessary.

To temporarily SILENCE the Watchdog2, press the reset button for approx. 1 second.

LED INDICATORS

LED	Function
PUMP (yellow)	ON = pump running (power applied to pump)
FAULT (red)	<p>The LED stays on for 10 seconds then flashes according to the fault. At the last flash the LED stays on for 10 seconds before the sequence is repeated (see below example for 3 flashes).</p>  <p style="text-align: center;">Flash1 2 3 Flash1 2 3</p> <p style="text-align: center;">↓ ↓ ↓ ↓ ↓ ↓</p> <p style="text-align: center;">ON 10 ON 10 ON 10</p> <p style="text-align: center;">secs secs secs</p> <p>2 flashes - Auto_Test_Failure 3 flashes - Low_Water 4 flashes - Pressure_Switch1_Failure 5 flashes - Pressure_Switch2_Failure 6 flashes - Excessive_Operation 7 flashes - Phase_Failure (not on WD2) 8 flashes - Maximum_Run_time 9 flashes - Monitored_Valve_Failure (not on WD2) 10 flashes - Possible Fire (pressure loss but no water flow detected)</p>
FIRE! (red)	<p>Flash 2Hz (0.5 secs) = Fire Mode</p> <p>Water flow detected. Normally means that a sprinkler head is open. Implies there is a fire.</p>
SERVICE (blue)	<p>Flash 1Hz (1 sec) = Whole system service required</p> <p>Refer to installer for servicing of the whole system.</p>
TESTING (orange)	<p>Automatic testing in progress</p> <p>Flash every 2 seconds = Dump Valve open (water discharged from system) Normally only on during periodic automatic test (normally weekly)</p> <p>ON = Remainder of auto test in progress OR ON = Wait period after operation (e.g., after jockey mode)</p> <p>Also</p> <p>ON when a USB stick is inserted and read/write is in progress (sounder sounds when read/write is complete)</p>
POWER (green)	Mains power connected. Illuminated all the time when main power available.

BUTTON FUNCTIONS

Function	Button Press	Action
Silence sounder	RESET button, short press (>1 <2 secs)	Silences sounder until next weekly test <i>Contact installer ASAP for further help and maintenance.</i>
Stop pump	RESET button >10 secs, when pump is running in fire mode or possible fire mode	Stops pump, but only after initial jockey run period. Will resume if pressure not restored or water flow is present. <i>Contact installer ASAP for further help and maintenance.</i>
Reset periodic test time.	RESET button > 10 secs (beep) Followed immediately by TEST button >10 secs (beep)	Resets periodic test time (time of day when auto test will run). The frequency of the test (e.g., every 7 days) is configured in the USB settings file
FIRE MODE	TEST + RESET >10 seconds	Forces FIRE MODE (Pump running only. Does NOT open any sprinkler)
Run pump	TEST button, short press (>1<5 secs)	Runs pump for 10 seconds (no dump valve operation)
Run periodic automatic test.	TEST button >10 secs (beep)	Runs full test with dump valve etc. See periodic automatic test below

PERIODIC AUTOMATIC TEST SEQUENCE (ALSO KNOW AS WEEKLY SELF-TEST)

<p>Periodic Automatic Test</p> <p>Refer to Button Functions above to reset the time of day to run the test</p>	<p>Runs periodic test according to time period in settings file.</p> <p>e.g., weekly. (default = 7 days)</p>	<ol style="list-style-type: none"> 1. Open dump valve, FLASH TESTING LED 2. Discharges water 3. Wait for pressure drop 4. Confirm both pressure sensors detect pressure drop (times out after defined auto-test period → fault) 5. Close dump valve as soon as pressures switches activated 6. Run pump (PUMP LED ON) 7. TESTING LED to ON 8. Confirm both pressure sensors reinstated/closed 9. Run on for X secs after pressure reinstated (jockey run period) 10. If any faults detected, set fault o/p 11. TESTING LED OFF
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