

Waterguard

WATERGUARD S7 DUAL INITIAL SETUP & OPERATING GUIDE

PART OF THE WATERGUARD
SERIES 7 COMMERCIAL
RANGE OF WATER LEAK
DETECTION EQUIPMENT



IMPORTANT! IN ORDER TO SUCCESSFULLY SETUP THIS SYSTEM YOU WILL REQUIRE INFORMATION REGARDING THE BUILDINGS OCCUPATION. THIS INCLUDES OPERATIONAL HOURS, OCCUPATION AND WATER USAGE. UNLESS OTHERWISE STATED WITH A PREARRANGED SETUP ALL ENGINEERING SETTINGS WILL BE SET TO DEFAULT.

BREEAM[®]

IF ON INSTALLATION THE S7 DUAL HAS COMPLETELY LOST BACKUP POWER CALL OUR HQ WITH YOUR ORDER NUMBER IMMEDIATELY AFTER CONNECTING IT TO A POWER SUPPLY ON 01226 244200.

SYSTEM PROFILE

The S7 Dual controller monitors the water flowing through TWO water meters in different buildings with independent settings and parameters. If the maximum allowable volume of water is exceeded, the controller will emit an audible and visual alarm alerting that a leak has been detected. Where installed the valve can be set to automatically shut off the water supply. There are two guard levels, low guard for when the property is occupied and high guard for when it is unoccupied. To familiarise yourself with your installed Waterguard System please read this user guide in full.

NAVIGATION

On the front of the S7 Dual there is an LED screen, x 2 green LED lights, 1 x red LED light and x 5 push buttons.

LED INDICATIONS

Green LEDs flash when water is flowing, but only when the display is awake. Left green LED is for channel 1, right is for channel 2. The red LED flashes when there is an alarm condition.



Dedicated technical helpline: 01226 397987

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BUTTON OPERATION

The S7 Dual has 5 push buttons, 4 arrow buttons used to navigate and access the menus, the OK button is used to select and confirm menu options. The Waterguard S7 Dual has three separate menus for feature selection, perimeter setting and day to day operation. Accessing the menus:



- **GUARD MENU:** To only be accessed by authorised personnel when setting up the system. Push both the up and down keys simultaneously for 5 seconds. To exit the menu; push the left arrow key at any time.
- **OPERATING MENU:** To be accessed by the consumer for day-to-day operation. Once in full operation this menu can be used to check the status, override the system and check system activity. Push any key to wake the display which will show the Home Page, navigate from left to right to access other pages.
- **ENGINEERING MENU:** This menu should only be accessed by authorised personnel when commissioning or changing the system configuration settings, or the controller has completely lost power. Otherwise, no access is required as these settings are inputted prior to dispatch. If you require access call the technical support line on 01226 397987.

SYSTEM MENUS

THE GUARD MENU - SETUP

- Set the water allowances based on the FLOW PER options selected in the Engineering menu for CHANNEL 1:
 - When FLOW PER 1/2 HOUR, HOUR (default) or GUARD is selected:
 - **LOW:** Push OK to change and confirm the maximum allowable litres when the building is occupied.
 - **HIGH:** Push OK to change and confirm the maximum allowable litres when the building is unoccupied.
 - When FLOW PER DAY is selected:
 - **DAILY LITRE:** The total maximum litres of water allowed in 24 Hours.
- Input METER READINGS: Push OK, navigate to match the actual water meter reading wired to CHANNEL 1.
- Configure manual override options for CHANNEL 1 (this allows unlimited water and ignores set parameters for the allocated time).
 - **OVR TIME:** Select override time. Push OK, increase by 10 minutes to a maximum of 120. This option is not available if the controller is set to have no manual override options.
 - **OVERRIDE TIMES.** This option is only available if PRESET manual overrides have been selected in the Engineering Menu. Up to 3 manual overrides can be scheduled per day.
 - **DAYS:** Schedule manual override times.
 - WKEND/WKDAY – Weekend and weekday set times.
 - EVERY DAY – Daily set times, every day is the same.
 - 7 DAY – Daily set times, every day is different.

Each of the 3 times can be enabled or disabled when editing the start time, cursor over to the USE/OFF and press Up or Down key to change.

- Setting GUARD time options for CHANNEL 1:
 - **MAIN:** Selects guard level source, **TIMER** or **ALARM** when connected to intruder alarm.
 - **LO GUARD TIMES** (only available when TIMER is selected):
 - **DAYS:**
 - WKEND/WKDAY: Saturday Sunday and Monday to Friday
 - EVERY DAY: Every day is the same



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- 7 DAY: Every day is different

Select the start and finish times of the two guard periods.

- Configure **HIGH24** for CHANNEL 1: YES will enable the system to automatically switch guard to HIGH after 25 hours of no use regardless of time settings. This function can only be ended by the user accessing the control panel and pressing OK.
- CHANNEL 1 **AUDIT DATA**: Audit maintains the most recent 21 days' worth of usage data. If you change any settings relevant to metering, periods or date/time then the audit data for the affected channel will be cleared. 14 days of audit data required to automatically set limits.
 - When using audit to update the limits it will automatically update limits based on the current period and daily settings. The audit page shows the audited data collected to date and shows it in a way that matches the current daily settings, e.g. 7 sets of results for 7 day, 2 sets of results for weekday/weekend and 1 set of results for daily.
 - If you choose to use the audit data to set the limits, audit will add 10% + 10 to the results data before it sets the limits.
- Set the water allowances based on the FLOW PER options selected in the Engineering menu for CHANNEL 2:
 - When FLOW PER 1/2 HOUR, HOUR (default) or GUARD is selected:
 - **LOW**: Push OK to change and confirm the maximum allowable litres when the building is occupied.
 - **HIGH**: Push OK to change and confirm the maximum allowable litres when the building is unoccupied.
 - When FLOW PER DAY is selected:
 - **DAILY LITRE**: The total maximum litres of water allowed in 24 Hours.
- Input METER READINGS: Push OK, navigate to match the actual water meter reading wired to CHANNEL 2.
- Configure manual override options for CHANNEL 2 (this allows unlimited water and ignores set parameters for the allocated time).
 - **OVR TIME**: Select override time. Push OK, increase by 10 minutes to a maximum of 120. This option is not available if the controller is set to have no manual override options.
 - **OVERRIDE TIMES**. This option is only available if PRESET manual overrides have been selected in the Engineering Menu. Up to 3 manual overrides can be scheduled per day.
 - **DAYS**: Schedule manual override times.
 - WKEND/WKDAY – Weekend and weekday set times.
 - EVERY DAY – Daily set times, every day is the same.
 - 7 DAY – Daily set times, every day is different.

Each of the 3 times can be enabled or disabled when editing the start time, cursor over to the USE/OFF and press Up or Down key to change.

- Setting GUARD time options for CHANNEL 2:
 - **MAIN**: Selects guard level source, **TIMER** or **ALARM** when connected to intruder alarm.
 - **LO GUARD TIMES** (only available when **TIMER** is selected):
 - **DAYS**:
 - WKEND/WKDAY: Saturday Sunday and Monday to Friday
 - EVERY DAY: Every day is the same
 - 7 DAY: Every day is different

Select the start and finish times of the two guard periods.

- Configure **HIGH24** for CHANNEL 1: YES will enable the system to automatically switch guard to HIGH after 25 hours of no use regardless of time settings. This function can only be ended by the user accessing the control panel and pressing OK.
- CHANNEL 2 **AUDIT DATA**: Audit maintains the most recent 21 days' worth of usage data. If you change any settings relevant to metering, periods or date/time then the audit data for the affected channel will be cleared. 14 days of audit data required to automatically set limits.
 - When using audit to update the limits it will automatically update limits based on the current period and daily settings. The audit page shows the audited data collected to date and shows it in a way that



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matches the current daily settings, e.g. 7 sets of results for 7 day, 2 sets of results for weekday/weekend and 1 set of results for daily.

If you choose to use the audit data to set the limits, audit will add 10% + 10 to the results data before it sets the limits.

- Input standard settings:
 - **DATE:** Push OK to select and confirm the date. Use to adjust the date.
 - **TIME:** Push OK to select and confirm the time. Use to adjust the time.
 - **BUZZER:** Push OK to select audible alarm options:
 - OFF: No warnings, buzzer off.
 - LEAK: Buzzer enabled when a leak is detected.
 - POWER: Buzzer enabled for selected power warnings.
 - BOTH: Buzzer enabled when a leak is detected and for selected power warnings.
 - **PWR WRN:** Power warning options; **NONE, MAINS FAIL, LOW BATTERY** and **BOTH**. To remove a warning firstly the problem must be fixed (e.g., power turned back on) then view the events page (in the operating menu) to clear. Battery fail warning is always enabled and will show on the home screen: The battery is no longer working. If the mains power also fails, then the controller will stop working.

THE OPERATING MENU

The operating menu has 4 different pages for day-to-day operation and checking of the system status.

- **HOME PAGE** (use any key to wake the display): Using the navigation keys, you can change the guard level, start a manual override, open, and close any valves and check the status of each channel. Information and options available:
 - Time and date are shown at the top of the screen, power warnings also flash on this line.
 - CHANNEL 1 GUARD STATUS, options are:
 - ALARM/TIMER LOW: The alarm or timer input controls guard levels and has changed guard level to LOW.
 - MANUAL LOW: Guard level is low and set by the user by pressing OK, this will be overridden by the next ALARM LOW or TIMER LOW.
 - ALARM/TIMER HIGH: The alarm or timer input controls guard levels and has changed guard level to HIGH.
 - MANUAL HIGH: Guard level is high and set by the user by pressing OK, this will be overridden by the next ALARM HIGH or TIMER HIGH.
 - HIGH 24: When HIGH 24 is enabled, if there is no measured water usage for 24 hours then the guard level switches to HIGH 24, which is a HIGH level. HIGH 24 can only be ended by the user pressing OK.
 - PERM HIGH: Guard level is HIGH and cannot be changed by the alarm input, the timer or the user pressing OK key. MODE on the Mode page controls this state, you can set and clear it there.
 - CHANNEL 1 OVERRIDE: Pressing OK will start a manual override allowing an unlimited amount of water for a preset time, to cancel the override press OK again at any time.
 - CHANNEL 1 STATUS: Described as a METER, VALVE or CHANNEL (meter and valve). Each channel will show either OK, CLOSED or LEAK. Pressing OK when on the channel will change the status.
 - CHANNEL 2 GUARD STATUS, options are:
 - ALARM/TIMER LOW: The alarm or timer input controls guard levels and has changed guard level to LOW.
 - MANUAL LOW: Guard level is low and set by the user by pressing OK, this will be overridden by the next ALARM LOW or TIMER LOW.
 - ALARM/TIMER HIGH: The alarm or timer input controls guard levels and has changed guard level to HIGH.
 - MANUAL HIGH: Guard level is high and set by the user by pressing OK, this will be overridden by the next ALARM HIGH or TIMER HIGH.



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- **HIGH 24:** When HIGH 24 is enabled, if there is no measured water usage for 24 hours then the guard level switches to HIGH 24, which is a HIGH level. HIGH 24 can only be ended by the user pressing OK.
- **PERM HIGH:** Guard level is HIGH and cannot be changed by the alarm input, the timer or the user pressing OK key. MODE on the Mode page controls this state, you can set and clear it there.
- **CHANNEL 2 OVERRIDE:** Pressing OK will start a manual override allowing an unlimited amount of water for a preset time, to cancel the override press OK again at any time.
- **CHANNEL 2 STATUS:** Described as a METER, VALVE or CHANNEL (meter and valve). Each channel will show either OK, CLOSED or LEAK. Pressing OK when on the channel will change the status.
- **MODE PAGE** (right arrow key from home page): The mode can be either PERMANENT HIGH GUARD or NORMAL. POWER display is either mains or backup battery. This page also displays the meter readings for each channel and any differences to readings.
- **EVENTS LOG PAGE** (RIGHT ARROW KEY x 2 from homepage): The events log page records all events in reverse order. Each event is time and date stamped and includes LEAK DETECTED, ACCESS GUARD MENU, USER OPENED VALVE 1, CONTROLLER STARTUP.
- **SYSTEM INFORMATION** (right arrow key x 3 from homepage): This page displays system information and Waterguard contact details for customer support.

REINSTATING THE WATER SUPPLY

Ensure to check for leaks before reinstating the water supply, if an alarm persists without a leak consider increasing litre allowances in the guard menu, also ensure that the system mode has not been set to PERMANENT HI (change via the operating menu on the mode page):

- From the controller: Access the Operating menu by pressing any button, navigate to the channel which has closed (LEAK CLOSED) and press the OK button to open the valve.
- From the valve: All solenoid valves include a manual override. Ensure the override is adjusted by a competent person.

POWER LOSS

In the event of any mains power loss the S7 Dual is equipped with a backup battery which will continue to provide uninterrupted power for at least 12 months. The system has several power warning options available in the GUARD MENU.

MAINTENANCE

This system requires minimal maintenance. In hard water areas it is recommended that any connected valves are dismantled and cleaned with limescale remover annually as build up can cause the valve operation to fail.

CONTACT US

If you require any further assistance operating the Waterguard S7 Dual or if the S7 Dual is not functioning correctly, technical support and further product information is available during office hours. Please call 01226 397987 to speak with one of our technical experts, ensure to have your order details ready so we can handle your query as efficiently as possible.

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