

K RAIN®

KRX8™

8 ZONE WI-FI IRRIGATION CONTROL



WWW.K-RAIN.COM.AU

User Manual



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Please be sure to read through all the instructions before attempting to use your controller

Model no: KRX8

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Overview





Controls

1. **MAIN DIAL**
2. Indicator LED ring
3. **START** button
4. **STOP** button
5. **SENSOR SWITCH**

⚠ Do not disassemble this product. There are no serviceable parts inside. Some internal components can run at elevated temperatures and touching these could cause burns

Overview

Key Features

- ✔ Wi-Fi control with **Holman Home** via  iOS® or  Android®
- ✔ 8 **ZONES** can be added to the 4 **START** times
- ✔ Scheduling options:
7 DAYS, INTERVAL DAYS, ODD DAYS incl. 31st, ODD DAYS excl. 31st, EVEN DAYS, with misting
- ✔ Max. 15 day rain delay
- ✔ 11:59 hr max. **RUN TIME** per **ZONE**
- ✔ **ZONE** and multi-zone (sequential)
MANUAL control
- ✔ On-board **MANUAL** controls: **START** and **STOP**, including shut-off with the **MAIN DIAL**
- ✔ M-205 fuse rated at 1A for power spike protection
- ✔ Memory backup power requires 9V battery (sold separately)
- ✔ IP54 rated housing with lockable door
- ✔ To drive a pump contactor, this controller must be installed with a low current relay

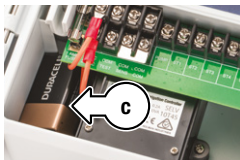
Installation

9V Battery

1. Open the controller housing door
2. Remove the terminal cover using the two tabs as shown (a)
4. Connect a 9V battery to the snap, and fit below the terminal block (c)



3. Locate the 9V battery snap (b) below the terminal block



5. Replace the terminal cover to house the battery

Installation

Power Supply

- i** This unit runs off a 240V 50Hz single phase outlet, drawing 30W at 240V AC
- ✔ **Internal transformer:**
Reduces 240V AC to extra low voltage supply of 24V AC
- ✔ Fully compliant with AS/NZS 61558-2-6
- ✔ 1.25A low energy, high efficiency toroidal transformer for long life
- ✔ **Input:** 24V AC 50/60Hz
Output: Max 1 amp
- ✔ **To stations:**
24V AC 50/60Hz.
0.5 amp max
- ✔ **To master/pump:**
24V AC 0.25, amp max
- ✔ Transformer and fuse capacity must be compatible with output requirements

⚠ Any electrical installation must be carried out in accordance with these instructions all Local, State and Federal codes

Installation

Installing Holman Home

1. Download **Holman Home** to your mobile device via the **App Store** or **Google Play**
4. Read our User Agreement and Privacy Policy and tap **AGREE** if you wish to proceed



SCAN FOR MORE INFO

2. Open **Holman Home** on your mobile device
5. Follow the prompts to register a **Holman Home** account with your email address

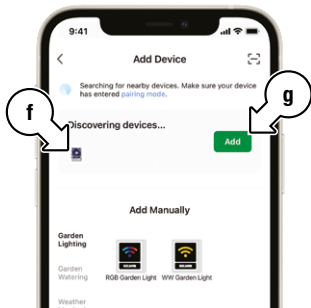
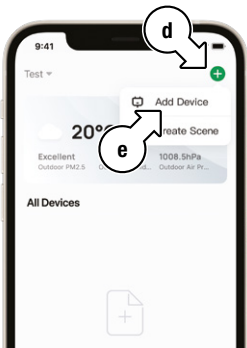
⚠ Ensure your country details are correct at this stage

- i** You may be prompted to allow notifications—the app can still function if you choose to opt out
 - i** You may be prompted to allow access to your location. This allows the app to show weather information-it will still function if you choose to opt out
3. Tap **SIGN UP**

Installation

Adding your KRX8 to Holman Home

1. Before attempting to connect your **KRX8** to **Holman Home**, ensure:
 - 9V battery connected
 - **KRX8** is close to your router
 - Bluetooth on your smartphone is active
2. Open the **HOME** screen in **Holman Home** and tap **+** (d) and **ADD DEVICE** (e)
3. If your **KRX8** appears in the **DISCOVERING DEVICES...** section (f), tap **ADD** (g)

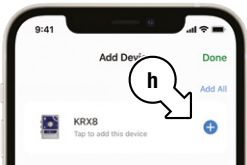


- i** If your **KRX8** does not appear here, refer to **EZ MODE** and **AP MODE** connection methods for further assistance

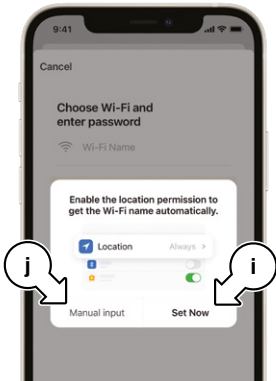
Installation

Adding your KRX8 to Holman Home

4. In the following screen, tap **+** (h) next to your **KRX8**

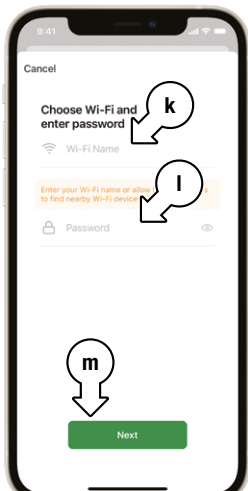


- i** *Holman Home* will ask to access location data; tap **SET NOW** (i) to share this with *Holman Home*



- i** Alternatively, to connect without sharing location, tap **MANUAL INPUT** (j)

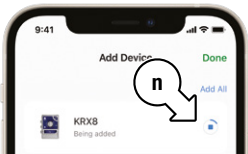
5. Enter the **Wi-Fi NAME** (k) and **PASSWORD** (l) of your Wi-Fi network as necessary and tap **NEXT** (m)



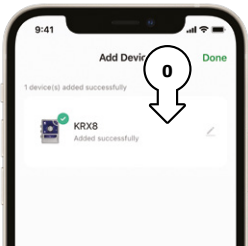
Installation

Adding your KRX8 to Holman Home

- i** It may take a few minutes for your **KRX8** to add to **Holman Home**; please wait for the progress dial (n) to finish



6. Once the connection process is complete, **Holman Home** will confirm it has successfully added your **KRX8** (o); tap **DONE** to access the main **KRX8** 🏠 screen





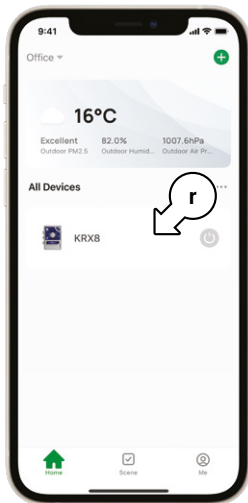
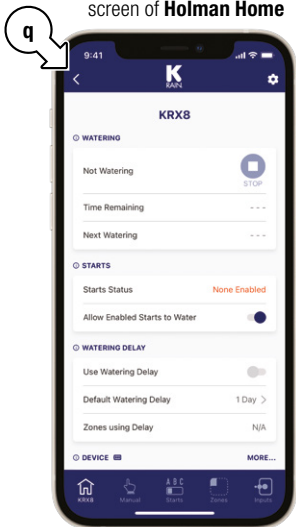
- i** On first use, the **KRX8** interface will need a moment to initialise (p)



Installation

Adding your KRX8 to Holman Home

- Once initialisation is complete and the **KRX8** is connected, the **KRX8**  screen will display; tap  (q) to return to the **HOME** screen of **Holman Home**
- Your **KRX8** will now be shown on the **HOME** screen under **ALL DEVICES** (r)



Installation

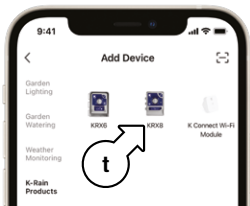
Adding your KRX8 using EZ Mode

⚠ Follow these instructions if your *KRX8* does not appear in the previously mentioned **DISCOVERING DEVICES...** dialogue

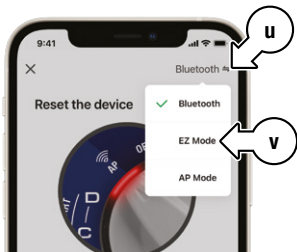
1. In the **ADD DEVICE** menu, tap **K-RAIN PRODUCTS** (s)



2. In the **K-RAIN PRODUCTS** menu, tap **KRX8** (t)



3. On the following connection screen, tap **BLUETOOTH** (u) and select **EZ MODE** (v) from the subsequent drop-down menu



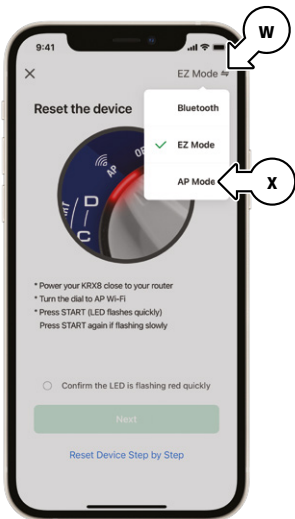
Installation

Adding your KRX8 using EZ Mode

4. Work through the following prompts in **Holman Home** to complete the **EZ MODE** connection process

Adding your KRX8 using AP Mode

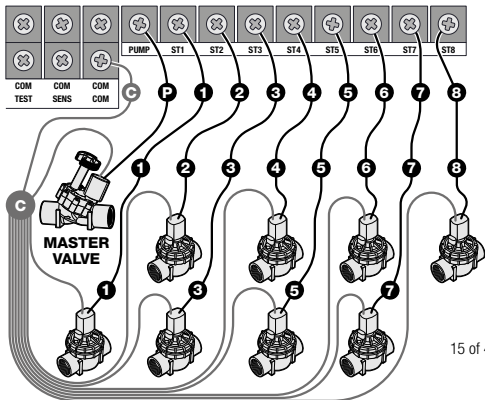
1. Ensure your smartphone mobile data is switched off before trying **AP MODE**
2. In the connection screen, tap **EZ MODE** (W) and select **AP MODE** (X) from the subsequent drop-down menu
3. Work through the following prompts in **Holman Home** to complete the **AP MODE** connection process



Installation

Field Wiring

- ⚠** Disconnect all 240VAC power before commencing any field wiring or solenoid valve connection
 - ✔ Strip approx. 6mm of insulation and place under the loosened screw, tighten gently and check the cable is firmly held
1. Connect one cable from the terminals to each solenoid valve
 2. Complete the circuit by *looping* a common cable to all valves and connecting to the COMMON (C) terminal



Installation

Setting up your KRX8 in Holman Home

1. Set up the **ZONES**
 - i. Name each **ZONE**
 - ii. Choose the **WATERING MODE**—**NORMAL** (default) or **MISTING**
 - i** For **MISTING**, set the desired **ON TIME** and **DELAY TIME**
 - iii. Decide which **ZONES** are to be included in a **WATERING DELAY** (not included by default)—refer to [ZONE SETTINGS](#) for more information
2. Set up the **STARTS**
 - i. Enable each **START**
 - ii. Choose the **START TIME** and **WATERING ROSTER**
 - i** For **INTERVAL DAYS**, note the **DEVICE INFORMATION** screen will list how many days to water
 - iii. Select the appropriate **ZONES** and amend the **RUN TIMES**

Installation

Setting up your KRX8 in Holman Home

3. Set up the **MANUAL WATERING** run time for each **ZONE**
 - i** This run time is used when you press **START** on-board the controller for each **ZONE**
 - i** This run time is used in **SCENE AUTOMATION** when you switch a **ZONE** on
4. Set the **MAIN DIAL** position—for **STARTS** to water, ensure it is set to **RUN**, otherwise ensure it is **OFF**
5. Set up any **INPUTS** such as rain or humidity sensors—refer to [INPUTS](#) for more information
6. Set up either **TAP-TO-RUN** or **AUTOMATIONS** to enable the **WATERING DELAY** where appropriate

Installation

Mounting the Unit

- i** Position the unit in a place that is convenient for valve wiring and near a power source
 - ☑ Install near a 240V AC outlet
 - ☑ We recommend mounting the unit at eye level
1. Drive a #8 screw into the wall, leaving approx. 4mm exposed. Use a toggle bolt or masonry plug if necessary
 2. Hang the unit from the key at the back, ensuring it is properly seated
 3. Optional: Remove the terminal cover to add additional screws through the holes in the lower corners for extra stability

Installation


Checking Connected Zones

1. Open **Holman Home**, enable **START A** and select the **ZONES** to be tested
2. Turn the **MAIN DIAL** to **TEST**
3. Press **START** on the controller
 - Activated **ZONES** in any **START** will run for 2 minutes, sequentially from **ZONE 1** to **8**
 - If no **ZONES** are activated in any **STARTS**, the test function will not run
- i** To skip a **ZONE** during the process, press **START** on the controller
4. Once completed, turn the **MAIN DIAL** to **RUN** or **OFF**

Controls

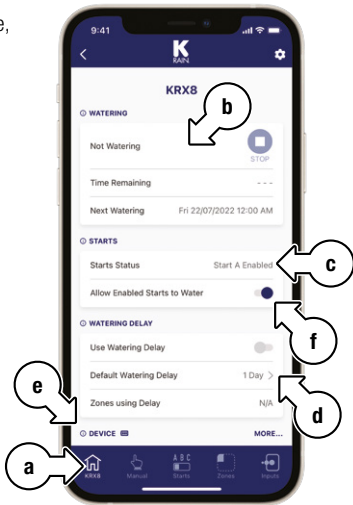
KRX8 Home Screen

i Within the **KRX8** interface, tap **KRX8**  (a)

i This page displays info for your **KRX8**, including **WATERING** status (b), **STARTS** status (c), **WATERING DELAY** settings (d), and **DEVICE** status (e)—note the  icon will turn red when your battery needs replacing

i Enable or disable all **STARTS** by using the **ALLOW ENABLED STARTS TO WATER** switch (f)

i All **STARTS** can also be globally enabled or disabled by setting the **MAIN DIAL** to **RUN** or **OFF** respectively



Controls

Start Settings

- i** Within the **KRX8** interface, tap **STARTS** in the main footer menu
- i** Tap the desired **START** (g) for the following settings:
 - ENABLE** (h)
 - Set a **START TIME** (i)
 - WATERING ROSTER** (j)
 - Activate a **ZONE** using the check box (k)
 - Set **RUN TIME** by tapping the **ZONE**
- i** If **STARTS** are queued for the same time, they will run sequentially from **START A**
- i** Queued **STARTS** will be skipped if they are run manually during the queue process

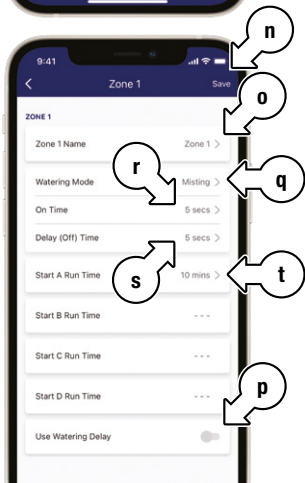
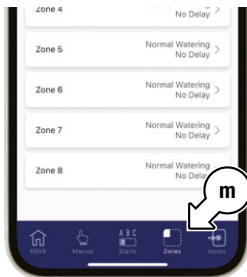


- i** Be sure to tap **SAVE** (l) after finalising your **START** settings

Controls

Zone Settings

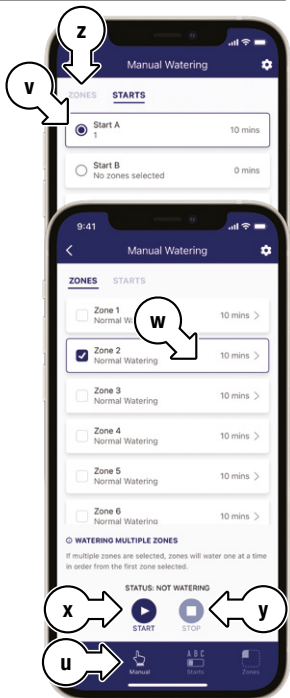
- i** Within the **KRX8** interface, tap **ZONES** (m)
- i** Tap the desired **ZONE** for the following settings:
 - ZONE NAME** (o)
 - WATERING DELAY** on or off (p)
- i** Also includes **MISTING**:
 - WATERING MODE** (q)
 - ON TIME** (r)
 - DELAY TIME** (s)
- i** **RUN TIMES** for each **START** (t)
- i** Be sure to tap **SAVE** (n) after finalising your **ZONE** settings



Controls

Manual Watering

- i** Within the **KRX8** interface, tap **MANUAL** (u)
- i** Use the selector (v) to select a **START** to water
- i** Tap **START** ▶ (x) to begin watering as per the pre-set **START** settings
- i** Tap **STOP** ■ (y) to end the watering session
- i** Tap **ZONES** (z) to water **ZONES** individually
- i** Tap a **ZONE** (w) to access its manual controls
- i** Tap a check box to activate a **ZONE** for your manual watering session




Controls

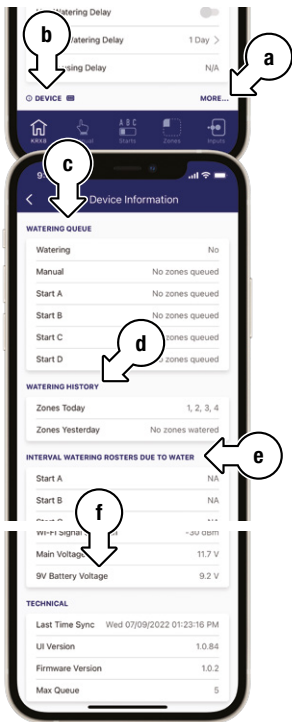
Manual Watering

- i** If multiple **ZONES** are selected they will water sequentially starting at **ZONE 1**
- i** **ZONES** will run as **NORMAL** or **MISTING** watering depending on pre-set **ZONE** settings
- i** It is not possible to choose multiple **STARTS** for manual watering
- i** If your **KRX8** is already watering a schedule, you will need to stop this to be able to water manually

Controls

Device Information

- To access **DEVICE INFORMATION**, tap **MORE** (a) next to **DEVICE** (b) in the **KRX8**  page—this contains the following:
 - WATERING QUEUE** (c)—it is possible to have zones in all the queues. Your **KRX8** will water in order of the queues shown on screen
 - WATERING HISTORY** (d)
 - INTERVAL WATERING ROSTER** (e)—if a **START** uses **INTERVAL DAYS**, it displays how many days until the next watering
 - 9V battery level (f)



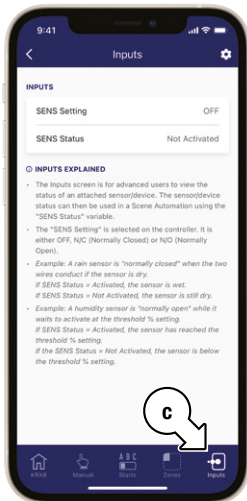
Inputs/Outputs

App Integration

i Within the **KRX8** interface, tap **INPUTS** (c)

i Refer to the **INPUTS** screen for details on this function

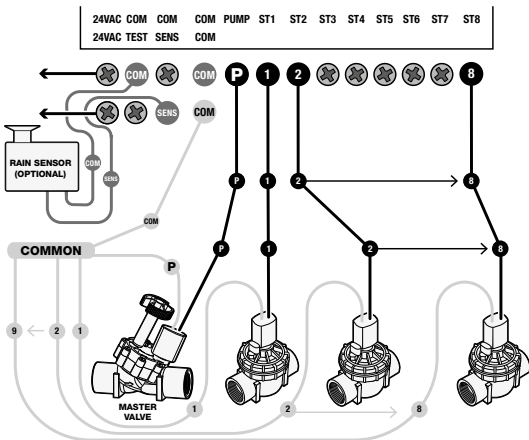
⚠ **Disconnect all 240VAC power before commencing any field wiring or solenoid valve connection**



Inputs/Outputs

Rain Sensor

- ✔ A rain sensor suspends watering during rainfall, resuming after the sensor dries out
- ✔ This is only available once a rain sensor has been added and **SCENE AUTOMATIONS** have been set
- ✔ Ensure the **SENSOR** switch is set to **N/C**
- ✔ To install a rain sensor, wire as shown below



Inputs/Outputs

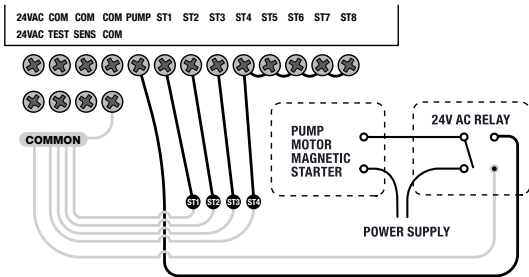
Pump Connection

- ✔ This controller does not provide mains power to drive a pump—a pump must be driven via an external relay and contactor (pump start) setup
- ✔ The controller provides a low voltage signal that actuates the relay which in turn enables the contactor and finally the pump
- ❗ Although the controller has permanent memory and thus a default program will not cause erroneous valve actuation, it is good practice to connect unused zones on the unit back to the last used zone
- ❗ This in effect, inhibits the chances of the pump ever running against a closed head
- ✔ In some circumstances not all operational zones may be hooked up—for example, your **KRX8** is capable of running 8 zones but there were only 4 field wires and solenoid valves available for connection
- ❗ This situation can pose a risk to a pump when the system test routine for the controller is initiated

Inputs/Outputs

Pump Connection

- i** In the above example this would mean zones 5 through to 8 would become active and would cause the pump to operate against a closed head
- i** It is mandatory if the system test routine is going to be used, that all unused, spare zones, should be linked together and then looped to the last working zone with a valve on it
- ⚠ This could possibly cause permanent pump, pipe and pressure vessel damage**
- i** It is recommended to always use a relay between the controller and the pump starter for single phase pump installation



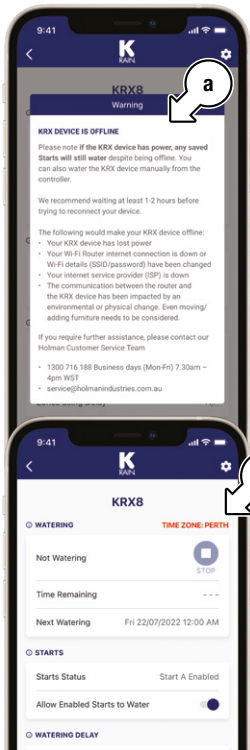
Additional Notes

Offline Device

- i** A warning message (a) will be displayed if your **KRX8** is not connected to the internet
- i** If your **KRX8** still has a connection to power, it will still water the saved **STARTS** despite being offline from **Holman Home**—it will still be possible to water manually using the on-board controls

Time Zones

- i** When in a different time zone to your **KRX8**, **Holman Home** will highlight which time zone the **KRX8** is sitting (b)



Additional Notes

Holman Home Automations

- i** **STARTS** run from a *Holman Home* automation will behave the same as a manually run **START**
- i** **WATERING DELAYS** only effect schedules from the *KRX8* interface—**STARTS** running from automations will ignore **WATERING DELAYS**
- i** To exclude **ZONES** using the **WATERING DELAY** function, this will need to be set using two automations—for example:
- ☑ If the time is 1:00 am and **WATERING DELAY** is **ON**, then water **ZONE 1** and, if the time is 1:00 am and **WATERING DELAY** is **OFF**, then water **ZONE 1, 2** and **3**

Test Function

1. To test the *KRX8* system, turn the **MAIN DIAL** to **TEST**
 2. Press **START** on board the controller
- i** Activated **ZONES** in any **START** will run for 2 minutes, sequentially from **ZONE 1** to **8**
 - i** If no **ZONES** are activated in any **STARTS**, the test function will not run
 - i** To skip a **ZONE** during the process, press **START** on board the controller

Additional Notes

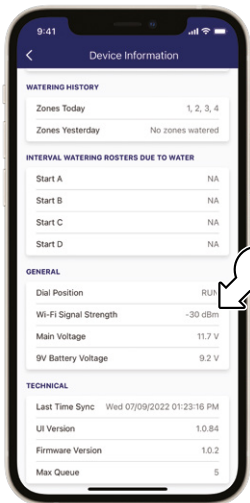
Wi-Fi Signal Strength

i **Wi-Fi SIGNAL STRENGTH** can be accessed on the **DEVICE INFORMATION** page—refer to [DEVICE INFORMATION](#) on how to access this

i This signal (c) determines if your internet connection is reliable enough for your **KRX8** to function correctly

i The stronger the signal, the more reliable your connection will be

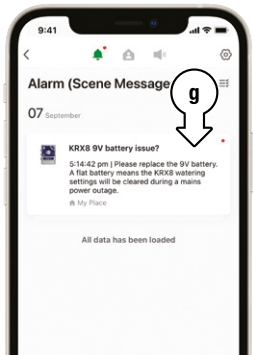
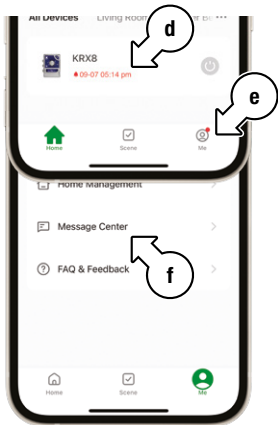
i The higher the number the stronger the signal—for example; a signal strength of -30 dBm (decibel milliwatts) is considered a perfect signal. A Wi-Fi signal strength of -90 dBm is considered not connected. -60 dBm is considered the minimum connection strength



Additional Notes

9V Battery Notification

- i** If the 9V battery needs to be replaced, a notification will display (d) in **Holman Home** in the device list—if the **KRX8** interface is opened, this will be dismissed
- i** To review the notification:
 - i. Tap **ME** below the **Holman Home** device list (e)
 - ii. Tap **MESSAGE CENTRE** (f) and your **Holman Home** notifications will display as shown (g)
- i** To display these as notifications on your smartphone, ensure notification permissions are enabled for **Holman Home** in your smartphone system settings



Troubleshooting

Symptom	Suggestion
KRX8 cannot connect to Holman Home	<p>When adding your KRX8 to Holman Home:</p> <ol style="list-style-type: none">1. Confirm your KRX8 is powered ON2. Confirm both your KRX8 and smartphone are within Wi-Fi range3. Ensure Bluetooth is turned on and permissions are approved for Holman Home4. Make sure the network functions of your Wi-Fi router and smartphone are unblocked; firewalls can block certain ports5. Confirm your Wi-Fi network name (SSID) has been entered correctly, including spaces. Note this is case sensitive6. Confirm your Wi-Fi network password has been entered correctly7. Confirm your KRX8 is connected to a 2.4GHz Wi-Fi network (not 5GHz), enable the broadcast and do not allow the Wi-Fi network to be hidden8. Confirm your Wi-Fi router encryption method is WPA2-PSK and authentication type is AES, or both are set to automatic9. If the number of connected devices to the Wi-Fi has reached the amount limit (usually 16 or 50 devices), turn off other Wi-Fi devices and configure again10. If your Wi-Fi router enables the MAC address filter, remove the device from MAC filter list and make sure the Wi-Fi router is allowing your KRX8 to be connected11. Make sure that the Wi-Fi router has the DHCP service enabled. If it is not enabled, the address will be occupied12. Your Wi-Fi router may not be compatible with your KRX8. It is recommended that you replace the Wi-Fi router and try again

Troubleshooting

Symptom	Suggestion
KRX8 was connected is now not connecting after mounting in desired position	This indicates a lack of Wi-Fi signal. You will need to move your KRX8 and Wi-Fi router closer to each other
No LED lights on	This indicates that there is no power to the unit. Your controller will not operate if there is an AC fault. Please check the power point. Check and replace the fuse if necessary
Single zone not working	Faulty solenoid coil, or break in field wire. Check solenoid coil (a good solenoid coil should read around 33Ω on a multi meter). Test field cable for continuity. Test common cable for continuity
No automatic start	Setup error, MAIN DIAL is in OFF position, blown fuse or power issue. If there are no lights on the controller check your fuse and then power point (refer to 'Fuse keeps blowing' below). If the unit works manually, check your program set up and dial position. The dial should be in the RUN position for regular use
Buttons not responding	Please contact our Customer Service team
Multiple zones watering at once	Solenoids may be dirty: clean and flush solenoids to remove debris. Possible faulty driver triac, incorrect field wiring or broken or lost common wire in field. Check wiring and swap faulty valve wires on the controller terminal block with known working zones. If the same outputs are still locked on, please contact our Customer Service team

Troubleshooting

Symptom	Suggestion
KRX8 is not connecting in AP MODE	Ensure mobile data is switched off
Rain sensor not working	For third party sensors, this could be faulty wiring or sensor. Check rain sensor information on Holman Home and check the wiring on sensor
Fuse keeps blowing	<p>The 1amp glass fuse is installed in the controller to protect the board from being damaged as a result of something wrong in the field wiring (this is the wiring from the solenoid to the controller).</p> <p>If your fuse has blown, check that your wiring on each station is in tack and not damaged in any way. If your fuse is continuously blowing, remove all wires from your stations. Reconnect each station one at a time to help determine which station is causing the fault.</p> <p>Our irrigation controllers use a 5mm x 20mm 1amp glass fuse</p>

Warranty

5 Year Replacement Guarantee

Holman Industries offers a 5 year replacement guarantee with this product.

In Australia our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

As well as your statutory rights referred to above and any other rights and remedies you have under any other laws relating to your Holman product, we also provide you with a Holman guarantee.

Holman Industries guarantees this product against defects caused by faulty workmanship and materials for 5 years domestic use from the date of purchase. During this guarantee period Holman Industries will replace any defective product. Packaging and instructions may not be replaced unless faulty.

In the event of a product being replaced during the guarantee period, the guarantee on the replacement product will expire 5 years from the purchase date of the original product, not 5 years from the date of replacement.

To the extent permitted by law, this Holman Replacement Guarantee excludes liability for consequential loss or any other loss or damage caused to property of persons arising from any cause whatsoever. It also excludes defects caused by the product not being used in accordance with instructions, accidental damage, misuse, or being tampered with by unauthorised persons, excludes normal wear and tear and does not cover the cost of claiming under the warranty or transporting the goods to and from the place of purchase.

Should you suspect your product may be defective and need some clarification or advice please contact us directly:

1300 716 188
support@holmanindustries.com.au
11 Walters Drive, Osborne Park 6017 WA

If you are certain your product is defective and is covered by the terms of this warranty, you will need to present your defective product and your purchase receipt as proof of purchase to the place you purchased it from, where the retailer will replace the product for you on our behalf.



We really appreciate having you as a customer and would like to say thank you for choosing us.

We recommend registering your new product on our website. This will ensure we have a copy of your purchase and activate an extended warranty. Keep up to date to with relevant product information and special offers available through our newsletter.



Scan here, or visit
k-rain.com.au/register
for more info