Figure 6.14. Prompting for station or program



From here on, the procedure for running stations is identical to Running a station manually [44] and running programs is explained in Running a program manually [45].



Тір

You can manually run programs and stations simultaneously.

6.3. Alarms

When running in AUTO or MANUAL mode, the RKD will react on a number of conditions by raising one or more alarms.



Note

Though some alarms, like a rain alarm, can halt the execution of irrigation schedules, you can always start both stations and programs manually, even when there is an active alarm. Two exceptions: if a short alarm is active, you can not start anything, and if a station is failing you can not start this manually.

6.3.1. Becoming aware of alarms on-site

If the RKD has received an alarm, and is in AUTO OF MANUAL mode (see Chapter 6, *Running the* RKD [41] for a description of the two modes), the bottom row of the display will toggle between normal text and the alarm that has arrived.

For example, if you had a rain alarm at 01:10 PM, your display will toggle between normal mode and alarm notification:

Figure 6.15. Normal display



Figure 6.16. Toggled display with alarm info



The display will toggle between the two modes in short intervals.

If you had multiple alarms the controller will toggle to a different alarm each time it toggles to notification.



Note

If you had more than three alarms the fourth message in the bottom row of the display will say that you should visit the alarm list for details - the display will look something like this:

Figure 6.17. Display with notification to visit the alarm list



6.3.2. Receiving alarm notifications on email

If your communication subscription with your supplier allows it, the RKD will support sending out alarm notifications to one or more email addresses.



Note

This requires the WIN-100 or LAN-200 module.

To configure your controller to email alarms, follow this procedure:

1. Turn the mode selector to ADVANCED

Figure 6.18. Mode selector in Advanced

MANUAL	UTO PROGRAM
IRR.OFF	SETUP/ TEST

Now the display looks like this:

Figure 6.19. Display message on switch to ADVANCED mode



2. Scroll down to Alarm Notification and press the ENTER button. Now you see the following display:



3. Select Email addresses and press the ENTER button. If no email addresses are entered, you can select Add new:



Now you can enter an email address using the up/down arrow keys to select the characters. Once you are done, press the ENTER button.

4. Next you configure which alarms should be emailed. Select Alarm Notification settings and press the ENTER button. Now you see the following display:



Here you can scroll between the different alarms emitted by the controller.

5. Select the alarm you wish to configure and press the ENTER button. Now you see the following display:



You can select each email address you have entered, and determine if you want an email when this type of alarm is raised and/or when it is recalled.

6. Select the email you wish to configure for the current alarm and press the ENTER button.

Use the arrow keys to set On and Off to either Yes or No - see the explanation table below:

Table 6.1. Meaning of On/Off/Yes/No

Setting	Selection	Meaning
On	Yes	Send email when the alarm is raised
	No	No email when the alarm is raised
Off	Yes	Send email when the alarm is recalled
	No	No email when the alarm is recalled

6.3.3. Viewing the alarm list

To view the list of alarms in the RKD, follow this procedure:

- 1. Make sure the controller is running in AUTO or MANUAL mode.
- 2. Push the ALARMS button. Now you'll see a scrollable list of the different types of alarms known to the RKD:

Figure 6.20. Alarm list





Note

If you have an older version of the RKD that has no $_{\rm ALARMS}$ button, you need to push the $_{\rm WATER}$ days button instead.

In this case there is no off time for the alarm, meaning that the alarm is still on. Had the alarm ceased you would see the end time too.

Use the *item selectors* to scroll through the list. The list contains information on the latest observed alarms of the 12 known alarm types:



Note

The alarm list will not survive a power failure - if the controller loses power, the list is wiped clean.

Short name in display (Alarm type)	Full name / Description	How to clear alarm (see note below)
1. Rain	Rain alarm.	Will automatically disappear when it stops raining.
2. Alarm	Whatever alarm you have attached to the alarm termnial. If you're using the AUX terminal for a flow sensor, you won't ever see this alarm (See Section 2.2.2.3, "Connecting an Alarm or Flow Sensor" [11])	The alarm stays on as long as the attached alarm is active, but you can clear it by viewing the alarm list.
3. ET	Evapotranspiration alarm. This will only ever be raised if you're running in "ET-enabled" mode. See Section B.1, "How ET Works with the RKD" [101] for in-depth details about ET.	Will automatically disappear when the "ET enable" device is no longer controlling your irrigation.
4. Short	Short alarm.	The alarm stays on as long as there is a short in your system. You can clear the notification by viewing the alarm list.
5. High F	High flow alarm	The alarm stays on as long as the flow is too high. You can clear the notification by viewing the alarm list.
6. MPF	Main pump failure	The alarm will be cleared once you have viewed the alarm list and acknowledged the alarm.
7. USch F	Unscheduled flow alarm. This means that water is flowing in your pipes when you're not irrigating. Such an alarm indicates that you have a leak.	Stays on as long as the flow is too high. The cut-off valve (COV) will be activated, so the alarm will clear itself, but you can clear the notification by viewing the alarm list.
8. St. Err	Station error alarm. This means that one or more stations in the field have failed, and will only be raised if you are using a flow sensor. Image: Constraint of the field have failed have failed, and will only be raised if you are using a flow sensor. Image: Constraint of the field have failed, and will only be raised if you are using a flow sensor. Image: Constraint of the field have failed, and will only be raised if you are using a flow sensor. Image: Constraint of the field have failed, and will only be raised if you are using a flow sensor. Image: Constraint only concerns flow related problems - not any electrical errors that may occur in a station. If	Stays on until all stations are labeled OK (see Section C.4, "Inspecting and Toggling Station Status" [136]). You can clear the notification by viewing the alarm list.
	you suspect that a stations has an electrical error, please see Section 7.1.1, "Running the "Electrical Test"" [57].	

Table 6.2. Alarms in the RKD

Short name in display (Alarm type)	Full name / Description	How to clear alarm (see note below)
9. Max St.	Maximum number of stations reached. This means that a program tried to start a station when the maximum number of stations was already running.	The alarm will be cleared once you have viewed the alarm list and acknowledged the alarm.
	This alarm can only be triggered if you have changed the power adjustment to something higher than the default value.	
10. Repeat.	The number of repeats has been reduced in a misting program. This typically happens if ET expands the run time for repeats and the program can't fit all the repeats into the configured time frame. You can read more about this in Appendix H, <i>Advanced Irrigation: Misting,</i> <i>Cycle & Soak</i> [169].	The alarm will be cleared once you have viewed the alarm list and acknowledged the alarm.
11. NW Prg.	A program has not been run because it was set to start in the non-water time window. You can read more about the non-water window in Appendix G, <i>Defining a Custom Irrigation Period</i> [167].	The alarm will be cleared once you have viewed the alarm list and acknowledged the alarm.
12. NW Stp.	A program was halted because it was running when entering the non-water time window. You can read more about the non-water window in Appendix G, <i>Defining a Custom Irrigation Period</i> [167].	The alarm will be cleared once you have viewed the alarm list and acknowledged the alarm.
13. Mst NR.	There is no response from your moisture sensors.	Stays on until the sensors are all responding.
14. Mst Lv.	One or more of your moisture sensors is reporting a moisture level below the alarm threshold.	Stays on until the moisture level is above the threshold.
15. Rem ET	Your controller is not receiving ET data from the remote ET server.	The alarm will be cleared once you have viewed the alarm list and acknowledged the alarm.

3. To exit the alarm list push the ALARMS button again, or simply wait about 20 seconds, and the controller will return to the normal display.

When you have viewed the list of alarms you will no longer be notified in the display about past alarms. Of course you can always revisit the list.

6.4. Monitor Data

If your communication subscription allows, you can enable the controller to send monitor data to your Web interface.

To enable relaying monitor data to your Web interface, follow this procedure: