The Rain Bird® CYCLIK™ wireless control system is battery operated for economical automation of an irrigation system, without AC power and without control wires.

The CONTROL MODULE has a 9-volt battery located in a weatherproof enclosure and operates latching solenoids to interrupt water flow to the valve chamber and provide on/off control of up to four valves.

The FIELD TRANSMITTER uses simple programming steps to create a coordinated irrigation schedule for up to 85 control modules. Programs are loaded into the optical port of the control modules through an infra-red link.

The simple programming menu in the field transmitter is used to set up the irrigation schedule for each valve. Then, the transmitter is taken to the field to load the program into each control module via the optical port. After the programs are loaded, each valve will operate until a new program is entered. The programming can be created to repeat a sequence, or operate one time, then remain off.

There are two models of field transmitters for different irrigation applications:

- **Cyclik CI** controls a series of valves to open and close in a sequence such as “pulse” irrigation of a solid set sprinkler or drip system.

- **Cyclik Micro** controls valves to open and close at specific times per day.
  - **Micro Mode A** allows four programs, and up to eight start times per day on a weekly schedule.
  - **Micro Mode B** allows multiple start and stop times within a specific time window, for use in a system with frequent daily irrigation and rest intervals.

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**Features**

- Accurate, synchronized control without control wires or AC power
- Weatherproof optical port
- Simple menu-driven programming
- Programming changes are made only through the field transmitter
- One year control module operation with one 9-volt alkaline battery
- On/Off rainy weather control via the field transmitter
- Synchronized control of up to 85 irrigation blocks

**Benefits**

- Low cost installation
- Trouble-free operation, even under water
- Saves time and reduces errors
- Unauthorized individuals cannot change irrigation programs
- Battery is reliable for one irrigation season
- Saves water by allowing shut-off during rain without losing the stored program
- Economical system, even for large farms

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**How to Specify/Order:**

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>JA1100</td>
<td>Cyclik CI Field Transmitter</td>
</tr>
<tr>
<td>JA1300</td>
<td>Cyclik Micro Field Transmitter</td>
</tr>
<tr>
<td>JA3000</td>
<td>3-Way Latching Solenoid</td>
</tr>
<tr>
<td>JA3001</td>
<td>Control Module - 1 Station</td>
</tr>
<tr>
<td>JA3002</td>
<td>Control Module - 2 Stations</td>
</tr>
<tr>
<td>JA3004</td>
<td>Control Module - 4 Stations</td>
</tr>
<tr>
<td>71P51018</td>
<td>Bracket (attaches control module to valve)</td>
</tr>
<tr>
<td>TBOSPSOL</td>
<td>2-Way Latching Solenoid</td>
</tr>
</tbody>
</table>
Cyclik CI

Many growers who use drip irrigation have found that frequently turning the drip laterals off and on will spread out the water in the ground to create a broader wetting pattern. This also avoids saturation and promotes better oxygenation of the plant roots. By spreading the wetting pattern, excess deep percolation can also be avoided.

The Cyclik CI, combined with Rain Bird automatic valves provides an ideal system for pulse irrigation. As many as 85 valves can be programmed to open and close in a coordinated sequence. The Cyclik CI also features a time overlap between valve operations so that the next valve will be sure to be open before the previous valve closes. Cyclik does not allow a pump to operate against a closed system, so this avoids the situation where a pump could “dead head”.

The simple four valve system illustrated above shows the location of the Cyclik control modules and Rain Bird valves, with connecting piping to the water source. For example, suppose the grower wants to irrigate each block for one hour, then rest each block for three hours. The Cyclik CI field transmitter would be programmed to operate block 1 for one hour, then open the valve for block 2 slightly before closing the valve for block 1. One hour later, the valve for block 3 would open, slightly before closing block 2, and so on until all four blocks receive one hour of water.

The Cyclik control modules can be programmed to repeat the pulsing schedule as many times as necessary to apply the required irrigation to all blocks. After the irrigation is completed, the grower can turn off the pump. A popular option is to program the Cyclik control modules to keep opening and closing the valves, even while the pump is off. This approach means that one of the valves will be open at all times, so a grower can start an irrigation at any time by simply starting the pump. Once the water is on, the Cyclik control modules operate the valves to provide “pulse” irrigation to the field.

Key Features

- Works with single station control modules
- Maximum irrigation time is 23 hours, 55 minutes
- Maximum overlap between valves is 120 seconds
- Maximum 14 days between irrigation cycles
- Up to 85 control modules

Choosing between Cyclik CI, Micro A and Micro B

Do you have the same run time for all valves?

- Yes: Choose Cyclik CI to open and close a group of valves in a coordinated sequence
- No: Do you have a consistent pause time between irrigation sets?
  - Yes: Select Micro A if you have a flexible schedule that can be repeated on a weekly basis
  - No: Choose Cyclik CI to program each valve individually

Do you have a maximum overlap time between valves?

- Yes: Maximum overlap time between valves is 120 seconds
- No: Maximum overlap time between valves is 120 seconds

Do you have a maximum number of days between irrigation cycles?

- Yes: Maximum number of days between irrigation cycles is 14 days
- No: Maximum number of days between irrigation cycles is 14 days

Manual option

- Yes: Yes, for each station individually
- No: Yes

Other features

- Up to 85 valves in a sequence
- Up to 8 start and run times per day
- Two irrigation windows per day

Rainy weather shutdown

- Yes: Yes
- No: Yes

<table>
<thead>
<tr>
<th>Feature</th>
<th>CI</th>
<th>Micro A</th>
<th>Micro B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of stations (valves) operated by one control module</td>
<td>1</td>
<td>1, 2, or 4</td>
<td>1</td>
</tr>
<tr>
<td>Maximum irrigation time per set</td>
<td>23 hours, 55 minutes</td>
<td>12 hours</td>
<td>99 minutes</td>
</tr>
<tr>
<td>Interval of runtime</td>
<td>5 minutes</td>
<td>1 minute</td>
<td>Seconds (minimum 10)</td>
</tr>
<tr>
<td>Maximum overlap time between valves</td>
<td>120 seconds</td>
<td>No maximum – Valves may be individually programmed</td>
<td>No maximum – Valves may be individually programmed</td>
</tr>
<tr>
<td>Maximum number of days between irrigation cycles</td>
<td>14 days</td>
<td>Select from a 7-day calendar</td>
<td>Runs daily</td>
</tr>
<tr>
<td>Manual option</td>
<td>Yes</td>
<td>Yes, for each station individually</td>
<td>Yes</td>
</tr>
<tr>
<td>Other features</td>
<td>Up to 85 valves in a sequence</td>
<td>Up to 8 start and run times per day at each station</td>
<td>Two irrigation windows per day</td>
</tr>
<tr>
<td>Rainy weather shutdown</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Typical field layout with Cyclik control of each valve in a sequence.
**Cyclik Micro Mode A**

Growers who need to irrigate on a weekly schedule may use Cyclik Micro Mode A. The first step is to choose the days of the week to receive irrigation, and skip the days that will not get water. Next, set the start time and run time, up to 8 start times per station per day, and the Cyclik control modules will repeat the program until a new program is entered.

**Example:** A remote pasture requires irrigation Monday through Friday only. On irrigation days, the pasture needs two irrigations per day, three hours starting at 5 AM, and for one hour starting at 3 PM.

**Key Features**

- Works with 1, 2, or 4 station control modules
- Each station controls up to 8 start times and run times per day
- Can assign an independent program to each station

**Cyclik Micro Mode B**

This sequence is designed for growers that want to operate on the same schedule every day, and need to irrigate in short bursts, followed by a “soak-in” time. After the time of day is set, the next step is to enter the start time and end time of the irrigation window (up to 2 irrigation windows per day). Once the irrigation windows are set, the final step is to enter the run time (from 10 seconds up to 99 minutes), and soak time (up to 99 minutes) within the irrigation windows.

**Example:** A Greenhouse requires 30 seconds on and 3 minutes off all day from 6 AM to 7 PM.

**Key Features**

- Works with single station control modules
- Up to 2 irrigation operating windows per day
- 10 seconds to 99 minutes irrigation “run time”
- 1 minute to 99 minutes “soak time”
Additional Features

Manual control

All Cyclik products have the option of manual control with the field transmitter to close or open a valve immediately.

ON/OFF control

An ON/OFF mode is also available. In the OFF mode, the program is kept from operating (and valves are not allowed to open) until the control modules receive an ON command. This feature is often used during rainy periods when the grower does not wish to irrigate, but wants to store the program in the control modules for activation in the future.

Program review

The system also allows the grower to take the field transmitter to the field and review the program in each control module by connecting the optical port and choosing the key.

Automated irrigation of a corn field with the Cyclik control system.

This control module and valve were buried for 2 weeks due to flooding. Infra-red communication with the field transmitter still worked.