



Rain Bird MDC Decoder-based Control System

The Rain Bird ET Manager (Model ETMi) can enhance the control of the Rain Bird MDC Controller by managing the frequency of watering based on ET and measured rainfall amounts. The ET Manager receives hourly weather information broadcast by a Weather Reach Signal Provider who accesses a network of weather stations.

Purpose

The ET Manager controls the frequency of watering by interrupting or allowing watering as needed. This control method may be adapted to the MDC. The ET Manager shall interrupt watering until needed by controlling the Rain Sensor input on the MDC.

Settings

1. ET Manager
 - Valve Group A will control the watering days of the MDC. Use the Enable Output method to manage watering frequency.
 - The Irrigation Amount of Valve Group B MUST be set to 0.
 - Remove Jumper from the “Jumper” terminal (located next to the 24VAC terminal).
2. MDC Controller
 - Set “RAIN SENSOR” mode to “ACTIVE”.
 - Set “SWITCH SETTINGS” mode to “Normally open” (Open switch allows watering, closed switch prevents watering).
 - o **Note:** A “Normally Closed” sensor “Switch Setting” can be used when the MDC is connected using the “Normally Closed” option shown in the wiring diagram. (ET Manager “A” terminal and left “Jumper” terminal)
 - Program an Output Decoder as MV or Booster
 - Set MV or Booster Output Decoder parameter as shown in following table.

Switch settings	49F360
Address	Address located on decoder label
ON (delay)	0
OFF (delay)	0



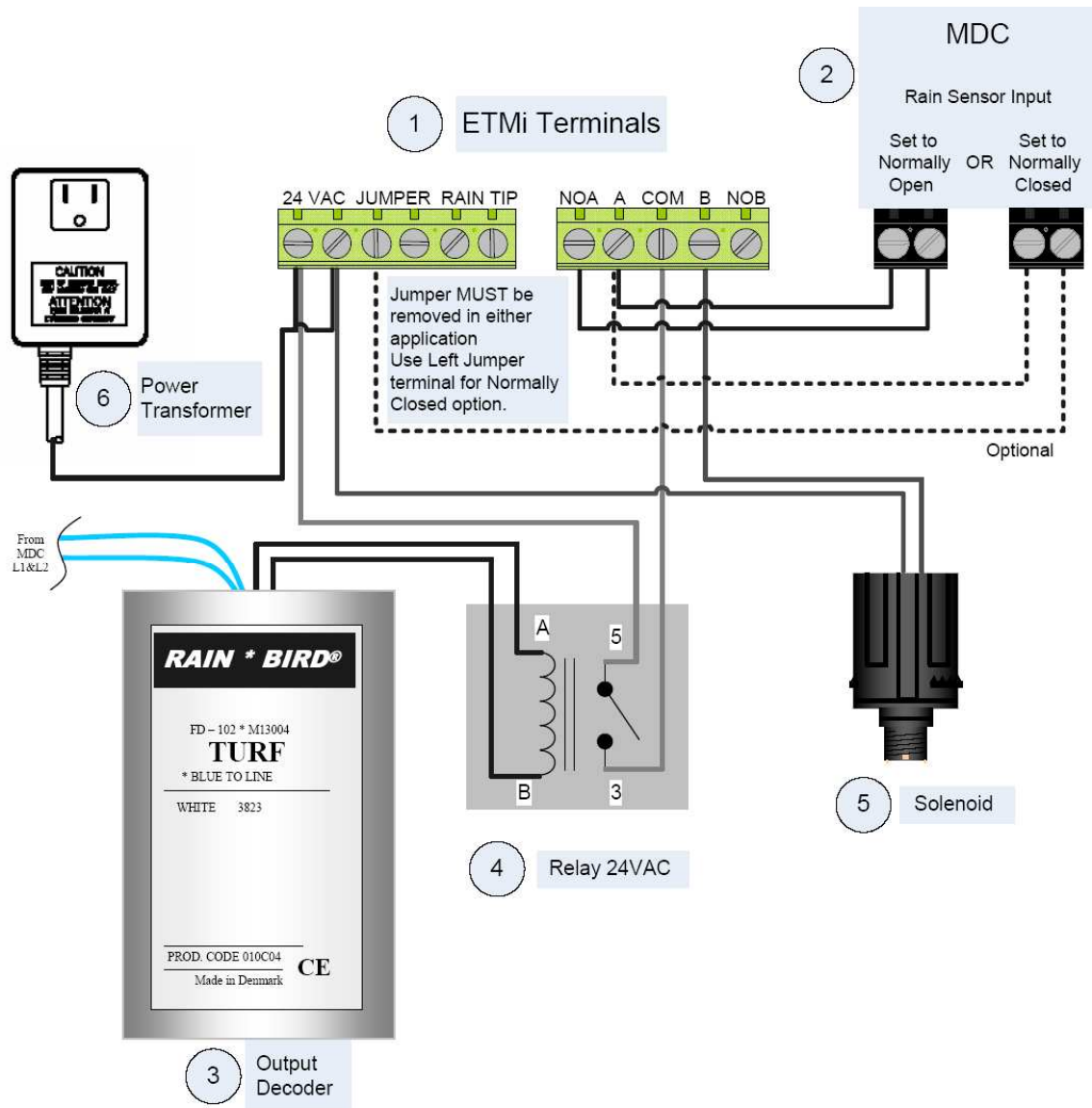
ET Manager™ Application Notes

Installation

1. Material Required

Item	Description	Part Number	Notes
1	ET Manager	Rain Bird ETMi	Standard model.
2	MDC Controller	Rain Bird MDC	Standard Model
3	Output Decoder	Rain Bird FD-102	The ET Manager needs feedback from the MDC that watering has occurred. Set this Output Decoder as MV or Booster Pump. It should come on when a cycle starts.
4	Relay 24 VAC	Tyco Electronics Relay K10P-11A15-24 with Socket Base 27E895	The Output Decoder activates the relay which in turn activates the solenoid.
5	Solenoid	Rain Bird 208588-02	The ETMi feedback sensor needs more current than the Output Decoder uses. The solenoid provides a LOAD the ET Manager will recognize. The plunger can be removed to keep it quiet. Or As an alternative a 10 Watt 220 Ohm Resistor can be used in place of the solenoid. Note: It does get hot.
6	Power Transformer (25.5 VAC 1 Amp.)	Rain Bird 635640 or ETMi-TRAN	Use this transformer to power the ETMi and provide power for the solenoid. Most 24VAC transformers can be used.
7	Enclosure	Rain Bird ETMI-OE	The components may also be installed in another cabinet. When using the ETMI-OE the Decoder needs to be installed in the MDC cabinet.
8	Hook Up Wire	AWG 18	As required

2. Wiring Diagram





ET Manager™ **Application Notes**

Verification Test

Once connected the following tests should be performed:

1. Adjust the Moisture Level in the ET Manager greater than 0 to interrupt watering, the Valve Group A light will be Red. Activate a valve manually with the MDC, the valve should not come on.
2. Adjust the Moisture Level in the ET Manager less than 0 to enable watering, the Valve Group A light will be Green. Temporarily set the Automatic Window range to include the current time. Return to the Home screen. Wait for the status line to display “Automatic Window Open.” Activate a valve manually with the MDC, the valve should come on. Watch the soil Moisture Level on the home screen, when watering is detected the graph will be adjusted. The date and time of the detected watering will also be added to the “A” Irrigation Log.
3. Once the test is complete do the following:
 - a. Clear the Logs
 - b. Reset the Automatic Window to match the MDC program settings.
 - c. Set the Valve Group A Irrigation Amount based on the MDC program and site conditions.
 - d. Adjust the Moisture Level as needed.