Controller Assembly Options

MASTER LIST FOR IRRITROL® MCE and RAIN MASTER® EAGLE™, EAGLE-I, and EAGLE PLUS CONTROLLER OPTIONS

5 YEAR DATA SERVICE PLAN INCLUDED

As of January 1, 2020, all Eagle Plus Cellular and Ethernet communication controllers will include 5 years of data service.

IRRITROL® SENSOR OPTIONS (For MCE Controllers only)

PART #	DESCRIPTION
IRCL	IRRITROL® WIRELESS WEATHER SENSOR AND MODULE
IRCLP	IRRITROL® WIRELESS WEATHER SENSOR AND MODULE POLE MOUNTED
IRCLR	IRRITROL® WIRELESS RECEIVER MODULE (For additional controllers from Weather Sensor)
IRCL-R100	IRRITROL® MINI REMOTE TRANSMITTER AND RECEIVER KIT (Irritrol® Controllers Only)

iCENTRAL™ SYSTEM OPTIONS (For EAGLE™, EAGLE-i, and EAGLE PLUS Controllers only)

PART #	DESCRIPTION
RMCC-EG	CELLUAR COMMUNICATION CARD AND LP ANTENNA FOR Eagle – 3G
RMCC-EGP	CELLUAR COMMUNICATION CARD AND LP ANTENNA FOR EAGLE PLUS – 3G
RMCC-ETH	ETHERNET COMMUNICATION CARD FOR Eagle Plus
RMCC-WIFI	ETHERNET COMMUNICATION CARD + WIFI ADAPTER

iCENTRAL™ CELLULAR SERVICE PLANS (For EAGLE™, EAGLE-i, and EAGLE PLUS) with ZipET™

PART #	DESCRIPTION
RMSP-1MO	iCENTRAL™ WIRELESS DATA SERVICE PLAN – 1 MONTH
RMSP-1	iCENTRAL™ WIRELESS DATA SERVICE PLAN – 1 YEAR
RMSP-2	iCENTRAL™ WIRELESS DATA SERVICE PLAN – 2 YEAR
RMSP-5	iCENTRAL™ WIRELESS DATA SERVICE PLAN – 5 YEAR

iCENTRAL™ CELLULAR SERVICE PLANS (For EAGLE™, EAGLE-i, and EAGLE PLUS) with On-site WS, No ZipET™

PART #	DESCRIPTION
RMSPWS-1MO	iCENTRAL™ WIRELESS DATA SERVICE PLAN – 1 MONTH
RMSPWS-1	iCENTRAL™ WIRELESS DATA SERVICE PLAN – 1 YEAR
RMSPWS-2	iCENTRAL™ WIRELESS DATA SERVICE PLAN – 2 YEAR
RMSPWS-5	iCENTRAL™ WIRELESS DATA SERVICE PLAN – 5 YEAR

Controller Assembly Options

MASTER LIST FOR IRRITROL® MCE and RAIN MASTER® EAGLE™, EAGLE-I, and EAGLE PLUS CONTROLLER OPTIONS (Cont.)

Eagle™, Eagle-i, and Eagle Plus Decoder System Options

REMOTE CONTROLS AND ACCESSORIES

PART #	DESCRIPTION
RMPMUA	TRANSMITTER AND RECEIVER KIT FOR ALL NON-RM CONTROLLER TYPES
RMPM	TRANSMITTER AND RECEIVER FOR RAIN MASTER CONTROLLERS ONLY
RMRX	PERMANENT MOUNT RECEIVER KIT FOR RAIN MASTER CONTROLLERS ONLY
RMRX12	12 STA. PERMANENT MOUNT RECEIVER KIT FOR NON-RM CONTROLLERS
RMRX24	24 STA. PERMANENT MOUNT RECEIVER KIT FOR NON-RM CONTROLLERS
RMRX32	32 STA. PERMANENT MOUNT RECEIVER KIT FOR NON-RM CONTROLLERS
RMTX	HAND HELD TRANSMITTER AND ANTENNA
RMANT-LP	PERMANENT MOUNT LOW PROFILE ANTENNA FOR STAINLESS STEEL ENCLOSURES

DECODERS - VALVE

PART #	DESCRIPTION
RMDEC1	SINGLE VALVE FIELD DECODER
RMDEC2	TWO VALVE FIELD DECODER
RMDEC4	FOUR VALVE FIELD DECODER
RMHCP	HANDHELD DECODER PROGRAMMER

TWO WIRE DECODER COMMUNICATION AND FLOW SENSOR CABLE

PART #	DESCRIPTION
TW-CAB-14**	RAIN MASTER® COMMUNICATION CABLE – Polyethylene double-jacketed 14 AWG/2 Conductor Cable with two type UF wires (Red/Black) with a PE outer jacket (Blue).
RMWSCAB**	12-conductor shielded direct burial cable for connecting ET Weather Center devices to weather computer at the Eagle™ controller. Maximum distance is 500’
EV-CAB-SEN	RAIN MASTER SENSING CABLE –2 conductor 20 AWG foil shield with drain, black jacket direct burial shielded cable for field sensor connections to controllers. Used for flow and moisture sensor applications. Maximum distance is 2000’.

**It is recommended that Communication and Flow Sensing Cable be installed in conduit with pull boxes located every 250’ and at all crossings. Please refer to the customer’s requirements for specific conduit need and size, and pull box requirements.

The Maximum Critical path for the Twice™ Two Wire System:
14AWG is 10,000 Feet (Loop pattern) and 5,000 Feet to furthest valve.
12AWG is 14,800 Feet (Loop pattern) and 7,400 Feet to furthest valve.

Controller Assembly Options

SPECIFICATIONS FOR PRE – INSTALLED CONTROLLER OPTIONS
IRRITROL® MCE and RAIN MASTER™ SENTAR™, EAGLE™, EAGLE-I, and EAGLE PLUS CONTROLLERS

IRRITROL® MCE ONLY OPTIONS

Irritrol® Sensor Options (For MCE Controllers only)

PART #	DESCRIPTION
IRCL	**IRRITROL® CLIMATE LOGIC®** The Controller Assembly shall be provided with a Irritrol® brand Climate Logic® weather sensor and module for the purpose of providing compatible Irritrol® controllers daily weather data to the percent of the hottest month's watering time to alter the controller's water budget. The Climate Logic® consists of a field mounted wireless transmitter with temperature, rain, and solar sensors and pre-mounted receiver module. **The Climate Logic® is compatible with Rain Dial®-R, Total Control®-R, KwikDial®, and MC-E controllers only.**
IRCL-P	**IRRITROL® CLIMATE LOGIC® - POLE MOUNTED** The Controller Assembly shall be provided with a Irritrol® brand Climate Logic® weather sensor and module for the purpose of providing compatible Irritrol® controllers daily weather data to the percent of the hottest month's watering time to alter the controller's water budget. The Climate Logic® consists of a field mounted wireless transmitter with temperature, rain, and solar sensors and pre-mounted receiver module. **The Climate Logic® is compatible with Rain Dial®-R, Total Control®-R, KwikDial®, and MC-E controllers only**. A fifteen foot (15') pole shall be included for field mounting the Climate Logic® wireless transmitter.
IRCLR (SENSOR)	**IRRITROL® CLIMATE LOGIC® RECEIVER (For additional controllers sharing Climate Logic®)** The Controller Assembly shall be provided with a Irritrol® brand Climate Logic® weather Receiver Module for the purpose of providing compatible Irritrol® controllers daily weather data to the percent of the hottest month's watering time to alter the controller's water budget. The Climate Logic® consists of a pre-mounted receiver module in additional controllers sharing Climate Logic® Sensor (Transmitter) **The Climate Logic® Receiver is compatible with Rain Dial®-R, Total Control®-R, KwikDial®, and MC-E controllers only.**
IRCL-R100	**IRRITROL® CLIMATE LOGIC® REMOTE TRANSMITTER AND RECEIVER** The Controller Assembly shall be provided with a Irritrol® brand Climate Logic® Hand Held Remote and Receiver for remote valve activation. The Kit includes the CL-R1 Transmitter, CL-MR Mini Receiver, and CMR-ADP Cable Adapter.

Controller Assembly Options

SPECIFICATIONS FOR PRE – INSTALLED CONTROLLER OPTIONS
IRRITROL® MCE and RAIN MASTER™ SENTAR™, EAGLE™, EAGLE-I, and EAGLE PLUS CONTROLLERS

iCENTRAL™ System Communication Options (For EAGLE-I, and EAGLE PLUS Controllers only)

NOTE: ALL RAIN MASTER Eagle-I and Eagle Plus Controllers include multi-year Data Plans.

PART #	DESCRIPTION
RM-MVR	**RAIN MASTER™ MASTER VALVE RELAY ASSEMBLY** The Controller Assembly shall be provided with a Master Valve Relay assembly for the purpose of multiple satellite operation of a single normally closed master valve. This does not apply to single controller with single master valve situations. This assembly shall consist of a 24V transformer and relay mounted on the backboard assembly. One **RM-MVR** each is required for 2nd, 3rd, etc. controllers sharing a single master valve. The 1st controller shall utilize the relay provided with the controller.
RM-PSR	**RAIN MASTER™ PUMP START RELAY ASSEMBLY (TWICE™ DECODER CONTROLLER)** The Controller Assembly shall be provided with a Pump Start Relay assembly for the purpose of multiple satellite operation of a single booster pump on a Twice™ Two Wire Decoder Controller. This assembly shall consist of a 24VDC relay mounted on the backboard assembly. One **RM-PSR** each is required for 2nd, 3rd, etc. controllers sharing a single booster pump.

Weather Sensor (For EAGLE™, EAGLE-I, and EAGLE PLUS Controllers)

PART #	DESCRIPTION
RM-WTHR	**10' ET WEATHER CENTER** The Controller Assembly shall be provided with a 10' Weather Center for the purpose of accessing evapotranspiration data and send this pulsed signal output information (in .01 inches of ET, wind speed, and rainfall in .01 inches) to the Eagle controller. The Weather Center shall consist of a solar radiation sensor, temperature/relative humidity sensor, tipping rain bucket, and wind speed sensor. The #RM-WTHR requires 12 conductor cable no more than 500' from the Eagle™, Eagle-I, or Eagle Plus controllers. The #RM-WTHR requires 110VAC, 12 VDC @ 0.2 mA max.

Remote Controls and Accessories

PART #	DESCRIPTION
RMPMUA	**TRANSMITTER AND RECEIVER KIT – UNIVERSAL FOR ALL NON R.M. CONTROLLERS** The Controller Assembly shall be provided with Transmitter and Receiver Kit for the purpose of remote valve operation for any manufacturer's 24-volt controller. The #RMPMUA may control up to 999 receivers from a single transmitter and operates at a frequency of 154.600 MHz. The #RMPMUA Kit includes the transmitter, receiver, 36" remote cable, universal adapter, 30" permanent connector, transmitter and receiver antennas, and carrying case.
RMPM	**TRANSMITTER AND RECEIVER KIT – FOR RAIN MASTER CONTROLLERS ONLY** The Controller Assembly shall be provided with Transmitter and Receiver Kit for the purpose of remote valve operation for Rain Master Eagle and Sentar controllers. The #RMPM may control up to 999 receivers from a single transmitter and operates at a frequency of 154.600 MHz. The #RMPM Kit includes the transmitter, receiver, 36" remote cable, transmitter, and receiver antennas, and carrying case.

Controller Assembly Options

SPECIFICATIONS FOR PRE – INSTALLED CONTROLLER OPTIONS
IRRITROL® MCE and RAIN MASTER™ SENTAR™, EAGLE™, EAGLE-I, and EAGLE PLUS CONTROLLERS

Remote Controls and Accessories Cont.

PART #	DESCRIPTION
RMRX	**RECEIVER KIT – FOR RAIN MASTER CONTROLLERS ONLY** The Controller Assembly shall be provided with permanent mount Receiver Kit for the purpose of remote valve operation for Rain Master Eagle and Sentar controllers. Up to 999 #RMRX may be controlled by a single transmitter and operate at a frequency of 154.600 MHz. The #RMRX Kit includes the receiver, 36" remote cable, and receiver antenna.
RMRX-12	**RECEIVER KIT – 12 STA. PERMANENT MOUNT FOR ALL NON R.M. CONTROLLERS** The Controller Assembly shall be provided with permanent mount Receiver Kit for the purpose of remote valve operation for any manufacturer's 24-volt controller up to 12 stations. Up to 999 #RMRX-12 may be controlled single transmitter and operate at a frequency of 154.600 MHz. The #RMRX-12 Kit includes the receiver, 32EX extension cable, Chassis Mount Access Door, and receiver antenna.
RMRX-24	**RECEIVER KIT – 24 STA. PERMANENT MOUNT FOR ALL NON R.M. CONTROLLERS** The Controller Assembly shall be provided with permanent mount Receiver Kit for the purpose of remote valve operation for any manufacturer's 24-volt controller up to 24 stations. Up to 999 #RMRX-24 may be controlled by a single transmitter and operate at a frequency of 154.600 MHz. The #RMRX-24 Kit includes the receiver, 32EX extension cable, Chassis Mount Access Door, and receiver antenna.
RMRX-32	**RECEIVER KIT – 32 STA. PERMANENT MOUNT FOR ALL NON R.M. CONTROLLERS** The Controller Assembly shall be provided with permanent mount Receiver Kit for the purpose of remote valve operation for any manufacturer's 24-volt controller up to 32 stations. Up to 999 #RMRX-32 may be controlled by a single transmitter and operate at a frequency of 154.600 MHz. The #RMRX-32 Kit includes the receiver, 32EX extension cable, Chassis Mount Access Door, and receiver antenna.
RMTX-32	**TRANSMITTER KIT – FOR ALL CONTROLLER TYPES INCLUDING RAIN MASTER** The Controller Assembly shall be provided with Transmitter Kit for the purpose of remote valve operation for any manufacturer's 24-volt controller including all Rain Master Controllers. The #RMTX may control up to 999 receivers from a single transmitter and operates at a frequency of 154.600 MHz. The #RMTX Kit includes the transmitter, transmitter antenna, and battery.
RMANT-LP	**PERMANENT MOUNT LOW PROFILE CHASSIS ANTENNA** The Controller Assembly shall be provided with permanent mount low profile antenna for the purpose of connecting to a permanent receiver. The #RMANT-LP is designed for mounting on a stainless-steel enclosure and shall operate at a frequency of 154.600 MHz.

Controller Assembly Options

SPECIFICATIONS FOR PRE – INSTALLED CONTROLLER OPTIONS
IRRITROL® MCE and RAIN MASTER™ SENTAR™, EAGLE™, EAGLE-I, and EAGLE PLUS CONTROLLERS

Decoders – Two Wire Decoder System

PART #	DESCRIPTION
RMDEC1	**TWICE™ SINGLE VALVE FIELD DECODER** The Rain Master Twice™ Decoder System Assembly shall be provided with a single valve field Decoder for the purpose of providing an interface between the Twice™ controller to each valve. Each Decoder shall have a pre-programmable station address from 1-200. The RMDEC1 is capable of a single output with one valve maximum. The recommended splice kit shall be 3M #DBR. **For two additional Field Decoders use # 2RMDEC1, for three, use #RMDEC1 etc., up to a maximum of 100RMDEC1. This is based on the number of valves controlled by the Twice™ Controller.** The RMDEC1 may be used separately or in combination with other Field Decoder models such as the RMDEC2 and RMDEC4 (see descriptions). The RMDEC1 is ideal for one or two valve manifold locations. The Field Decoder may be installed in a valve box or direct buried.
RMDEC2	**TWICE™ TWO VALVE FIELD DECODER** The Rain Master Twice™ Decoder System Assembly shall be provided with a two-valve field Decoder for the purpose of providing an interface between the Twice™ controller to each valve. Each Decoder shall have a pre-programmable station address from 1-200. The RMDEC2 is capable of two outputs with up to four valves maximum. The recommended splice kit shall be 3M #DBR. **For two additional Field Decoders use # 2RMDEC2, for three, use #3RMDEC2 etc. up to 100RMDEC2. This is based on the number of valves controlled by the Twice™ Controller.** The RMDEC2 may be used separately or in combination with other Field Decoder models such as the RMDEC1 and RMDEC4 (see descriptions). The RMDEC2 is ideal for one to four valve manifold locations. The Field Decoder may be installed in a valve box or direct buried.
RMDEC4	**TWICE™ FOUR VALVE FIELD DECODER** The Rain Master Twice™ Decoder System Assembly shall be provided with a four-valve field Decoder for the purpose of providing an interface between the Twice™ controller to each valve. Each Decoder shall have a pre-programmable station address from 1-200. The RMDEC4 is capable of four outputs with up to four valves maximum. The recommended splice kit shall be 3M #DBR. **For two additional Field Decoders use # 2RMDEC4, for three, use #3RMDEC4 etc. up to 50RMDEC4. This is based on the number of valves controlled by the Twice™ Controller.** The RMDEC4 may be used separately or in combination with other Field Decoder models such as the RMDEC1 and RMDEC2 (see descriptions). The RMDEC4 is ideal for one to four valve manifold locations. The Field Decoder may be installed in a valve box or direct buried.

Note: The Two Wire Decoder System may operate up to 200 valves, however, no more than 100 Decoders may be used in any combination of RMDEC1, RMDEC2, or RMDEC4 Decoders.

Handheld Programmer

PART #	DESCRIPTION
RMHCP	**HANDHELD FIELD DECODER PROGRAMMER** The Controller Assembly shall be provided with a handheld Decoder Programmer for the purpose of field programming decoders for use with RMDEC Decoders.

Controller Assembly Options

SPECIFICATIONS FOR PRE – INSTALLED CONTROLLER OPTIONS
IRRITROL® MCE and RAIN MASTER™ SENTAR™, EAGLE™, EAGLE-I, and EAGLE PLUS CONTROLLERS

Decoders – Lightning Arrestor and Grounding

PART #	DESCRIPTION
RMLA-1	**TWICE™ LINE SURGE PROTECTION** The Rain Master Twice™ Decoder System Assembly shall be provided with a Lightning Arrestor for the purpose of providing a surge protection interface between the Twice™ controller to each valve. and ground rod. The Lightning Arrestor shall protect an area of ~600 feet in diameter and at dead end runs. The Lightning Arrestor shall be installed every 600 feet on the 2-wire path. A ground rod kit (#GR-K) must also be installed at each RMLA-1 location. The #GR-K must be included separately.
GRD-K	**GROUND ROD and CLAMP for DECODER GROUNDING** The Controller Assembly shall be provided with a Ground Rod and Clamp for the purpose of providing grounding protection to the controller electrical and field installed Weathertrak® Surge Protection Decoders (#HPSP or HP2SP).
GP8-K	**8' GROUND PLATE and 25' of #6 GROUND WIRE** The Controller Assembly shall be provided with a 4" x 96" Copper Ground Plate, and 25' of #6 ground wire for the purpose of providing grounding protection to the controller electrical components or field installed Weathertrak® Surge Protection Decoders (#HPSP or HP2SP). The #GP8-K Kit shall be used primarily with an 8' Ground Rod per National Electric Code requirements for grounding. Includes 2- 50 lb. bags of PowerFill™ or PowerSet® backfill material for ground plate installation.
GP3-K	**3' GROUND PLATE and 10' of #6 GROUND WIRE** The Controller Assembly shall be provided with a 4" x 36" Copper Ground Plate, and 10' of #6 ground wire for the purpose of providing grounding protection to the controller electrical components and field installed Weathertrak® Surge Protection Decoders (#HPSP or HP2SP). The #GP3-K Kit shall be used primarily on two wire decoder system path grounding along with the specific manufacturer's surge suppression device per each specific manufacturer's grounding requirements. Includes 1- 50 lb. bag of PowerFill™ or PowerSet® backfill material for ground plate installation.