

Controller Assembly Options MASTER LIST FOR RAIN BIRD™ CONTROLLER OPTIONS

IQ CLOUD AND SOFTWARE

PART#	DESCRIPTION
Q-CLOUD3.0	Q-CLOUD WEB ACCESS
IQ-ENTER3.0	IQ-ENTERPRISE WEB ACCESS – SOFTWARE DOWNLOAD
IQ-DESKTOP3.0	IQ-DESKTOP - SOFTWARE DOWNLOAD
IQ-5SATUPGRD	IQ 5-SATELLITE CAPACITY UPGRADE (For IQ-Enterprise and IQ-Desktop Only)

IQ[™] SYSTEM COMMUNICATION CARTRIDGE

PART#	DESCRIPTION
IQ-GPRS-X	IQ GPRS 3G CELLULAR COMMUNICATION CARTRIDGE WITH X YEAR(S) DATA SERVICE
Note: The number of years of cellular data service to be indicated. 1-10 years available.	
IQ-ETH	IQ ETHERNET (LAN) COMMUNICATION CARTRIDGE
IQ-WF	IQ WIFI (WLAN) COMMUNICATION CARTRIDGE
IQ-RS	IQ RS-232 (DIRECT CONNECT or RADIO) COMMUNICATION CARTRIDGE
IQ-CM	CONNECTION MODULE FOR LXME SERIES
IQ-CMLXD	CONNECTION MODULE FOR LXD SERIES

IQ[™] SYSTEM RADIO COMMUNICATION

PART#	DESCRIPTION
IQ-SSO	900 MHz SPREAD SPECTRUM RADIO WITH OMNI MULTI-DIRECTIONAL ANTENNA
IQ-SSOP	900 MHz SPREAD SPECTRUM RADIO WITH OMNI MULTI-DIRECT. ANTENNA & POLE
IQ-SSD	900 MHz SPREAD SPECTRUM RADIO WITH DOME TYPE ANTENNA
IQ-SSPH	900 MHz SPREAD SPECTRUM RADIO WITH 3dB PHANTOM TYPE ANTENNA
IQ-SSO-RPTR	900 MHz SPREAD SPECTRUM RADIO REPEATER WITH OMNI MULTI-DIRECT. ANT
IQ-SSOP-RPTR	900 MHz SPREAD SPECTRUM RADIO REPEATER WITH OMNI MULTI-DIRECT. ANT. & POLE
IQ-SSD-RPTR	900 MHz SPREAD SPECTRUM RADIO REPEATER WITH DOME TYPE ANTENNA
IQ-SSPH-RPTR	900 MHz SPREAD SPECTRUM RADIO REPEATER WITH PHANTOM TYPE ANTENNA

REMOTE CONTROL OPTIONS

PART#	DESCRIPTION
RMPMX-RBLX	RAIN MASTER™ TRANSMITTER AND RECEIVER KIT FOR RAIN BIRD® LX SERIES CONTROLLERS ONLY
RMRX-RBLX	RAIN MASTER™ RECEIVER KIT ONLY– PERMANENT MOUNT <u>FOR RAIN BIRD® LX SERIES CONTROLLERS ONLY</u>
RB-UA	9 PIN REMOTE CONTROL ADAPTER BOARD - FOR RAIN BIRD LX SERIES CONTROLLERS ONLY



ESP-LXD[™] and LX-IVM/IVM PRO Decoder System Options

ESP-LXD- 50 Controller is capable of operating up to 50 solenoids. ESP-LXD -125 Controller is capable of operating up to 125 solenoids ESP-LXD -200 Controller is capable of operating up to 200 solenoids.

This is important to know when determining the number of Decoders necessary. ie., if you have 40 total valves using a 50 station ESP-LXD controller and have 20 single valve locations, 4 double valve locations (two valves adjacent to each other) and 3 quadruple valve locations, you would need 20DEC1, 4DEC2, and 3DEC4.

LX-IVM Controller is capable of operating up to 60 solenoids. LX-IVM PRO Controller is capable of operating up to 240 solenoids LX-IVM Controllers use single station Decoders only.

ESP LXD DECODERS - VALVE

PART#	DESCRIPTION
DEC1	ESP-LXD SINGLE VALVE FIELD DECODER
DEC1-2	ESP-LXD SINGLE OR TWO VALVE FIELD DECODER
DEC2	ESP-LXD TWO VALVE FIELD DECODER
DEC4	ESP-LXD FOUR VALVE FIELD DECODER
DEC6	ESP-LXD SIX VALVE FIELD DECODER

ESP LX-IVM & IVM PRO DECODERS - VALVE

PART#	DESCRIPTION
IVMDEC	LX IVM & IVM PRO SINGLE VALVE FIELD DECODER FOR ALL NON-RAIN BIRD® VALVES
IVMSL	LX IVM & IVM PRO SOLENOID WITH DECODER FOR RAIN BIRD® VALVES ONLY

DECODERS - SURGE AND SENSOR (WEATHER SENSOR OR FLOW SENSOR)

PART#	DESCRIPTION
LSP	ESP-LXD LINE SURGE PROTECTION (For LXD Series Controller Only)
IVMSP	LX IVM & IVM PRO LINE SURGE PROTECTION (For LX IVM & IVM PRO Series Controller Only)
SDI	ESP-LXD SENSOR DECODER INTERFACE (For LXD Series Controller Only)
IVMSDEC	LX IVM & IVM PRO SENSOR DECODER INTERFACE (For LX IVM & IVM PRO Series Controller Only)

DECODERS – GROUNDING

PART#	DESCRIPTION
GRD-K	GROUND ROD and CLAMP for DECODER GROUNDING
GP8-K	8' GROUND PLATE and 25' of #6 GROUND WIRE
GP3-K	3' GROUND PLATE and 10' of #6 GROUND WIRE

DC LATCHING - PUMP START RELAY (FOR OR IVM CONTROLLERS ONLY)

PART#	DESCRIPTION
DCL-PSR	DC LATCHING-PUMP START RELAY ASSEMBLY – (FOR TWO WIRE DC LATCHING DECODER SYSTEMS)



ESP-LXD[™] and LX-IVM/IVM PRO Decoder System Options

LX-IVM & IVM PRO INTEGRATED DC LATCHING VALVE SOLENOID AND DECODER (Rain Bird Valves only)

PART#	DESCRIPTION
IVMPGA-100	1" PGA VALVE (NPT) WITH INTEGRATED IVM DECODER
IVMPGA-150	1 1/2" PGA VALVE (NPT) WITH INTEGRATED IVM DECODER
IVMPGA-200	2" PGA VALVE (NPT) WITH INTEGRATED IVM DECODER
IVMPGA-100B	1" PGA VALVE (BSP) WITH INTEGRATED IVM DECODER
IVMPGA-150B	1 1/2" PGA VALVE (BSP) WITH INTEGRATED IVM DECODER
IVMPGA-200B	2" PGA VALVE (BSP) WITH INTEGRATED IVM DECODER
IVMEFB-100	1" EFB VALVE (NPT) WITH INTEGRATED IVM DECODER
IVMEFB-150	1 1/2" EFB VALVE (NPT) WITH INTEGRATED IVM DECODER
IVMEFB-200	2" EFB VALVE (NPT) WITH INTEGRATED IVM DECODER
IVMEFB-200B	2" EFB VALVE (BSP) WITH INTEGRATED IVM DECODER
IVMPEB-100	1" PEB VALVE (NPT) WITH INTEGRATED IVM DECODER
IVMPEB-150	1 1/2" PEB VALVE (NPT) WITH INTEGRATED IVM DECODER
IVMPEB-200	2" PEB VALVE (NPT) WITH INTEGRATED IVM DECODER
IVMPEB-100B	1" PEB VALVE (BSP) WITH INTEGRATED IVM DECODER
IVMPEB-150B	1 1/2" PEB VALVE (BSP) WITH INTEGRATED IVM DECODER
IVMPESB-100	1" PESB VALVE (NPT) WITH INTEGRATED IVM DECODER
IVMPESB-150	1 1/2" PESB VALVE (NPT) WITH INTEGRATED IVM DECODER
IVMPESB-200	2" PESB VALVE (NPT) WITH INTEGRATED IVM DECODER
IVMPESB-100B	1" PESB VALVE (BSP) WITH INTEGRATED IVM DECODER
IVMPESB-150B	1 1/2" PESB VALVE (BSP) WITH INTEGRATED IVM DECODER
IVMPESB-200B	2" PESB VALVE (BSP) WITH INTEGRATED IVM DECODER
IVMPESBR-100	1" PESB VALVE (NPT) RECLAIMED WATER WITH INTEGRATED IVM DECODER
IVMPESBR-150	1 1/2" PESB VALVE (NPT) RECLAIMED WATER WITH INTEGRATED IVM DECODER
IVMPESBR-200	2" PESB VALVE (NPT) RECLAIMED WATER WITH INTEGRATED IVM DECODER
IVMPESBR-100B	1" PESB VALVE (BSP) RECLAIMED WATER WITH INTEGRATED IVM DECODER
IVMPESBR-150B	1 1/2" PESB VALVE (BSP) RECLAIMED WATER WITH INTEGRATED IVM DECODER
IVMBPES-300	3" BPES VALVE (NPT) WITH INTEGRATED IVM DECODER
IVMBPES-300B	3" BPES VALVE (BSP) WITH INTEGRATED IVM DECODER
IVM-XCZ-100	1" PESB VALVE (NPT) WITH INTEGRATED IVM DECODER AND BASKET FILTER
UPGRADE OPTIONS	
I XD-DTC	

IMPERIAL TECHNICAL SERVICES support@imperialtechnical.com



ESP-LXD[™] and LX-IVM/IVM PRO Decoder System Options

TWO WIRE CABLE FOR ALL VALVE DECODERS, MASTER VALVE, FLOW SENSORS, AND SURGE

PART# DESCRIPTION

P-7072D**

PAIGE ELECTRIC COMMUNICATION CABLE

14 AWG/2 Conductor "MAXI" Cable with two type UF wires with a PE outer jacket. The colors of the outer jacket shall be as called-for in the irrigation plans and specifications. Multiple colors available.

The Maximum Critical path for:

14AWG is 1.65 miles (Star pattern) and 6.61 miles (Loop pattern). 12AWG is 2.63 miles (Star) and 10.52 miles (Loop). 10AWG is 4.18 miles (Star), and 16.71 miles (Loop).

**tl is recommended that Communication 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 size and pull box requirements.

IQ[™] Platform Software

PART#	DESCRIPTION
IQ-CLOUD3.0	IQ-CLOUD WEB ACCESS (For descriptive purposes only as this is a downloadable version) The Controller Assembly shall be provided with the IQ-CLOUD Ver. 3.0 web access platform for multiple user access. Does not require a dedicated computer. Unlimited number of LXMEF, or LXD Satellites. The IQ-CLOUD 3.0 is a mobile accessible system. Must communicate to one or all of the following communication cartridges – IQ-GPRS, IQ-ETH, or IQ-WF to access IQ-CLOUD 3.0, go to the Rain Bird IQ Cloud Server at www.rainbird.com/iq to download system program. Compatible with multiple operating systems – confirm current operating systems at above listed web site link
IQ-ENTER3.0	IQ-ENTERPRISE WEB ACCESS – SOFTWARE DOWNLOAD The Controller Assembly shall be provided with the IQ-ENTER Ver. 3.0 web access platform for multiple user access. Does not require a dedicated computer. Available with up to five (5) LXME, LXMEF, or LXD Satellites with additional expansions in increments of five (5) separately purchased. The IQ-ENTER 3.0 is a mobile accessible system. Must communicate to one or all of the following communication cartridges – IQ-GPRS, IQ-ETH, or IQ-WF. Compatible with Windows Server 2008 R2 or later. Each Software License provides for one (1) installation.
IQ-DESKTOP3.0	IQ-DESKTOP - SOFTWARE DOWNLOAD The Controller Assembly shall be provided with the IQ-DESK Ver. 3.0 platform for single user access. Does not require a dedicated computer. Available with up to five (5) LXME, LXMEF, or LXD Satellites with additional expansions in increments of five (5) separately purchased. The IQ-DESK 3.0 is a dedicated computer system software and not web accessible. Must communicate to one or all of the following communication cartridges – IQ-GPRS, IQ-ETH, IQ-WF, or IQ-RS. IQ-DESKTOP supports both IP based irrigation and serial connections. Compatible with Windows 7, 8, 8.1, or 10. Each Software License provides for one (1) installation.
IQ-5SATUPGRD	IQ 5-SATELLITE CAPACITY UPGRADE – For IQ-Enterprise and IQ-Desktop Only The Controller Assembly shall be provided with the IQ-5 Satellite capacity increase via a software activation keycode. Each IQ-5SATUPGRD provides for upgrade in five (5) satellite increments for the IQ-Enterprise and IQ-Desktop software systems only. This feature may be added at time of specification or at a later date.

IQ[™] System Communication Cartridge

PART#	DESCRIPTION
IQ-GPRS-X	IQ GPRS 3G CELLULAR COMMUNICATION CARTRIDGE WITH X YEAR(S) DATA SERVICE The Controller Assembly shall be provided with a GPRS 3G Communication Cartridge with X Year(s) data service for the purpose of receiving cellular communication from the IQ Platform based server or computer control software to a Direct or Server (primary) Satellite located at site. Multiple IQ-GPRS Satellites may be utilized on site as Server Satellites only. The IQ-GPRS-X Cartridge includes a 3G Cellular data service plan with static IP address from Cellular Service Provider such as AT & T or Verizon. Subsequent years shall be the responsibility of the customer/end user. The number of years of cellular data communication service shall range from 1-10 years.
IQ-ETH	IQ ETHERNET (LAN) COMMUNICATION CARTRIDGE The Controller Assembly shall be provided with an Ethernet Communication Cartridge for the purpose of receiving Ethernet communi- cation from the IQ Platform based server or computer control software to a Direct or Server (primary) Satellite located at site. Multiple IQ-ETH Satellites may be utilized on site as Server or Client Satellites. The IQ-ETH Cartridge includes an embedded Ethernet Network Modem with RJ-45 port. The IQ-ETH requires a LAN network static IP Address.
IQ-WF	IQ WIFI (WLAN) COMMUNICATION CARTRIDGE The Controller Assembly shall be provided with an Ethernet Communication Cartridge and universal ethernet to wireless adapter for the purpose of receiving WiFi communication from the IQ Platform based server or computer control software to a Direct or Server (primary) Satellite located at site. Multiple IQ-WF Satellites may be utilized on site as Server or Client Satellites. The IQ-WF communication includes an external adapter connected to an Ethernet Cartridge. The IQ-WF requires a WiFi LAN network static IP Address. Used for Direct or Server Satellite applications requires WiFi LAN wireless network.
IQ-RS	IQ RS-232 (DIRECT CONNECT or RADIO) COMMUNICATION CARTRIDGE The Controller Assembly shall be provided with a RS-232 Communication Cartridge for the purpose of receiving Direct Cable or External Modem communication from the IQ Platform based server or computer control software to a Direct or Server (primary) or Client Satellite located at site. Multiple IQ-RS Satellites may be utilized on site as Server or Client Satellites. The IQ-RS Cartridge must be used for Client Satellite applications requiring IQNet high speed data cable or radio communication (such as Spread Spectrum) with the Server Satellite.
IQ-CM	CONNECTION MODULE FOR LXME SERIES The Controller Assembly shall be provided with a IQ-CM Connection Module for the purpose of providing high-speed data connections to LXME Series controllers. Includes Flow Smart and Base Module functions. The IQ-CM is necessary when communicating from a Server Satellite to a Client Satellite via direct connect (hardwire) or radio communication (Spread Spectrum).
IQ-CMLXD	CONNECTION MODULE FOR LXD SERIES The Controller Assembly shall be provided with a IQ-CMLXD Connection Module for the purpose of providing high-speed data connec- tions to LXD Series controllers. Includes Flow Smart and Base Module functions. The IQ-CMLXD is necessary when communicating from a Server Satellite to a Client Satellite via direct connect (hardwire) or radio communication (Spread Spectrum).

IQ[™] System Radio Communication

IQ-SSO	900 MHz SPREAD SPECTRUM RADIO WITH OMNI MULTI-DIRECTIONAL ANTENNA The Controller Assembly shall be provided with a 900 MHz Spread Spectrum Radio and Omni Multi-Directional Antenna for the purpose of communicating directly from an IQ Platform to a Server Satellite or from a Server Satellite to Client Satellite. For Server to Client Sat- ellite communication, both the Server and Client must have Spread Spectrum Radio communication. A radio survey must be conducted prior to shipping Controller Assembly to site to confirm successful communication from either IQ Platform to Server Satellite or Server Satellite to Client Satellite when using Spread Spectrum communication.
IQ-SSOP	900 MHz SPREAD SPECTRUM RADIO WITH OMNI MULTI-DIRECTIONAL ANTENNA & POLE The Controller Assembly shall be provided with a 900 MHz Spread Spectrum Radio and Omni Multi-Directional Antenna with Pole for the purpose of communicating directly from an IQ Platform to a Server Satellite or from a Server Satellite to Client Satellite. For Server to Client Satellite communication, both the Server and Client must have Spread Spectrum Radio communication. A radio survey must be conducted prior to shipping Controller Assembly to site to confirm successful communication from either IQ Platform to Server Satellite or Server Satellite to Client Satellite when using Spread Spectrum communication. A two (2) inch x 15 foot pole and mounting brackets shall be provided with #IQ-SSOP.
IQ-SSD	900 MHz SPREAD SPECTRUM RADIO WITH DOME TYPE ANTENNA The Controller Assembly shall be provided with a 900 MHz Spread Spectrum Radio and Dome Antenna for the purpose of communi- cating directly from a Server Satellite to Client Satellite. For Server to Client Satellite communication, both the Server and Client must have Spread Spectrum Radio communication. A radio survey must be conducted prior to shipping Controller Assembly to site to confirm successful communication from either IQ Platform to Server Satellite or Server Satellite to Client Satellite when using Spread Spectrum communication.
IQ-SSPH	900 MHz SPREAD SPECTRUM RADIO WITH 3dB PHANTOM TYPE ANTENNA The Controller Assembly shall be provided with a 900 MHz Spread Spectrum Radio and 3dB Phantom Antenna for the purpose of communicating directly from a Server Satellite to Client Satellite. For Server to Client Satellite communication, both the Server and Client must have Spread Spectrum Radio communication. A radio survey must be conducted prior to shipping Controller Assembly to site to confirm successful communication from either IQ Platform to Server Satellite or Server Satellite to Client Satellite when using Spread Spectrum communication.
IQ-SSO-RPTR	900 MHz SPREAD SPECTRUM RADIO REPEATER WITH OMNI MULTI-DIRECTIONAL ANTENNA The Controller Assembly shall be provided with a 900 MHz Spread Spectrum Radio Repeater and Omni Multi-Directional Antenna for the purpose of extending communicating directly from an IQ Platform to a Server Satellite or from a Server Satellite to Client Satellite. For Server to Client Satellite communication, both the Server and Client must have Spread Spectrum Radio communication. A radio survey must be conducted prior to shipping Controller Assembly to site to confirm successful communication from either IQ Platform to Server Satellite or Server Satellite to Client Satellite when using Spread Spectrum communication. The IQ-SSO-RPTR is intended to be for a separate radio location between two radios (Server and Client), and will require its own power source and mounting location.

IQ[™] System Radio Communication

PART#	DESCRIPTION
IQ-SSOP-RPTR	900 MHz SPREAD SPECTRUM RADIO REPEATER WITH OMNI MULTI-DIRECTIONAL ANTENNA & POLE The Controller Assembly shall be provided with a 900 MHz Spread Spectrum Radio Repeater and Omni Multi-Directional Antenna with Pole for the purpose of extending communicating directly from an IQ Platform to a Server Satellite or from a Server Satellite to Client Sat- ellite. For Server to Client Satellite communication, both the Server and Client must have Spread Spectrum Radio communication. A radio survey must be conducted prior to shipping Controller Assembly to site to confirm successful communication from either IQ Platform to Server Satellite or Server Satellite to Client Satellite when using Spread Spectrum communication. The IQ-SSOP-RPTR is intended to be for a separate radio location between two radios (Server and Client), and will require its own power source and mounting location.
IQ-SSD-RPTR	900 MHz SPREAD SPECTRUM RADIO REPEATER WITH DOME TYPE ANTENNA The Controller Assembly shall be provided with a 900 MHz Spread Spectrum Radio Repeater and Dome type Antenna for the purpose of extending communicating directly from an IQ Platform to a Server Satellite or from a Server Satellite to Client Satellite. For Server to Client Satellite communication, both the Server and Client must have Spread Spectrum Radio communication. A radio survey must be conducted prior to shipping Controller Assembly to site to confirm successful communication from either IQ Platform to Server Satellite or Server Satellite to Client Satellite when using Spread Spectrum communication. The IQ-SSD-RPTR is intended to be for a separate radio location between two radios (Server and Client), and will require its own power source and mounting location.
IQ-SSPH-RPTR	900 MHz SPREAD SPECTRUM RADIO REPEATER WITH PHANTOM TYPE ANTENNA The Controller Assembly shall be provided with a 900 MHz Spread Spectrum Radio Repeater and 3dB Phantom type Antenna for the pur- pose of extending communicating directly from an IQ Platform to a Server Satellite or from a Server Satellite to Client Satellite. For Server to Client Satellite communication, both the Server and Client must have Spread Spectrum Radio communication. A radio survey must be conducted prior to shipping Controller Assembly to site to confirm successful communication from either IQ Platform to Server Satellite or Server Satellite to Client Satellite when using Spread Spectrum communication. The IQ-SSD-RPTR is intended to be for a separate radio location between two radios (Server and Client), and will require its own power source and mounting location.

Note: For Spread Spectrum Radio communication, antenna selection shall be determined at time of specification based on anticipated communication range. A radio survey must be conducted to best determine the correct selection of antenna type and height (Omni or Dome type). A radio survey is included with the purchase of all Assemblies including IQ controllers and radio equipment.

Remote Controls

PART#	DESCRIPTION
RMPMX-RBLX	RAIN MASTER™ TRANSMITTER AND RECEIVER KIT FOR RAIN BIRD® LX SERIES CONTROLLERS ONLY The Controller Assembly shall be provided with Rain Master™ ProMax™Transmitter and Receiver Kit for the purpose of remote valve operation for Rain Bird® LXME, LXMEF, or LXD Controllers. The #RMPMX-RBLX may control up to 999 receivers from a single transmitter and operates at a frequency of 154.600 MHz. The #RMPMX-RBLX Kit includes the transmitter, receiver, 36" remote cable, universal adapter, 30" permanent connector, transmitter, permanent mount receiver, Rain Bird® remote adapter board, antenna, and carrying case.
RMRX-RBLX	RAIN MASTER [™] RECEIVER KIT ONLY– PERMANENT MOUNT FOR RAIN BIRD® LX SERIES CONTROLLERS ONLY The Controller Assembly shall be provided with Rain Master [™] ProMax [™] Transmitter and Receiver Kit for the purpose of remote valve operation for Rain Bird® LXME, LXMEF, or LXD Controllers. The #RMPMX-RBLX may control up to 999 receivers from a single transmitter and operates at a frequency of 154.600 MHz. The #RMPMX-RBLX Kit includes the transmitter, receiver, 36" remote cable, universal adapter, 30" permanent connector, transmitter, permanent mount receiver, Rain Bird® remote adapter board, antenna, and carrying case.
RB-URA	9 PIN REMOTE CONTROL ADAPTER BOARD – FOR RAIN BIRD LX SERIES CONTROLLERS ONLY The Controller Assembly shall be provided with a 9 Pin remote control adapter connector board for the purpose of activating irrigation valves remotely with a Rain Master TM ProMax TM remote control and Rain Bird® LXME, LXMEF, or LXD Controller. The remote control adapter board shall provide access of activating up to 200 stations.

SPECIFICATIONS FOR RAIN BIRD® LXD and LX-LVM/IVM PRO DECODER SYSTEM OPTIONS

LXD[™]Decoder System Options

ESP-LXD-50 Controller is capable of operating up to 50 solenoids. ESP-LXD -125 Controller is capable of operating up to 125 solenoids ESP-LXD -200 Controller is capable of operating up to 200 solenoids.

This is important to know when determining the number of Decoders necessary. ie., if you have 40 total valves using a 50 station ESP-LXD controller and have 20 single valve locations, 4 double valve locations (two valves adjacent to each other) and 3 quadruple valve locations, you would need 20DEC1, 4DEC2, and 3DEC4.

LX-IVM Controller is capable of operating up to 60 solenoids. LX-IVM PRO Controller is capable of operating up to 240 solenoids LX-IVM & IVM PRO Controllers use single station decoders only.

ESP LXD[™] Decoders Only - Valve

PART#	DESCRIPTION
DEC1	ESP-LXD SINGLE VALVE FIELD DECODER The ESP-LXD Decoder System Assembly shall be provided with a single valve field Decoder for the purpose of providing an interface be- tween the ESP-LXD-50, ESP-LXD-125, or ESP-LXD -200 controllers to each valve. Each Decoder shall have a pre-programmable station address from 1-200. The DEC1 is capable of a single output with one valve maximum. The recommended splice kit shall be 3M #DBR.
	For two additional Field Decoders use # 2DEC1, for three, use #DEC1 etc., up to a maximum of #20DEC1. This is based on the number of valves controlled by the LXD Controller.
	The DEC1 may be used in separately or in combination with other Field Decoder models such as the DEC2, DEC 4 and DEC6 (see de- scriptions). The DEC1 is ideal for one or two valve manifold locations. The Field Decoder may be installed in a valve box or direct buried.
	ESP-LXD SINGLE OR TWO VALVE FIELD DECODER The ESP-LXD Decoder System Assembly shall be provided with a single valve field Decoder for the purpose of providing an interface between the ESP-LXD-50, ESP-LXD-125, or ESP-LXD -200 controllers to each valve. Each Decoder shall have a pre-programmable station address from 1-200. The DEC1-2 is capable of a single output with up to two valves maximum. The recommended splice kit shall be 3M #DBR.
DEC1-2	For two additional Field Decoders use # 2DEC1-2, for three, use #DEC1-2 etc., up to a maximum of #20DEC1-2. This is based on the number of valves controlled by the LXD Controller.
	The DEC1-2 may be used in separately or in combination with other Field Decoder models such as the DEC1, DEC2, DEC 4 and DEC6 (see descriptions). The DEC1 is ideal for one or two valve manifold locations. The Field Decoder may be installed in a valve box or direct buried.
DEC2	ESP-LXD TWO VALVE FIELD DECODER The ESP-LXD Decoder System Assembly shall be provided with a two valve field Decoder for the purpose of providing an interface between the ESP-LXD-50, ESP-LXD-125, or ESP-LXD -200 controllers to each valve. Each Decoder shall have a pre-programmable station address from 1-200. The DEC2 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 # 2 DEC2, for three, use #3 DEC2 etc. up to #200 DEC2. This is based on the number of valves controlled by the LXD Controller.
	The DEC2 may be used in separately or in combination with other Field Decoder models such as the DEC1, DEC4 and DEC6 (see de- scriptions). The DEC2 is ideal for one to four valve manifold locations. The Field Decoder may be installed in a valve box or direct buried.

SPECIFICATIONS FOR RAIN BIRD® LXD and LX-LVM/IVM PRO DECODER SYSTEM OPTIONS

ESP LXD[™] Decoders Only - Valve

PART#	DESCRIPTION
DEC4	ESP-LXD FOUR VALVE FIELD DECODER The ESP-LXD Decoder System Assembly shall be provided with a four valve field Decoder for the purpose of providing an interface between the ESP-LXD-50, ESP-LXD-125, or ESP-LXD -200 controllers to each valve. Each Decoder shall have a pre-programmable station address from 1-200. The DEC4 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 # 2 DEC4, for three, use #3 DEC4 etc. up to #200 DEC4. This is based on the number of valves controlled by the LXD Controller.
	The DEC4 may be used in separately or in combination with other Field Decoder models such as the DEC1, DEC2 and DEC6 (see de- scriptions). The DEC4 is ideal for one to four valve manifold locations. The Field Decoder may be installed in a valve box or direct buried. The DEC4 includes built-in surge protection.
	ESP-LXD SIX VALVE FIELD DECODER The ESP-LXD Decoder System Assembly shall be provided with a six valve field Decoder for the purpose of providing an interface be- tween the ESP-LXD-50, ESP-LXD-125, or ESP-LXD -200 controllers to each valve. Each Decoder shall have a pre-programmable station address from 1-200. The DEC6 is capable of six outputs with up to six valves maximum. The recommended splice kit shall be 3M #DBR.
DEC6	For two additional Field Decoders use # 2 DEC6, for three, use #3 DEC6 etc. up to #200 DEC6. This is based on the number of valves controlled by the LXD Controller.
	The DEC6 may be used in separately or in combination with other Field Decoder models such as the DEC1, DEC2 and DEC4 (see de- scriptions). The DEC6 is ideal for one to four valve manifold locations. The Field Decoder may be installed in a valve box or direct buried. The DEC6 includes built-in surge protection.

SPECIFICATIONS FOR RAIN BIRD® LXD and LX-LVM/IVM PRO DECODER SYSTEM OPTIONS

ESP LX IVM and IVM PRO Decoders Only - Valve

PART#	DESCRIPTION
IVMDEC	LX IVM & IVM PRO SINGLE VALVE FIELD DECODER FOR ALL NON-RAIN BIRD® VALVES The LX IVM & LX IVM PRO Decoder System Assembly shall be provided with a single valve field Decoder for the purpose of providing an interface between the LX IVM 60 station or LX IVM PRO 240 station controller to each valve. Each Decoder shall have a pre-programmable station address from 1-60 or 1-240. The IVM-DEC is capable of a <u>single output with one valve maximum</u> . The recommended splice kit shall be 3M #DBR.
	For two additional Field Decoders use # (2)IVM-DEC, for three, use (3)IVM-DEC etc., up to a maximum of 60 for the IVM and 240 for the IVM PRO. This is based on the number of valves controlled by the LX IVM or IVM PRO Controller.
IVMSL	ESP-LXD SENSOR DECODER INTERFACE (For LXD Series Controller Only) The ESP-LXD Decoder System Assembly shall be provided with a Sensor Decoder Interface for the purpose interfacing a Flow Sensor with the ESP-LXD Controller to read high and low flows. The SDI Sensor Decoder and Flow Sensor shall have a maximum cable run of 400' using approved flow sensing cable. A maximum of 5 Sensor Decoders/Flow Sensors can be used per LXD Controller. For two Sensor Decoders use # (2)SDI.
Decoders – Surge	e and Sensor (Weather Sensor or Flow Sensor)
PART#	DESCRIPTION
LSP	ESP-LXD LINE SURGE PROTECTION (For LXD Series Controller Only) The ESP-LXD Decoder System Assembly shall be provided with a Line Surge Protector for the purpose of providing a surge protection in- terface between the ESP-LXD-50, ESP-LXD-125, or ESP-LXD -200 controllers to each valve and ground rod. The Line Surge Protection shall protect an area of ~500 feet in diameter, and at dead end runs. The Line Surge Protection shall be installed every 500 feet or every 8 decoders on the 2-wire path. A ground rod kit (#GR-K) must also be installed at each LSP location. The #GRD-K, or GP3-K must be included separately.
IVMSP	LX IVM & IVM PRO LINE SURGE PROTECTION (For LX IVM & IVM PRO Series Controller Only) The LX IVM & IVM PRO Decoder System Assembly shall be provided with a Line Surge Protector for the purpose of providing a surge protection interface between the LX IVM 60 station or LX IVM PRO 240 station controller to the two wire decoder cable path and ground rod. The Line Surge Protection shall protect an area of ~500 feet in diameter, and at dead end runs. The Line Surge Protection shall be installed every 500 feet or every 15 decoders on the 2-wire path. A ground rod kit (#GRD-K) must also be installed at each LSP location. The #GRD-K, or GP3-K must be included separately.
SDI	ESP-LXD SENSOR DECODER INTERFACE (For LXD Series Controller Only) The ESP-LXD Decoder System Assembly shall be provided with a Sensor Decoder Interface for the purpose interfacing a Flow Sensor with the ESP-LXD Controller to read high and low flows. The SDI Sensor Decoder and Flow Sensor shall have a maximum cable run of 400' using approved flow sensing cable. A maximum of 5 Sensor Decoders/Flow Sensors can be used per LXD Controller.
	For two Sensor Decoders use # (2)SDI.
IVMSDEC	LX IVM & IVM PRO SENSOR DECODER INTERFACE (For LX IVM & IVM PRO Series Controller Only) The LX IVM & IVM PRO Decoder System Assembly shall be provided with a Sensor Decoder Interface for the purpose interfacing a Flow Sensor with the LX IVM & IVM PRO Controllers to read high and low flows. The IVM-SD Sensor Decoder and Flow Sensor shall have a maximum cable run of 400' using approved flow sensing cable. A maximum of 5 Sensor Decoders/Flow Sensors can be used per LX IVM Controller and up to 10 per LX IVM PRO. For two Sensor Decoders use # (2)IVM-SD.

SPECIFICATIONS FOR RAIN BIRD® LXD and LX-LVM/IVM PRO DECODER SYSTEM OPTIONS

Decoders – Grounding PART# DESCRIPTION **GROUND ROD and CLAMP for DECODER GROUNDING** The Controller Assembly shall be provided with a Ground Rod and Clamp for the purpose of providing IGRD-K grounding protection to the controller electrical and field installed Weathertrak® Surge Protection Decoders (#HPSP or HP2SP). ESP-LXD SENSOR DECODER INTERFACE (For LXD Series Controller Only) The ESP-LXD Decoder System Assembly shall be provided with a Sensor Decoder Interface for the purpose interfacing a Flow Sensor GP8-K with the ESP-LXD Controller to read high and low flows. The SDI Sensor Decoder and Flow Sensor shall have a maximum cable run of 400' using approved flow sensing cable. A maximum of 5 Sensor Decoders/Flow Sensors can be used per LXD Controller. 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 GP3-K 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.

DC Latching – Pump Start Relay (For IVM Controllers Only)

PART#	DESCRIPTION
DCL-PSR	DC LATCHING-PUMP START RELAY ASSEMBLY – (FOR TWO WIRE DC LATCHING DECODER SYSTEMS) The Controller Assembly shall be provided with a DC Latching - Pump Start Relay assembly for the purpose of controller-initiated pump operation. This assembly shall consist of a relay pre-wired to a terminal strip. One DCL-PSR is required for each controller. This relay is intended for two wire decod- er systems operating on DC power.

SPECIFICATIONS FOR RAIN BIRD® LXD and LX-LVM/IVM PRO DECODER SYSTEM OPTIONS

PART#	DESCRIPTION
IVMPGA-100	1" PGA VALVE (NPT) WITH INTEGRATED IVM DECODER The LX IVM & LX IVM PRO Decoder System Assembly shall be provided with a single valve with integrated DC Latching field Solenoid and Decoder for the purpose of providing an interface between an LX IVM 60 station or LX IVM PRO 240 station controller to each valve. Each Valve/Decoder shall have a pre-programmable station address from 1-60 or 1-240. The Valve/Decoder is capable of a single output with one valve maximum. The recommended splice kit shall be 3M #DBR.
IVMPGA-150	1 1/2" PGA VALVE (NPT) WITH INTEGRATED IVM DECODER The LX IVM & LX IVM PRO Decoder System Assembly shall be provided with a single valve with integrated DC Latching field Solenoid and Decoder for the purpose of providing an interface between an LX IVM 60 station or LX IVM PRO 240 station controller to each valve. Each Valve/Decoder shall have a pre-programmable station address from 1-60 or 1-240. The Valve/Decoder is capable of a single output with one valve maximum. The recommended splice kit shall be 3M #DBR.
IVMPGA-200	2" PGA VALVE (NPT) WITH INTEGRATED IVM DECODER The LX IVM & LX IVM PRO Decoder System Assembly shall be provided with a single valve with integrated DC Latching field Solenoid and Decoder for the purpose of providing an interface between an LX IVM 60 station or LX IVM PRO 240 station controller to each valve. Each Valve/Decoder shall have a pre-programmable station address from 1-60 or 1-240. The Valve/Decoder is capable of a single output with one valve maximum. The recommended splice kit shall be 3M #DBR.
IVMPGA-100B	1" PGA VALVE (BSP) WITH INTEGRATED IVM DECODER The LX IVM & LX IVM PRO Decoder System Assembly shall be provided with a single valve with integrated DC Latching field Solenoid and Decoder for the purpose of providing an interface between an LX IVM 60 station or LX IVM PRO 240 station controller to each valve. Each Valve/Decoder shall have a pre-programmable station address from 1-60 or 1-240. The Valve/Decoder is capable of a single output with one valve maximum. The recommended splice kit shall be 3M #DBR.
IVMPGA-150B	1/2" PGA VALVE (BSP) WITH INTEGRATED IVM DECODER The LX IVM & LX IVM PRO Decoder System Assembly shall be provided with a single valve with integrated DC Latching field Solenoid and Decoder for the purpose of providing an interface between an LX IVM 60 station or LX IVM PRO 240 station controller to each valve. Each Valve/Decoder shall have a pre-programmable station address from 1-60 or 1-240. The Valve/Decoder is capable of a single output with one valve maximum. The recommended splice kit shall be 3M #DBR.
IVMPGA-200B	2" PGA VALVE (BSP) WITH INTEGRATED IVM DECODER The LX IVM & LX IVM PRO Decoder System Assembly shall be provided with a single valve with integrated DC Latching field Solenoid and Decoder for the purpose of providing an interface between an LX IVM 60 station or LX IVM PRO 240 station controller to each valve. Each Valve/Decoder shall have a pre-programmable station address from 1-60 or 1-240. The Valve/Decoder is capable of a single output with one valve maximum. The recommended splice kit shall be 3M #DBR.
IVMEFB-100	1" EFB VALVE (NPT) WITH INTEGRATED IVM DECODER The LX IVM & LX IVM PRO Decoder System Assembly shall be provided with a single valve with integrated DC Latching field Solenoid and Decoder for the purpose of providing an interface between an LX IVM 60 station or LX IVM PRO 240 station controller to each valve. Each Valve/Decoder shall have a pre-programmable station address from 1-60 or 1-240. The Valve/Decoder is capable of a single output with one valve maximum. The recommended splice kit shall be 3M #DBR.
IVMEFB-150	1 1/2" EFB VALVE (NPT) WITH INTEGRATED IVM DECODER The LX IVM & LX IVM PRO Decoder System Assembly shall be provided with a single valve with integrated DC Latching field Solenoid and Decoder for the purpose of providing an interface between an LX IVM 60 station or LX IVM PRO 240 station controller to each valve. Each Valve/Decoder shall have a pre-programmable station address from 1-60 or 1-240. The Valve/Decoder is capable of a single output with one valve maximum. The recommended splice kit shall be 3M #DBR.
IVMEFB-200	2" EFB VALVE (NPT) WITH INTEGRATED IVM DECODER The LX IVM & LX IVM PRO Decoder System Assembly shall be provided with a single valve with integrated DC Latching field Solenoid and Decoder for the purpose of providing an interface between an LX IVM 60 station or LX IVM PRO 240 station controller to each valve. Each Valve/Decoder shall have a pre-programmable station address from 1-60 or 1-240. The Valve/Decoder is capable of a single output with one valve maximum. The recommended splice kit shall be 3M #DBR

SPECIFICATIONS FOR RAIN BIRD® LXD and LX-LVM/IVM PRO DECODER SYSTEM OPTIONS

PART#	DESCRIPTION
IVMEFB-200B	2" EFB VALVE (BSP) WITH INTEGRATED IVM DECODER The LX IVM & LX IVM PRO Decoder System Assembly shall be provided with a single valve with integrated DC Latching field Solenoid and Decoder for the purpose of providing an interface between an LX IVM 60 station or LX IVM PRO 240 station controller to each valve. Each Valve/Decoder shall have a pre-programmable station address from 1-60 or 1-240. The Valve/Decoder is capable of a single output with
	one valve maximum. The recommended splice kit shall be 3M #DBR.
IVMPEB-100	1" PEB VALVE (NPT) WITH INTEGRATED IVM DECODER The LX IVM & LX IVM PRO Decoder System Assembly shall be provided with a single valve with integrated DC Latching field Solenoid and Decoder for the purpose of providing an interface between an LX IVM 60 station or LX IVM PRO 240 station controller to each valve. Each Valve/Decoder shall have a pre-programmable station address from 1-60 or 1-240. The Valve/Decoder is capable of a single output with one valve maximum. The recommended splice kit shall be 3M #DBR.
IVMPEB-150	1 1/2" PEB VALVE (NPT) WITH INTEGRATED IVM DECODER The LX IVM & LX IVM PRO Decoder System Assembly shall be provided with a single valve with integrated DC Latching field Solenoid and Decoder for the purpose of providing an interface between an LX IVM 60 station or LX IVM PRO 240 station controller to each valve. Each Valve/Decoder shall have a pre-programmable station address from 1-60 or 1-240. The Valve/Decoder is capable of a single output with one valve maximum. The recommended splice kit shall be 3M #DBR.
IVMPEB-200	2" PEB VALVE (NPT) WITH INTEGRATED IVM DECODER The LX IVM & LX IVM PRO Decoder System Assembly shall be provided with a single valve with integrated DC Latching field Solenoid and Decoder for the purpose of providing an interface between an LX IVM 60 station or LX IVM PRO 240 station controller to each valve. Each Valve/Decoder shall have a pre-programmable station address from 1-60 or 1-240. The Valve/Decoder is capable of a single output with one valve maximum. The recommended splice kit shall be 3M #DBR.
IVMPEB-100B	1" PEB VALVE (BSP) WITH INTEGRATED IVM DECODER The LX IVM & LX IVM PRO Decoder System Assembly shall be provided with a single valve with integrated DC Latching field Solenoid and Decoder for the purpose of providing an interface between an LX IVM 60 station or LX IVM PRO 240 station controller to each valve. Each Valve/Decoder shall have a pre-programmable station address from 1-60 or 1-240. The Valve/Decoder is capable of a single output with one valve maximum. The recommended splice kit shall be 3M #DBR.
IVMPEB-150B	1 1/2" PEB VALVE (BSP) WITH INTEGRATED IVM DECODER The LX IVM & LX IVM PRO Decoder System Assembly shall be provided with a single valve with integrated DC Latching field Solenoid and Decoder for the purpose of providing an interface between an LX IVM 60 station or LX IVM PRO 240 station controller to each valve. Each Valve/Decoder shall have a pre-programmable station address from 1-60 or 1-240. The Valve/Decoder is capable of a single output with one valve maximum. The recommended splice kit shall be 3M #DBR.
IVMPESB-100	1" PESB VALVE (NPT) WITH INTEGRATED IVM DECODER The LX IVM & LX IVM PRO Decoder System Assembly shall be provided with a single valve with integrated DC Latching field Solenoid and Decoder for the purpose of providing an interface between an LX IVM 60 station or LX IVM PRO 240 station controller to each valve. Each Valve/Decoder shall have a pre-programmable station address from 1-60 or 1-240. The Valve/Decoder is capable of a single output with one valve maximum. The recommended splice kit shall be 3M #DBR.
IVMPESB-150	1 1/2" PESB VALVE (NPT) WITH INTEGRATED IVM DECODER The LX IVM & LX IVM PRO Decoder System Assembly shall be provided with a single valve with integrated DC Latching field Solenoid and Decoder for the purpose of providing an interface between an LX IVM 60 station or LX IVM PRO 240 station controller to each valve. Each Valve/Decoder shall have a pre-programmable station address from 1-60 or 1-240. The Valve/Decoder is capable of a single output with one valve maximum. The recommended splice kit shall be 3M #DBR.
IVMPESB-200	2" PESB VALVE (NPT) WITH INTEGRATED IVM DECODER The LX IVM & LX IVM PRO Decoder System Assembly shall be provided with a single valve with integrated DC Latching field Solenoid and Decoder for the purpose of providing an interface between an LX IVM 60 station or LX IVM PRO 240 station controller to each valve. Each Valve/Decoder shall have a pre-programmable station address from 1-60 or 1-240. The Valve/Decoder is capable of a single output with one valve maximum. The recommended splice kit shall be 3M #DBR.

SPECIFICATIONS FOR RAIN BIRD® LXD and LX-LVM/IVM PRO DECODER SYSTEM OPTIONS

PART#	DESCRIPTION
IVMPESB-100B	1" PESB VALVE (BSP) WITH INTEGRATED IVM DECODER The LX IVM & LX IVM PRO Decoder System Assembly shall be provided with a single valve with integrated DC Latching field Solenoid and Decoder for the purpose of providing an interface between an LX IVM 60 station or LX IVM PRO 240 station controller to each valve. Each Valve/Decoder shall have a pre-programmable station address from 1-60 or 1-240. The Valve/Decoder is capable of a single output with one valve maximum. The recommended splice kit shall be 3M #DBR.
IVMPESB-150B	1 1/2" PESB VALVE (BSP) WITH INTEGRATED IVM DECODER The LX IVM & LX IVM PRO Decoder System Assembly shall be provided with a single valve with integrated DC Latching field Solenoid and Decoder for the purpose of providing an interface between an LX IVM 60 station or LX IVM PRO 240 station controller to each valve. Each Valve/Decoder shall have a pre-programmable station address from 1-60 or 1-240. The Valve/Decoder is capable of a single output with one valve maximum. The recommended splice kit shall be 3M #DBR.
IVMPESB-200B	2" PESB VALVE (BSP) WITH INTEGRATED IVM DECODER The LX IVM & LX IVM PRO Decoder System Assembly shall be provided with a single valve with integrated DC Latching field Solenoid and Decoder for the purpose of providing an interface between an LX IVM 60 station or LX IVM PRO 240 station controller to each valve. Each Valve/Decoder shall have a pre-programmable station address from 1-60 or 1-240. The Valve/Decoder is capable of a single output with one valve maximum. The recommended splice kit shall be 3M #DBR.
IVMPESBR-100	1" PESBR VALVE (NPT) FOR RECLAIMED WATER WITH INTEGRATED IVM DECODER The LX IVM & LX IVM PRO Decoder System Assembly shall be provided with a single valve with integrated DC Latching field Solenoid and Decoder for the purpose of providing an interface between an LX IVM 60 station or LX IVM PRO 240 station controller to each valve. Each Valve/Decoder shall have a pre-programmable station address from 1-60 or 1-240. The Valve/Decoder is capable of a single output with one valve maximum. The recommended splice kit shall be 3M #DBR.
IVMPESBR-150	1 1/2" PESBR VALVE (NPT) FOR RECLAIMED WATER WITH INTEGRATED IVM DECODER The LX IVM & LX IVM PRO Decoder System Assembly shall be provided with a single valve with integrated DC Latching field Solenoid and Decoder for the purpose of providing an interface between an LX IVM 60 station or LX IVM PRO 240 station controller to each valve. Each Valve/Decoder shall have a pre-programmable station address from 1-60 or 1-240. The Valve/Decoder is capable of a single output with one valve maximum. The recommended splice kit shall be 3M #DBR.
IVMPESBR-200	2" PESBR VALVE (NPT) FOR RECLAIMED WATER WITH INTEGRATED IVM DECODER The LX IVM & LX IVM PRO Decoder System Assembly shall be provided with a single valve with integrated DC Latching field Solenoid and Decoder for the purpose of providing an interface between an LX IVM 60 station or LX IVM PRO 240 station controller to each valve. Each Valve/Decoder shall have a pre-programmable station address from 1-60 or 1-240. The Valve/Decoder is capable of a single output with one valve maximum. The recommended splice kit shall be 3M #DBR.
IVMPESB-100B	1" PESB VALVE (BSP) WITH INTEGRATED IVM DECODER The LX IVM & LX IVM PRO Decoder System Assembly shall be provided with a single valve with integrated DC Latching field Solenoid and Decoder for the purpose of providing an interface between an LX IVM 60 station or LX IVM PRO 240 station controller to each valve. Each Valve/Decoder shall have a pre-programmable station address from 1-60 or 1-240. The Valve/Decoder is capable of a single output with one valve maximum. The recommended splice kit shall be 3M #DBR.
IVMPESB-150B	1 1/2" PESB VALVE (BSP) WITH INTEGRATED IVM DECODER The LX IVM & LX IVM PRO Decoder System Assembly shall be provided with a single valve with integrated DC Latching field Solenoid and Decoder for the purpose of providing an interface between an LX IVM 60 station or LX IVM PRO 240 station controller to each valve. Each Valve/Decoder shall have a pre-programmable station address from 1-60 or 1-240. The Valve/Decoder is capable of a single output with one valve maximum. The recommended splice kit shall be 3M #DBR.

SPECIFICATIONS FOR RAIN BIRD $\ensuremath{\mathbb{R}}$ LXD and LX-LVM/IVM PRO DECODER SYSTEM OPTIONS

PART#	DESCRIPTION
IVMPESB-200B	2" PESB VALVE (BSP) WITH INTEGRATED IVM DECODER The LX IVM & LX IVM PRO Decoder System Assembly shall be provided with a single valve with integrated DC Latching field Solenoid and Decoder for the purpose of providing an interface between an LX IVM 60 station or LX IVM PRO 240 station controller to each valve. Each Valve/Decoder shall have a pre-programmable station address from 1-60 or 1-240. The Valve/Decoder is capable of a single output with one valve maximum. The recommended splice kit shall be 3M #DBR.
IVMPESBR-100	1" PESBR VALVE (NPT) FOR RECLAIMED WATER WITH INTEGRATED IVM DECODER The LX IVM & LX IVM PRO Decoder System Assembly shall be provided with a single valve with integrated DC Latching field Solenoid and Decoder for the purpose of providing an interface between an LX IVM 60 station or LX IVM PRO 240 station controller to each valve. Each Valve/Decoder shall have a pre-programmable station address from 1-60 or 1-240. The Valve/Decoder is capable of a single output with one valve maximum. The recommended splice kit shall be 3M #DBR.
IVMPESBR-150	1 1/2" PESBR VALVE (NPT) FOR RECLAIMED WATER WITH INTEGRATED IVM DECODER The LX IVM & LX IVM PRO Decoder System Assembly shall be provided with a single valve with integrated DC Latching field Solenoid and Decoder for the purpose of providing an interface between an LX IVM 60 station or LX IVM PRO 240 station controller to each valve. Each Valve/Decoder shall have a pre-programmable station address from 1-60 or 1-240. The Valve/Decoder is capable of a single output with one valve maximum. The recommended splice kit shall be 3M #DBR.
IVMPESBR-200	2" PESBR VALVE (NPT) FOR RECLAIMED WATER WITH INTEGRATED IVM DECODER The LX IVM & LX IVM PRO Decoder System Assembly shall be provided with a single valve with integrated DC Latching field Solenoid and Decoder for the purpose of providing an interface between an LX IVM 60 station or LX IVM PRO 240 station controller to each valve. Each Valve/Decoder shall have a pre-programmable station address from 1-60 or 1-240. The Valve/Decoder is capable of a single output with one valve maximum. The recommended splice kit shall be 3M #DBR.
IVMPESBR-100B	1" PESBR VALVE (BSP) FOR RECLAIMED WATER WITH INTEGRATED IVM DECODER The LX IVM & LX IVM PRO Decoder System Assembly shall be provided with a single valve with integrated DC Latching field Solenoid and Decoder for the purpose of providing an interface between an LX IVM 60 station or LX IVM PRO 240 station controller to each valve. Each Valve/Decoder shall have a pre-programmable station address from 1-60 or 1-240. The Valve/Decoder is capable of a single output with one valve maximum. The recommended splice kit shall be 3M #DBR.
IVMPESBR-150B	1 1/2" PESBR VALVE (BSP) FOR RECLAIMED WATER WITH INTEGRATED IVM DECODER The LX IVM & LX IVM PRO Decoder System Assembly shall be provided with a single valve with integrated DC Latching field Solenoid and Decoder for the purpose of providing an interface between an LX IVM 60 station or LX IVM PRO 240 station controller to each valve. Each Valve/Decoder shall have a pre-programmable station address from 1-60 or 1-240. The Valve/Decoder is capable of a single output with one valve maximum. The recommended splice kit shall be 3M #DBR.
IVMBPES-300	3" BPES VALVE (NPT) WITH INTEGRATED IVM DECODER The LX IVM & LX IVM PRO Decoder System Assembly shall be provided with a single valve with integrated DC Latching field Solenoid and Decoder for the purpose of providing an interface between an LX IVM 60 station or LX IVM PRO 240 station controller to each valve. Each Valve/Decoder shall have a pre-programmable station address from 1-60 or 1-240. The Valve/Decoder is capable of a single output with one valve maximum. The recommended splice kit shall be 3M #DBR.
IVMBPES-300B	3" BPES VALVE (BSP) WITH INTEGRATED IVM DECODER The LX IVM & LX IVM PRO Decoder System Assembly shall be provided with a single valve with integrated DC Latching field Solenoid and Decoder for the purpose of providing an interface between an LX IVM 60 station or LX IVM PRO 240 station controller to each valve. Each Valve/Decoder shall have a pre-programmable station address from 1-60 or 1-240. The Valve/Decoder is capable of a single output with one valve maximum. The recommended splice kit shall be 3M #DBR.
IVM-XCZ-100	1" PESB VALVE (NPT) WITH INTEGRATED IVM DECODER AND BASKET FILTER The LX IVM & LX IVM PRO Decoder System Assembly shall be provided with a single valve with integrated DC Latching field Solenoid and Decoder for the purpose of providing an interface between an LX IVM 60 station or LX IVM PRO 240 station controller to each valve. Each Valve/Decoder shall have a pre-programmable station address from 1-60 or 1-240. The Valve/Decoder is capable of a single output with one valve maximum. The recommended splice kit shall be 3M #DBR. The IVM-XCZ drip valve shall include a PVC ball valve, and 150 Mesh (100 Micron) Basket Filter.



SPECIFICATIONS FOR RAIN BIRD® LXD and LX-LVM/IVM PRO DECODER SYSTEM OPTIONS

PART#	DESCRIPTION
Upgrade Options	
LXD-DTC	IQ CENTRAL CONTROL SATELLITE COMMUNICATION CARTRIDGE The ESP-LXD Decoder System Assembly shall be provided with a IQ Central Control Communication Cartridge for the purpose of integration into the IQ Central Control System to allow for programming, adjustments, manual operation, and monitoring from a computer equipped with the IQ Central Control Software. The Communication option to transmit data to the software is not included. The LXD-DTC shall be pre-mounted within the ESP-LXD controller.
LXD-PBC	PROGRAMMING BACKUP CARTRIDGE The Decoder System Assembly shall be provided with a Program Backup Cartridge (PBC) to allow 8 full backups of all field programming of the ESP-LXD and for the purpose allowing the use to enter field decoder addresses by scanning provided barcodes using a separately purchased barcode scanning pen. The LXD-PBC shall be pre-mounted within the ESP-LXD controller.