



ELECTROLOGIXS® PMD-4/4R

Crossing Controller

The ElectroLogIXS® family from KB Signaling is engineered to simplify and enhance the way railroads manage wayside control.

The ElectroLogIXS PMD-4 delivers a modern, motion-detection solution for crossing applications. Designed for straightforward upgrades, it seamlessly replaces existing PMD-1, PMD-2, and HXP-1 installations. Built on proven ElectroLogIXS XP4 technology, the PMD-4 ensures fast adoption, reliable performance, and long-term maintainability.



KB SIGNALING™

ElectroLogIXS® PMD-4/4R Crossing Controller

Key Benefits

- Simple train detection unit
- Motion and Constant Warning mode
- Simple setup
- Based on ElectroLogIXS® XP4 technology

Customer Benefits

Cost Effective

The PMD-4 unit was designed to be a direct replacement for PMD-1 units while the PMD-4R easily replaces PMD-2 installations. This unit offers motion detection with a small foot print, low power consumption, and easy to use setup menus, all with an upgrade budget in mind. In addition, basic constant warning is available for upgrading HXP-1 locations

Simple Setup

Particular attention was paid to the keypad menu system alignment so that it would be as easy or easier to configure than a PMD-3 unit. A bright, 4x20 character display is used with large alpha-numeric keypad. Organic LED (OLED) display technology offers backlighting, sleep mode, and easy viewing in bright conditions

Scalable

With the use of the VPM-3 microprocessor, multiple ElectroLogIXS PMD-4/4R system units can be vitally linked through one of the two Ethernet ports through a standard cat5 cable. This allows up to 32 remotes (chassis) to be linked vitally in a local area network with virtually zero latency.

General Description

The introduction of the ElectroLogIXS® PMD-4 and PMD-4R add to the versatility of this platform. These units will deliver superior motion-based train detection over our own previous generation of products.

The ElectroLogIXS PMD-4 units are offered in two configurations, non-redundant (ElectroLogIXS PMD-4), and redundant (ElectroLogIXS PMD-4R) based on which application modules are populated, track and I/O can be redundant. Both are the same chassis size.

The ElectroLogIXS PMD-4 series builds on the ElectroLogIXS platform by using already proven train detection algorithms, VPM-3 processor, and vital I/O. This equipment was designed and built with upgrading older equipment in small cases in mind. Particular attention was paid to size, mounting and easy change-out capabilities.

Proven Performance

The ElectroLogIXS PMD-4/4R was built using the core of HXP/PMD-3 technology and ElectroLogIXS XP4 components. Over 20 years of solid train detection performance was incorporated into the XP4. All options and adjustment parameter terminology were kept as close to HXP/PMD-3, as possible, for easier adoption.



ElectroLogiXS® PMD-4/4R Crossing Controller

Upgrading Existing Locations

The following table provides equivalent part numbers for upgrading older motion or constant warning systems. For systems that use the AXC-1 or an internal AXD module for remote start functions, please refer to the ElectroLogiXS® XP4 products.

The chassis can be field replaced without the use of any tools:

- Plug-style wiring connectors
- Spring tension mounting plate
- External memory device for setup and configuration

The chassis is arranged in a card file system for **easy module replacement**:

- PMD-4
 - Chassis/Processor/Display
 - Track – XTI-1S (Normal)
 - I/O - VIO-44S
- PMD-4R
 - Chassis/Processor/Display
 - Track – XTI-1S (Normal and Standby)
 - I/O - VIO-44R



	ElectroLogiXS PMD-4/4R Part Number	MD or CW
PMD-1	300911-000	MD
PMD-2	300911-001	MD
HXP-1/no AXD	300911-030	CW
HXP-1 with CTU-2	300911-031	CW
PMD-3	300911-000	MD
PMD-3R	300911-001	MD
HXP-3/no AXD	300911-030	CW
HXP-3R/no AXD	300911-031	CW

Features

Number of Tracks

- One, normal or normal/standby

Weight

- PMD-4 – 12.2lbs
- PMD-4R – 17.2lbs

Dimensions

- Chassis - 7.75" L x 13"W x 10.5" H
- Mounting plate - 15.3" L x 6" W x 10.6" H

Maximum Track Length

- 7,500 feet

Mode

- Motion

Processor

- Ethernet processor (VPM-3)

Communications

- Ethernet
- Web GUI
- RP 2009 vital linking
- GENISYS Office
- Telnet
- SNMP/SNTP
- SCP/SSH

Approach Frequencies

- Selectable 86Hz to 979Hz

Island Frequencies

- Nine, Selectable 4Khz to 8Khz

I/O

- MDR, Island, AUX
- Traffic preemption – CW mode
- Out-of-Service Jumper

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Application

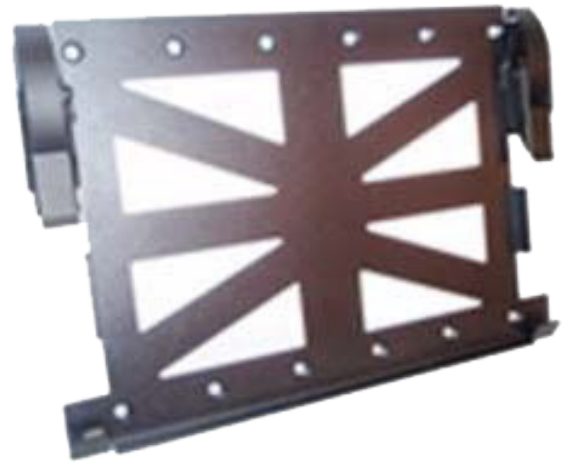
Each PMD-4 will ship with a standard application program that will perform functionality equivalent to PMD-3 and PMD-3R operation. Existing programs are user configurable and may be customized utilizing Logic Station application development tools. Users can also create their own programs using that tool as well.

Recording and Analysis

The ElectroLogIXS® PMD-4 System has a built-in recorder that logs time-stamped vital and non-vital events as well as internal logic state changes, crossing performance data and failures/reset information. All recorded events can be printed both trackside and in the office. All logs that were available in the HXP/PMD-3 RMM module as well as additional logs, are available in the VPM-3 processor.

- Event storage - 100,000 events
- Error recording - 5000 events
- Configuration settings - 1,000 events
- Crossing system Event – 15,000 events
- Grade crossing train records - 5,000 trains
- Train data log - 15,000 events
- Crossing ring status – 450 events

In addition, **upgrade panels** and **pre-made cables** are available for PMD-1, PMD-2, PMD-3, PMD-3R, HXP-1, and HXP-3, that allow for easier on-site upgrades. Please refer to the latest estimators guide for part numbers.



ElectroLogIXS PMD-4R
Mounting Plate



Contact your KB Signaling Business Development Manager

Call 1-800-825-7090, or Email us at aso.techsupport-kb@alstomgroup.com for more information today

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