

A photograph of a train passing a signal post with red lights at sunset. The sky is a mix of orange, red, and blue. The train is blurred, suggesting motion. The signal post has two red lights illuminated. The word "ElectroBlox" is overlaid in white text.

ElectroBlox

Positive Train Control (PTC) Wayside Interface Units

A simple, drop-in-place answer to your stand-alone Wayside Interface Unit (WIU) requirements – engineered for the right fit in both dark territory switch monitoring and relay monitoring applications. Built on KB Signaling's vital design principles and backed by more than 45 years of expertise in delivering safety-critical rail solutions, this WIU combines proven reliability with effortless deployment.



KB SIGNALING™

ElectroBlox PTC Wayside Interface Units

Key Benefits

- Minimal cost and interruption
- Reliable and rugged WIU, easy to install anywhere
- Small size and Ethernet connectivity allows distributed installation
- Scalable for monitoring a single dark territory switch to large interlockings

General Description

ElectroBlox is an ITC compliant PTC Wayside Interface Unit (WIU) designed for stand-alone monitoring of locations as simple as dark territory switches and as complex as large relay or electronic interlockings. The ElectroBlox architecture is scalable and can be distributed to cost-effectively accommodate a wide range of applications. Since ElectroBlox communicates to its I/O modules using KB Signaling's RP2000/2009 vital communications protocol, its I/O can be integrated into applications using the KB Signaling ElectroLogIXS® family of products.



ElectroBlox WIU

Customer Benefits

Low Acquisition Cost

Engineering design and back-office support is minimized, thanks to reuse of existing PTC rule libraries across all KB Signaling WIUs. ElectroBlox I/O modules can be distributed in multiple shelters. This allows for ElectroBlox I/O modules to be dispersed in a large interlocking plant. It leads to a reduction in wiring costs, number of WIUs, and Wayside Message Servers required.

The Fastest and Easiest WIU to Install

A single control unit can manage up to 388 built-in current or voltage sensors, eliminating the need for external sensors. Flexible configuration options can eliminate the need to completely redesign existing infrastructure when changes are required to add signals, switches, track circuits, or to monitor new devices.

Scalable and Stackable

Small size (4.9" X 7.7" X 7.0") fits any installation space making it the most flexible standalone WIU available. Additional flexibility comes from the rugged connectors which allow units to be stacked or distributed horizontally, or even into separate locations.

The Simple Stand-Alone WIU Overlay

ElectroBlox does not require disarrangement of existing signal locations. This avoids the need for extensive retesting, which would increase the amount of time and resources required to implement PTC functionality. Universal lamp sensing thresholds eliminate the need to set up, calibrate, or retest lamp voltage (or current) on/off/flashing thresholds. Low power mode reduces the number of batteries and/or standby power required. Built to integrate with older equipment, the ElectroBlox uses standard KB Signaling RP2000/2009 vital communications protocol.



ElectroBlox PTC Wayside Interface Units

Specifications

General	- Compliant with ITC WIU specification AAR-S-9202 - Compliant with AREMA 1.5.15 (Electrical Interfaces) and 11.5.1 (Environmental) - Web Graphical User Interface - Extended recorder capability >100,000 events
Mechanical	4.9"x7.7"x7.0"; small size can install in existing wayside shelters
Environmental	-40°C to +70°C - All interfaces (power, I/O, communications) 2 kV isolated
Power	- WIU (<5 Watts), VIO (<7 Watts) 9.5-16.5 VDC
Vital Inputs	- Voltage (+/-18 Vrms), Current (+/-4 Arms) - Bipolar operation - Automatic AC or DC sensing (DC-70Hz) - Universal thresholds (12-25 W incandescent, RM4 LEDs)
Vital Outputs	12 VDC @ 50 ohms
Analog Inputs	0-18 VDC



ElectroBlox VIO

ElectroBlox VIO

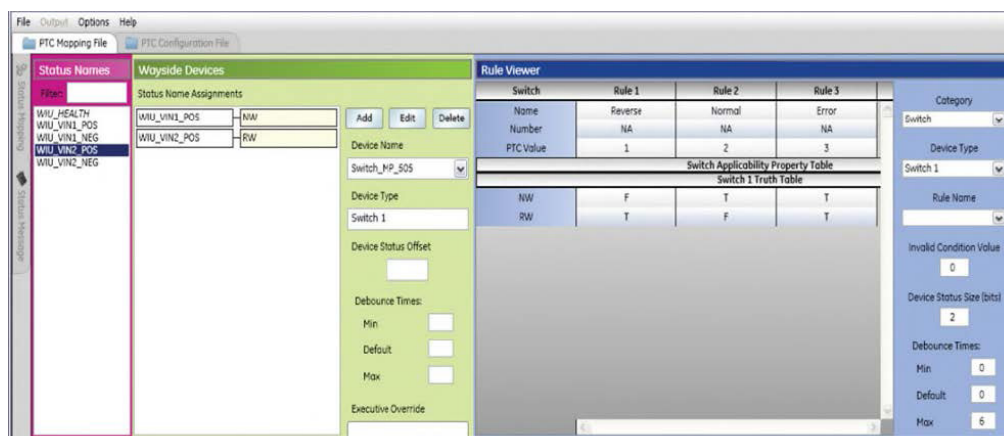
- Simple expansion where additional input/output is needed
- 4, 8, or 12 inputs – either voltage or current sensing
- Optional two-output capability
- All inputs capable of general-purpose current or voltage as well as lamp monitoring

PTC Configuration Tool

Using the same programming environment as used for other KB Signaling products (VHLC, EC4, EC5/ElectroLogIXS and EL-1A WIUs) simplifies programming, potentially lowering the cost of implementation.

ElectroBlox WIU

- Supports monitoring of reverse and normal switch position, single signal head, or hazard detectors
- 2 or 4 inputs – either voltage or current sensing
- Generates PTC messages, ready for the WMS
- Supports up to 32 ElectroBlox VIO modules
- Uses PTC mapping files created with the same tool as all other products in the ElectroLogIXS® product family



Contact your KB Signaling Business Development Manager
Call 1-800-825-7090, or Email us at kbsignaling.techsupport@knorr-bremse.com for more information today.

KB Signaling

2712 S. Dillingham Rd
Grain Valley, MO 64029
Phone: +1 800-825-7090
www.kb-signaling.com

