

### Bus Interface Unit (P/N BIU200)

The Bus Interface Unit (BIU) is an interface between Port 1 of the Controller and the terminal facility and loop detector racks. Port 1 uses a SDLC (synchronous data link) communication protocol with a bit rate of 153.6 Kb per second. The BIU's functions include controlling field I/O to and from the controller. The BIU meets the specifications of NEMA TS2-1998, Section 8.

#### Specifications

<i>Dimensions:</i>	2.34"W x 4.5"H x 6.5L (59 mm W x 144 mm H X 165 mm L)
<i>Power Requirements:</i>	24VDC +/- 2VDC
<i>Indicators:</i>	Supply Voltage, Port 1 Transmitting,
<i>Interface:</i>	Port 1, a 15 pin "D" female connector
<i>Inputs/Outputs:</i>	8 inputs 4 optical inputs 15 outputs 24 input/outputs



**BIU200**

### Cabinet Power Supply (P/N CPS105)

The Cabinet Power Supply (CPS) provides a regulated DC power, an unregulated AC power and a line frequency reference for the BIUs, load switches, detector racks and other auxiliary equipment within the cabinet. The Cabinet Power Supply is shelf mounted. The CPS meets the specifications of NEMA TS2-1998, Section 5, and exceeds the TXDOT TS-2 2003 addendum.

#### Specifications

<i>Dimensions:</i>	9"W x 4.0"H x 6.75"L (229 mm W x 102 mm H x 171 mm L)
<i>Power Requirements:</i>	89 VAC to 135 VAC
<i>Interface:</i>	MS3106-18-IPW
<i>Outputs:</i>	+12 VDC @ 5.0 Amps +24 VDC @ 3.0 Amps 12 VAC @ 0.25 Amps Line Frequency Reference Test jacks for 24 VDC
<i>Indicators:</i>	24 VDC 12 VDC 12 VAC Line Frequency



**CPS105**

## Cabinet Detector Racks

The Cabinet Detector Rack (CDR) provides housing and circuitry for one (1) BIU and up to 16 channels of detection (8 two channel or 4 four channel detector cards). The CDR is programmable for any of the four (4) TS2 defined detector rack addresses. A 37-pin connector is attached to the printed circuit board for designated inputs/outputs. Other models are available with 4 channels of optical detection and external vehicle detector inputs.

**CDR100** - 16 channel, 8 position rack. Requires *ABW12062P008* (8ft) or *ABW12062P010* (10ft) cable. **Dimensions:** 14.6"W x 5.4"H x 7.5"D

**CDR101** - 8 channel, 4 position rack. Requires *ABW12303P006* (6ft) or *ABW12303P001* (7.5ft). **Dimensions:** 9.8"W x 5.9"H x 7.1"D

**AAD12047P001** - 16 channel, 10 position rack. Requires *ABW12062P008* (8ft) or *ABW12062P010* (10ft) cable. Optional *ABW12047P002* allows for 4 additional channels of preempt detection (and Opticom compatibility). Optional *ABW12047P001* allows for momentary push button detector call capability (Opticom, Tomar, or standard preempt compatible). **Dimensions:** 17"W x 7.1"D x 5.9"H

## CDR Connector Pin Assignment

### CDR100/CDR101\*

Pin	Function
1	Detector 1/2, Loop 1 - A
2	Detector 1/2, Loop 1 - B
3	Detector 1/2, Loop 2 - A
4	Detector 1/2, Loop 2 - B
5	Detector 1/2, Loop 3 - A
6	Detector 1/2, Loop 3 - B
7	Detector 1/2, Loop 4 - A
8	Detector 1/2, Loop 4 - B
9	Detector 3/4, Loop 1 - A
10	Detector 3/4, Loop 1 - B
11	Detector 3/4, Loop 2 - A
12	Detector 3/4, Loop 2 - B
13	Detector 3/4, Loop 3 - A
14	Detector 3/4, Loop 3 - B
15	Detector 3/4, Loop 4 - A
16	Detector 3/4, Loop 4 - B
17	Detector 5/6, Loop 1 - A
18	Detector 5/6, Loop 1 - B
19	Detector 5/6, Loop 2 - A
20	Detector 5/6, Loop 2 - B
21	Detector 5/6, Loop 3 - A
22	Detector 5/6, Loop 3 - B
23	Detector 5/6, Loop 4 - A
24	Detector 5/6, Loop 4 - B
25	Detector 7/8, Loop 1 - A
26	Detector 7/8, Loop 1 - B
27	Detector 7/8, Loop 2 - A
28	Detector 7/8, Loop 2 - B
29	Detector 7/8, Loop 3 - A
30	Detector 7/8, Loop 3 - B
31	Detector 7/8, Loop 4 - A
32	Detector 7/8, Loop 4 - B
33	+ 12 volts D.C.
34	Logic Common
35	+ 24 volts D.C.
36	Line Frequency Reference
37	Equipment Ground

\* Only channels 1-16 and 33-34 are available for use with the CDR101 rack.

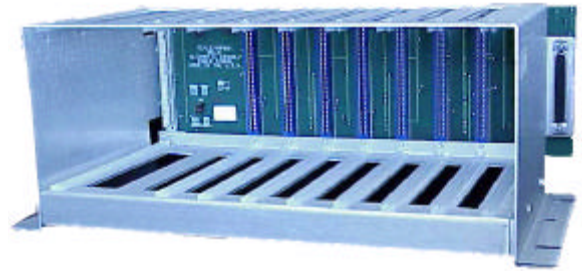
### ABW12012047P001

Pin	Function
1	Channel 1 Call
2	Channel 2 Call
3	Channel 3 Call
4	Channel 4 Call
5	Channel 5 Call
6	Channel 6 Call
7	Channel 7 Call
8	Channel 8 Call
9	Channel 9 Call
10	Channel 10 Call
11	Channel 11 Call
12	Channel 12 Call
13	Channel 13 Call
14	Channel 14 Call
15	Channel 15 Call
16	Channel 16 Call

### ABW12012047P002

Pin	Function
1	**
2	**
3	**
4	1A Detector
5	+24 #1
6	1A Out (C)
7	1B Detector
8	DC- #1
9	**
10	2A Detector
11	+24 #2
12	2A Out (C)
13	2B Detector
14	DC- #2
15	1B Out (C)
16	2B Out (C)
17	1A Out (E)
18	1B Out (E)
19	2A Out (E)
20	2B Out (E)

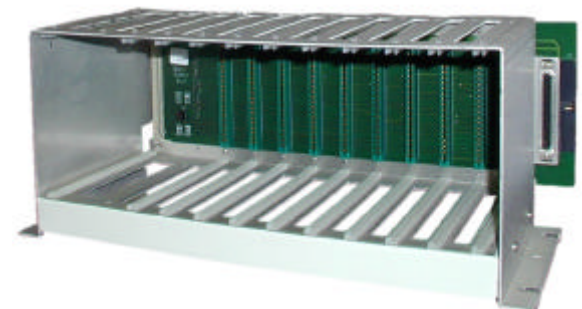
\*\* Not Used



**CDR100**



**CDR101**



**AAD12047P001**

## Detector Loop Hook-Up Panel (P.C. Board)

<b>AAD14972P001</b>	16 Channel Hook-Up Panel
<b>ABW14503P0XX*</b>	16 Channel Loop Harness
<b>ABW14665P0XX*</b>	Opticom Harness

Note: Other special Loop Hook-Up Panels are available. Please contact your representative.

\*XX = Length in feet of cable

## SDLC Cable/Hook-Up Panel (P.C. Board)

<b>ABW14652P0XX*</b>	SDLC Harness
<b>AAD14652P001</b>	6 Position
<b>AAD14753P001</b>	8 Position

\*XX = Length in feet of cable