



***Universal Discrete Adapter
PNs 517-T006 and 517-T008***

994-T032 Rev. C Oct 2000

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REGULATORY INFORMATION

WARNING: This equipment generates, uses, and can radiate radio frequency energy, and, if not installed and used in accordance with the installation manual, may cause interference to radio communications. It has been tested and found to comply with the limits for a Class A digital device pursuant to Part 15, Subpart J of the FCC rules, which are designed to provide reasonable protection against such interference when operated in a commercial environment. Operation of the equipment in a residential area is likely to cause interference, in which case the user, at his own expense, will be required to take whatever measures may be required to correct the interference.

CAUTION: Changes or modifications not expressly approved by WESTRONIC could void the user's authority to operate this equipment.

The FCC label can be found on the right side of the shelf assembly. The label includes the following information:

This device complies with Part 15 of the FCC Rules.

Operation is subject to the following two conditions:

- This device may not cause harmful interference, and
- This device must accept any interference received, including interference that may cause undesired operation.

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Revision History

Revision	Issue Date	Reason for Reissue
A	November, 1993	First Release
B	June, 2000	Logo Update, Format Changes, Inclusion of PN 517-T008
C	October, 2000	Logo Update

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Product Description

The Universal Discrete Adapter uses optoisolation circuits to isolate discrete inputs from a Remote Terminal Unit's (RTU) positive and negative battery voltages. With the discrete inputs isolated from the RTU, the Network Element (NE) or field wiring must provide the input signal voltage and common. Single Inline Package (SIP) resistive networks (R-Nets) match various input voltages to the isolation circuits in groups of four points. Figure 1 shows a schematic of a typical input circuit.

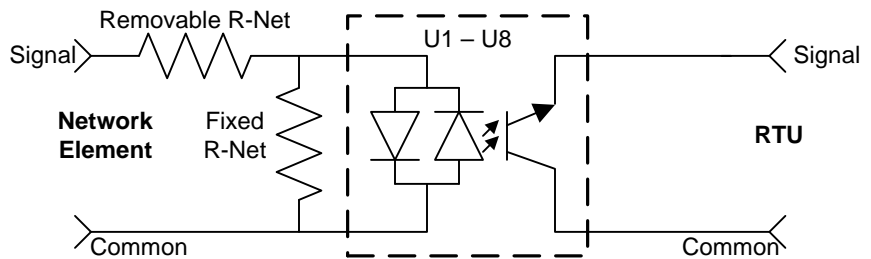


Figure 1 Typical Discrete Input

The Universal Discrete Adapter includes SIPs that match 5-, 12-, 24-, 48-, and 60-Volt inputs. The factory installs SIPs for 48-Vdc operation. SIPs for operating at the other voltage levels are in a kit included with the unit. You can install the Universal Discrete Adapter directly on the rear-panel connectors of the following units:

- C1000 – J1 through J8
- WS2000 – J1 and J2
- WS3000 – J1 and J2

Remove the four screws and lift the cover plate from the standoffs to gain access to the circuit board. Figure 2 shows the board layout.

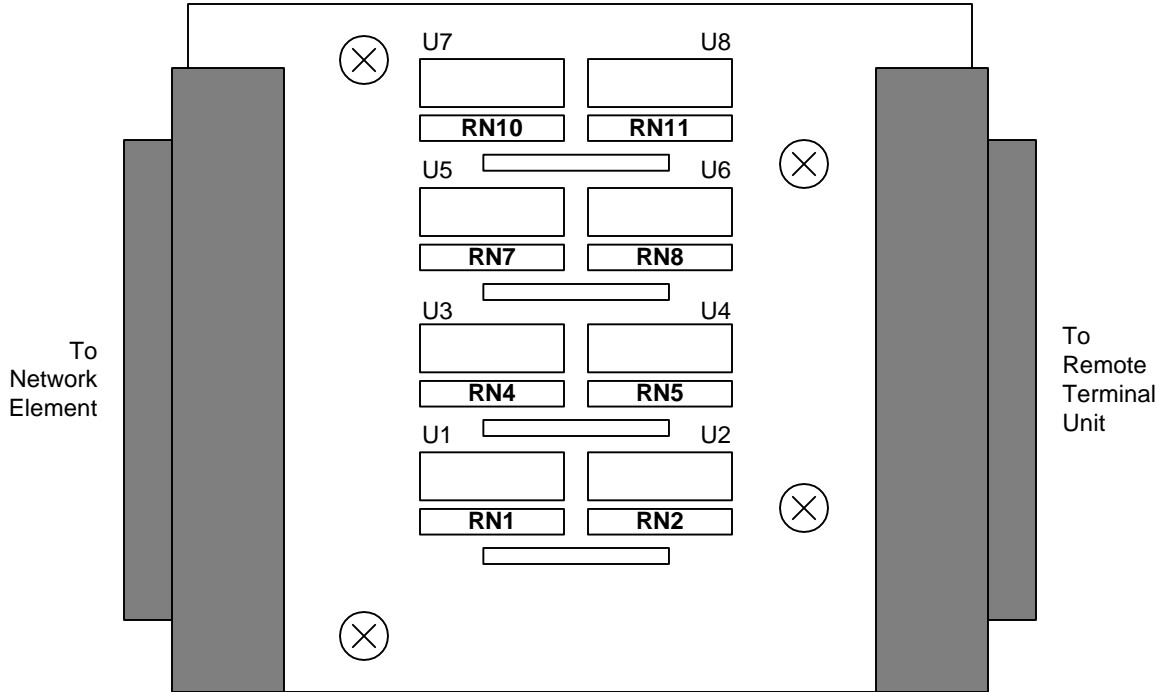


Figure 2 Universal Discrete Adapter Board Layout (Cover Plate Removed)

The SIP R-Nets, which you can install in a socket in either direction, plug into RN1, RN2, RN4, RN5, RN7, RN8, RN10, and RN11. Table 1 shows the correlation between the SIP sockets and individual discrete points. Which SIP to install in a socket depends on the required voltage level.

Table 1 Point Designations for SIP Sockets

	SIP Socket							
	RN1	RN2	RN4	RN5	RN7	RN8	RN10	RN11
Points	1 – 4	5 – 8	9 – 12	13 – 16	17 – 20	21 – 24	25 – 28	29 – 32

Table 2 lists the SIP R-Nets that come with the Universal Discrete Adapter. Part Number 517-T006 includes all listed parts. Standard SIP R-Net markings appear on the individual SIPs. However, the marking locations vary by manufacturer. You can easily determine the SIP value by checking the resistance between the first two pins on either end. Westronic recommends that you store unused SIPs in the provided packages to reduce the possibility of installing an incorrect SIP.

Table 2 Part Numbers, Descriptions, and SIPR-Net Values

Part Number	Qty	Resistance Value (kΩ)	SIP Marking	Logic 0 (Off) Max Vdc	Logic 1 (On) Min Vdc	SIP R-Net Description
240-T014	8	12.0	123	15	40	\pm 48 Vdc Operation
240-0001	8	1.0	102	2	4	\pm 5 Vdc Operation
240-T003	8	2.2	222	2	8	\pm 12 Vdc Operation
240-T004	8	4.7	472	5	15	\pm 24 Vdc Operation
240-T016	8	20.0	203	25	55	\pm 60 Vdc Operation

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