

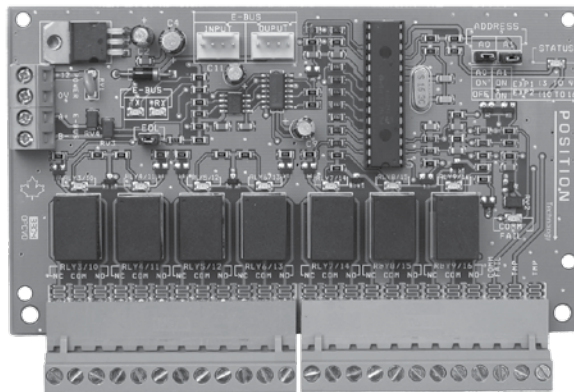


CDV® Group

INSTRUCTIONS

RELAY EXPANSION MODULE CA-A460-P

The CA-A460-P Relay Expansion module provides an additional seven relays to the CT-V900-A controller. Up to two “plug and play” relay expansion modules can be added to each controller for a total of 16 relays per controller. The relay expansion modules are connected to the controller via a RS-485 E-bus network, allowing you to install the relay expansion modules a maximum distance of 1220m (4000 ft.) from the controller. The module features an activation status LED for each relay, a communication failure LED with an associated output, a 24-hour anti-tamper input and supply monitoring. Removable terminals are optional.



- Outputs: 7 form C relays rated at 5A/28 Vdc, N.C./N.O.
- Maximum 2 CA-A460-P modules per CT-V900-A controller
- Connects directly to the CT-V900-A expansion bus (E-BUS)
- Connects up to 1220m (4000ft.) from the CT-V900-A controller
- Power input: 12 Vdc
- Current consumption: 50mA (typical), 400mA (maximum)

INSTALLTION INSTRUCTIONS

The E-bus is a RS-485 bus that allows you to connect the relay expansion modules at a maximum distance of 1220m (4000 ft.) from the controller using a Belden 1227A Ethernet grade 3 cable or equivalent. The CA-A460-P connects to the CT-V900-A controller through its on-board terminals. For a description of the module's terminals, see "Terminal Overview". The following details both the single and multiple module installation types.

Connecting a Single CA-A460-P Module

Connect the A and B terminals on the CA-A460-P module to the A2+ and B2- terminals on the CT-V900-A controller. Then, connect the + and - terminals on the CA-A460-P module to the +12V and GND terminals on the CT-V900-A controller. See Figure 1.

As an alternate connection type, a 4-pin serial connector (not included) can be installed between the E-Bus connectors on the CA-A460-P module and the CT-V900-A controller. See Figure 2. This installation method can only be used when connecting a single CA-A460-P module.

Connecting Multiple CA-A460-P Modules

When installing a second CA-A460-P module, connect the A and B terminals on the second CA-A460-P module to the A and B terminals on the first CA-A460-P module. The first CA-A460-P is connected to the CT-V900-A controller as described in "Connecting a Single CA-A460-P Module". Then, connect the + and - terminals on the second CA-A460-P module to the + and - terminals on the first CA-A460-P module. See Figure 1.

Figure 1: Terminal Connections

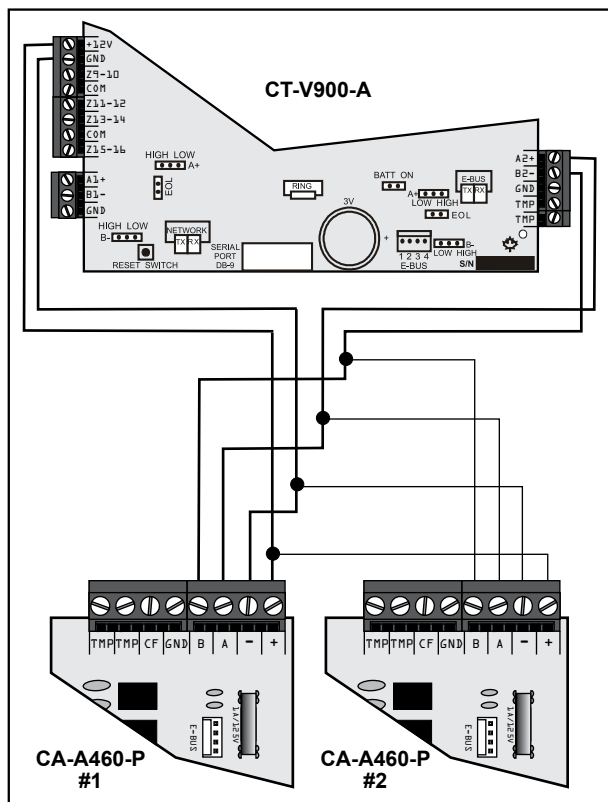
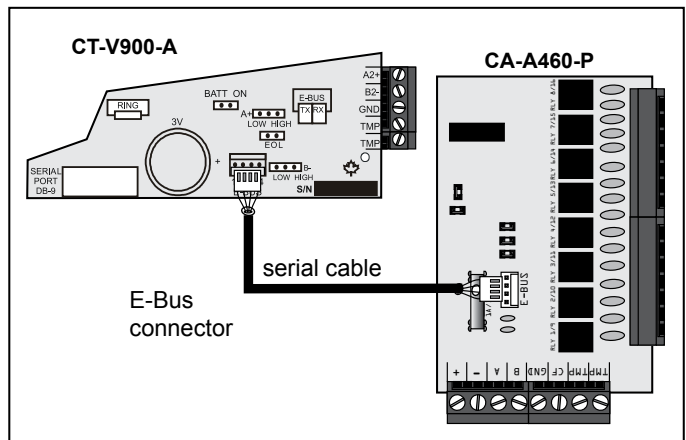


Figure 2: Serial Cable Connection



TERMINAL DESCRIPTION

A / B	A and B are the communication connections for the E-bus network.
+ / -	Each CA-A460-P module must be powered by 12Vdc. A common ground must run from the controller to the relay modules.
TMP	The two TMP terminals permit connection of the N.C. Anti-tamper switch on the metal cabinet. When the contact opens, a Relay Module Tamper event is generated.
CF Output	This output, connected to an external bell or buzzer, is switched to ground when the CA-A460-P module detects communication loss with the controller. The Comm Fail LED on the module will illuminate.

JUMPER SETTING

As shown in Figure 3, there are 5 jumpers on the CA-A460-P which set some of the module's operating modes.

EOL Jumper

Place the EOL jumper ON when the CA-A460-P is at the beginning (Start Point) or at the end (End Point) of the E-Bus network. Otherwise, place the jumper OFF. See Figure 4.

High/Low Bias Jumpers

Sets the impedance of the RS-485 to either HIGH or LOW (default = HIGH). Set both jumpers to HIGH when running normally. Setting the impedance to LOW raises the DC level and should only be used in advanced installations. See Figure 4.

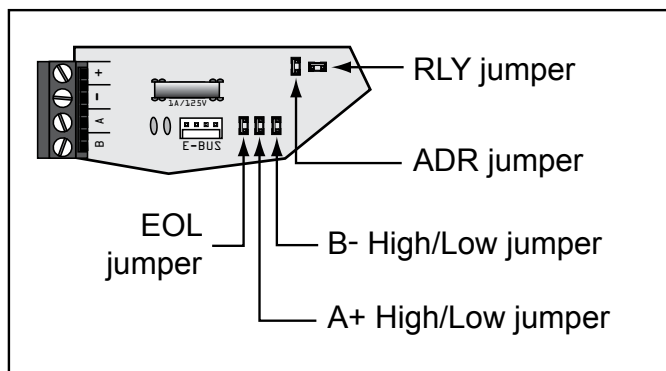
ADR Jumper

Used in multiple relay expansion installation types, this jumper sets the addresses of the modules. Set the first module's ADR jumper to ON to set the module's address to Expander 1. A module with an address of Expander 1 recognizes the on-board relays as relays 3-9 when connected to the CT-V900-A controller. Set the second module's jumper to OFF to set the module's address to Expander 2. A module with an address of Expander 2 recognizes the on-board relays as relays 10-16 when connected to the CT-V900-A controller. See Figure 4.

RLY Jumper

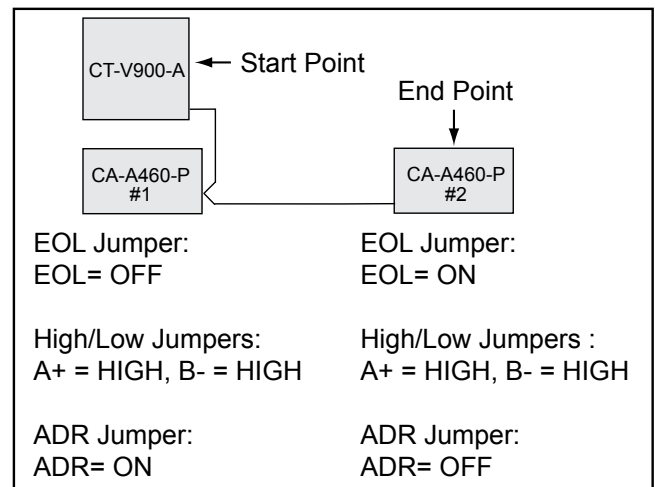
Reserved for future use.

Figure 3: Jumper Location



Set all jumpers to OFF whenever resetting the controller.

Figure 4: Jumper Settings



©2007 CDV Americas Ltd. All rights reserved. Specifications may change without prior notice. One or more of the following US patents may apply: 6215399, 6111256, 5751803, 5721542, 5287111, 5119069, 5077549, 5920259, 5886632. Canadian and international patents may also apply.

Centaur is a trademark or registered trademark of CDV Americas Ltd. or its affiliates in Canada, the United States and/or other country
Printed in Canada - 26/03/07 - CA-A460-P_IE