



C1922M-A (4/99) KBDKIT Series Remote Keyboard Wiring Kit

300 W. Pontiac Way,
Clovis, CA 93612-5699
USA

In North America & Canada:
Tel (800) 289-9100
FAX (800) 289-9150
DataFAX (800) 289-9108

International Customers:
Tel (1-559) 292-1981
FAX (1-559) 348-1120
DataFAX (1-559) 292-0435

Pelco Online
<http://www.pelco.com>

NOTE: The second RJ-45 wall block is for use with the KBD4000 keyboard and MX4000 multiplexer only. See Figure 3.

NOTE: Keyboards must be addressed differently when more than one keyboard is used.

NOTE: Pelco recommends using shielded twisted pairs cable, such as Belden 9843 or similar cable, that meets or exceeds the basic requirements for EIA RS-422 or RS-485 applications.

DESCRIPTION

The Remote Keyboard Wiring Kits of the KBDKIT Series are used to connect KBD100, KBD200, or KBD300 keyboards to the CM6700 Matrix Switcher, or to connect the KBD4000 keyboard to the Genex™ MX4000SVR Multiplexer Server or Genex™ MX4000 Series Multiplexer.

The kits are also used when installing either the KBD200 or KBD300 for Direct Mode control of Pelco receivers.

Models

KBDKIT	Remote keyboard wiring kit that includes two RJ-45 wall blocks and a transformer to convert 120 VAC power to 12 VAC for keyboard power.
KBDKIT-X	Remote keyboard wiring kit that includes two RJ-45 wall blocks and a transformer to convert 230 VAC power to 12 VAC for keyboard power.

REMOTE KEYBOARDS

Connecting Remote Keyboard(s) to the CM6700 Matrix Switcher or the MX4000SVR Multiplexer Server

You can connect up to eight KBD100, KBD200, or KBD300 keyboards to the REMOTE KEYBOARD(S) port of the CM6700 Matrix Switcher or up to four KBD4000 keyboards to the REMOTE KEYBOARD(S) port of the Genex™ MX4000SVR Multiplexer Server.

To install more than one keyboard, you must have a kit for each keyboard.

To connect the keyboards:

1. If the DIP switches on the keyboards have not been set already, refer to your keyboard manual to set the switches.
2. Determine the location of all keyboards. Each keyboard must be located within 25 feet (7.6 m) of where you will install the wall block. Wall blocks must be within 6 feet (1.8 m) of the nearest electrical outlet to accommodate the transformer.
3. Run the wall block interconnect cable (user-supplied shielded twisted pairs) from the CM6700 or MX4000SVR to the wall block locations.

Wall blocks should be wired in a daisy-chain configuration for best results (refer to Figure 1). Communications with the keyboards, which are connected to the wall blocks, is RS-485. Maximum cable distance from the CM6700 Matrix Switcher or MX4000SVR Multiplexer Server to the last keyboard in the chain is 4,000 feet (1,219 m).

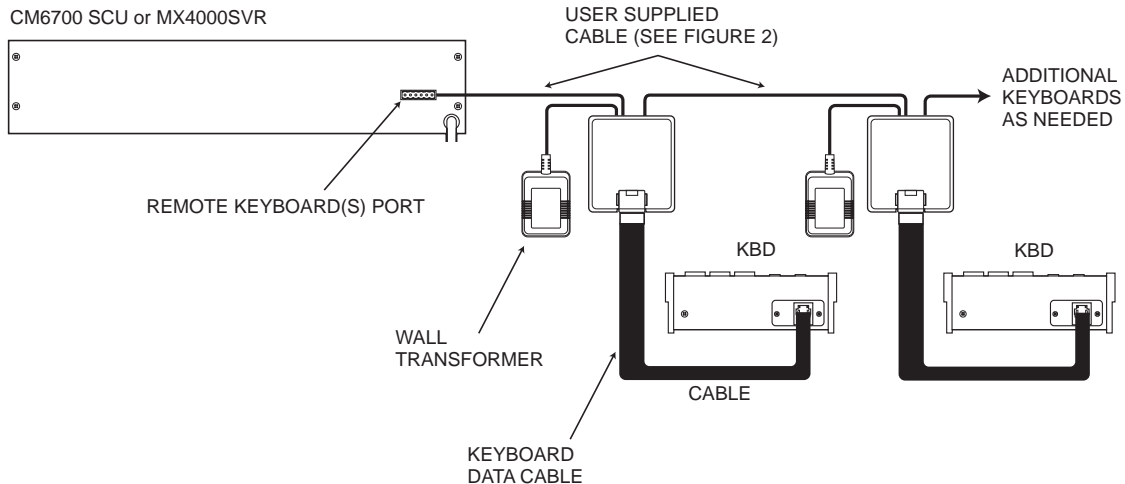


Figure 1. Keyboard Cabling Diagram

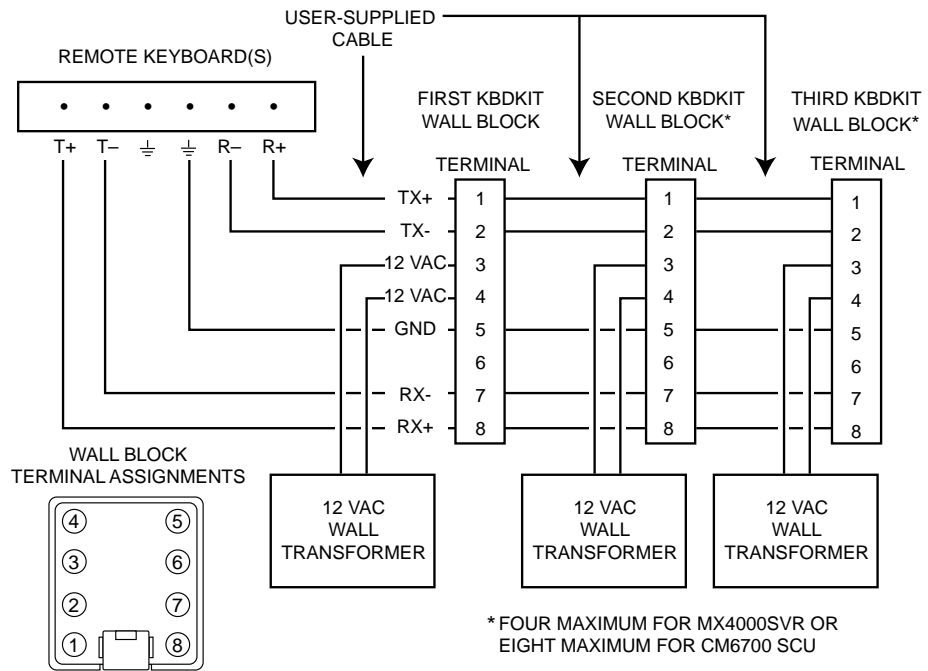


Figure 2. Wiring Diagram for CM6700 or MX4000SVR Remote Keyboard

4. Remove the covers from the wall blocks. Wire the connections between the wall blocks and the CM6700 or MX4000SVR according to Figure 2. Connect the transformers to terminals 3 and 4 of each wall block. Polarity is unimportant.
5. Replace the covers on the wall blocks. Secure each wall block to a suitable surface with the double-sided sticky pad that is supplied.
6. Plug each transformer into a power outlet.
7. Connect the data cable that is supplied with each keyboard. Plug one end into the wall block and the other end into the keyboard receptacle.

Connecting a Remote Keyboard to the MX4000 Multiplexer

You can connect one KBD4000 Keyboard to the COM IN receptacle of an MX4000 Series Multiplexer at a remote location at a maximum distance of 4,000 feet (1,219 m).

To connect the keyboard:

1. If the DIP switches on the keyboard have not been set already, refer to the keyboard manual to set the switches.
2. Determine the location of the keyboard. It must be located within 25 feet (7.6 m) of where you will install its wall block. Refer to Figure 3. The wall block for the KBDKIT must be within 6 feet (1.8 m) of the nearest electrical outlet to accommodate the transformer. Communications with the keyboard, which is connected to the wall block, is RS-485.
3. Determine the location of the multiplexer. It must be located within 6 feet (1.8 m) of where you want to install its wall block. Refer to Figure 3.
4. Run the interconnect cable (user-supplied shielded twisted pairs) from the keyboard wall block to the multiplexer wall block. Maximum cable distance between the wall blocks is 4,000 feet (1,219 m).
5. Remove the covers from the wall blocks. Connect the cable to the wall blocks according to Figure 3. Connect the transformer to terminals 3 and 4 of the keyboard wall block. Polarity is unimportant.
6. Replace the covers on the wall blocks. Secure each wall block to a suitable surface with the double-sided sticky pad that is supplied.
7. Plug each transformer into a power outlet.

NOTE: Pelco recommends using shielded twisted pairs cable, such as Belden 9843 or similar cable, that meets or exceeds the basic requirements for EIA RS-422 or RS-485 applications.

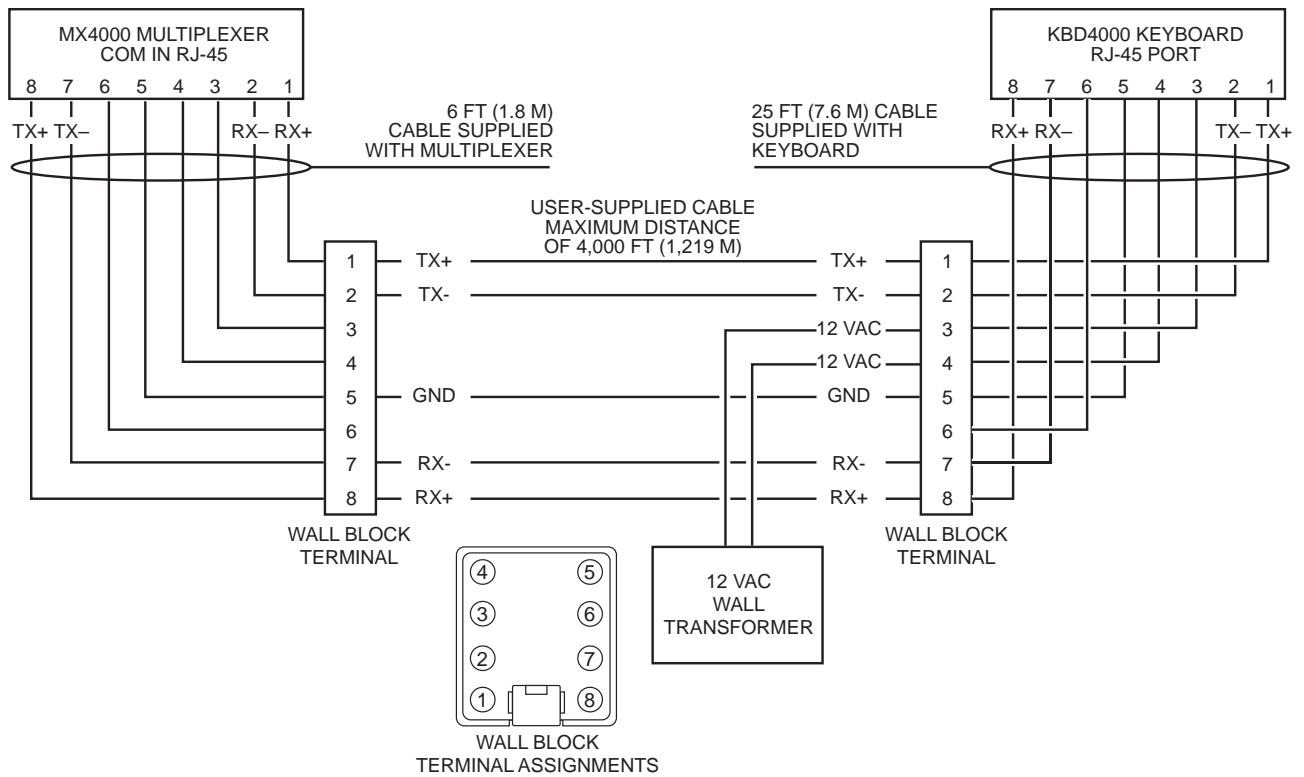


Figure 3. Wiring Diagram for KBD4000 Keyboard and MX4000 Series Multiplexer

NOTE: The second RJ-45 wall block is for use with the KBD4000 keyboard and MX4000 multiplexer only. See Figure 3.

8. Plug one end of the 25-foot (7.6 m) data cable into the KBD4000 keyboard receptacle and the other end into the wall block.
9. Plug one end of the 6-foot (1.8 m) data cable into the COM IN receptacle on the rear of the multiplexer and the other end into the wall block.

DIRECT MODE

Using the KBD200 or KBD300 in Direct Mode is a single keyboard installation. Daisy-chaining more than one keyboard is not possible.

To connect the keyboard:

1. If the DIP switches on the keyboard have not been set already, refer to your keyboard manual to set the switches.
2. Determine the location for the keyboard. The keyboard must be located within 25 feet (7.6 m) of where you will install the wall block. The wall block must be within 6 feet (1.8 m) of the nearest electrical outlet to accommodate the transformer.
3. Remove the cover from the wall block. Wire the connections between the wall block and the receiver/drivers according to Figure 4. Up to 16 receiver/drivers can be controlled from the keyboard. Receiver/drivers should be wired in a daisy-chain configuration for best results.
 - Connect RX+ from the first receiver/driver to TX+ (terminal 1) on the wall block.
 - Connect RX- from the first receiver/driver to TX- (terminal 2) on the wall block.
 - Connect the transformer to terminals 3 and 4. Polarity is unimportant.
4. Replace the cover on the wall block. Secure the wall block to a suitable surface with the double-sided sticky pad that is supplied.
5. Plug the transformer into a power outlet.
6. Connect the 25-foot (7.6 m) data cable that is supplied with the keyboard. Plug one end into the wall block and the other end into the keyboard receptacle.

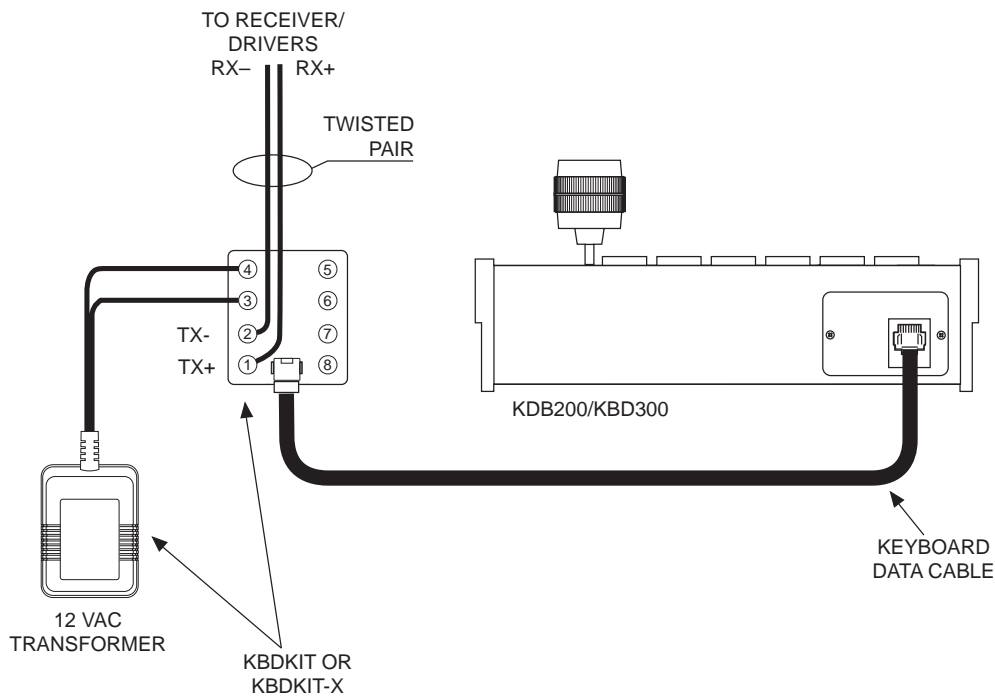


Figure 4. Wiring Diagram for Direct Mode Operation

WARRANTY AND RETURN INFORMATION

WARRANTY

Pelco will repair or replace, without charge, any merchandise proved defective in material or workmanship for a period of one year after the date of shipment. Exceptions to this warranty are as noted below:

- Three years on Genex™ Series (multiplexers, server, and keyboard).
- Two years on all standard motorized and fixed focal length lenses.
- Two years on Esprit™, Legacy®, Intercept®, PV1000 Series, CM6700/CM8500/CM9500/CM9750/CM9760 Matrix, Spectra®, DF5 Series and DF8 Fixed Dome products.
- Two years on WW5700 series window wiper (excluding wiper blades).
- Two years on cameras.
- Six months on all pan and tilts, scanners or preset lenses used in continuous motion applications (that is, preset scan, tour and auto scan modes).

Pelco will warrant all replacement parts and repairs for 90 days from the date of Pelco shipment. All goods requiring warranty repair shall be sent freight prepaid to Pelco, Clovis, California. Repairs made necessary by reason of misuse, alteration, normal wear, or accident are not covered under this warranty.

Pelco assumes no risk and shall be subject to no liability for damages or loss resulting from the specific use or application made of the Products. Pelco's liability for any claim, whether based on breach of contract, negligence, infringement of any rights of any party or product liability, relating to the Products shall not exceed the price paid by the Dealer to Pelco for such Products. In no event will Pelco be liable for any special, incidental or consequential damages (including loss of use, loss of profit and claims of third parties) however caused, whether by the negligence of Pelco or otherwise.

The above warranty provides the Dealer with specific legal rights. The Dealer may also have additional rights, which are subject to variation from state to state.

If a warranty repair is required, the Dealer must contact Pelco at (800) 289-9100 or (559) 292-1981 to obtain a Repair Authorization number (RA), and provide the following information:

1. Model and serial number
2. Date of shipment, P.O. number, Sales Order number, or Pelco invoice number
3. Details of the defect or problem

If there is a dispute regarding the warranty of a product which does not fall under the warranty conditions stated above, please include a written explanation with the product when returned.

Ship freight prepaid to: Pelco
300 West Pontiac Way
Clovis, CA 93612-5699

Method of return shipment shall be the same or equal to the method by which the item was received by Pelco.

RETURNS

In order to expedite parts returned to the factory for repair or credit, please call the factory at (800) 289-9100 or (559) 292-1981 to obtain an authorization number (CA number if returned for credit, and RA number if returned for repair). Goods returned for repair or credit should be clearly identified with the assigned CA/RA number and freight should be prepaid. All merchandise returned for credit may be subject to a 20% restocking and refurbishing charge.

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Clovis, CA 93612-5699

REVISION HISTORY

Manual #	Date	Comments
C1922M	5/98	Original version.
C1922M-A	1/99	Rev. A. Added MX4000 Multiplexer.
	4/99	Added a second RJ-45 wall block for use with the KBD4000 keyboard and MX4000 multiplexer.