PRODUCT SPECIFICATION

KBD300/KBD300V Series Keyboard
FULL-FUNCTION, FIXED/VARIABLE-SPEED, PTZ CONTROL

CE

UL LISTED

c UL

U.S. Patent
#411,530

Product Features

- Keyboard to Control:
  - CM6700/CM6800/CM9760-SAT Matrix Switchers
  - Genex® Multiplexer When Used with CM6700/CM6800
  - Up to 16 Receivers Directly from Keyboard (such as Spectra® and Esprit™)
- Joystick Control of PTZ Functions
- Preset Position and Pattern Control
- Auxiliary Operation
- Auto/Random/Frame Scanning
- Programming of CM6700/CM6800/CM9760-SAT/CM9760-MDA
- KBD300V Includes 5-inch (12.7 cm) Monitor

The **KBD300** Keyboard and the **KBD300V Series** Keyboard are full-function, desktop keyboard controllers that can be used in a variety of applications.
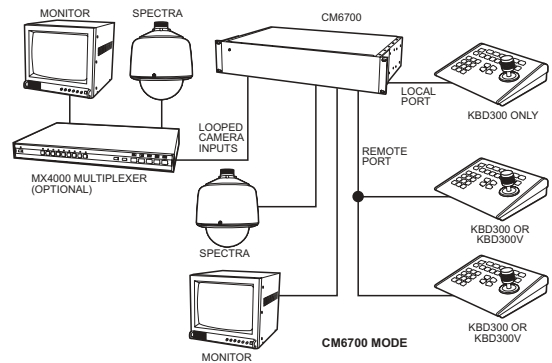
A barrel-type joystick provides precise pan and tilt control of fixed-speed and variable-speed receivers. Twisting the joystick clockwise or counterclockwise zooms the lens in or out.

Keys select cameras and monitors; operate presets, patterns, auxiliaries, and sequences; open and close the iris; zoom and focus the lens; and start and stop auto, frame, and random scanning.

The **KBD300V Series** includes a 5-inch (12.7 cm) color monitor with brightness and color controls. A tilt stand on the keyboard lifts the rear of the keyboard to improve the viewing angle of the monitor.

The keyboards can be used in two modes of operation: CM6700 Mode and Direct Mode.

In the first mode, the keyboard is plugged into a CM6700, CM6800 or CM9760-SAT Switcher/Controller Unit and is used to program and operate the SCU. The maximum number of keyboards per unit is eight (CM6700), sixteen (CM6800) or four (CM9760-SAT). You can use a combination of **KBD300** and **KBD300V** Keyboards in a system,

however, the number of **KBD300V** Keyboards in any CM6700/CM6800 system is limited by the number of available monitor outputs. In CM6700/CM6800 applications, the keyboard can control cameras connected directly to the SCU or through an MX4000 Series Genex Multiplexer.

If you do not need all the features of the CM6700/ CM6800 SCU, but want the same keyboard functionality, then one **KBD300** or **KBD300V** Keyboard can be wired directly to camera receivers in the Direct Mode (KBDKIT required). Up to 16 receivers can be wired to a keyboard; however, a switcher such as an MS500 or VA6100, is required to route video to the monitor. Direct Mode uses two-wire control of receivers using Pelco's P protocol.

The **KBD300** Keyboard can also be used for on-screen programming of the CM9760-MDA Master Distribution Amplifier.

ISO 9001 CERTIFIED

International Standards Organization Registered Firm ISO 9001 Quality System

MODELS

KBD300	Desktop keyboard with full switching and programming capabilities, plus joystick control of PTZ functions
KBD300V	Same as KBD300 except has 5-inch (12.7 cm) LCD monitor; 120 VAC, 60 Hz, NTSC format
KBD300V-X	Same as KBD300V except 230 VAC, 50 Hz, PAL format

ELECTRICAL

Input Voltage
- KBD300   12 VAC or ± 12 VDC
- KBD300V   +12 VDC @ 1A

Power Consumption
- KBD300   1 watt
- KBD300V   8 watts

Keyboard Connector   RJ-45, 8-pin, modular (female)

Keyboard Communication

6700 Mode
- Interface   RS-485
- Protocol   Pelco ASCII
- Baud   9600
- Communication
- Parameters   8 data bits, odd parity, 1 stop bit

Direct Mode
- Interface   RS-422
- Protocol   Pelco P
- Baud   4800
- Communication
- Parameters   8 data bits, no parity, 1 stop bit

LCD MONITOR (KBD300V ONLY)

Display Size	5-inch diagonal (12.7 cm)
Display Method	TFT active matrix system
Input Signal	
KBD300V	NTSC
KBD300V-X	PAL
Input Signal Level	1.0 Vp-p, 75 ohms
Backlight	+12 VDC, 500 mA
Screen Controls	Brightness and color

MECHANICAL (KBD300V ONLY)

Tilt Stand   Adds additional 20° viewing angle

GENERAL

Keyboard Keypad   Mechanical
Joystick   3-axis, vector-solving, with twisting, return-to-center head
Display   Red LED, 7-segment, 2 cells

Dimensions
- KBD300   2.25" H x 9.50" W x 7.125" D (5.72 x 24.13 x 18.10 cm)
- KBD300V   2.25" H x 14.63" W x 7.125" D (5.72 x 37.16 x 18.10 cm)

Unit Weight	Unit	Shipping
KBD300	2.5 lb (1.12 kg)	4.10 lb (1.86 kg)
KBD300V	4.3 lb (1.95 kg)	6.85 lb (3.10 kg)

ENVIRONMENTAL

Ambient Operating Temperature
- KBD300   20° to 120°F (-7° to 49°C)
- KBD300V   14° to 140°F (-10° to 60°C)

Storage Temperature
- KBD300V   -4° to140°F (-20° to 60°C)

Humidity   10-90% non-condensing
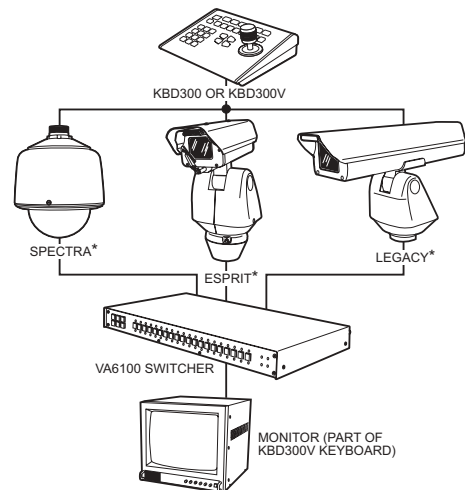
CERTIFICATIONS/PATENTS

- ◆ CE, Class A (KBD300, KBD300V-X)
- ◆ UL listed to Standard 2044 (KBD300)
- ◆ cUL listed to CSA Standard 22.2 No. 1-94 (KBD300)
- ◆ FCC, Class A (KBD300, KBD300V)
- ◆ U.S. Patent 411,530 (KBD300V)

SUPPLIED ACCESSORIES

KBD300	25-foot (7.6 m) RJ-45 data cable
KBD300V	KBD300V Interface
	6-foot (1.8 m) interface cable
	+12 VDC power supply

OPTIONAL ACCESSORIES

KBDKIT   Remote keyboard wiring kit. Required if connecting KBD300 Keyboards to the Remote Keyboard Port on the SCU (6700 Mode) or when using a single keyboard in Direct or ASCII Mode applications. Includes two RJ-45 wall blocks and one 120 VAC to 12 VAC transformer. Maximum cable distance for RS-422/ RS-485 communication over 24-gauge wire is 4,000 feet (1,219 m). Use shielded twisted pairs cable that meets basic requirements for RS-422/RS-485 applications. (One wall block and transformer required for each keyboard.)

KBDKIT-X   Same as KBDKIT except includes 230 VAC to 12 VAC transformer

KBD300 OR KBD300V

SPECTRA*

ESPRIT*

LEGACY*

VA6100 SWITCHER

MONITOR (PART OF KBD300V KEYBOARD)

* SPECTRA AND ESPRIT HAVE BUILT-IN RECEIVER. LEGACY REQUIRES LRD41C SERIES RECEIVER.

DIRECT MODE