*Direct*View 1000

4-line by 16-character backlit LCD display

DV-1000 <--->

Overview

The *Direct*View DV-1000 is a small, low-cost operator interface. The DV-1000 can be directly connected to DL05, DL06, DL105, DL205, D3-350 or DL405 CPUs. The DV-1000 is a "ladder logic dependent" terminal which relies entirely on PLC ladder logic to perform its functions. The DV-1000 does not require any configuration software. Instead, setup is performed through special reserved memory locations inside of the CPU. These special memory areas tell the DV-1000 which modes to use, and more importantly, where to get its display data. The following functions can be performed by the DV-1000:

View memory status: Display up to four variable address values at a time on a single screen.

View bit status: Display 32 bits (4 lines of 8 bits) or 64 bits (4 lines of 16 bits) at a time on a single screen. Bit data types can include I/O points, control relays, timer/counter and stage bits.

Change values of memory locations: Up to 16 different variable memory values can be changed (32 for DL405). Just move the cursor over the appropriate digit and press the increment (+)/decrement (-) keys.

Units per CPU: Only one DV-1000 per CPU.

Specifications

Specifications	
Cable Required	DV-1000CBL or D4-1000CBL. See the following page
Max. Distance	15 feet from the CPU
Connector	Phone jack RJ12
Power Consumption	150mA @ 5VDC max (supplied by PLC communication port)
NEMA Rating	None
Agency Approval	UL, CUL, CE
Storage Temp	-4 to 158°F (-20 to 70°C)
Operating Temp	32 to 122°F (0 to 50°C)
Humidity	5-95% (non-condensing)
Vibration Resistance	MIL STD 810C Method 514.2
Shock Resistance	MIL STD 810C Method 516.2
Noise Immunity	NEMA (ICS3-304)
Atmosphere	No corrosive gases
Manufacturer	Koyo Electronics

Part Number	Price	Description
DV-1000	<--->	*Direct*View 1000 Timer/Counter access unit for *Direct*LOGIC PLCs
DV-1000CBL	<--->	Shielded cable to connect to *Direct*LOGIC PLCs, (RS-232C)
D4-1000CBL	<--->	Shielded cable to connect to 15-pin port on DL405 PLCs (RS232C)

Display user-defined messages, even with embedded V-memory values: Each line may contain a maximum of four embedded values. Messages are stored in CPU variable memory. Therefore, the number of messages is limited only by available CPU variable memory.

Display system-defined error messages and user-defined fault messages even in list format: Scroll through errors and messages. Error logs can even show time and date stamps on DL06 family, D2-240, D2-250-1, D2-260, D3-350, D4-440, D4-450 CPUs.

Is the DV-1000 right for you?

The DV-1000 is best suited for displaying information and occasionally changing setpoint parameters. To use the DV-1000 you should be very comfortable with ladder logic programming. If you're looking for an operator control panel, you should consider the *C-more* family of panels. They are better suited for applications that require operator interaction as a normal part of operation.

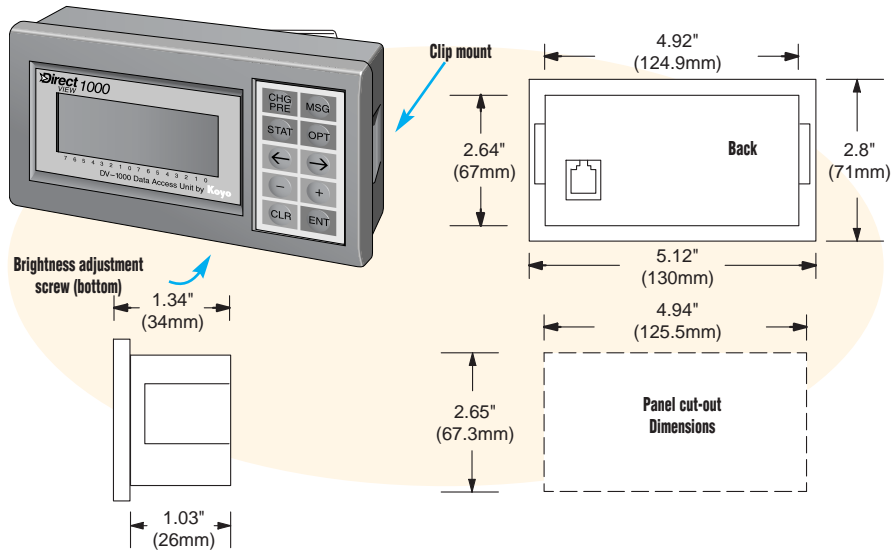### Which CPU is best to use with the DV-1000?

The DL05, DL105, DL06, D2-240, D2-250-1, D2-260, D3-350, D4-440, and D4-450 have ACON instructions that make the DV-1000 easier to work with. The DL105 and D2-230 have only one communication port, which can be a limitation in some cases. The DV-1000 does not work with D3-330 or D3-340 CPUs.

DV-1000 Dimensions and Installation

Installation

The DV-1000 is designed to snap into a rectangular cutout in a control panel or other surface panel. On each side of the housing there is a retention clip to keep the unit in place after installation. There are no provisions for mounting screws, so if your particular application is subject to high amounts of vibration, this may be a factor in your selection process. The drawing gives the physical dimensions of the DV-1000 housing.

The panel cut-out dimensions provide necessary clearance for the body of the unit and allow the outer housing bezel to cover the edges of the cut-out for a nice finished appearance. The optimum panel thickness for using the retention clips is 1/16″" to 1/8″.

Clip mount

4.92" (124.9mm)

2.64" (67mm)

Back

2.8" (71mm)

5.12" (130mm)

Brightness adjustment screw (bottom)

1.34" (34mm)

1.03" (26mm)

4.94" (125.5mm)
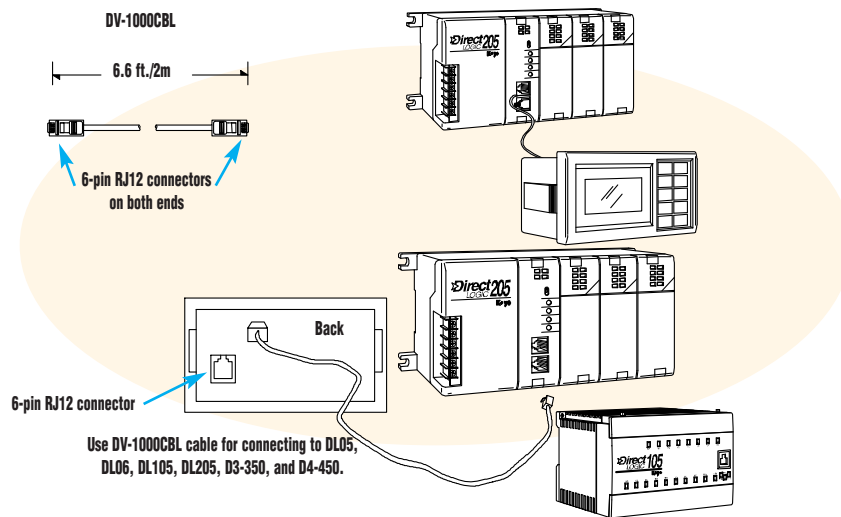
2.65" (67.3mm)

Panel cut-out Dimensions

Cabling requirements

Since the DV-1000 only works with the DL05, DL06, DL105, DL205, D3-350 and DL405 CPUs, your cabling choices are fairly simple.

- **DV-1000CBL** — connects to DL05, DL06, DL105, DL205, D3-350 and D4-450 phone jack.
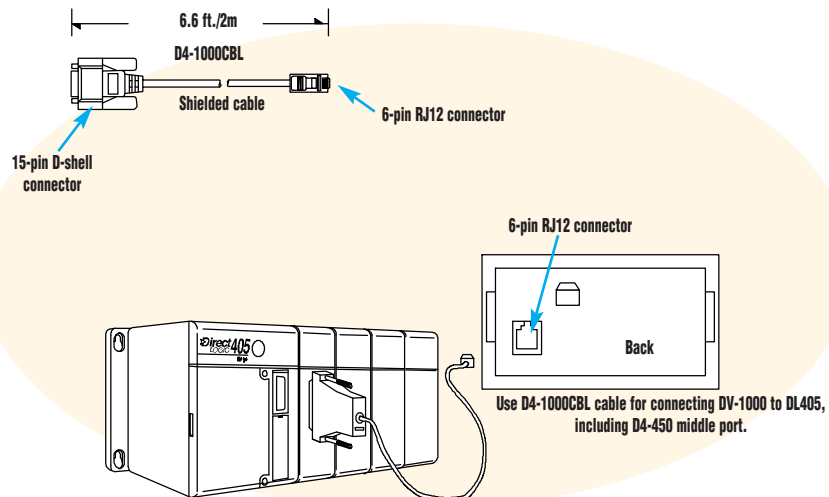- **D4-1000CBL** — connects to all DL405 CPU 15-pin ports.

Maximum cable length of 15 feet between the DV-1000 and the PLC is recommended.

The DV-1000 can be connected to a DL205 or DL405 DCM, but you have to build your own cable.

DV-1000CBL

6.6 ft./2m

6-pin RJ12 connectors on both ends

Back

6-pin RJ12 connector

Use DV-1000CBL cable for connecting to DL05, DL06, DL105, DL205, D3-350, and D4-450.

C-more Micro-Graphic

The new *C-more* Micro-Graphic Panels are a more enhanced small, low-cost graphic operator interface that you may want to consider when selecting a panel. The *C-more* Micro-Graphic panels are available in both a touch screen and non-touch version. The C-more panels will work with all *Direct*LOGIC PLCs and will also work with many different 3rd party PLCs.

6.6 ft./2m

D4-1000CBL

Shielded cable

15-pin D-shell connector

6-pin RJ12 connector

6-pin RJ12 connector

Back

Use D4-1000CBL cable for connecting DV-1000 to DL405, including D4-450 middle port.

Operator Interface 11–9