

# Programmer

D2-HPP

## Handheld Programmer

- The DL05/DL06/DL205/PZ/D4 are supported.
- EEPROMs can be mounted.
- Everything from programming to memory storage is possible.
- The contents of menus, syntax errors, and self-diagnoses are displayed as messages



The photo shows the Japanese model.  
(The shape is the same.)

### General Specifications

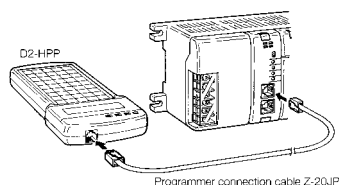
Items	Specifications
Storage Temperature	-10°C to 65°C
Use Ambient Temperature	0°C to 60°C
Ambient Humidity	Relative humidity 20% to 90% (No condensation)
Vibration Resistance	Compliant with MIL STD 810C, Method 514.2, JIS C0040, and sine wave oscillation test method
Impact Resistance	Compliant with JIS C0041 Compliant with MIL STD 810C, Method 516.2
Noise Resistance	NEMA (ICS3-304)
Surrounding Atmosphere in Place of Use	No corrosive gases

### Performance Specifications

Items	Specifications
Display	LCD (16 digits x 2 lines) with backlight LED 4 points (RUN-TEST-STOP-OFFLINE)
Operation Key	45 keys
Warning	Electronic buzzer
Communication Function: Port 1	RS-232C Transmission distance: 3 m
PPROM writer	Write by attaching memory for storage
Use Ambient Temperature	0 to +50°C
Consumption Current	200 mA (Supplied from CPU)
Weight	220 g
Accessories	Programmer connection cable Z-20JP

### Connection

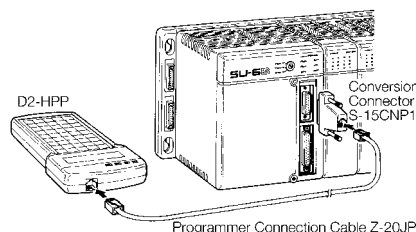
#### Connection Between D2-HPP and the DL05/DL06/DL205/PZ/D4 PLC



Port of the PLC corresponding

DL05	Port 1
DL06	Port 1
D2-230	Port 1
D2-240	Port 1
D2-250-1	Port 1
D2-260	Port 1
PZ1, 2, 3	Port 1
D4-450	Port 2
SU-6M	Port 2

#### Connection Between D2-HPP and the D4/SU-6M



### Functional List

Programming	<ul style="list-style-type: none"> <li>- Zero address readout, optional address readout, next address readout</li> <li>- Previous address readout, instruction word search, number search</li> <li>- Write / Overwrite of instruction words, insertion of instruction words, deletion of instruction words</li> <li>- Rewrite, insert, and delete instruction words during RUN</li> </ul>
Monitor	<ul style="list-style-type: none"> <li>- Block monitor, register monitor, plus change, minus change</li> <li>- Octal display change, decimal display change, hexadecimal display change, ASCII display change</li> <li>- Designated address run-time block monitor</li> <li>- Designated address run-time data monitor</li> <li>- Instruction execution state monitor (ON/OFF, master line, ACC, etc.)</li> </ul>
Debug	<ul style="list-style-type: none"> <li>- Forced ON/OFF, forced data writing</li> <li>- Scan stop, 1 scan restart</li> <li>- RUN mode change, TEST mode change, STOP mode change</li> <li>- Overwrite mode change during RUN</li> </ul>
Edit	<ul style="list-style-type: none"> <li>- Syntax check, simultaneous number overwrite</li> <li>- Program range deletion, program clear</li> <li>- Register all reset</li> </ul>
I/O Information	<ul style="list-style-type: none"> <li>- System configuration readout, I/O abnormal contents display</li> <li>- I/O arrangement check selection, I/O arrangement error processing</li> <li>- I/O No. optional allocation</li> </ul>
PLC Information	<ul style="list-style-type: none"> <li>- Program name read/write</li> <li>- Calendar readout / change, scan time readout</li> <li>- System parameter initialization, watchdog timer time change</li> <li>- CCM2 station No. setting, power failure holding area setting</li> <li>- Pause parameter setting, override setting</li> <li>- Override all cancellation</li> <li>- Special feature setting, history information display</li> <li>- Scan mode setting, general-purpose communication port setting, memory mode setting</li> </ul>
Programmer Information	<ul style="list-style-type: none"> <li>- D2-HPP, CPU, etc. REV No readout</li> <li>- Buzzer ON/OFF</li> <li>- D2-HPP self-diagnosis</li> </ul>
Memory Cartridge	<ul style="list-style-type: none"> <li>- CPU → D2-HPP program / parameter / data transfer</li> <li>- D2-HPP → CPU program / parameter / data transfer</li> <li>- D2-HPP ↔ CPU program / parameter / data checking</li> <li>- EEPROM clear / blank check</li> <li>- EEPROM type readout</li> </ul>
Other	<ul style="list-style-type: none"> <li>- Communication with link PLC, online / offline selection</li> <li>- Password readout / registration, password open / close</li> <li>- FALT message display</li> </ul>

# Programmer D2-HPP

PLC	
HMI	
SENSOR	
ENCODER	
COUNTER	
INFORMATION	

Common Subject Matter
SJ-ETHER/SJ
DL05/06
DL205
D4
D3
<b>Programmer</b>
KPP
DirectSOFT
Terminator I/O

<b>D2-HPP</b>
DV-1000

## Panel Explanation

### ① CPU mode display

[CPU mode display]

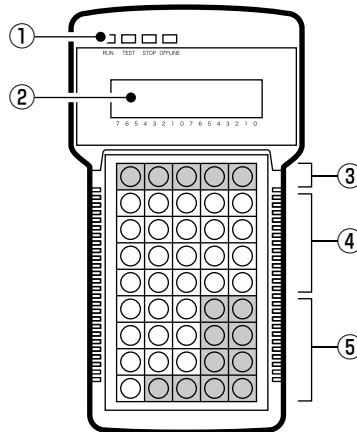
- RUN lighting ..... RUN state
- TOP lighting ..... STOP state
- RUN and TEST light up TEST RUN state
- STOP and TEST light up TEST STOP state
- TEST lighting ..... TEST HALT state
- OFF LINE lighting ..... D2-HPP OFF line

[Overwrite mode display during RUN]

- RUN blinking ..... CPU is in the RUN state and write/insert/delete are possible in units of instruction.

### ② Message display part

- 16 digits x 2 lines
- With backlight



### ③ Operation key (Main)

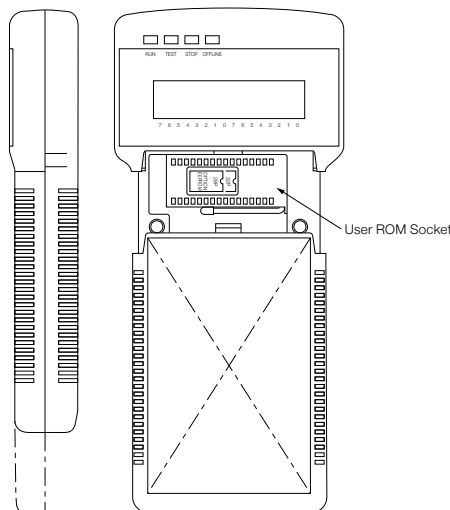
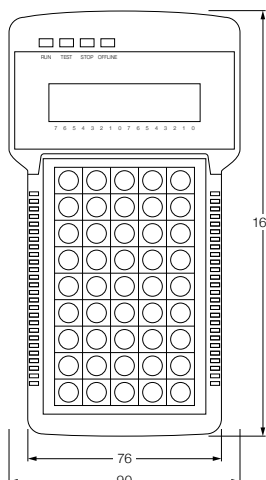
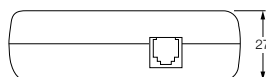
### ④ Instruction setting/ Identification symbol key

### ⑤ Operation / Numeric key

## List of Components

Classification / Appearance (Reference)	Model Number	Name / Function
	D2-HPP	Instruction word programmer (Equipped with Z-20JP) Online / Off-line programming monitor /EEPROM writer
Modular 6-pin Connector Plug 	Z-20JP	Programmer connection cable for D2-HPP (2 m)
D-sub 15-pin 	S-15CNP1	Conversion connector between D4 programmer port and Z-20JP
Storage Memory EEPROM 	D2-EE-1	EEPROM for PZ1/2, D2-230: 8 K bytes (2 units)
	D2-EE-2	EEPROM for PZ3, D2-240: 32 K bytes (2 units)

## Dimensions (Unit: mm)



# Programmer

DV-1000 (Discontinued Products)

## Operation Display Panel

- The DL05/DL06/DL205/PZ/D4 are supported.
- Operation display panel common to programmable controllers
- Operation monitors, set values and message displays can be changed.
- Block monitor / Register monitor of the functional memory
- Overwriting the set value data of timer / counter
- Option monitor (User registration monitor)
- History display (Error / Message)
- Simple key entry (The functional memory of any PLC can be turned on/off by pressing the operation switch of the DV-1000.)



### General Specifications

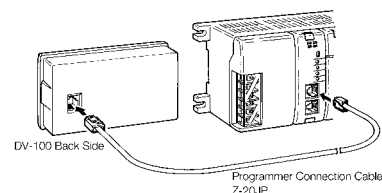
Items	Specifications
Storage Temperature	-20°C to 70°C
Use Ambient Temperature	0°C to 50°C
Ambient Humidity	Relative humidity 30% to 95% (No condensation)
Vibration Resistance	Compliant with MIL STD 810C, Method 514.2, JIS C0040, and sine wave oscillation test method
Impact Resistance	Compliant with JIS C0041 Compliant with MIL STD 810C, Method 516.2
Noise Resistance	NEMA (ICS3-304)
Surrounding Atmosphere in Place of Use	No corrosive gases

### Performance Specifications

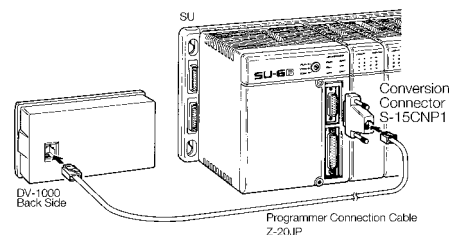
Items	Specifications
Display	LCD display (16 digits x 2 lines) with backlight
Operation Key	10 keys
Communication Function: Port 1	RS-232C Transmission distance: Within 10 m
Ambient Temperature	Use Ambient Temperature: 0 to +50°C/ Storage Temperature: -20 to +70°C
Ambient Humidity	Use / Storage ambient humidity: 30 to 95% RH (No condensation)
Vibration Resistance	Compliant with JIS C0040 and sine wave oscillation test method Half amplitude: 0.075 mm (10 to 57 Hz) 3 directions Constant acceleration: 10 m/s <sup>2</sup> (57 to 150Hz) 3 directions Sweep: 1 octave / min ±10%
Impact Resistance	Compliant with JIS C 0041 Malfunction impact: Peak acceleration 150 m/s <sup>2</sup> 11 ms 3 directions
Consumption Current	150 mA (Supplied from CPU)
Weight	160 g

### Connection

Connection Between DV-1000 and DL05/DL06/DL205/PZ/D4 PLC



Connection Between DV-1000 and D4/SU-6M



### Functional List

Items	Contents	Remarks
Comment Registration Set Value Change	Changes the set value by displaying the characters registered by users in place of the register No.(R) of the register for which the set value is changed.	DV-1000 password Operation is prohibited when closed.
Timer / Counter Set Value Change	Changes the set value of the counter and timer.	PZ series and D2-230 unusable DV-1000 password Operation is prohibited when closed.
Block Monitor	Displays the ON/OFF state of the functional memory that uses bits for input, output, and internal relay for 32 points.	
64 points Block Monitor	Displays the ON/OFF state of the functional memory that uses bit for 64 points.	
Register Data Monitor	Displays the numeric data stored in the register for 4 points.	
Message / Numerical Indication	Displays the messages and numeric values created with the user program of the PLC.	
Password	Permits / Prohibits the set value change functions.	
System Error History Display	Displays the self-diagnosis error history detected by the PLC.	
Message History Display	Displays the message history by the execution of FALT and HISTRY instructions.	
Simple Key Entry	Any functional memory can be turned ON/OFF by operating the switch on the DV-1000.	

# Programmer

## DV-1000

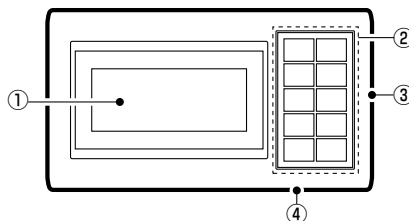
PLC	
HMI	
SENSOR	
ENCODER	
COUNTER	
INFORMATION	

### Panel Explanation

#### ① LCD display part

- 16 digits x 2 lines
- With backlight

#### ④ Contrast control volume



#### ② Operation switch (Sheet key)

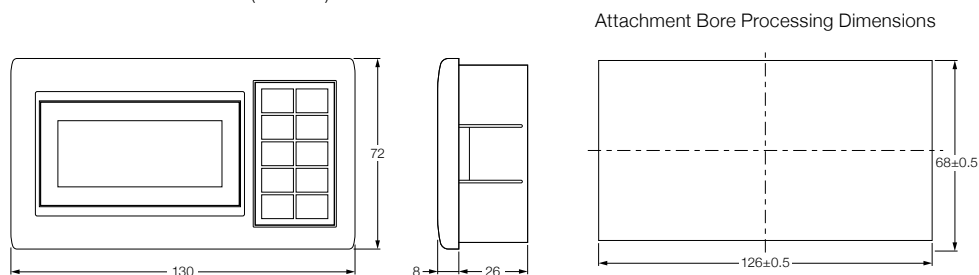
- Can be attached to the surface of the control panel.

#### ③ One-touch installation switch

### List of Components

Classification / Appearance (Reference)	Model Number	Name / Function
	DV-1000	Operation display panel Monitor / Message display Timer / Counter set value change, etc.
Modular 6-pin Connector Plug 	Z-20JP	Programmer connection cable (2 m)
D-sub 15-pin 	S-15CNP1	Conversion connector between D4 programmer port and Z-20JP
D-sub 15-pin (High-density) 	S-15HCNP1	Conversion connector D2-250-1 port 2 D2-260 port 2 ⇔ Z-20JP DL06 port 2 PZ3 port 2

### Dimensions (Unit: mm)



Common Subject Matter
SJ-ETHER/SJ
DL05/06
DL205
D4
D3
<b>Programmer</b>
KPP
DirectSOFT
Terminator I/O

D2-HPP
<b>DV-1000</b>