



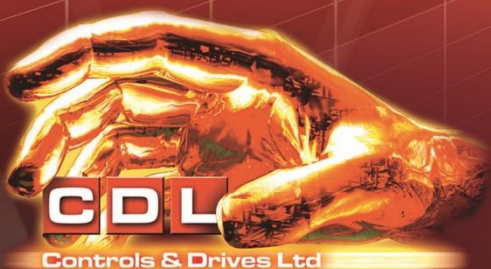
CONTROLS & DRIVES LTD

The Industrial Automation Specialists

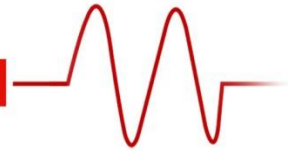


## Technical Tip

Factory Restoring a Mitsubishi Inverter.



Part of the **B P X** Group



### **Technical Tip**

1. Turn on Inverter power, the operation may be in monitor mode (MON) mode.
2. Change the Operation mode to PU (parameter unit mode) this is normally switched by pressing the PU/EXT key. The PU LED turns ON.
3. Access parameter selection by pressing the MODE key (multiple times may be necessary) until you see PR. on the display.
4. Turn the setting dial ANITCLOCKWISE or press the DOWN key until "Pr.CL" appears for Parameter clear or "ALLC" for All parameter clear, and press the SET key. "0" (initial value) appears.
5. Last step, turn the setting dial or press the UP/DOWN key to change the value to "1". Press the SET key to confirm the setting. "1" and "Pr.CL" ("ALLC") are displayed alternately after parameters are cleared.

The Inverter is now factor restored.

### **NOTES:**

Setting	Description	
	Pr.CL Parameter clear	ALLC All parameter clear
0	Initial display (Parameters are not cleared.)	
1	The settings of parameters except for calibration parameters and terminal function selection parameters are initialized.	The settings of all the parameters, including calibration parameters and terminal function selection parameters, are initialized.

**NOTE**

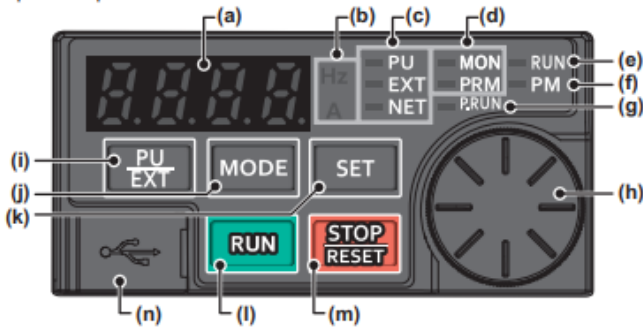
- "1" and "Er4" are displayed alternately when the operation mode is other than the PU operation mode.
  - 1) Press the PU/EXT key.  
The PU LED turns ON, and "1" appears on the monitor. (When Pr.79 ="0" (initial value))
  - 2) Press the SET key to clear the parameter.
- Stop the inverter first. Writing error occurs if parameter clear is attempted while the inverter is running.
- To clear the parameter, the inverter must be in the PU operation mode even if "2" is set to Pr.77.



**PARAMETER UNIT (OPERATION PANEL) INFO (FR-E800 INVERTERS)**

**◆ Standard model**

The operation panel cannot be removed from the inverter.



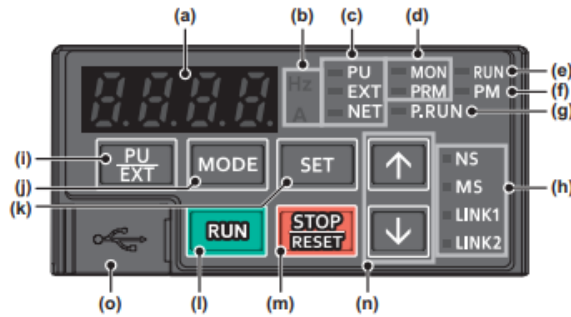
No.	Appearance	Name	Description
(a)		Monitor (4-digit LED)	Shows a numeric value (readout) of a monitor item such as the frequency or a parameter number. (The monitor item can be changed according to the settings of Pr.52, Pr.774 to Pr.776.)
(b)		Unit indication	Hz: ON when the actual frequency is monitored. (Blinks when the set frequency is monitored.) A: ON when the current is monitored. (Both "Hz" and "A" are OFF to indicate a value other than the frequency or the current.)
(c)		Inverter operation mode LED indicator	PU: ON when the inverter is in the PU operation mode. EXT: ON when the inverter is in the External operation mode. (ON when the inverter in the initial setting is powered ON.) NET: ON when the inverter is in the Network operation mode. PU and EXT: ON when the inverter is in the External/PU combined operation mode 1 or 2.
(d)		Operation panel mode LED indicator	MON: ON or blinks only when the first, second, or third monitor is displayed. PRM: ON when the operation panel is in the parameter setting mode. The indicator blinks when the inverter is in the easy setting mode.
(e)		Operating status indicator	ON or blinks during inverter running. ON: During forward rotation operation. Blinks slowly (1.4-second cycle): During reverse rotation operation. Blinks quickly (0.2-second cycle): Operation is disabled although the start command is given.*1
(f)		Controlled motor type LED indicator	ON when the inverter is set to control the PM motor. The indicator blinks during test operation. The indicator is OFF when the inverter controls the induction motor.
(g)		PLC function LED indicator	ON when the PLC function of the inverter is valid. (The indicator blinks when a fault occurs while the PLC function is valid.)
(h)		Setting dial	The setting dial of the Mitsubishi Electric inverters. Turn the setting dial to change the setting of frequency or parameter, etc. Press the setting dial to perform the following operations: • To display a set frequency on the LED display in the monitor mode. (The monitor item shown on the display can be changed by using Pr.992.) • To display the present setting during calibration.
(i)		PU/EXT key	Switches between the PU operation mode, the PUJOG operation mode, and the External operation mode. The easy setting of the inverter operation mode is enabled by pressing this key simultaneously with the MODE key. Also cancels the PU stop warning.

No.	Appearance	Name	Description
(j)		MODE key	Switches the operation panel to a different mode. The easy setting of the inverter operation mode is enabled by pressing this key simultaneously with the PU/EXT key. Every key on the operation panel becomes inoperable by holding this key for 2 seconds. The key lock function is disabled when Pr.161 = "0 (initial setting)". (Refer to page 217.)
(k)		SET key	Confirms each selection. When this key is pressed during inverter operation, the monitor item changes. (The monitor item on each screen can be changed according to the settings of Pr.52, Pr.774 to Pr.776.) 
(l)		RUN key	Start command The direction of motor rotation depends on the Pr.40 setting.
(m)		STOP/RESET key	Stops the operation commands. Used to reset the inverter when the protective function is activated.
(n)		USB connector	FR Configurator2 is available by USB connection.

\*1 Situations such as when the MRS/X10 signal is input, during the automatic restart after instantaneous power failure, after auto tuning is complete, when "SE" (incorrect parameter setting) alarm occurs.

### ◆ Ethernet model and safety communication model

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(f)		Controlled motor type LED indicator	ON when the inverter is set to control the PM motor. The indicator blinks during test operation. The indicator is OFF when the inverter controls the induction motor.
(g)		PLC function LED indicator	ON when the PLC function of the inverter is valid. (The indicator blinks when a fault occurs while the PLC function is valid.)
(h)		Ethernet communication status	Indicates the Ethernet communication status. For details, refer to the Instruction Manual (Communication).
(i)		PU/EXT key	Switches between the PU operation mode, the PUJOG operation mode, and the External operation mode. The easy setting of the inverter operation mode is enabled by pressing this key simultaneously with the MODE key. Also cancels the PU stop warning.
(j)		MODE key	Switches the operation panel to a different mode. The easy setting of the inverter operation mode is enabled by pressing this key simultaneously with the PU/EXT key. Every key on the operation panel becomes inoperable by holding this key for 2 seconds. The key lock function is disabled when Pr.161 = "0 (initial setting)". (Refer to page 217.)
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