

**USER'S MANUAL**

**ROM WRITER UNIT**

**F2-20MW-E**

\* Users should ensure that the details of this article are studied and understood before attempting to use the unit.

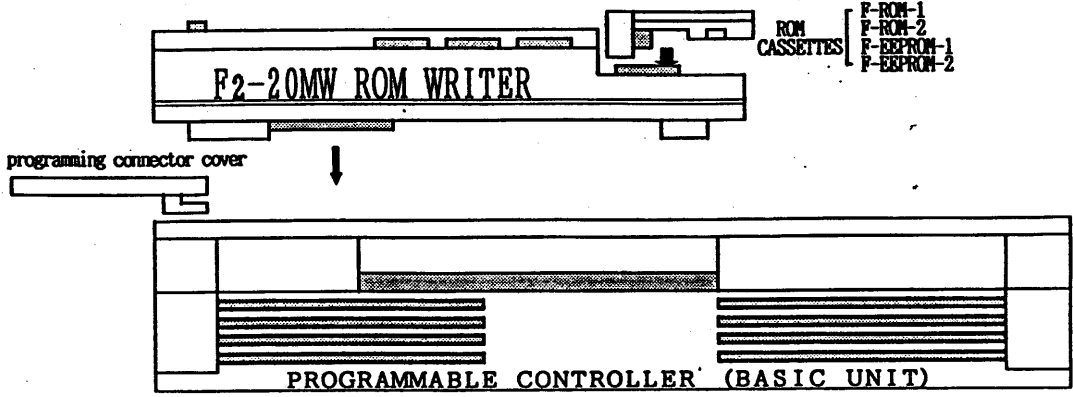
**MITSUBISHI ELECTRIC CORPORATION**

# INTRODUCTION

The F<sub>2</sub>-20MW-E ROM Writer transfers programs between the applicable programmable controller (PC) and the memory cassettes F-ROM-1, F-ROM-2, F-EEPROM-1 and F-EEPROM-2.

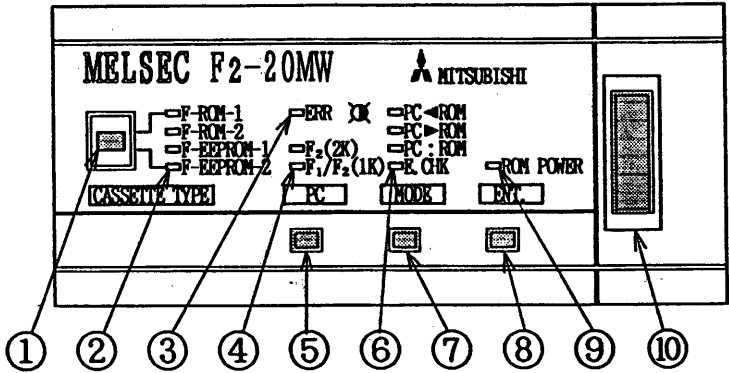
Applicable programmable controllers are F<sub>1</sub>, F<sub>2</sub> and Enhanced F<sub>2</sub> (1K or 2K mode).

## 1. MOUNTING



- NOTE**
- Unlike the F-20MW-E, the F<sub>2</sub>-20MW-E do not require any system cassettes.
  - The programmable controller PC must be in **STOP** mode before the F<sub>2</sub>-20MW-E can be used.

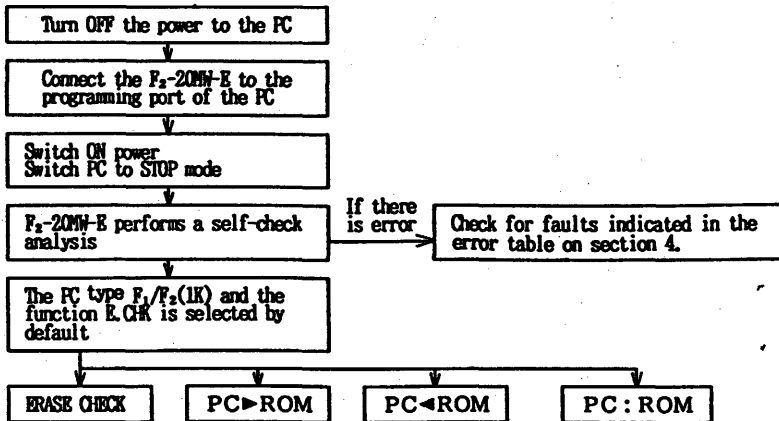
## 2. PANEL



- ① Slide switch to select the memory cassette type.
- ② Cassette type LED indicators : When power is delivered, these indicate the selected cassette type.
- ③ Error LED indicator : Flashes to indicate errors.
- ④ PC type indicators : These indicators will alternate each time the PC button is pushed.
- ⑤ PC select button
- ⑥ Function mode indicators : These functions are selected by the MODE button.
- ⑦ MODE select button
- ⑧ ENTER button : Executes the selected function.
- ⑨ ROM POWER indicator : Indicates that it is busy writing to cassette.
- ⑩ Memory cassette connector

### 3. OPERATIONS

#### INITIAL PREPARATIONS



SELECT FUNCTION  
BY THE MODE  
BUTTON

#### GENERAL KEY AND INDICATOR SEQUENCES.

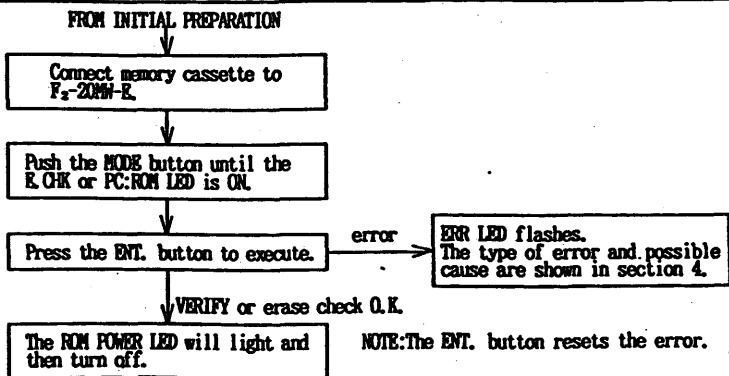
- ① The memory cassette type switch selects the cassette type by a slide action. The selected type is indicated by an LED.
- ② The FC type is selected by pushing the PC button. The selected type is indicated by an LED.
- ③ The function of the ROM Writer is selected by pushing the MODE button until the LED of the desired function is lit.
- ④ Pressing the ENT. button will execute the LED lit function. The ROM POWER LED will light as to indicate that it is under process. Upon completion, this LED will turn off.
- ⑤ If there is error during any of the operations, the error ERR LED flashes and the process is stopped. Also, selection buttons are disabled until the error is reset.
- ⑥ The error is reset by pressing the ENT. button. Note that pressing the ENT. button also resets and abandons the current process even under cases where there is no error.

#### CAUTION

Remove or insert the memory cassettes to the ROM Writer only when the ROM POWER LED is OFF.

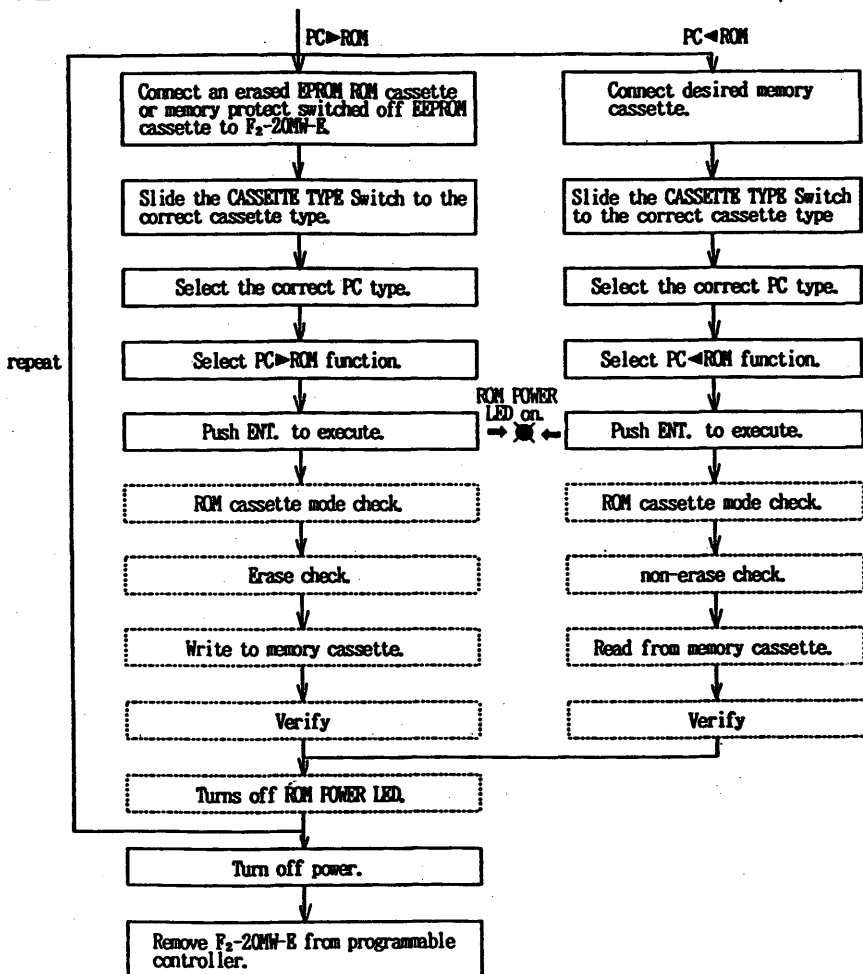
# 3. OPERATIONS

## ERASE CHECK AND VERIFY (PC:ROM)



## TRANSFERS

### FROM INITIAL PREPARATION



## 4. ERROR DISPLAY AND EXECUTION TIMES

The cause of error may be determined by the combination of the PC type and function Mode LED's.

Error Mode	ON LED's			Possible cause and solutions
	ERR LED	PC type LED's	Mode LED	
PC RUN error	flash $\times$		PC $\leftarrow$ ROM PC $\rightarrow$ ROM PC:ROM	Switch the PC to STOP mode.
Cassette type error	flash $\times$	F <sub>2</sub> (2K) F <sub>1</sub> /F <sub>2</sub> (1K)		Mismatch of setting to cassette type. Select the cassette type again.
PC type error	flash $\times$	F <sub>2</sub> (2K)		The connected PC is of 1K memory size. Select the PC type switch to F <sub>1</sub> /F <sub>2</sub> (1K).
		F <sub>1</sub> /F <sub>2</sub> (1K)		The connected PC is of 2K memory size. Select the PC type switch to F <sub>2</sub> (2K).
Erase error	flash $\times$		E.CHK	If occurred during reading of cassette, the cassette has not been programmed. Use an already programmed cassette.
				If occurred during writing of cassette, the cassette has not been properly erased. Use an erased cassette instead.
				If occurred during E.CHK the cassette has proven to be erased improperly.
Write error	flash $\times$		PC $\rightarrow$ ROM	Writing is incorrect or impossible. Possible causes: <ul style="list-style-type: none"> <li><input type="checkbox"/> EEPROM cassette is protected by switch</li> <li><input type="checkbox"/> Wrong cassette type is selected</li> <li><input type="checkbox"/> Non-erased EPROM cassette is used</li> <li><input type="checkbox"/> Memory cassette is damaged</li> </ul>
Read error	flash $\times$		PC $\leftarrow$ ROM	Read not possible. Possible reasons include: EPROM cassette has been erased. Data in cassette is corrupted.
Verify error	flash $\times$		PC:ROM	The contents of the cassette is not the same as the contents of the memory of the PC.

### EXECUTION TIMES(seconds)

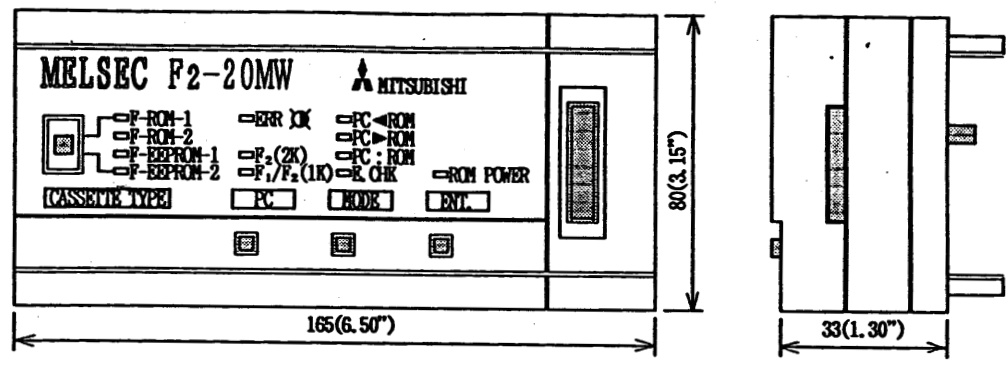
PC	MODE	MEMORY CASSETTE			
		F-ROM-1	F-ROM-2	F-EEPROM-1	F-EEPROM-2
F <sub>2</sub> (2K)	PC $\leftarrow$ ROM	—	4.0	—	4.0
	PC $\rightarrow$ ROM	—	25.0	—	48.0
	PC:ROM	—	4.0	—	4.0
	E.CHK	—	1.0	—	—
F <sub>1</sub> F <sub>2</sub> (1K)	PC $\leftarrow$ ROM	2.5	2.5	2.5	2.5
	PC $\rightarrow$ ROM	107.0	13.0	25.0	25.0
	PC:ROM	2.5	2.5	2.5	2.5
	E.CHK	1.0	1.0	—	—

## 5. INSTALLING CASSETTES TO PC

After programming the memory cassettes by the ROM Writer, they can be installed into the programmable controller. Once the cassette is connected to the programmable controller, the programmable controller will automatically run the program contained in the cassette.

⚡ Power must be turned off before insertion or removal of the memory cassette.

## 6. DIMENSIONS





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HEAD OFFICE: MITSUBISHI DENKI BLDG MARUNOUCHI TOKYO 100 TELEX: J24532 CABLE MELCO TOKYO

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Effective JAN. 1990  
The specifications and details are subject to change without notice.