

Addressing unit, FL1HA-E

■ Description

Incorporates versatile new functions compatible with version 2.1.

- In addition to conventional address setting functions, this unit makes it possible to read the addresses of slaves on the AS-i line and the I/O data of the slaves.
- Address settings can be made for standard slaves and A/B slaves.
- Address settings can be made for slaves provided with an addressing jack (e.g., FM6D □ 1, FM4D, FM2D1, and FM1D slaves) over an address setting conversion cable (FX9Y002).

■ Ratings and specifications

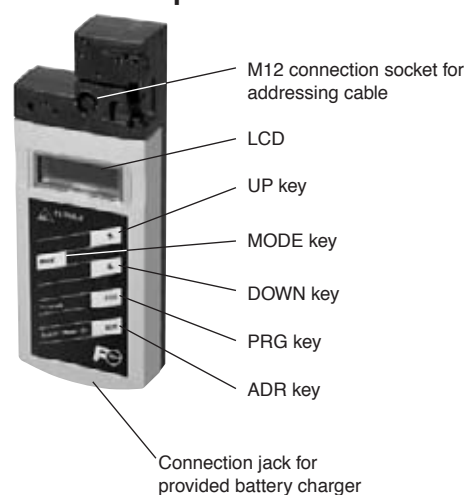
Type	FL1HA-E
Operating temperature range	0 to 40°C
Storage temperature range	-20 to 40°C
Display	LCD
Control key	Flat key (Numeric 5-key pad)
Degree of protection	IP20
Power supply	Built-in secondary battery Charging time: Approx. 14h (with provided battery charger)
Secondary battery life	Addresses can be read or written approximately 250 times with a full charge. If the battery is charged and discharged for a maximum of 500 cycles, the number of possible address reading and writing times will be gradually reduced by the battery memory effect.
Battery charger	Provided
Addressing cable	FX9Y002 (sold separately)
AS-i specifications	Version 2.1 compatible

■ Control key functions

Key display	Function
ADR	Reads the addresses of connected slaves. The power will be automatically turned off if no operation is made for approximately one minute or more.
PRG	Writes addresses to connected slaves.
MODE	Selects operating modes.
↓	Selects and subtracts addresses or data.
↑	Selects and adds address or data.



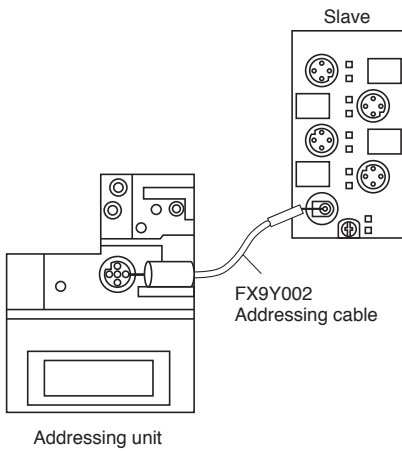
■ Name of each part



AS-Interface

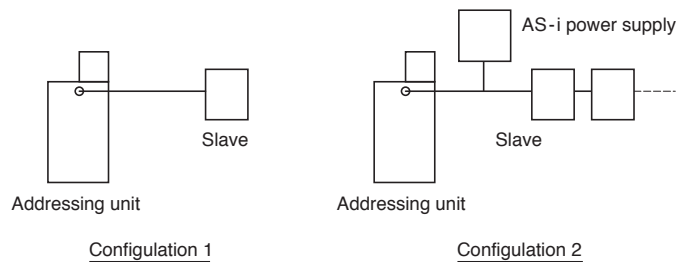
■ Address Setting Procedure (Address Setting Function)

- (1) Connect a slave to the addressing unit.
- (2) Press the ADR key to read the presently set address.
The value on the right-hand side is decimal. A standard slave does not have any prefix, but A or B slaves have the prefix A or B. When a slave is communicating with the addressing unit, the small number on the lower part will blink at approximately 0.5-second intervals.
- (3) Press the UP or DOWN key to display the new address.
- (4) Press the PRG key to register the new address.



■ Error display

Code	Description	Configuration 1	Configuration 2
F1	Overloading or short-circuiting of the communications power supply provided from the unit.	○	—
F2	The slave is disconnected, the slave is not connected properly, or a failure occurred in reading the slave.	○	—
F3	An error occurred in writing the address or ID code 1.	○	—
F4	An error occurred in an address setting. (An attempt was made to write a duplicated address.)	○	—
	An error occurred in an address setting. (The same address is already in use.)	—	○
F5	An error occurred in a settings change. (A slave with address 0 is connected.)	—	○
F6	An error occurred in a standard slave setting. (An attempt was made to write an A/B slave address, e.g., 01A or 01B, to a standard slave.)	○	○
F7	An error occurred in an A/B slave setting. (An attempt was made to write a standard slave address, e.g., 01 or 02, to an A/B slave.)	○	○
F8	The response signal from the slave was not received correctly.	○	○
F8	The secondary battery needs charging.	○	○

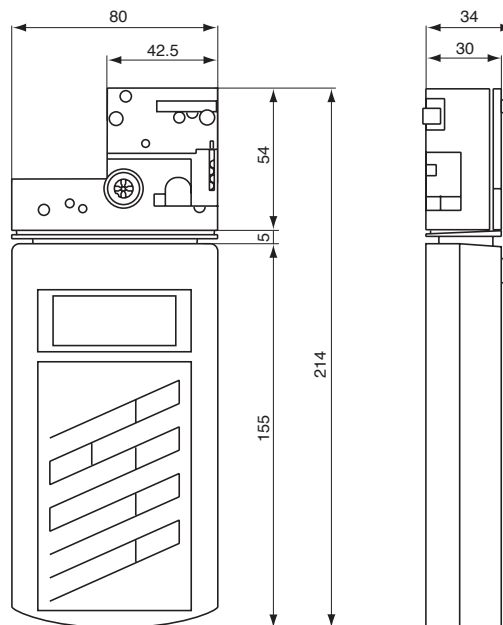


■ Other functions

Press the ADR key to turn on the power first. Then press the MODE key to select the following functions. Use the PARA and DATA functions only in functional tests for slaves.

Name	Function
ID	Reads the ID code.
ID1	Reads and writes ID code 1 (for version 2.1 compatible models only). Set the value with the UP or DOWN keys and press the PRG key to overwrite the ID code.
ID2	Reads ID code 2 (for version 2.1 compatible models only).
IO	Reads the IO code.
PERI	Peripheral fault flag indication (for version 2.1 compatible models only). If a slave is using this option flag, there will be no error while 0 is displayed. The display will change to 1 if an error occurs.
PARA	Displays and writes parameters. Check that the address of the slave is other than 0 before selecting this function. When this function is selected, the default value (F) will be displayed. Set the value (hexadecimal) with the UP or DOWN keys and press the PRG key. The parameter will then be sent to the slave once. By pressing the ADR key at this time, the last parameter written can be checked. After the slave is connected, the slave will operate according to the parameter as long as this function is operating. Once the slave is disconnected or another function is selected, the currently set parameter will be lost.
DATA	Reads input data and writes output data. Check that the address of the slave is other than 0 before selecting this function. The function transfers data while the ADR or PRG key is pressed. With this function selected, input data will be read once and displayed in hexadecimal. While the ADR key is pressed, the data of the slave will be read continuously. When the ADR key is released, communication with the slave will stop. Set the value (hexadecimal) with the UP or DOWN keys and PRG key when writing output data. The data will then be transferred once. The data will be output to the slave continuously while the PRG key is pressed. When the ADR key is released, communication with the slave will stop.

■ Dimensions, mm



■ Precautions

- A system error may occur when overwriting an address, parameter, data, or ID code 1, which could result in equipment damage or physical harm. Confirm the safety of any change before making it.
- Use the provided battery charger to charge the secondary battery. Approximately 14 hours is required to fully charge the battery.
- If the automatic address setting function is used, make sure that the previous ID code 1 value remains after the slave is changed. Automatic address settings will not be made if the ID code 1 value is different.
- Operation using the PARA and DATA functions imposes a heavy load on the secondary battery. The continuous use of these functions will quickly deplete the voltage of the secondary battery.