F^{2}MC-8L FAMILY
MB2142-01 LAN ADAPTER

USER'S MANUAL

FUJITSU

F^{2}MC-8L FAMILY MB2142-01
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Preface

■ Purpose and Target Readers

The MB2142-01 is a support tool (LAN adapter) for developing and evaluating applications using the F^2MC family. Connect the MB2142-01 to the main unit (MB2141) to allow the main unit to communicate with a host computer (personal computer) via a LAN.

The manual is for engineers who use the MB2142-01 to develop applications for the F^2MC. It describes the handling and connections of the MB2142-01.

Reference manual:

- ***MB2140 Series Main Unit (MB2141) User's Manual***

■ Composition

The manual is composed of the following two chapters. Read the manual thoroughly before use.

Chapter 1 Product Handling

Describes product and handling of LAN adapter

Chapter 2 Connections and Power-On Sequence

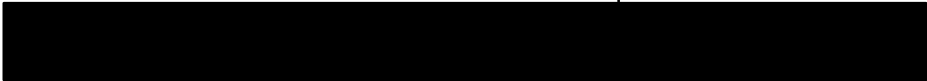Describes connections and power-on sequence of LAN adapter

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1. PRODUCT HANDLING

This chapter describes the handling and specifications of the LAN adapter. Read this chapter thoroughly before using the LAN adapter, and check the package for the required products.

1.1 PACKAGE CHECK AND NAMES OF COMPONENTS

Check the package for the following parts before using the LAN adapter.

- LAN adapter: 1

- Interface cable: 1

■ Appearance of LAN adapter and names of components

Figure 1.1 shows the appearance of the LAN adapter. For more information on connections, see Chapter 2.
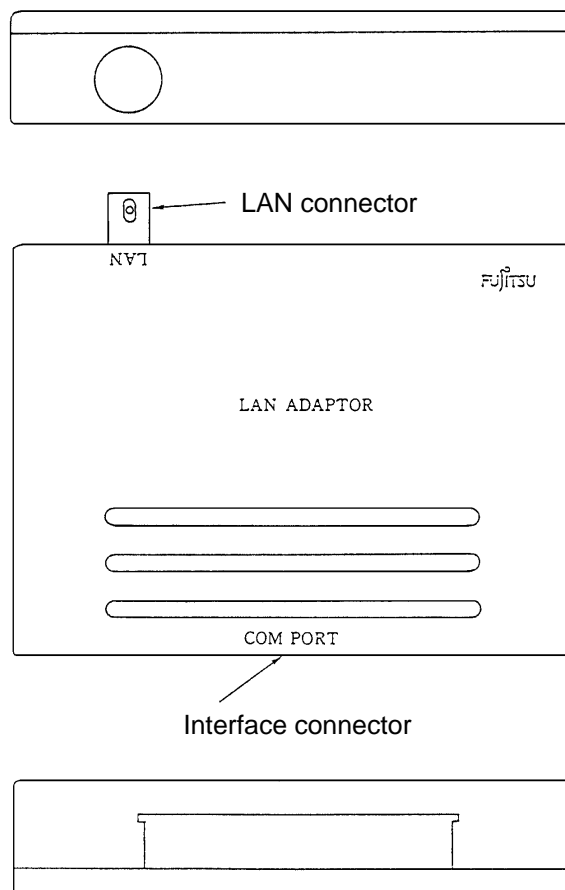
Fig. 1.1 Appearance of LAN Adapter (Top View)

The component functions are given below.

- Interface connector: Connects interface cable
- LAN connector: Connects LAN cable

1.2 SPECIFICATIONS OF LAN ADAPTER

Table 1-1 and 1-2 list the specifications of the LAN adapter and LAN, respectively.

■ **Specifications of LAN adapter**

Table 1-1 lists the specifications of the LAN adapter.

Table 1-1 Specifications of LAN Adapter

Item	Specifications
Name	LAN adapter
Model	MB2142-01
Power supply	Voltage: +5 V±5%, Current: +1 A [1]
Working temperature	5° to 40°C
Working humidity	30 to 80% (No condensation)
Outside dimensions	120 mm (W) × 26 mm (H) × 90 mm (D)[2]
Weight	220 g[3]

*1 Power is supplied from the main unit.
*2 Except protrusions
*3 Except pod interface cable

■ **LAN Specifications**

Table 1-2 lists the specifications of the LAN.

The LAN connector is a BNC (10BASE-2) type.

Table 1-2 LAN Specifications

Item	Specifications
Communication type	TCP/IP
IP address	Variable
Port address	Variable
Ethernet address	Global address/local address
Ethernet global address	Fixed value (IEEE registered)
Ethernet local address	Variable

Note: The IP address, port address and Ethernet local address are set from the host
computer via the RS-232C by the LAN address write program supplied   with
the emulator debugger.

For more information, refer to the ***Emulator Debugger Installation Manual***.

1.3 SPECIFICATIONS OF INTERFACE CABLE

Table 1-3 and 1-4 list the components and specifications of the interface cable, respectively. Figure 1.2 shows its dimensions.

■ **Specifications of interface cable**

For the connections to the main unit and pod, see 2.2.

Table 1-3 Components of Interface Cable

Component name	Remarks
Connector FCN-237R068-G/E × 2	Fujitsu
Cover FCN-230C068-C/E × 2	Fujitsu

Table 1-4 Specifications of Interface Cable

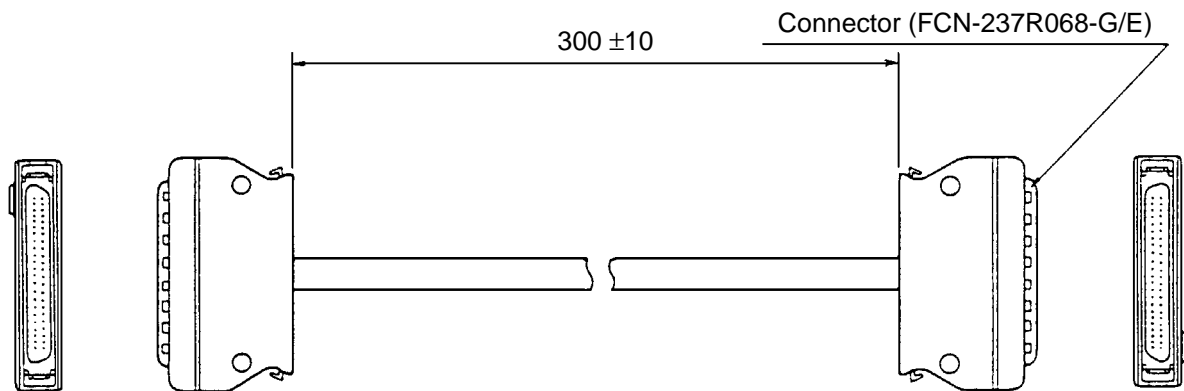| Item		Description
Rated current		1 A (dc)
Temperature	Operating	−10° to +60°C
	Storage	−10° to +60°C
Weight		140 g

Fig. 1.2 Dimensions of Interface Cable

1.4 PRECAUTIONS

Take the following precautions when using the LAN adapter.

■ Precautions

Take the following precautions when using the LAN adapter.

- Turn off the power before connecting/disconnecting cables.

- Hold the case/connector when disconnecting a cable.

- Never touch any connector pins to avoid dielectric breakdown.

- Do not obstruct the ventilation holes.

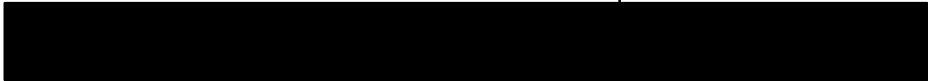- Install and use the LAN adapter according to this manual.

■ Storage

Take the following precautions when storing the LAN adapter.

- Do not drop the LAN adapter in storage.

- Do not expose the LAN adapter to direct sunshine, high temperature and high humidity. Also, keep it condensation free.

- Avoid storing the LAN adapter where it may be exposed to strong electric or magnetic fields for long periods.

Table 1-5 shows storage temperature and humidity.

Table 1-5 Storage Environments

Storage Temperature	Storage Humidity
−20° to +70°C	20 to 90% (No Condensation)

2. CONNECTIONS AND POWER-ON SEQUENCE

This chapter describes the connections and power-on sequence for the LAN adapter. Read this chapter before turning the power on.

2.1 SYSTEM CONFIGURATION

Connecting the LAN adapter to a network including a host computer allows LAN communication with that computer.

■ **System configuration**

Connecting the LAN adapter to a network including a host computer allows LAN communication with that computer.

Figure 2.1 shows the hardware configuration of the LAN adapter.
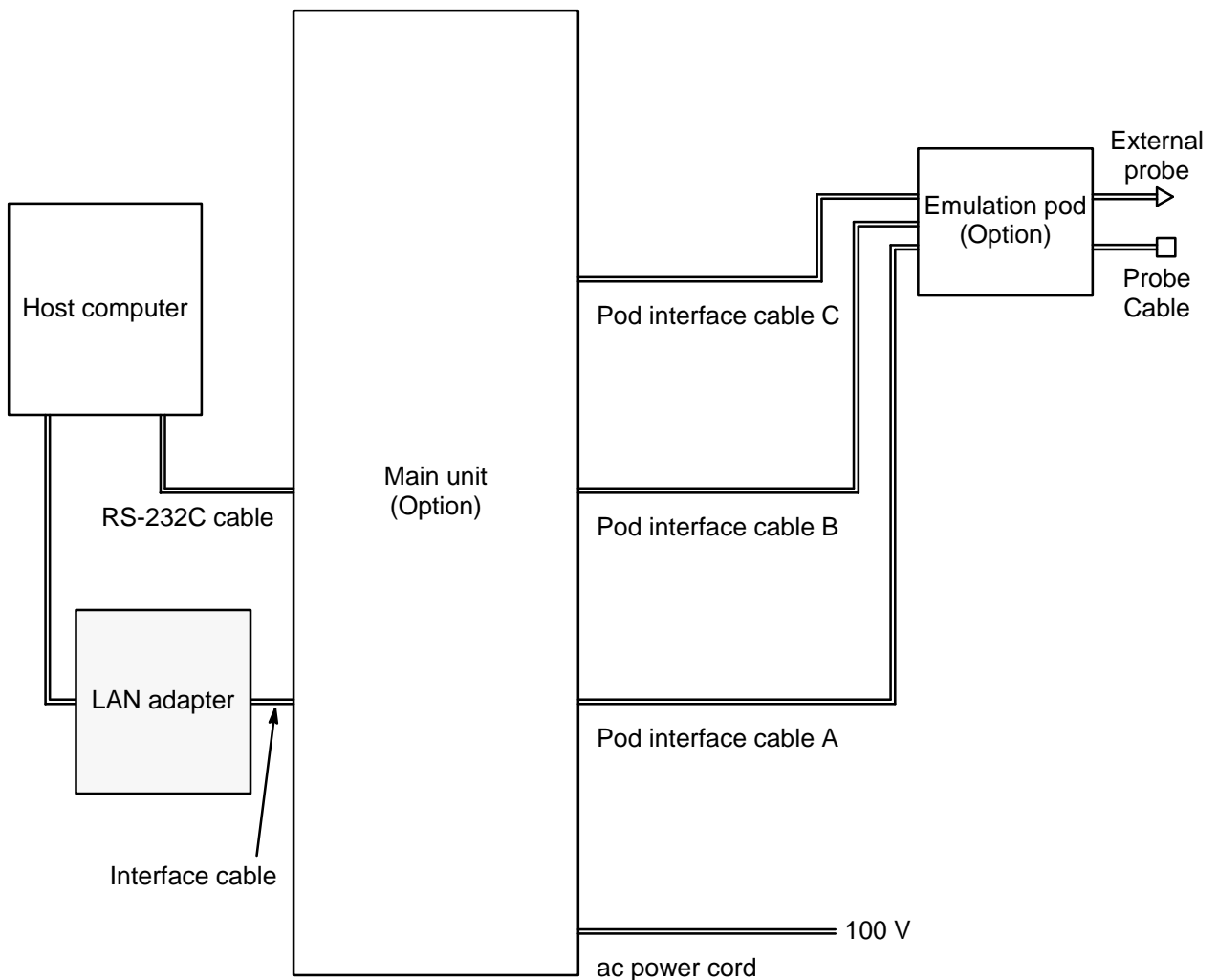
Fig. 2.1 System Configuration

2.2 CONNECTING TO MAIN UNIT

Connect the LAN adapter to the main unit (option) via the interface cable as shown in Figure 2.2.

■ **Connection to main unit**

Connect the LAN adapter to the main unit (option) via the interface cable as shown in Figure 2.2.
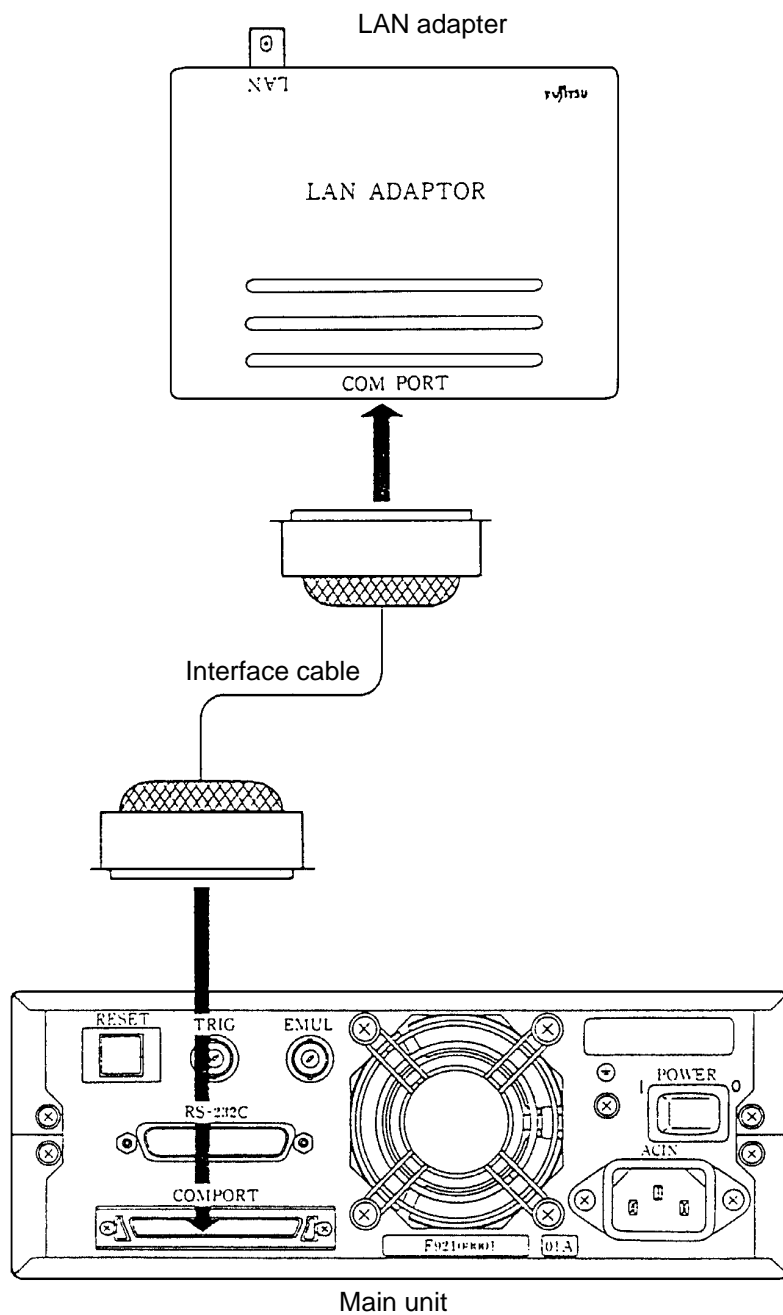

Fig. 2.2 Connecting Main Unit

■ **Cautions**

Turn off the power when connecting/disconnecting cables; otherwise, the LAN adapter will be damaged.

When disconnecting a cable, hold its case or connector; otherwise, the cable may break.

2.3 CONNECTING TO NETWORK

Connect the LAN connector to a network including a host computer as shown in Figure 2.3.

■ Connecting to network

Connect the LAN connector to a network including a host computer as shown in Figure 2.3. Use a light coaxial cable, a terminator and a Y-type connector (T or F type also available) which are optionally available. They are not attached to the LAN adaptor.

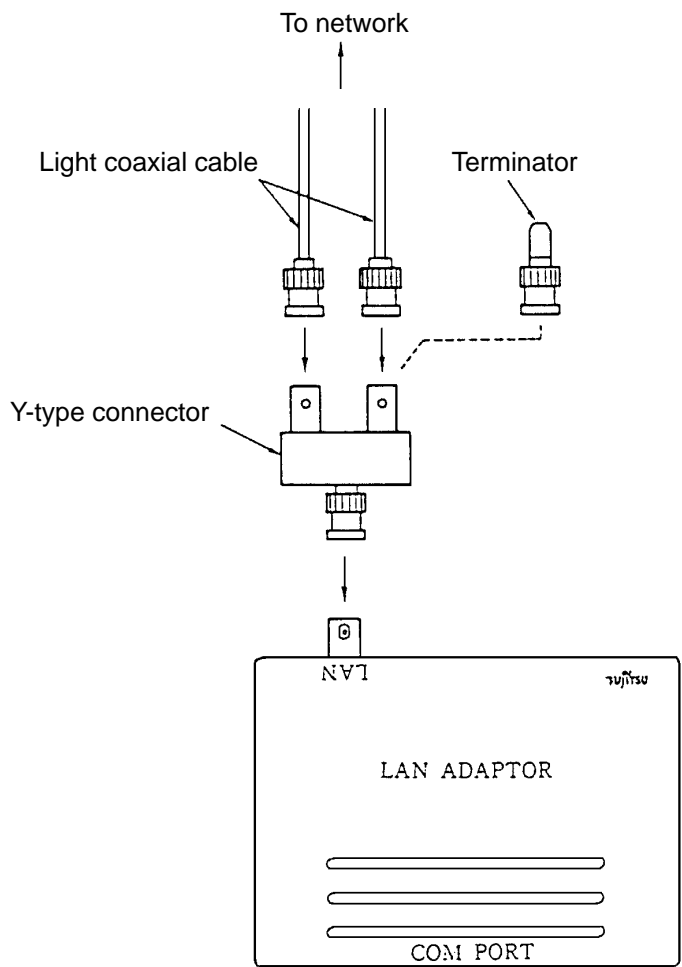**Fig. 2.3 Connecting to Network (Examlpe)**

■ Cautions

Turn off the power when connecting/disconnecting cables; otherwise, the LAN adapter will be damaged.

When disconnecting a cable, hold its case or connector; otherwise, the cable may break.

2.4 POWER-ON SEQUENCE

After making all the connections, turn on the power in the sequence: host computer, main unit and target (user target system).

■ **Power-on sequence**

After making all the connections, turn on the power in the sequence: host computer, main unit and target (user target system). Set the power switch on the rear of the main unit to 1. The LAN adapter is switched on at the same time as the main unit.

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