

SHARP

Interface Unit

Instruction Manual

MZ-8010



SHARP CORPORATION



**Note for Users in UK.
IMPORTANT**

The wires in the mains lead of this apparatus are coloured in accordance with the following code:

BLUE:	Neutral
BROWN:	Live

As the colours of the wires in the mains lead of this apparatus may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:

- * The wire which is coloured **BLUE** must be connected to the terminal which is marked with the letter **N** or coloured **BLACK**.
- * The wire which is coloured **BROWN** must be connected to the terminal which is marked with the letter **L** or coloured **RED**.

Foreword

Thank you very much for your purchase of the Sharp Interface Unit. Please read this instruction manual carefully before connecting this unit to the central processor (MZ-80K) and its peripheral units. We hope that you will make full, longstanding use of it.

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What is an Interface Unit ?

The unit has buffer store function, by which signals transmitted along the bus line from the MZ-80K are received and also data is output to various interface cards.

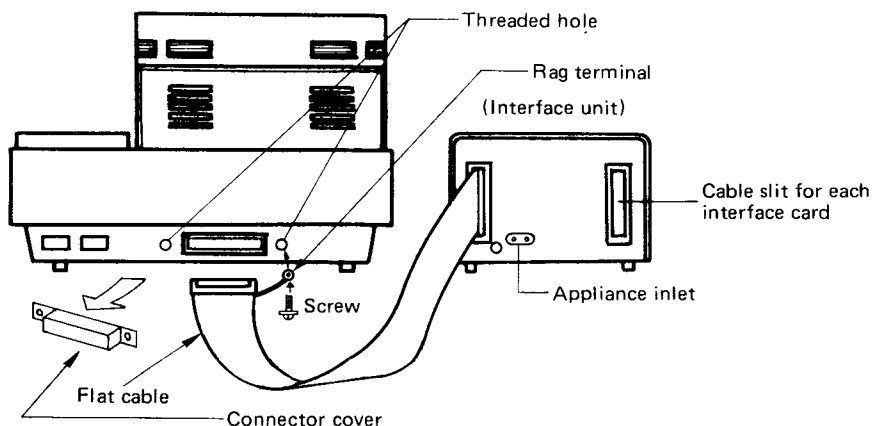
It consists of a mother board and a power supply unit for output +5V D.C.

The mother board is provided with 5 connectors into which interface cards are inserted. Bus lines are connected in parallel to each connector. Thus each peripheral is coupled to the central processor MZ-80K via this interface unit for the necessary control signals and data.

How to Use

(1) Coupling to the MZ-80K

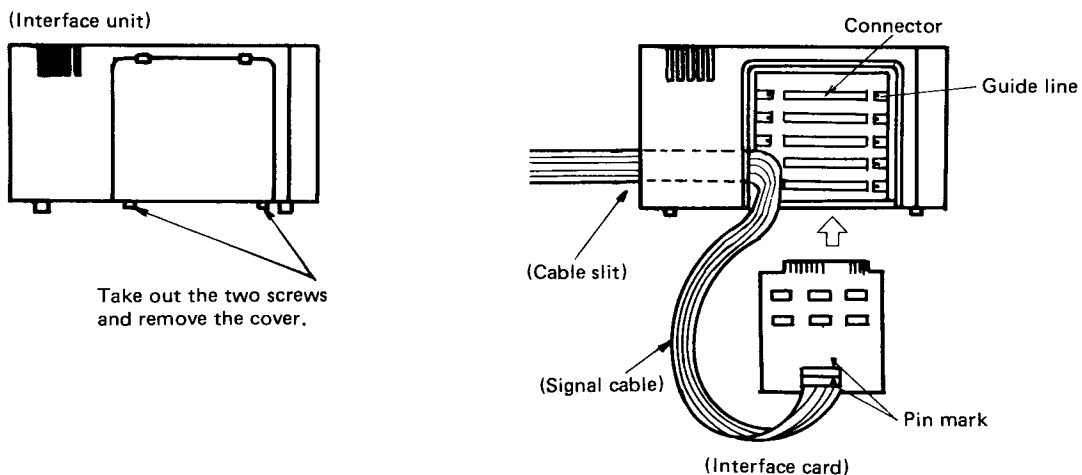
- * Be sure to power off the interface unit and the central processor before connecting.
- * Remove the connector cover provided at the rear of the MZ-80K.
- * Connect the flat cable coming from the rear of the interface unit to this connector. At this time, make sure that the pin mark (▼) on the connecting flat cable is on the right as viewed from the rear of the MZ-80K. Reverse connection may give damage to the central processor and the interface unit.
- * Fasten the rag terminal of the flat cable with the accessory screw to the right threaded hole of the rear of the MZ-80K.



Connecting with the MZ-80K

(2) Interface card insertion

- Before putting an interface card in, be sure to power off the interface unit and the central processor.
- Pass a signal cable through the interface card cable slit.
- Up to 5 sheets of interface card can be inserted. Push a card into any of the connectors along the guide line.
- Always match the pin mark (▼) on the interface card with the same mark (▼) on the connecting flat cable.
- After inserting the card, replace the cover by tightening the screws.
- For the method of inserting the interface card, refer to the sketch.
- Introduce a card with its parts-fitted face upward and its flat cable connecting part this side.
- Unlike normal interface cards, only one printer interface card can be used at a time in this unit. Two or more printer interface cards break the IC's because of the correspondence of port addresses.
- Standard optional interface cards (for printer, floppy disk, etc.), well examined, are satisfactory for normal uses. We, however, assume no responsibility for any trouble which is caused by these cards altered by the user. Other damages which are caused by universal interface cards (for general purpose) altered by the user are not covered by warranty.



(3) Auto reset

In the mother board of the interface unit is built an auto reset circuit which functions when power is turned on. (reset pulse: 100 ms MIN)

The inserted interface card is given an automatic resetting just when turning on the unit.

Specifications

Interface system	: Parallel interface
Signal	: TTL level (Refer to 'Wiring Diagram' for I/O signals)
Usable interface card	: Up to 5 sheets Printer interface card, Floppy Disk interface card, Colour display interface card, Universal interface card, etc.
IC's used	: SN74LS241N, SN74LS244N, SN74LS14N SN75451BP, SN75453BP
Reset	: Power on-reset Reset pulse of more than 100 ms
Power consumption	: 45W
Rated voltage	: Input; Local voltage 50Hz
Operating temperature	: 0 to 35°C
Storage temperature	: -15 to 60°C
Dimensions	: 205mm(W) x 320mm(D) x 130mm(H)
Weight	: 5kg

Advice on Use

- **Power supply cord**

Neither lay the power cord under a desk, chair, etc., nor put it in between them. A damaged power cord may cause injury to you. Also hold the plug to remove the power cord.

- **Power supply voltage**

Use a local supply voltage. Too high or low voltage may result in breakdown or reduce the performance.

- **Ventilation**

A ventilation hole is provided in the cabinet to prevent temperature rise in this unit. Choose a well-ventilated place. Do not put cloth on this unit or place it on a carpet or cushion, which may block up the hole.

- **Moisture and dust**

Otherwise, this unit is subject to any trouble.

- **High temperature**

Do not set up the unit in a place exposed to the direct rays of the sun or near a heating device. The cabinet and internal parts are highly sensitive to heat.

- **Water and foreign substances**

Never allow water, other liquid substances, and metals such as needle, pin, etc. to enter the unit. Particularly when water or other liquid foreign matter has entered the unit, unplug the power cord immediately.

- **Shock**

Precise electronic parts are employed in this unit. Do not let it fall or hit against something hard, which may cause trouble.

- **Prolonged standstill**

When this unit will not be used for a long time, be sure to disconnect the power cord out of the wall socket.

- **Stains**

Remove stains by using a soft cloth soaked with water or detergent. Never use volatile matter such as benzine, thinner, etc., nor insecticide, which may result in decoloration of the finish.

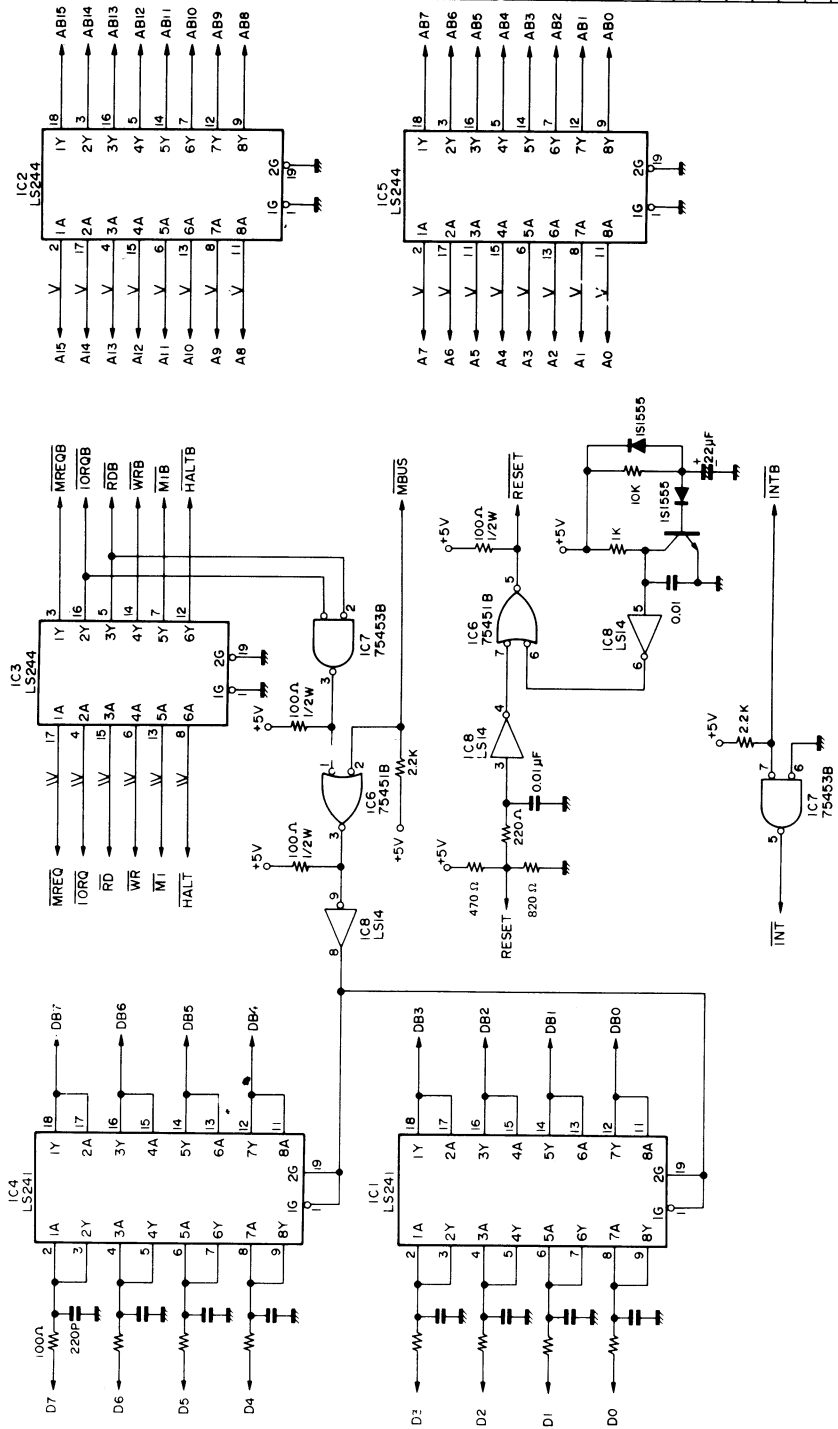
- **Installation conditions**

Do not operate this unit in a place exposed to extremely high or low temperature, abrupt temperature change, vibration, or dust. No object should be put on this unit.

- If the system does not function normally because of noises in the power supply line, get rid of them in either of the following methods.

1. Add a line filter or the like to remove the noises mixed in the supply line.
2. Place the signal cables (flat cable, etc.) of the system as far from the power cord or other electrical equipment as possible.

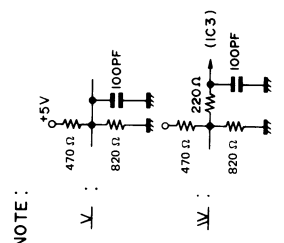
Wiring Diagram



I/O CONNECTOR DETAIL

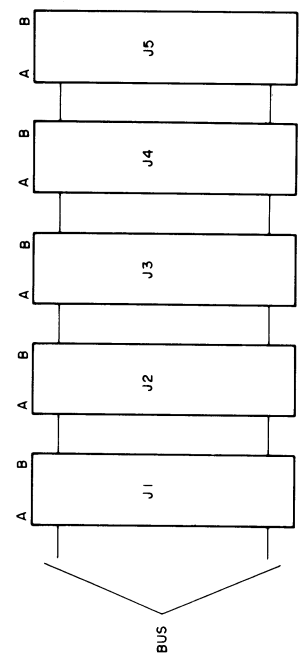
B		A	
DB7	1		
DB6	2		
DB5	3		
DB4	4		
DB3	5		
DB2	6		
DB0	7		
GND	8		
AB15	9		
AB14	10		
AB13	11		
AB12	12		
AB11	13		
AB10	14		
AB9	15		
AB8	16		
AB7	17		
AB6	18		
AB5	19		
AB4	20		
AB3	21		
AB2	22		
AB1	23		
AB0	24		
	25		
	26		
+5V	27		
+5V	28		
GND	29		
GND	30		

A PART'S SIDE



NOTE:

HOST SYSTEM-INTERFACE UNIT CONNECTOR		PERIPHERAL I/O CONNECTOR	
A15	1	GND	
A14	2	INT	
A13	3	GND	
A12	4	MREQ	
A11	5	GND	
A10	6	IORQ	
A9	7	GND	
A8	8	RD	
A7	9	GND	
A6	10	WR	
A5	11	GND	
A4	12	M1	
A3	13	GND	
A2	14	HALT	
A1	15	GND	
A0	16	RESET	
GND	17	GND	
D7	18	GND	
D6	19	GND	
D5	20	GND	
D4	21	GND	
D3	22	GND	
D2	23	GND	
D1	24	GND	
D0	25	GND	



PERIPHERAL I/O CONNECTOR

Mother Board Circuits

The circuit diagram subjects to change without prior notice.

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