

Explanation for Block Diagram

1. Power Supply Unit

A power supply unit consists of Lithium-Ion rechargeable battery(for main power supply), MnO₂-Li rechargeable battery(for backup) and DC/DC converter.

DC current is supplied to DC/DC converter by pressing ON key and converted 5V currency is supplied to all circuit.

2. Control Unit

A control unit consists of CPU, RESET, FROM, RAM and PIO.

Approximately after 100ms since power is supplied to the RESET circuit, the RESET is released and CPU controls the whole system by operation of a program in FROM.

3. Display Unit

Display unit consists of liquidcrystal display panel, backlight, LCD driver and power supply circuit.

LCD driver converts indication character into graphic pattern and shows it on the panel when display panel received indication command from the control unit.

4. Input/Output unit

I/O unit consists of keyboard, touch-panel, thermal printer and interface for the barcode reader.

When the keyboard is connected to PIO and a key is pressed, interruption is made to the CPU then does key matrix scan. The touch-panel employs resistance partial pressure system and detects coordinate position with A/D converter built into CPU.

A printer consists of motor control circuit and head drive circuit, it is controlled by a program. The barcode reader interface can scan data by connecting barcode scanner.

5. Communication Unit

The communication unit consists of RS-232C and infrared communication interface. Communication is made by connection of RS-232C interface and host computer with a cable.

Infrared interface uses infrared diode, and performs data communication with host computer by non-contact state.

PHT-16TP

