

A comprehensive range of standard peripheral equipment is available for use within the system, and where it is required non-standard and customer built devices may be connected either separately or in conjunction with standard equipment.

The standard peripheral devices currently available includes:

Input/Output Typewriters

P841-101 Normal ASR typewriter including paper tape reader/punch, current loop interface.

P841-105 The same as P841-001 but with V24 interface.

P842-001 PER3100 Matrix printer with keyboard, V24 interface.

P842-002 PER3100 Matrix printer with keyboard, current loop interface.

Punched Tape Equipment

P801-001 Punched Tape Reader, 333 char per sec.

P802-001 Punched Tape Reader, 600 char per sec.

P803-001 Tape Punch, 75 char per sec.

Card Reader

P806-102 Punched card reader, 300 cards per minute.

Line Printers

P809-002 Matrix line printer, 200 lines per minute, 132 col.

P811-001 Line printer, 245 lines per minute, 132 col.

P812-001 Line printer, 670 lines per minute, 132 col.

P842-003 PER3100 Matrix printer without keyboard, V24 interface.

P842-004 PER3100 Matrix printer without keyboard, current loop interface.

Cassette Tape Equipment

P833-001 Cassette tape drive unit, 7.5 ips, 800 bpi.

Magnetic Tape Equipment

P831-002 Magnetic tape drive, 25 ips, 800 bpi, 9-track.

P831-004 Magnetic tape drive, 45 ips, 800 bpi, 9-track.

P831-006 Magnetic tape drive, 37.5 ips, 1600 bpi, 9-track.

Magnetic disc equipment

P824-002 Moving head disc drive, 2.7M bytes

P825-007 Moving head disc drive, 40M bytes

Display Equipment
 P818-001 Display, current loop interface.
 P818-002 Display, V24 interface.

POWER SUPPLIES

The necessary power supplies for all the standard peripheral devices are produced by either self-contained power supply units or by a separate unit mounted together with the device in either the basic cabinet or an equipment shelf. Power supplies for the associated control unit are derived from the power supplies within the mounting boxes and equipment shelves or from the peripheral's separate power supply.

CONNECTION TO THE SYSTEM

The connection of standard peripheral devices to the system is carried out using a control unit and transfers will take place via the programmed or an input/output processor channel. Using either the programmed or an input/output processor channel, transfer rates up to the maximum operating speed of the device are possible and in normal circumstances these rates will always be maintained, the rate only being reduced when the servicing of the programmed or input/output processor channel concerned is slow.

CONTROL UNITS

Certain control units which are connected directly to the general purpose bus are of a multiple type (MCU), that is more than one control unit is mounted on a single printed circuit board. The configuration of MCU's and the availability of control units for connection to the system are:

Multiple Control Units (MCU's)

Multiple control units for use with PTR, PTP, V24 serial CU, LP and CR are available in the following configurations:

1. PTR/PTP/V24 serial CU.
2. PTR/PTP.
3. LP/CR.

CU's for all the devices mentioned above except the PTP and CR are also available as single control units.

Connection details for standard control units

Type Number	CU	Channel Connection		Int/Breaks	Remarks
		Prog. Chan.	I/O Proc.		
P801-040	PTR	x	o	1	separate CU
P840-001	PTR	x	o	2	multiple CU
	PTP	x	o		
P840-002	PTR	x	o	3	multiple CU
	PTP	x	o		
	V24	x	o		
P840-003	CR	o	x	2	multiple CU
	LP	o	x		
P810-040	LP	o	x	1	separate CU
	V24	x	o	1	separate CU
P845-040	V24	x	-	1	integrated on CPU
	V24	x	-	1	integrated on CPU
P831-040	MT	o	x	1	CU for 4 drives
P824-040	Disc	-	x	1	CU for 2 drives
P825-040	Disc 40 Mb	-	x	1	CU for 2 drives
P833-152	Cass Tape	x	x	1	CU for 3 drives
P837-001	DIOD 2 words	o	o	1	
P837-002	DIOD 4 words	o	o	2	
P847-060	SLCU2S	x	x	2	
	SLCU4	x	x	4	
P846-060	ALCU2	x	x	2	
P846-070	ALCU4	x	x	4	
P845-060	AMA8A	x	x	2	
P845-070	AMA8C	x	x	2	
P844-060	AMA16	x	-	1	
P844-110	V28CM	x	-	1	

Note: o means that connection to the channel is possible but not supported by standard software.

x connection supported by standard software.

- connection not possible to the channel.

The connection of non-standard devices to the system must also be made via a control unit and standard boards are available on which the customer may assemble his own control units. Boards are available without any logic circuits (printed circuit boarding) or with standard address and function decode logic and interrupt encoding already mounted and connected (General Purpose Cards).

INPUT/OUTPUT TYPEWRITERS

P841-101 Typewriter

Figure 17.1 shows the P841 typewriter.

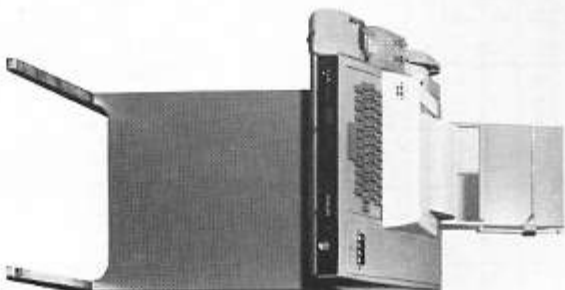


Figure 17.1

The P841-101 is a normal duty typewriter (ASR33) with attached paper tape reader/punch equipment. All the facilities operate at a maximum transfer speed of 10 characters per second, and may be operated on or off line to the system, switching being carried out at the typewriter.

Connection to the System

Connection to the system is with current loop interface.

17-4

Main Controls

Mode Switch - A three position switch mounted on the front of the typewriter, used to control the mode of operation of the typewriter.

OFF Typewriter switched OFF.
LOCAL Typewriter and paper tape equipment are operative but are not connected to the system.
LINE Typewriter and paper tape equipment are operative and connected to the system.

Paper Tape Reader Switch - A three position switch mounted on the top of the paper tape reader.

START Paper tape reader is started manually if the Mode Switch is in either the **LINE** or **LOCAL** position.

NEUTRAL Paper tape reader is operative and may be started or stopped by the system if the Mode Switch is in the **LINE** position.

STOP Paper tape reader is stopped manually by pressing the switch towards the free position.

FREE The paper feed is freed and the tape may be repositioned in the reader without completely releasing it from the mechanism.

Paper Tape Punch Controls - Four individual push button controls mounted on the top of the punch.

ON The punch is started manually if the Mode switch is in either the **LINE** or **LOCAL** position.

OFF The punch is stopped manually.

Note. The punch may be started and stopped by the system if the mode switch is in the **LINE** position.

REL The tape is released and may be threaded through the punch as required.

BS The tape is back spaced one character each time the button is depressed. This facility should only be used when the punch is operating **LOCAL** and is stopped.

Basic Specifications

Operating Speed	- 10 characters per second.
Size	- Width 560 mm, Height 1140 mm, Depth 470 mm.
Weight	- 25 Kilograms.
Paper Width	- 216 mm.
Power	- 300 V.A.

17-5

Operating Temperature - 0 - 43°C.
Relative Humidity - 20 - 80%

P841-105 Typewriter

This typewriter is the same as the P841-101 but with V24 interface. It may be connected to the integrated V24 control unit or the multiple control unit, or asynchronous Data Communication control units.

P842-001 PER3100 Matrix Printer

Figure 17.2 shows the P842-001 matrix printer and keyboard with V24 interface.

The P842-001 matrix printer and keyboard offers the same basis facilities as the typewriter without attached paper tape equipment. It is capable of near silent operation at up to 50 characters per second and may use peg or friction fed paper of various widths, multiple copies being available when peg fed paper is used.



Figure 17.2

Line spacing of 1, 1½, or 2 normal lines and LOCAL/ON LINE/OFF operation are selectable at the printer. Various keyboard layouts and character sets are available, including the possibility of up to 7 special characters on option.

Connection to the System

Connection to the system may be via the programmed or input/output processor channel and is made via the V24 serial control unit.

In all cases the maximum printer speed is 50 characters per second although the actual speed of transfer will depend on the control unit, interfacing, and program being used. The available interface boards enable: transfer speeds of 100-9600 baud to be selected in specific steps. Where transfer rates of above 50 characters per second occur or in the case of certain special characters the controlling program must insert sufficient null characters to avoid the loss of data.

Main Controls

Power On/Off Switch - An external two position switch, used by the operator to switch the mains power to the printer On or Off.

Operational Switch - An external two position switch, used by the operator in certain cases to make the printer operable.

Continuous Line Feed Switch - An external spring loaded switch, which whilst depressed causes line feeding of the paper to occur continuously.

Apart from the mentioned switches internal links exist on the standard interface boards within the printer, for the selection of line speed and to enable an echo print facility if this is required.

Basic Specifications

Operating Speed

- Up to 50 characters per second.

Size

- Width 510 mm, height 170 mm, Depth 310 mm, without keyboard, 465 with keyboard.

Weight

- 20 Kilograms.

Paper Width

- 231.8 mm, 203.2 mm and 314.3 mm (perforation distance).

Fricion Fed

- 148 mm to 306.3 mm.

Power

- 100 VA Average.

Operating Temperature

- 10° - 40°C operating.

Relative Humidity

- 20 - 80% operating.

