Programmable Asynchronous Single Line Adapter

(PASLA)

PRODUCT DESCRIPTION

The Programmable Asynchronous Single Line Adapter (PASLA) provides an interface between a 103/202-type modem over switched network or leased lines and can accommodate local terminals matching RS232 specifications. PASLA utilizes the latest MOS-LSI technology for:

● High Reliability
● Low Power Consumption
● Lower Cost Per Line

Program control extends to key parameters such as character format, baud rate, and various line control functions, thus providing a high degree of built in flexibility.

OPERATIONAL CHARACTERISTICS

PASLA contains a variable timing source. Standard baud rates are in the range of 75 to 9600 baud, two of which may be selected at time of order. The two selected baud rates are program-controlled.

Full or Half Duplex mode of operation is selected at the time of order and is a strapping option in PASLA. Independent program control is exercised over character size, baud rate (one of two), parity, and stop bits. A false start-bit detection feature permits a timing delay before actual character timing commences on input from the modem. The double character buffers for transmit and receive allow a full character period for data acquisition.

High tolerance to bit distortion enables PASLA to operate in the presence of bit distortion up to 40 per cent.

PASLA can be mounted in any multiplexor bus slot and is complete on one 7-in. board. A cable is provided with PASLA. This cable connects the circuit board to the convenience panel of an Interdata System Cabinet.

For connection to a local terminal, an optional direct connect cable provides a link between the convenience panel and Interdata's video display terminal (M46-100, M46-101, M46-102 or M46-103).

As an added benefit, the PASLA is software compatible with Interdata's Programmable Asynchronous Line System (PALS).

A test capability is not provided with PASLA; however, it may be purchased separately. The test capability requires two Single Line Adapters, Test Program Number 06-127 (R01 or higher), and a 28-014 Test Connector.

ADDITIONAL FEATURES

Echoplex — Programmable feature to allow received data to be transmitted to the modem.

Transmit Line Break — A programmable feature that causes a SPACE to be transmitted to the modem.

False Start Bit Detect — Requires a SPACE condition to be present for ½ bit time before character assembly commences.

SPECIFICATIONS

Baud Rates — The selected baud rates are restricted to the binary multiples of each other and in the range 75-9600 band.

Character Format (Programmable) — 5, 6, 7, or 8 data bits

Parity (Programmable) — Odd, even or more

Stop Bits (Programmable) — 1 or 2

Modem Control (Programmable) --
Data Terminal Ready
Reverse Channel Transmit
Request to Send
Data Terminal Busy

Modem Status —
Clear to Send
Carrier
Ring
Reverse Channel Receive
Data Set Ready

Other Status —
Overflow
Parity Fail
Busy
Framing Error

Transmit Distortion — 3% measured at RS232C interface

Maximum Tolerable Receive Distortion — 40% (for a single bit) measured at RS232 interface

Power Requirements — 5 Volts DC @ 1.7 Amperes

Operating Environment —
0 to 50° C
10-90% relative humidity (no condensation)

Weight — 1.5 pounds (.75 Kg)

Dimensions — 7 in. x 15 in. (17.7 cm x 38.1 cm)

INTERDATA PRODUCT NUMBERS*

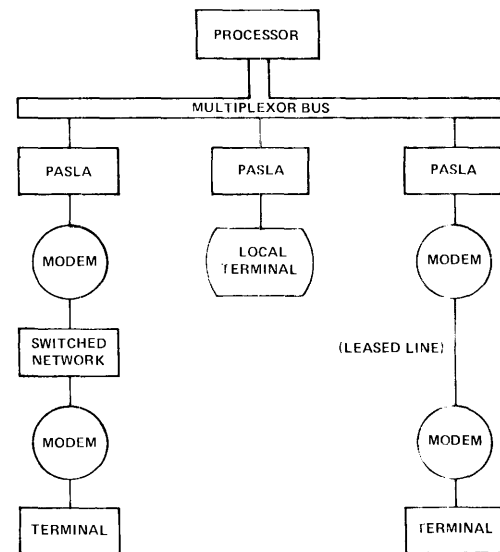**M47-102 Programmable Asynchronous Single Line Adapter.**
Provides an RS232C interface for a half or full duplex communications line, Bell Type 103/202 or equivalent, baud rate 75-9600, includes full data set control and status.

M10-054 Data Set Cable, 50 feet.

1. Two baud rates (binary multiples) and half or full duplex mode should be specified at time of order. In the absence of such specification, the PASLA will be strapped for half duplex mode, 300 and 1200 baud.

2. Various options and models are available on Western Electric or equivalent 103/202 Type Data Sets. The user should insure that the options or model he selected are compatible with the selected Interdata adapter and that he understands the programming ramifications, if any. The user may obtain information regarding the data set and network from his local telephone company representative or from the appropriate manuals supplied by the Bell System or the modem manufacturer.

3. There are various options and features available with terminals which may be interfaced to the PASLA. The user must verify that the model selected is compatible with the PASLA. In particular, many of the standard RS232 output lines are not available on terminals. In such cases, PASLA may be strapped to ignore these lines.

Programmable Asynchronous Single Line Adapter (PASLA)

GENERAL DESCRIPTION

The INTERDATA PROGRAMMABLE ASYNCHRONOUS SINGLE LINE ADAPTER (PASLA) provides an interface between a 103/202 type modem over the switched network or leased lines and can accommodate local terminals which match the RS232 specifications. The PASLA utilizes the latest MOS-LSI technology which results in the following benefits:

- *High Reliability*
- *Low Power Consumption*
- *Lower Cost Per Line*

Program control is provided over key parameters such as character format, baud rate and various line control functions, thus providing a high degree of built-in flexibility.

OPERATIONAL CHARACTERISTICS

The PASLA contains a variable timing source. Standard baud rates are in the range of 75 to 9600 baud, two of which may be selected at time of order. The two selected baud rates are program-controlled.

Full or Half Duplex mode of operation is selected at the time of order and is a strapping option in the PASLA. Independent program control is exercised over character size, baud rate (one of two), parity and stop bits. A "false start bit" detection feature permits a timing delay before actual character timing commences on input from the modem. The double character buffers for transmit and receive allow a full character period for data acquisition.

High tolerance to bit distortion enables the PASLA to operate in the presence of bit distortion up to 40%.

The PASLA may be mounted in any multiplexor bus slot and is complete on one 7" board. A cable is provided with the PASLA. This cable connects the circuit board to the convenience panel of an INTERDATA System Cabinet.

For connection to a local terminal an optional direct connect cable provides a connection between the convenience panel and INTERDATA's video display terminal (M46-100, M46-101, M46-102 or M46-103).

As an added benefit, the PASLA is software compatible with INTERDATA's Programmable Asynchronous Line System (PALS).

A test capability is not provided with the PASLA, however, may be purchased separately. The test capability requires 2 Single Line Adapters, a test program, number 06-127 (R01 or higher), and a 28-014 test connector.

SPECIFICATIONS

Baud Rates —
75-9600 — The selected baud rates are restricted to the binary multiples of each other and in the range 75-9600 band.

Character Format (Programmable) —
5, 6, 7 or 8 data bits

Parity (Programmable) —
Odd, Even or none

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5 Volts DC @ 1.7 Amperes

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0 to 50° C
10-90% relative humidity (no condensation)

Weight — 1.5 pounds

Dimensions — 7" x 15"

ADDITIONAL FEATURES

Echoplex —
Programmable feature to allow received data to be transmitted to the modem.

Transmit Line Break —
A programmable feature which causes a SPACE to be transmitted to the modem.

False Start Bit Detect —
Requires a SPACE condition to be present for ½ bit time before character assembly commences.

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