20 mA LA12X-AL INSTALLATION PROCEDURE

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# 20 mA LA12X-AL OPTION

### INTRODUCTION

The 20 mA loop option allows the LA120 to communicate directly with the computer up to a distance of 305m (1000 ft) without the use of a modem.

#### INSTALLATION

The 20 mA LA12X-AL option kit contains the following items.

Item No.	Quantity	Description	Part Number
1	1	20 mA External interface cable	BC05F
2	1	20 mA Assembly (logic board)	AD-7016059-0-0
3	1	20 mA Harness assembly	AD-7016186-0-0
4	2	Screw, hex head slotted #8-32, 0.38 long	9009988-08
5	2	Washer, lock, ext. tooth #8	9008072-00

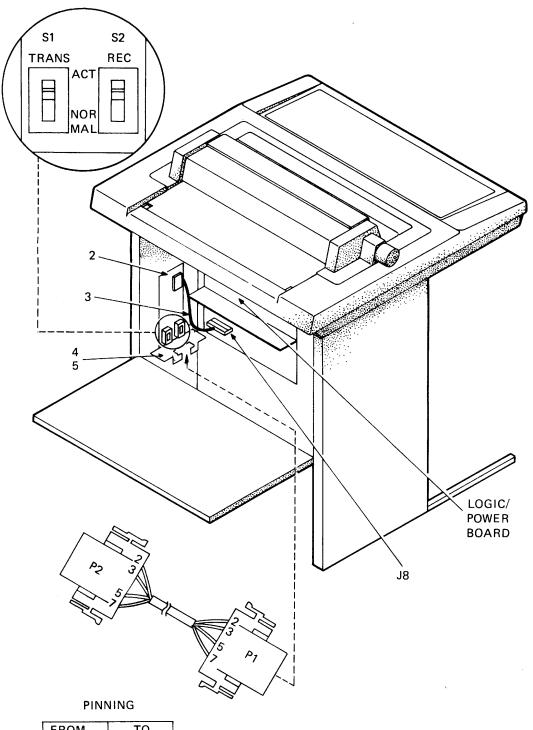
Install the 20 mA option as described in the following steps:

- Set the TRANS switch (following figure) on the 20 mA assembly to the NORMAL position. (If the LA120 must provide the current to the transmit line set the switch to the ACT position.)
- Set the REC switch to the NORMAL position. (If the LA120 must provide current on the receive line set switch to the ACT position.)
- 3. Lower the rear cabinet door on the LA120.
- Disconnect and remove any previously connected plug from J8 on logic/power board.

- 5. Slip the 20 mA assembly (2) up through the hole in the floor of the cabinet and secure with two hex head screws (4) and washers (5).
- 6. Connect the 20 mA harness assembly (3) between the jack on the 20 mA logic board and J8 on the logic/power board.
- 7. Place the LA120 in setup mode and select and store the following features:

Modem = 1 (FDX, no modem) Auto Disconnect = 0 (OFF)

Connect P1 of the 20 mA external interface cable to the connector on the bottom of the 20 mA logic board.



 FROM
 TO

 P1-2
 P2-3

 P1-3
 P2-2

 P1-5
 P2-7

 P1-7
 P2-5

MA-2320

#### **TEST AFTER INSTALLATION**

Once the LA120 has been connected to the system, you should send and receive data to verify the installation.

#### **ELECTRICAL CHARACTERS**

The electrical characteristics of the 20 mA current loop interface are described below.

### Transmitter

	Min	Max
Open circuit voltage	5.0 V	50 V
Voltage drop marking	_	4.0 V
Spacing current	_	2.0 mA
Marking current	20 mA	50 mA

## Receiver

	Min	Max
Voltage drop marking	_	2.5 V
Spacing current	_	3.0 mA
Marking current	15 mA	50 mA

#### Pin Assignments

- 1 Test Negative
- 2 Transmit -
- 3 Receive -
- 5 Transmit +
- 7 Receive +
- 8 Protective ground



MA-2323

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Order No. \_\_\_\_

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