

DIMENSION® PBX  
PRE-POWER INSPECTION  
AND  
APPLICATION OF POWER FOR SMDR

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1. GENERAL

- 1.1 Provide a visual inspection of the SMDR cabinet and its peripheral equipments.
- 1.2 Provide a power-up sequence and power supply check for SMDR.
- 1.3 Provide a preparatory check list for the SMDR peripheral equipments.
- 1.4 Set the Clock Display Panel for correct time and date.
- 1.5 Thread and load 9-track tape to tape transport.
- 1.6 When customer provided output device (peripheral equipment) is used, the Telco shall provide power up and testing information for the installer.

2. RECORD

- 2.1 Form SD-97-1313 is required for recording the results of this test.

3. TOOL

- 3.1 1 - ITE 5632 Digital Voltmeter (or KS-20599 L4 or equivalent)  
or  
ITE 5250  
or  
ITE 5356

PRIVATE

THE INFORMATION CONTAINED HEREIN SHOULD NOT BE DISCLOSED TO UNAUTHORIZED PERSONS. IT IS MEANT SOLELY FOR USE BY AUTHORIZED BELL SYSTEM EMPLOYEES.

4. DOCUMENT

- 4.1 SD-1E449-01  
CD-1E449-01  
COD - Customer Order Document
- 4.2 Tape Punch Version -  
FACIT 4070 Instruction Book (or equivalent)
- 4.3 Paper Print Version -  
BSP 574-500-200, 43 Basic Teleprinter Installation and Removal Manual 372, the 43 Teleprinter, Basic RO.
- 4.4 9-Track Magnetic Tape Version -  
Kennedy 9800 Tape Drive Operation and Maintenance Manual.  
Kennedy 9217 Tape Formatter Operation and Maintenance Manual.

5. VISUAL INSPECTION

- 5.1 Visually inspect SMDR cabinet and equipment for loose or unconnected wires and cables, bent or broken parts, and loose cable clamps.
- 5.2 Utilizing the System Configuration Layout of job COD, verify that SMDR carrier is equipped with proper circuit packs and all the circuit packs are properly seated in their assigned locations.
- 5.3 Verify that all fuse holders are equipped with proper fuses.
- 5.4 Visually inspect the cabinet for dents, scratches or other damage.
- 5.5 Verify that all cabling among Dimension PBX, SMDR carrier and the peripheral equipment are properly installed and connected as required per the associated section in Handbook 282.
- 5.6 For the 9-Track SMDR, verify that the following internal cablings in the SMDR cabinet are connected properly:

FROM		TO	
Type	Conn.	Type	Plug
Control Carrier	CD01	Clock Disp.	CLK 1
Control Carrier	CD02	Control PNL	DSP 1
Control Carrier	CD03	Control PNL	DSP 2
Control Carrier	CD04 *	Control PNL	DSP 3 *
Control Carrier	Form 1	Kenn. Formatter	P1
Control Carrier	Form 4	Kenn. Formatter	P4

\* SMDR Type II only.

- 5.7 Verify that the SMDR system grounds are connected properly as follows:

5.7.1 When the SMDR (direct output version) is to be installed in the same equipment room with the Dimension PBX, the following rules shall apply:

- A. If either the SMDR cabinet or the peripheral device (or both) are not powered from the same AC source as the PBX, then this equipment must be located at least 6 feet from each other and associated PBX equipment. A separate ground connection for the SMDR is not required.
- B. If the SMDR cabinet and the peripheral device are powered from the same AC source as the PBX, then there is no distance restriction. However, the SMDR should not make contact with incidental grounds just as is required for PBX cabinets. A separate ground connection for the SMDR, is not required.

When the SMDR is not located in the same equipment room as the PBX, no separate ground connection is required.

5.7.2 When the SMDR (9-Track Version) is to be installed in the same equipment room with the Dimension PBX, it must be powered from the same AC source as the PBX. A separate ground connection for the SMDR is not required. However, the SMDR should not make contact with incidental grounds just as is required for PBX cabinets.

When the SMDR is not located in the same equipment room as the PBX, no separate ground connection is required.

## 6. PREPARATION OF SMDR PERIPHERAL EQUIPMENT

### 6.1 FACIT 4070 - Tape Punch

- 6.1.1 Installed should familiarize the FACIT 4070 instruction handbook which contains general instruction on how to operate the tape punch.
- 6.1.2 Load tape and turn on power per Inserting Tape Instruction of the FACIT 4070 instruction handbook.
- 6.1.3 When LC374 is used in the SMDR, set band rate switch to 300 by closing switch positions 1, 4 and 7 of SW1 switch. Switch positions are closed by depressing the rocker toward the position number.
- 6.1.4 At this point, the tape punch is ready to receive data. However, it is recommended to leave power off on the tape punch when it is not used during installation period.

### 6.2 Teletype Model 4310 AAC Teleprinter (RO)

- 6.2.1 Prepare the 4310 AAC teleprinter per teletype instruction.
- 6.2.2 Install paper also per teletype instruction.

- 6.2.3 Set SPB5 option switch in the teleprinter, if it is not done, for 30 characters/second and ignore parity by selecting switch position 1 to ON and switch positions 2 through 4 to OFF.
- 6.2.4 When LC 374 is used in the SMDR, set band rate switch to 300 by closing switch positions 1, 4 and 7 of SW1 switch. Switch positions are closed by depressing the rocker toward the position number.
- 6.2.5 Turn on power to teleprinter by depressing upper half of ON/OFF switch.
- 6.2.6 Verify that DATA lamp is on.
- 6.2.7 The teleprinter is ready to receive data. However, it is recommended to leave power off on the teleprinter when it is not in use during installation period.

6.3 Customer Provided Output Device

- 6.3.1 Installation and test procedure for the customer provided output device (printer or magnetic cartridge tape recorder) should be done by the customer.
- 6.3.2 Customer provided output device should meet the following requirement:

- A. Standard EIA RS232 C interface unit using 10-Bit ACS II encoded characters with EVEN parity (1 start bit, 7 bits/character and 1 stop bit).
- B. The pin assignments used by SMDR for connectors SX01 and SX02 are given below:

<u>Conn. Term</u>	<u>SMDR Design</u>	<u>EIA CKT Design</u>	<u>Definition</u>
1 *	GRD	AA	Protective Ground
3	DTOUT-1 or (DTOUT-2)	BB	Receive Data
7	GRD	AB	Signal Ground

\* For SX01 only.

- C. The pin assignments used by SMDR for connector SX03 are given below:

<u>Conn. Term</u>	<u>SMDR Design</u>	<u>EIA CKT Design</u>	<u>Definition</u>
2	DTOUT-2	BA	Transmit Data
7	GRD	AB	Signal Ground

- D. LC63 provides 300 baud rates for the SMDR output data.
- E. LC374 provides 4 optional band rates for the SMDR output data. These baud rates are selected on DIP switch SW1 as shown in the table below. LC374 is shipped with 300 baud rate option.

<u>Baud Rate</u>	<u>Close SW1 Switch Position</u>
300	1, 4, 7
600	2, 4, 7
1200	3, 4, 7
2400	3, 5, 7
4800	3, 5, 6

6.4 SMDR 9-Track (Kennedy 9800 and Kennedy 9217) Cabinet

- 6.4.1 Verify that the 207B power supply AC power switch is off.
- 6.4.2 Connect the cabinet AC power cord to its dedicated 117 volt AC utility receptacle.
- 6.4.3 Turn on the power on the tape drive. The power switch is located at the lower left hand corner of the tape deck (rocker switch to right = on and to left = off).

7. APPLICATION OF POWER ON 207B POWER UNIT

- 7.1 At the 207B power unit, turn on the AC power switch.
- 7.2 Disregard any printouts at the printer.
- 7.3 Using an ITE-5632 Digital Voltmeter, measure and record all DC outputs. Expected results are shown below:

<u>Terminal Strip TBI of 207B Power Supply</u>	<u>Voltage Limits</u>
+5.1v	4.95 to 5.25v
+12v	11.40 to 12.60v
-24v	-21.12 to -26.88v

8. SET CLOCK DISPLAY PANEL

- 8.1 Set Correct Time
  - 8.1.1 Turn DISPLAY switch to TIME.
  - 8.1.2 Verify that a time is shown on the Clock Display Panel.
  - 8.1.3 Depress the HR switch to set the correct hour and the MIN switch to set the correct minute (Note: It is a 24 hour clock).

## 8.2 Set Correct Date

8.2.1 Turn DISPLAY switch to DATE.

8.2.2 Verify that the Clock Display Panel shows a date. If an incorrect date is shown, go to next step.

8.2.3 Depress DATE SET switch for correct month and then for correct date (Note: February has 28 or 29 days).

## 9. INSTALL NEW 9-TRACK TAPE PROCEDURE

9.1 Raise the latch of the quick release hub; place the write-enable ring on the back side of the reel of tape; and place the reel of tape on the supply hub.

9.2 Hold the reel flush against the butt flange and secure to pressing the quick release hub down.

9.3 The "Write Enable" lamp should light.

9.4 Thread tape onto take-up reel as shown in diagram inside the dust cover on tape transport or as shown in Figure 1.

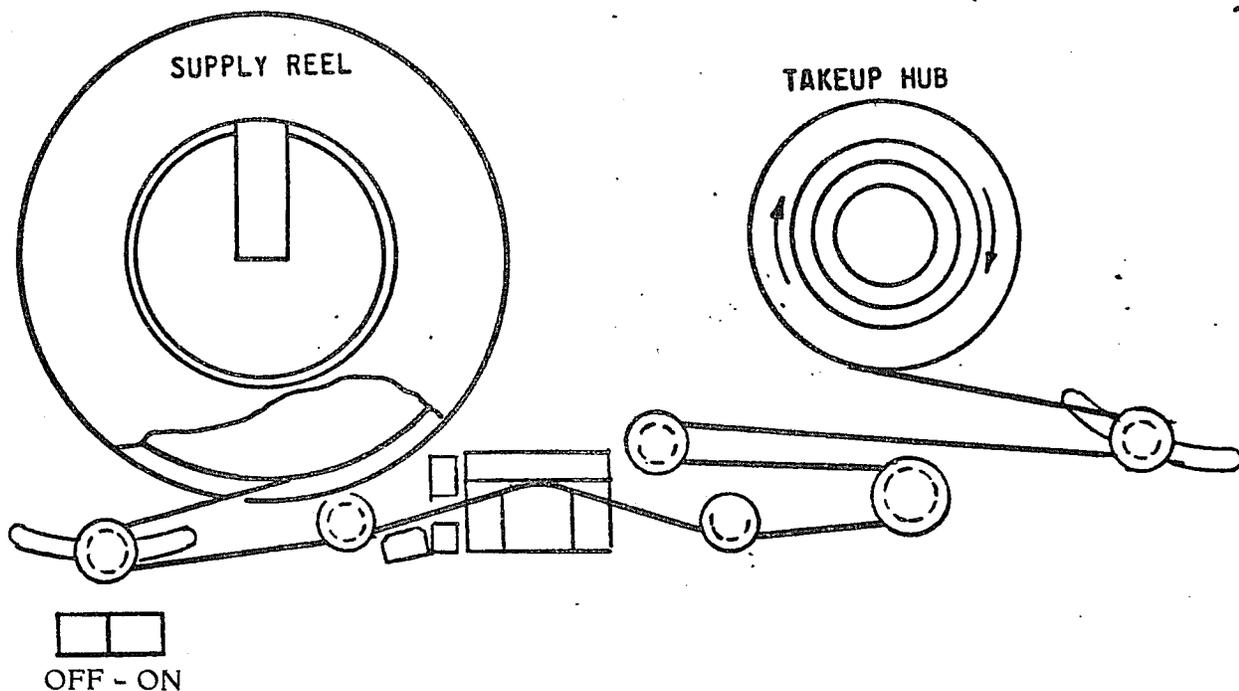


FIGURE 1

- 9.5 Close dust cover.
- 9.6 Depress "Load" button on the tape drive.
- 9.7 "Load" lamp and tape advance to "Load Point" and halt. If the "Load Point" marker (an aluminum strip) is already past the sensor, the tape will continue to move to the right; under this condition, depress the "Rewind" button and the tape will rewind to the "Load Point" and halt.
- 9.8 Depress "On Line" button on the tape drive; wait for "Read Status" and "On-Line" lamps to light.
- 9.9 Depress "System On Line" and then "Dump Memory" buttons on the SMDR control panel.
- 9.10 Tape advance, "Read Status" lamp extinguished, and "Write Status" lamp lights.
- 9.11 The 9-Track SMDR is ready to be tested.

#### 10. UNLOAD TAPE PROCEDURE (INFORMATION ONLY)

- 10.1 Depress the "Tape Unload" button on the SMDR control panel.
- 10.2 The "Write Status" lamp extinguishes.
- 10.3 The "Rewind" lamp lights as tape rewinds - the tape rewinds until it reaches the "Beginning of Tape" marker (Load Point) and halts.
- 10.4 The "Rewind" lamp extinguishes and the "Read Status" lamp lights.
- 10.5 Depress the "On-Line" button on the tape drive.
- 10.6 The "Read Status" lamp and the "On-Line" lamp extinguish.
- 10.7 Depress the "Rewind" button.
- 10.8 The tape completely rewinds on the reel.

No arrows shown due  
to major revision.

Reason for reissue:  
Deleted information for  
TI Model 755 Printer and  
added information for  
TTY 4310 AAC Teleprinter.

Manager, PBX PECC