## **Thermal Printer**

The cardiograph uses a thermal print head to record waveforms and label the ECG report. The paper supplied with the cardiograph is a thermal paper designed to work with the print head. The paper drawer accommodates both A and A4 size paper. A separate supplied paper shim is required for A4 paper use.

Philips guarantees the performance of the cardiograph only when used with Philips supplies, accessories, and paper that meets or exceeds Philips specifications.

## **Touch Screen Display**

The cardiograph features a 15-inch touch screen color LCD display. Never touch the screen with sharp objects or you may damage the touch screen surface.

## **Batteries**

The PageWriter Touch is powered by two rechargeable Lithium Ion batteries (Philips part number 989803129131). The cardiograph is intended to be operated primarily on battery power. Proper care of the batteries will ensure a long life. For more details see the Care and Maintenance chapter in the *PageWriter Touch Cardiograph Instructions for Use, Edition 7*, included on this Service Documentation CD.

# **Patient Interface Module (PIM)**

The Patient Interface Module (PIM) is a hand-held device that contains all of the cardiograph's waveform data acquisition electronics. The PIM connects to the patient data cable and to the lead wires attached to the patient. The PIM is available in a standard 12-lead, or an extended 16-lead model. The PIM has an Action button that is used to take ECG Snapshots from the bedside.

The lead wires and the patient data cable are shipped fully connected to the PIM. For details about connecting the lead wires to the PIM, see the *PageWriter Touch Cardiograph Instructions for Use, Edition 7.* 



Figure 1-4 Standard 12-Lead Patient Interface Module (PIM) Components

- **B** Chest lead wires
- **D** Patient data cable (connects to RJ-11 receptacle on right side of cardiograph)



Figure 1-5 16-Lead Patient Interface Module (PIM) Components

- **A** Action button **C** Limb and optional extended lead wires
- **B** Chest lead wires
- **D** Patient data cable (connects to RJ-11 receptacle on right side of cardiograph)

# Configuring the 16-Lead PIM (software version C.01.02 and higher only)

The optional 16-lead PIM may be configured to support three different 15 and 16-lead options for adult and pediatric application. The 16-lead PIM is shipped with the optional extended leads connected to the PIM. The available 15 and 16-lead options are listed in Table 1-1, "15 and 16-Lead PIM Configuration Options," on page 1-17.

Lead Option	Standard 12-leads plus extended leads (AAMI/IEC)	Lead Placement
Pediatric (15 leads)	V3R (C3R), V4R (C4R), V7 (C7)	V1/C1 V3R/C3R V4R/V4R V4R/V4R V4C4 V5/C5 V6/C6 RA/R RLIN LL/F V7/C7
Posterior (15 leads)	V7 (C7), V8 (C8), V9 (C9)	RA/R RL/N LL/F V1/C1 V3/C3 V4/C4 V5/C5 V6/C6 V6/C6
Balanced (16 leads)	V3R (C3R), V4R (C4R), V7 (C7), V8 (C8)	V1/C1 V3R/C3R V4R/V4R V4R/V4R V4/C4 V5/C5 V6/C6 RA/R RA/R LA/L V5/C5 V6/C6

 Table 1-1
 15 and 16-Lead PIM Configuration Options

#### To configure the 16-lead PIM:

**1** Press the On/Standby button to put the cardiograph into Standby.

**CAUTION** Always put the cardiograph in Standby before replacing the Patient Interface Module (PIM). Do not change the PIM while the cardiograph is in active use.

2 Disconnect the PIM from the cardiograph, if necessary.



**3** Remove the PIM cover by removing the screw on the cover housing (using a Phillips head screwdriver).



4 The interior of the PIM is color coded and labeled to identify the lead connections. The optional 16-lead connectors are labeled **A1-A4**.



5 The slots A1-A4 may be configured as described in Table 1-2 to support the available 15 and 16-lead options. Insert the designated lead into the correct connector. If no lead is inserted into a connector, insert the shorting plug (provided in the lead kit) into the connector slot. Do not leave the connector empty.

Table 1 2	Configuring	Ontional	1E and	161000		
Table I-Z	Conliguring	Optional	i s anu	IO-Leau	FILLO	puons

Lead Option	A1	A2	A3	A4
Pediatric	V4R/C4R	V3R/C3R	V7/C7	Insert plug (no lead inserted)
Posterior	Insert plug (no lead inserted)	V9/C9	V7/C7	V8/C8
Balanced	V4R/C4R	V3R/C3R	V7/C7	V8/C8

NOTE To configure the 16-lead PIM for standard 12 leads, insert shorting plugs into slots A1-A4.

#### Figure 1-6 Shorting Plug (included in Lead Kit)



6 Attach the appropriate color-coded identification clip (included in the lead kit) to the lead.



7 Attach the small color clip (included in the lead kit) near the connector end of the lead wire.



- 8 Ensure that each lead is firmly connected to the PIM.
- **9** Reattach the PIM cover.

## Connecting the PIM to the Cardiograph

#### To connect the PIM to the cardiograph:

• Connect the patient data cable to the RJ-11 receptacle on the right side of the cardiograph.



WARNING	To ensure safety and prevent damage to the system, ONLY connect the patient data cable to the correct <b>RJ-11</b> receptacle on the right side of the cardiograph.
WARNING	Do not connect the patient data cable into the LAN port or into the optional modem card connector.
CAUTION	Always put the cardiograph in Standby before replacing the Patient Interface Module (PIM). Do not change the PIM while the cardiograph is in active use.

# Placing the PIM in the Cardiograph Cradle

Ensure that the PIM is properly inserted into the PIM cradle on the front of the cardiograph with the lead wires facing down and the Action button facing up. Do not lower the touch screen if the lead wires are facing up. The touch screen may be damaged.

#### To place the **PIM** in the cradle:

Place the PIM in the cradle with the lead wires facing down and the Action button facing up.

#### Figure 1-7 Placing the PIM in the cardiograph cradle



![](_page_7_Figure_9.jpeg)