

Replacing the DC Power Supply

This procedure outlines the steps necessary to replace the DC power supply in the ACQUITY PDA Detector^a. This power supply provides the +5V, +15V, -15V and +24V power used in the detector.

NOTE: Except where noted, the term “ACQUITY PDA Detector” refers to two detectors:

- ACQUITY UPLC Photodiode Array (PDA) Detector
- ACQUITY UPLC PDA Extended Wavelength (e λ , or eLambda) Detector

Parts Required

Table 1: Parts Required

Part Number	Description	Quantity
700002553	DC Power Supply Kit	1

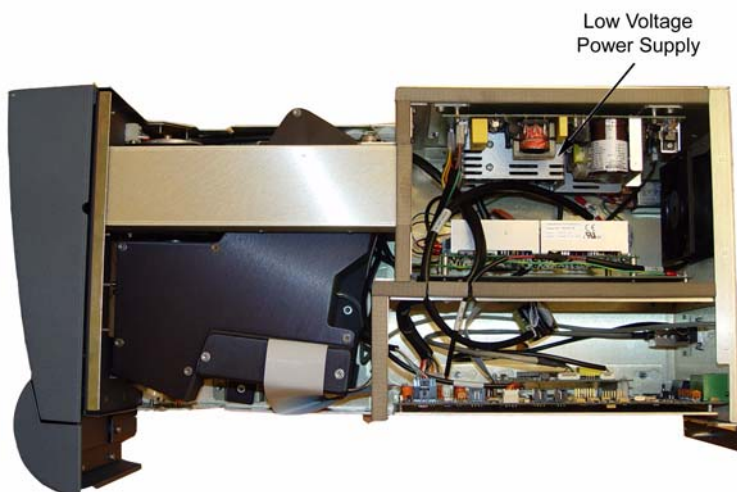


Figure 1 - Location of DC Power Supply Assembly

NOTE: Some of the illustrations show only one type of PDA detector. However, the physical differences between the PDA detector and PDA e λ detector are insignificant for this procedure.

Tools/Materials Required

- Flat-head screwdriver
- T10 Torx screwdriver
- Small Phillips screwdriver
- Medium Phillips screwdriver

a. To be certain you have the latest version of this procedure, please visit the Waters Support Center at Waters.com.

Procedure

1. Shut off power to the unit.
2. Remove the filler panel by removing two T20 Torx screws on the rear of the chassis and sliding the filler panel off of the two pins.
3. Remove the detector's cover by removing two T20 Torx screws on each side of the unit.
4. Loosen the captive screw securing the plenum and place it aside.

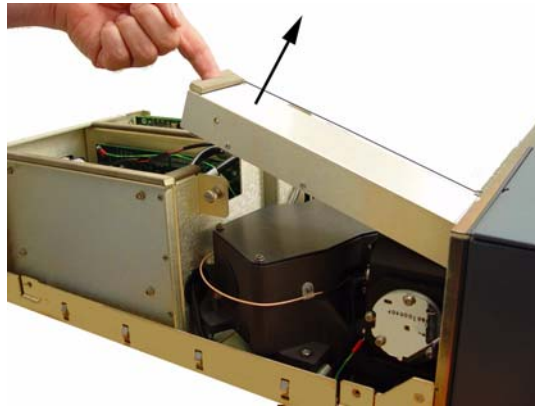


Figure 2 - Removing Plenum

5. Remove the four DC power supply bracket screws using the T10 Torx screwdriver.

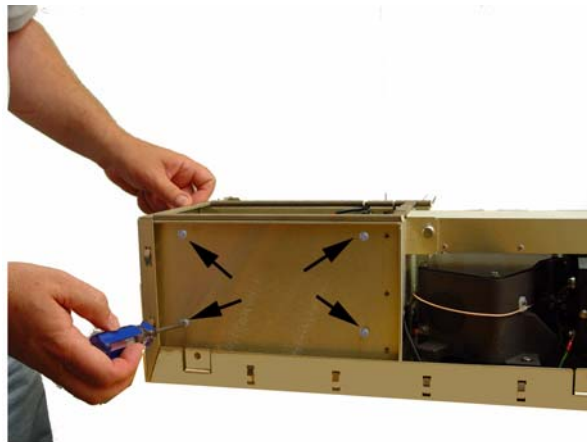


Figure 3 - Removing LVPS Bracket Screws

6. Remove the cables connected to J1, J3 and the small cable connected to the bottom right-hand corner of the DC power supply.
7. Remove four T10 Torx screws securing the low-voltage power supply to the two brackets on either side of the power supply pcb.

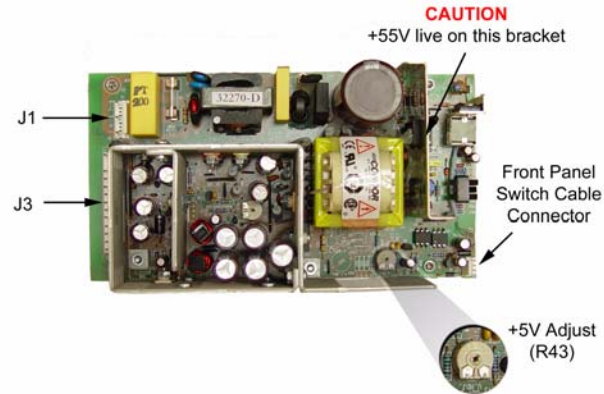


Figure 4 - Location of Connectors and R43 (+5V Adjust)

8. Install the new DC power supply by reversing steps 6 through 4.
9. Apply power to the unit.
10. Check for +5V, +15V, -15V and +24V on the Personality card.

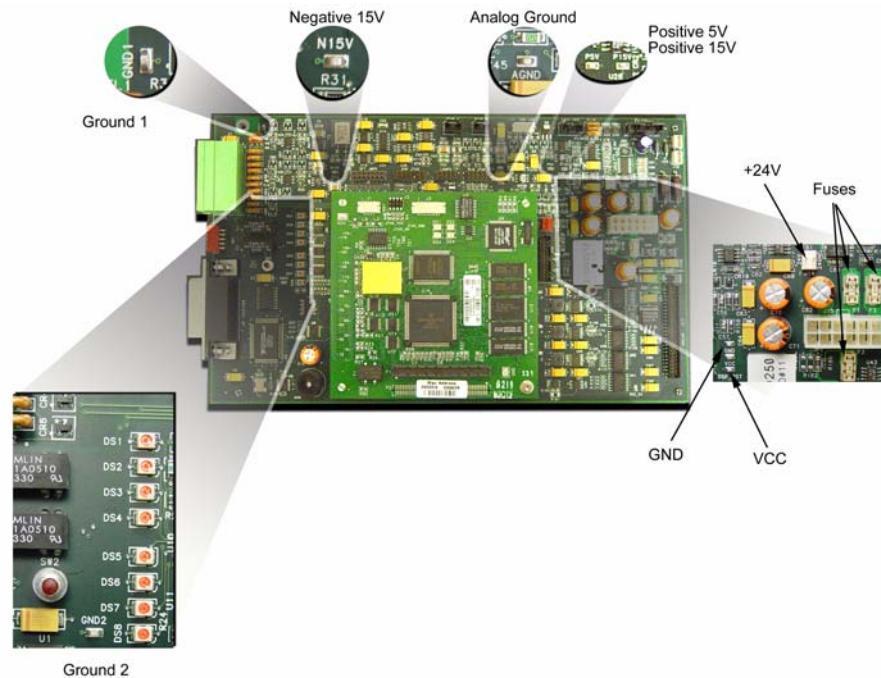


Figure 5 - Location of Voltage Test Points on Personality Card

11. Shut off power to the unit and replace the filler panel and cover.

Table 2: J1 Connector Pinout

Pin	Voltage	Wire Color
1	AC Ground	Green/Yellow
2	Empty	
3	AC Neutral	Blue
4	Empty	
5	AC Line	Brown

Table 3: J3 Connector Pinout

Pin	Voltage	Wire Color
1	+5 Vdc	Red
2	+5 Vdc	Red
3	+5 Vdc	Red
4	Common	Black
5	Common	Black
6	Common	Black
7	Common	Black
8	+24 Vdc	Orange
9	+24 Vdc	Orange
10	Empty	
11	-15 Vdc	Violet
12	KEY	
13	+15 Vdc	Yellow