

Hardware (Green)

1. Calibration Access Screws: These ten phillips head screws must be removed in order to lift the top plate and calibrate the unit. One screw is located underneath the calibration plate. Note that removing these screws voids the unit's warranty.

2. Purge Valve: This valve is for air pressure equilization.

3. Padlock Holes: When the unit is closed, a padlock can be placed through either hole to provide added security.

4. Handle: Provides unit portability and easy lifting.

5. Hinge Pins: By pulling out these two pins, the unit's lid may be removed.

6. Top Plate Handles: These two handles are for lifting up the unit's top plate once the calibration screws have been removed, revealing the unit's inner circuitry.

General Operation (Blue)

7. Power Switch: The unit's power switch. Press for two seconds to turn the unit on. Press for five seconds and then release to turn the unit off. Unit will shut off after 30 minutes of inactivity.

8. Display Backlight Switch: This switch engages the display's backlight. **9. Fuse Holder:** This houses the unit's 3AG 5A fuse required for general operation.

10. Resistance Ranges: The 601ES can measure 2 ohms, 20 ohms, 20 ohms, 2 Kohms, and 20 Kohms. The desired range can be selected by turning the rotary switch to the correlating position.

11. Voltage Ranges: The 601ES can measure voltage at 2V, 20V, 200V, and 600 VRMS. The desired range can be selected by turning the rotary switch to the correlating position.

12. Stray Current Button: To measure AC/DC current, connect input and output wires from the UUT to the far left 2 terminals (V). Connect to the UUT, then depress and hold the stray current button.

13. Display: The 601ES has a 4 1/2 digit LCD that is on a beveled hood for added visibility. A "LO BAT" and negative sign will be visible on the left side of the display when the unit's battery level is low. The right side of the display will indicate the unit of measure for your readings. Overrange readings will be indicated by ">>> OR" in the bottom right corner.

14. Signal Source Button: The function is used to verify DVM voltage and stray current measurements. Select the 2.0 V range, then press and hold the signal source button. The display should indicate approx. 0.0500V. Next, select the 2AMP range and then depress the signal source and stray current button at the same time. The display should indicate approx. 0.0050A.

15. Banana Jack Terminals: Used for test lead/probe connections. You can connect a cable set by inserting the black cable(s) into the white (LO) terminals, and the red cable(s) into the red (HI) terminals. You may also connect bare wires to these terminals by unscrewing the plastic cap, which then exposes a gold post that wires can be attached to.

16. 2 Wire/4 Wire Switch: This toggle switch will allow you to choose between 2 Wire and 4 Wire measurements. For 2 Wire measurements, flip switch into the up position and only use the VHI and VLO jacks for your leads. For 4 wire measurements, flip the switch into the down position and use all four jacks for your leads. Note that 4 Wire readings are significantly more accurate.

17. Chassis Ground Jack: This jack is connected to the meter's internal faraday cage, metal top plate, and the unit's bottom plate to provide an accessible earth ground connection.

18. Test Current Milliammeter: This is used to measure the test current coming from the unit. Select the desired resistance range to test, then press this button. The analog milliammeter will show the unit's test current for that range.

19. Zero Pot: Adjusts shorted resistance offset, such as with test leads. Should be used if user encounters unusual resistance.



20. Battery Cover Plate: This plate protects the unit's batteries. Remove the two screws to access. Note that (4) four rechargeable AA Energizer Ultimate Lithium (3000mAh) batteries are supplied with the unit and are the recommended replacement.

Identification (Red)

21. Serial Number Sticker: This sticker identifies the unit's serial number and should not be removed under any circumstance. The serial number is located below the barcode.

22. Calibration Plate: This sticker shows the date the unit was last calibrated at Amptec's facility. All units carry a 1-year calibration interval. One of the calibration access screws is beneath this plate. Removing this sticker voids your unit's warranty.