

For: Mettler Toledo AL, PL, and PL-S Series (1 Channel) Balances

Applicable Asset Models

- ✓ AL54
- ✓ AL104
- ✓ AL204
- ✓ PL303
- ✓ PL403
- ✓ PL3002
- ✓ PL4002
- ✓ PL83-2 (with optional standard RS232 intf)
- ✓ PL202-S (with optional standard RS232 intf)
- ✓ PL202-S2 (with optional standard RS232 intf)
- ✓ PL203-S (with optional standard RS232 intf)

Package Contents

- ✓ Element-D
- ✓ Power Supply
- ✓ Mounting Plate
- ✓ Connection Cable

Note: You may receive multiple types of cables if you are connecting Element-D's to different types of assets.

Safety Information



Review and abide by the safety information found in the Element-D and Mettler Toledo AL, PL, or PL-S series user manuals. Ensure compliance with your company safety best practices, which may include de-energizing equipment before working with electrical connections. Tidy connection cable to prevent tripping hazards.

Installation Instructions

Receiving the Shipment

1. If this is your first time setting up the Elemental Machines system, you will receive an email for your dashboard account verification. Save this email for when the devices arrive.
2. When devices are shipped, they will be added to your Elemental Insights™ Dashboard with default names.
3. When devices arrive, carefully remove the contents from the packaging. If any of the contents look damaged, please send a picture to help@elementalmachines.com.
4. Confirm the Element-D's in your package are labeled with the assets to which they are to connect. If the labels do not match the intended assets for connection, please contact help@elementalmachines.com.

Element-D Initial Power-up

5. Move the Element-D for the asset into a dashboard group on the Elemental Insights™ Dashboard. The device status on the dashboard will be listed as 'disconnected'.
6. Plug the Element-D in using the provided power supply.
7. If the device has not been preloaded with your company's Wi-Fi, complete Wi-Fi Connection outlined in 771-00010 Wi-Fi Connection Guide - Gateway GW2/3, Element-C/D.
 - a. 771-00010 is included with your Element-D as a printed copy. Digital versions of this are available in the Support section of the Elemental Insights™ Dashboard.

Attaching Connection Cable to Asset

8. Locate the DB9 data port on the asset (shown in Figure 1) to which the Element-D will connect.



Figure 1 Data port on asset

9. Plug the corresponding end of the Connection Cable into the data port on the asset.

Configuring Asset Menus

10. Press the highlighted **Menu** button to enter the systems settings menu.
11. Navigate to the Peripherals menu.
12. Continue through the menu options to select baud rate, bit/parity, stop bits, and handshake to the following conditions (Figure 2):
 - a. Baudrate: **bd 9600**
 - b. Bit/Parity: **8b – no**
 - c. Handshake: **HS off**
 - d. Stop Bits: **1 Stopbit**



Figure 2 Menu selections are circled in red

13. Exit the menu.

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Attaching Connection Cable to Element

14. Plug the USB end of the Connection Cable into the data port on the Element-D. The USB connector may be plugged into any USB port on the Element-D (Figure 3).



Figure 3 Data ports on Element-D

Positioning the Element-D

15. Determine where the Element-D should be placed to allow for power access and a tidy connection cable.
16. Securely position the Element-D in the chosen location. The Element-D has magnets which make it easily mountable to magnetic surfaces.
 - a. Note: If applicable, an adhesive metal mounting plate available from EM may be used.

Finalization

17. To send a weight measurement to the Elemental Insights™ Dashboard, press the PRINT button on the balance.
18. Confirm that the value appears on the dashboard. (The dashboard may only display two digits after the decimal point. However, transfer to any third party platforms will include the full value.).
19. If the dashboard does not display any value, check cable connection and menu settings. If data does not appear on the dashboard, power cycle the Element-D. Contact help@elementalmachines.com if problem persists.
20. Set up alert rules on the Elemental Insights™ Dashboard for the Element-D. Guidance on how to do so is available in the Support section of the dashboard.
21. Contact any third-party vendor for next steps regarding communication to the external platform (if applicable).