Manuals+ — User Manuals Simplified.

Element-D from Elemental Machines Installation Guide

Contents

Element-D from Elemental Machines

Product Information

- **Product Name:** Element-B Installation Guide
- **Models:** EB1, EB2
- **Compatible with:** Concoa Advantium 2 Manifold Alarm
- **Applicable** Concoa Advantium 2 Manifold Alarm Models: Advantium 2

Package Contents:

- Element-B (Qty 2)
- Connection Cable (Qty 1)
- Mounting Plate (Qty 2)

Safety Information:

- Review and abide by the safety information found in the Element-B and Concoa Advantium 2 Manifold Alarm user manuals.
- Tidy connection cable to prevent tripping hazards.

Product Usage 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 DashboardTM with default names. When you first log in you will see all your devices with a 'disconnected' status.
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. If you have ordered multiple Element-B's, ensure the Element-B being used is configured as Normally Closed (NC). This can be verified by checking the device label, the dashboard under 'Machine Model', or the packing list sent with your shipment.

Note: Element-B's can either be configured as Normally Closed (NC) or Normally Open (NO) by our team here at Elemental Machines. Different assets require different configurations. If you have ordered Element-B's for multiple assets, you may have a mix and need to be aware of attaching the correctly configured device to the correct asset.

Ensure there is an Elemental Machines Gateway set up in the vicinity of the Element-B.

- Depending on your location and application, your Gateway type may vary. If you have a tablet Gateway, brief setup instructions are given in Appendix 1: Gateway Setup below. If you have a Gateway Model GW2 or GW3, please follow the setup instructions in your Gateway, GW2 or GW3 User Manual.
- **Note:** 'Vicinity' is within wireless connection range. This is usually up to 30 meters but can depend on the lab's layout.

Attaching Connection Cable to Concoa Advantium 2 Manifold Alarm

6. Unplug the power cable from the Concoa Advantium 2 Manifold Alarm Box.
7. Open the manifold alarm by unscrewing the four screws on the back of the box.
8. Confirm that the jumpers J2 and J4 on the lower right side of the box are configured to Normally Closed (NC). That means that the jumper must be placed over the top two pins.
9. Locate SW2 on the left side of the box.
10. Configure the position of the Switches as follows:

Applicable White Multitron Incubator Shaker Models: Infors White Multitron

Package Contents

- Element-B Connection Cable

Safety Information

- Review and abide by the safety information found in the Element-B and White Multirun Incubator Shaker user manuals.
- Tidy connection cable to prevent tripping hazards.

Product Usage 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 mv verification. Save this email for when the devices arrive.
2. When devices are shipped, they will be added to your Elemental Insights Dashboard TM with default names. When you first log in you will see all your devices with a 'disconnected' status.
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. If you have ordered multiple Element-B's, ensure the Element-B being used is configured as Normally Closed

(NC). This can be verified by checking the device label, the dashboard under 'Machine Model', or the packing list sent with your shipment.

- Element-B's can either be configured as Normally Closed (NC) or Normally Open (NO) by our team here at Elemental Machines. Different assets require different configurations. If you have ordered Element-B's for multiple assets, you may have a mix and need to be aware of attaching the correctly configured device to the correct asset.
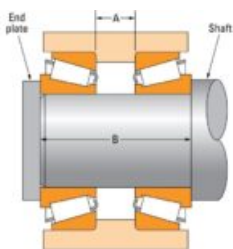
Elemental Machines Gateway Setup

1. Ensure there is an Elemental Machines Gateway set up in the vicinity of the Element-B.
   - Depending on your location and application, your Gateway type may vary. If you have a tablet Gateway, brief setup instructions are given in Appendix 1: Gateway Setup below. If you have a Gateway Model GW2 or GW3, please follow the setup instructions in your Gateway, GW2 or GW3 User Manual.
   - **Note:** 'Vicinity' is within wireless connection range. This is usually up to 30 meters but can depend on the lab's layout.

Attaching Connection Cable to White Multitron Incubator Shaker

6. Locate the Stereo Jack labeled EXTERNAL ALARM on the right side of the incubator. Make sure that the port is centered in the incubator cutout. If the port is off center, then it will not be possible to push the Stereo cable all the way into the port. The worst-case scenario is that the port may be partially obstructed by the incubator cover.
   - **Note:** Please contact Infors on how to open the cutout if the port is off center or obstructed, as shown in Figure 1 on the right. If this is the case, the stereo jack cable cannot be full inserted in the port and can report incorrect incubator status.

Figure 1:

Left: Location of the External Alarm on the incubator.
Top Right: External Alarm port is off center and bordering circumference of cutout. Bottom Right: External Alarm port partially obstructed by incubator cover.

Applicable Concoa Advantium 2 Manifold Alarm Models

- Advantium 2

Package Contents

- Element-B (Qty 2)
- Connection Cable (Qty 1)
- Mounting Plate (Qty 2)

Safety Information

Review and abide by the safety information found in the Element-B and Concoa Advantium 2 Manifold Alarm user manuals. 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. When you first log in you will see all your devices with a 'disconnected' status.
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. If you have ordered multiple Element-B's, ensure the Element-B being used is configured as Normally Closed (NC). This can be verified by checking the device label, the dashboard under 'Machine Model', or the packing list sent with your shipment.
   - Element-B's can either be configured as Normally Closed (NC) or Normally Open (NO) by our team here at Elemental Machines. Different assets require different configurations. If you have ordered Element-B's for multiple assets, you may have a mix and need to be aware of attaching the correctly configured device to the correct asset.
5. Ensure there is an Elemental Machines Gateway set up in the vicinity of the Element-B.
   - Depending on your location and application, your Gateway type may vary. If you have a tablet Gateway, brief setup instructions are given in Appendix 1: Gateway Setup below. If you have a Gateway Model GW2 or GW3, please follow the setup instructions in your Gateway, GW2 or GW3 User Manual
   - **Note:** 'Vicinity' is within wireless connection range. This is usually up to 30 meters but can depend on the lab's layout.

   Attaching Connection Cable to Concoa Advantium 2 Manifold Alarm
6. Unplug the power cable from the Concoa Advantium 2 Manifold Alarm Box.
7. Open the manifold alarm by unscrewing the four screws (shown in Figure 1 below) on the back of the box

8. Confirm that the jumpers J2 and J4 on the lower right side of the box are configured to Normally Closed (NC). That means that the jumper must be placed over the top two pins as shown in Figure 3.
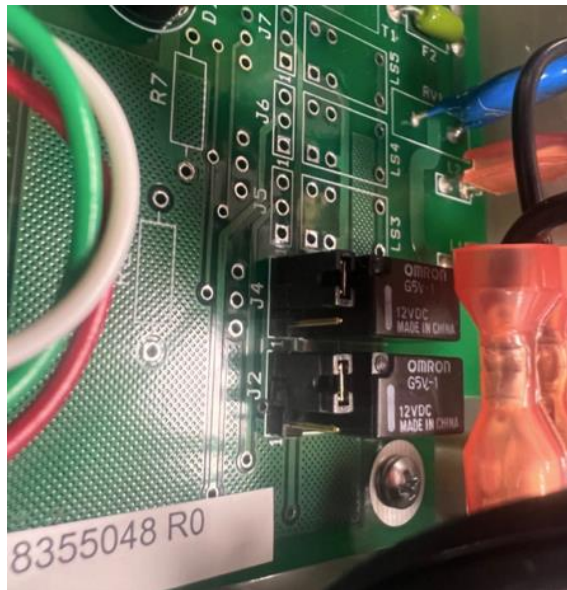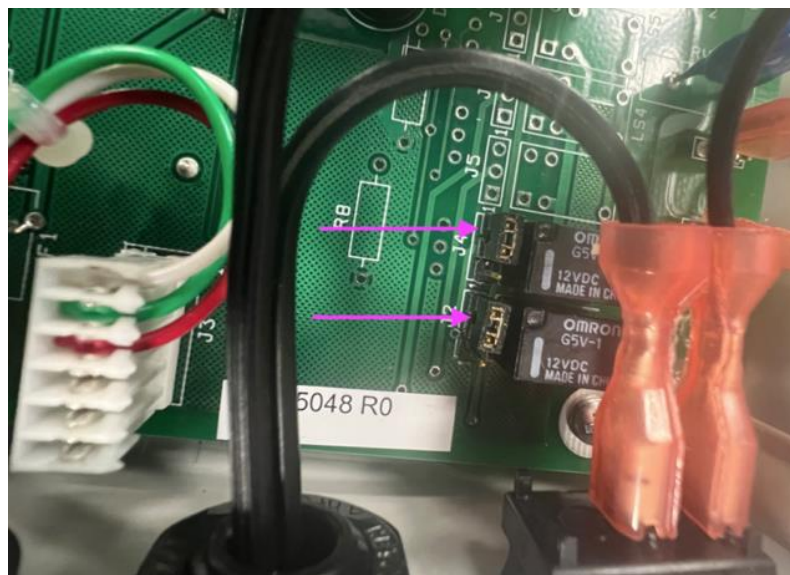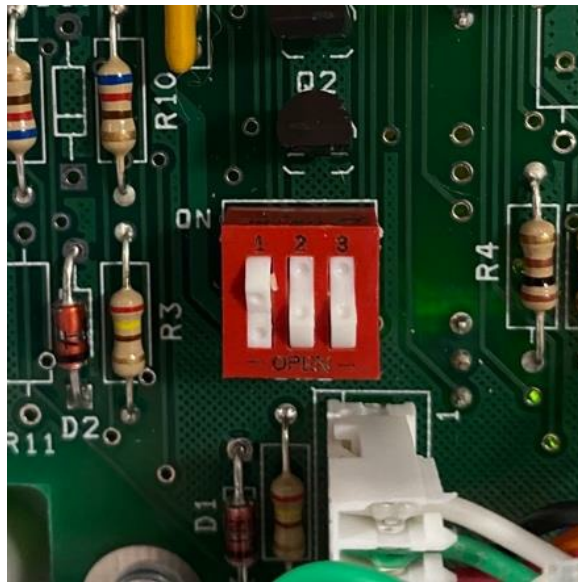

Figure 3 Jumpers configured for NC by placing over the top two pins for J2 and J4

9. Locate SW2 (red box) on the left side of the box, shown in Figure 4.

10. Configure the position of the Switches is as follows:

- **Switch 1:** Down (for immediate alarm, preferred, but may be positioned Up for a delayed alarm)
- **Switch 2:** Down (⚠ This is mandatory. Otherwise, the alarms will not function properly)
- **Switch 3**: Up (audible) or down (silent) depending on whether or not you would like the alarm to be audible

11. Replace the back cover on the manifold.

12. Connect the connector end of the connection cable to the Output port (4-pin) of the Manifold Alarm box, shown in Figure 5.
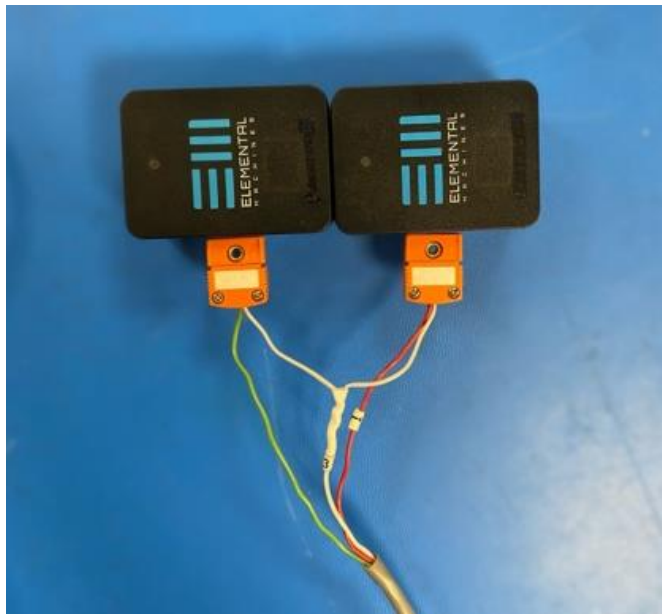
Attaching Connection Cable to Element

13. Per your discretion, write the name and/or location of the equipment being monitored on the Element-B. This can be particularly helpful if multiple devices are being installed. Use of a Sharpie is recommended.

14. Connect the Element-B's to the two thermocouple connectors of the Element-B connection cable (Figure 6). Either thermocouple connector can be connected to either Element-B; red wire receives data from Left Inlet Alarm, green wire receives data from Right Inlet Alarm.
    - Note Ensure the (-) and (+) prongs of the thermocouple end are properly matched.

- Figure 6 Thermocouple end of Element-B connection cabl

15. Pull the battery tab on the Element-B's.

Positioning the Element-B

16. Determine where the Element-B should be placed so that it is not blocked, which allows a better wireless connection, and so that the connection cable is tidy.

17. Securely position the Element-B in the chosen location. The Element-B has magnets which make it easily mountable to magnetic surfaces.

- **Note:** If applicable, an adhesive metal mounting plate available from EM may be used.

Programming Alerts

18. 18. Program alerts on the Concoa Advantium 2 Manifold Alarm. Refer to the Concoa Advantium 2 Manifold Alarm user manual for which alarm conditions the manifold can detect and how to set up alerts.

19. Set up alert rules on the Elemental Insights Dashboard™ for the Element-B. Guidance on how to do so is available in the Support section of the dashboard.

NOTE: Alerts must be programmed on both the asset and the Elemental Insights Dashboard™ to receive threshold alerts through the Elemental Machines platform.

Appendix 1: Gateway Setup

Elemental Machines provides multiple styles of Gateways. If you have a Tablet Gateway
(Model GW1), please follow the setup instructions below. For Gateway-2, please follow the setup instructions in 771-00021 Gateway (Model GW2) User Manual. For Gateway-3, please follow the setup instructions in 771-00034 Gateway (Model GW3) User Manual.
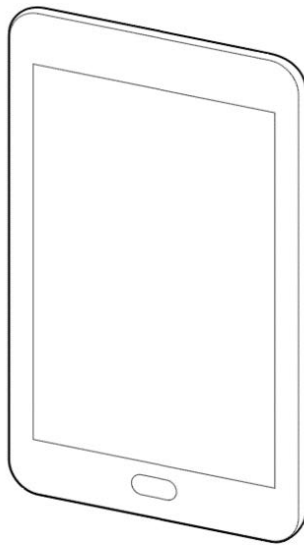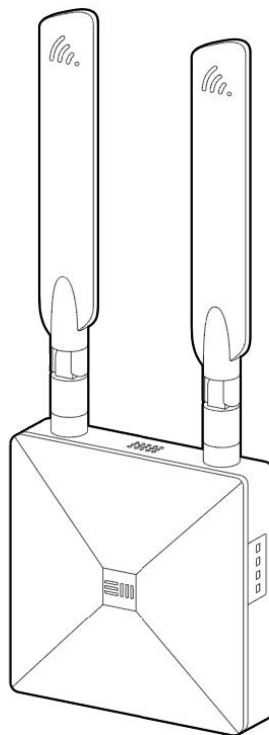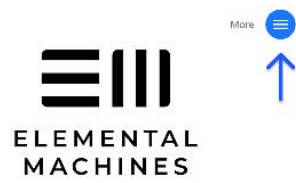
Figure 8 Tablet Gateway (Model GW1)

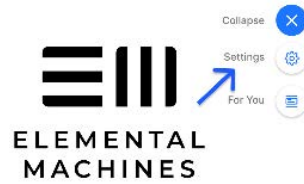**Tablet Gateway (Model GW1) Software Setup**
To power on the Gateway, press and hold the upper right-hand button on the device:

1. Wait for the main screen to come up
2. Press the 'home' button when you see the Elemental Machines Logo
3. Click on the blue circle in the upper right corner (if the circle is not visible, press the hardware home button on the bottom of the tablet to make it appear, or swipe up if you do not have a hardware button):
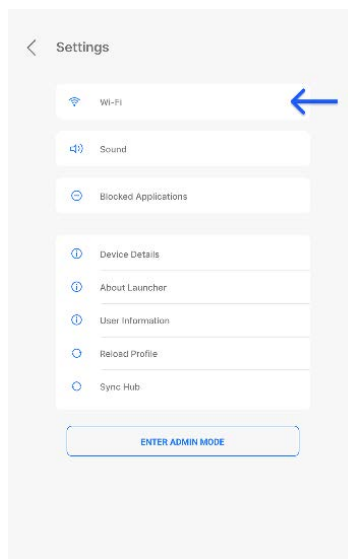
Serial number: F0EE10E10BED
Version: 2.6.5.1-release

4. Click on the settings icon:

Serial number: F0EE10E10BED
Version: 2.6.5.1-release

5. Select WiFi from the list:

Positioning the Tablet Gateway

Tablet Gateways collect data from the Elements, collating it and transmitting it across the internet to Elemental Machines' Cloud. The tablet Gateways' default is to transmit by Wi-Fi; for added reliability they fall back to Cellular connection when Wi-Fi connection drops out. There is a danger of data delay or even loss if all connection is lost, so tablet Gateways should be positioned where they are getting good Wi-Fi and Cellular connection.
The strength of the Wi-Fi and Cellular connection are displayed by the Wi-Fi icon using Cellular bar icons. These icons are displayed on the tablet Gateway to the left of the battery percentage.

- 4 or more bars for both Wi-Fi and cell indicate good connectivity
- 2 bars for both Wi-Fi and cell runs an increased risk of some data delay or loss
- 2 bars for cell or Wi-Fi carry a danger of significant data delay or loss

Documents / Resources

ELEMENTAL MACHINES Element-D from Elemental Machines [pdf] Installation Guide
EB1, EB2, Element-D from Elemental Machines, from Elemental Machines, Elemental Machines, Machines