

CURT 51180

CURT Echo Mobile Electric Trailer Brake Controller User Manual

Model: 51180

INTRODUCTION

The CURT Echo mobile trailer brake controller is a Bluetooth enabled device that wirelessly connects to your smartphone and allows you to control and monitor all trailer brake activity right from your device. It features a simple, plug-and-play installation, a portable design to easily switch between vehicles and a highly durable construction to outlast the elements. The Echo brake controller brings your towing experience into the modern age. Powered by Bluetooth, it wirelessly connects to your smartphone without any extra wiring harnesses or modules required. Simply download the Smart Control app on your Apple iOS or Android OS device, plug the Echo into your vehicle and you're ready to start towing.

This manual provides detailed instructions for the setup, operation, maintenance, and troubleshooting of your CURT Echo Mobile Electric Trailer Brake Controller.

KEY FEATURES

- **Portable Design:** Non-invasive installation, easily transferable between vehicles. Plugs into any standard 7-way connector.
- **Smartphone Connectivity:** Wirelessly syncs with Apple iOS or Android OS devices via Bluetooth using the Smart Control app.
- **Zero-Tool Installation:** Simple plug-and-play setup without the need for tools, extra wires, or hardware. Includes a locking tab and strap for secure connection.
- **Highly Responsive Braking:** Utilizes a triple-axis accelerometer for smooth, safe, and proportional braking. Maintains responsiveness even if the phone screen is locked, during incoming calls, or if Bluetooth connection is temporarily lost.
- **Versatile Compatibility:** Works with virtually any trailer equipped with 1 to 2 axles (2 to 4 brakes). Fully compatible with cruise control, anti-lock brakes, and low-voltage systems.
- **Durable Construction:** Features a potted enclosure with epoxy resin to protect internal electronics from dirt, moisture, and vibration, ensuring long-lasting durability.

SETUP AND INSTALLATION

The CURT Echo brake controller is designed for a straightforward, plug-and-play installation. Follow these steps to set up your device:

1. **Download the App:** Download the "Smart Control" app from your device's app store (Apple iOS or Android OS).

2. **Locate 7-Way Connector:** Identify the 7-way RV blade plug on your vehicle, typically located near the trailer hitch.
3. **Plug in the Echo:** Insert the CURT Echo mobile brake controller directly into your vehicle's 7-way connector. Ensure it is firmly seated.



Image: The CURT Echo device securely plugged into the vehicle's 7-way trailer wiring socket, ready for use.

4. **Secure with Strap:** Use the integrated retention strap and locking tab to firmly secure the Echo to the vehicle's socket.
Note: The strap is stored inside the cap.



Image: The CURT Echo mobile brake controller with its protective cap closed, illustrating its compact and integrated design when connected.

5. **Connect to Trailer:** Plug your trailer's 7-way connector into the CURT Echo device.



Image: The CURT Echo mobile brake controller with its cap open, revealing the 7-pin connector interface for trailer attachment.

6. **Pair with Smartphone:** Open the Smart Control app on your smartphone. The app will guide you through the Bluetooth pairing process.



Image: A smartphone displaying the "Connect to Controller via Bluetooth" screen within the Smart Control app, prompting the user to scan for devices.

Once paired, you can begin configuring your towing profiles and brake settings within the app.

OPERATING INSTRUCTIONS

The CURT Echo controller operates seamlessly with your smartphone to provide precise trailer braking. Here's how to use it:

Smart Control App Usage

- **Main Interface:** The app's main screen typically shows a large button to activate manual trailer brakes and sliders for adjusting Max Output and Aggressiveness.

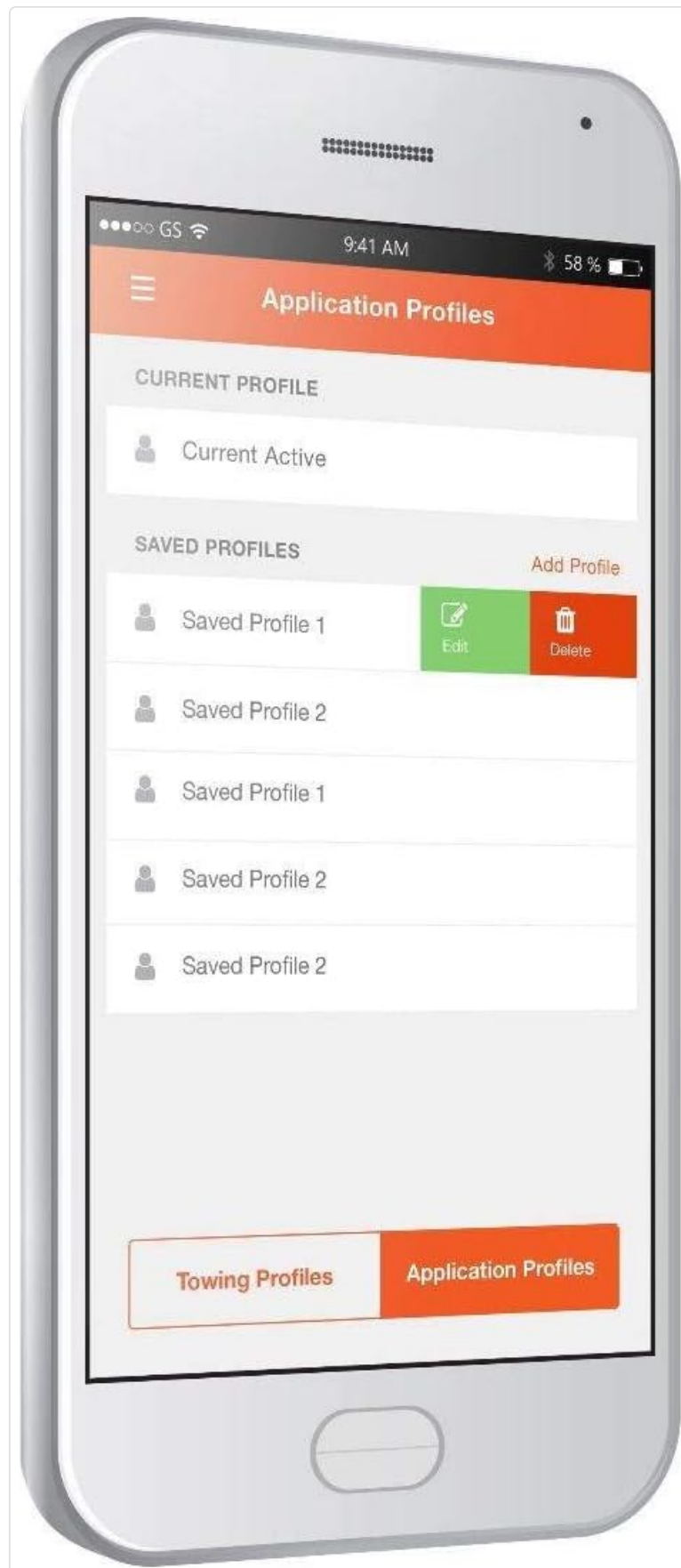


Image: A hand holding a smartphone displaying the main interface of the Smart Control app, showing a large red button to activate trailer brakes and controls for Max Output and Aggressiveness.

- **Creating Profiles:** The app allows you to create and save multiple vehicle-trailer profiles. This is useful if you tow different trailers or use the Echo with multiple vehicles.



Image: A smartphone displaying the "Application Profiles" section within the Smart Control app, showing options to create, edit, and delete saved towing profiles.

- **Adjusting Settings:**

- *Max Output:* Controls the maximum braking power applied to the trailer. Adjust this based on the weight of your trailer and desired braking force.
- *Aggressiveness:* Determines how quickly the trailer brakes engage. A higher setting provides more immediate braking.

- **Manual Override:** Use the large button on the app's main screen to manually apply trailer brakes. This is useful for testing or in situations requiring immediate trailer braking independent of the vehicle's brakes.

Proportional Braking

The Echo controller uses a tri-axis circuit to provide proportional braking. This means the trailer brakes are applied with a force proportional to the vehicle's braking, ensuring smooth and controlled stops, whether going uphill or downhill.

Video Demonstration

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Video: An instructional video demonstrating the setup and operation of the CURT Echo Mobile Brake Controller (Model 51180).

MAINTENANCE

The CURT Echo mobile brake controller is designed for minimal maintenance due to its durable construction. However, regular checks can ensure optimal performance and longevity:

- **Connection Check:** Before each tow, ensure the Echo unit is securely plugged into the vehicle's 7-way connector and the trailer's connector is firmly attached to the Echo. Verify the retention strap and locking tab are engaged.
- **Cleanliness:** Keep the connectors free from dirt, debris, and moisture. Use a clean, dry cloth to wipe down the unit as needed. The potted enclosure protects internal electronics, but external contacts should remain clean for reliable connection.
- **Storage:** When not in use, store the Echo in a clean, dry place to protect the connectors from environmental elements.
- **App Updates:** Periodically check for updates to the Smart Control app on your smartphone to ensure you have the latest features and bug fixes.

TROUBLESHOOTING

If you encounter issues with your CURT Echo Mobile Electric Trailer Brake Controller, refer to the following common problems and

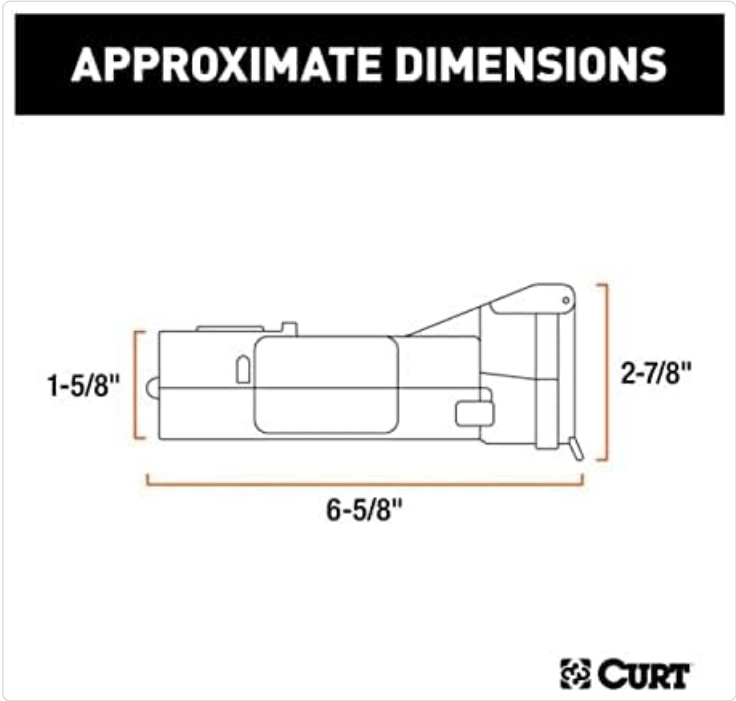
solutions:

Problem	Possible Cause	Solution
No Bluetooth Connection	Bluetooth is off on smartphone. App not open or not scanning. Echo unit not powered (not plugged into vehicle). Interference.	Ensure Bluetooth is enabled on your smartphone. Open the Smart Control app and initiate a device scan. Verify the Echo is properly plugged into the vehicle's 7-way connector. Move away from strong electromagnetic interference sources.
Trailer Brakes Not Engaging	Loose connection. Trailer wiring issue. Incorrect app settings (Max Output too low).	Check all 7-way connections (vehicle to Echo, Echo to trailer) for secure fit. Inspect trailer wiring for damage or corrosion. Increase the "Max Output" setting in the Smart Control app.
Erratic Braking	Poor connection. Aggressiveness setting too high. Unit not level (though tri-axis circuit minimizes this).	Ensure secure connections. Reduce the "Aggressiveness" setting in the Smart Control app. Verify the Echo unit is installed in a stable position.
App Crashing or Freezing	Outdated app version. Smartphone operating system issues.	Update the Smart Control app to the latest version. Restart your smartphone. Ensure your smartphone's operating system is up to date.

For further assistance, please refer to the official CURT support resources or contact customer service.

SPECIFICATIONS

Feature	Detail
Model Number	51180
Brake Type	Proportional
Trailer Axle Capacity	1 to 2 axles (2 to 4 brakes)
Connection Type	7-way RV blade plug
Wireless Connectivity	Bluetooth (for smartphone app)
App Compatibility	Apple iOS, Android OS (Smart Control app)

Feature	Detail
Dimensions (Approximate)	<div>6-5/8" (Length) x 1-5/8" (Width) x 2-7/8" (Height)</div> <div></div> <div>Image: A technical diagram illustrating the approximate dimensions of the CURT Echo mobile brake controller.</div>
Durability Features	Potted enclosure (epoxy resin) for protection against dirt, moisture, and vibration.
Compatibility	Cruise control, anti-lock brakes, low-voltage systems.

WARRANTY AND SUPPORT

For detailed warranty information and customer support, please refer to the official CURT website or the documentation included with your product. You can also find additional resources and FAQs on the CURT brand store page on Amazon.

Official Documents:

- [Installation Manual \(PDF\)](#)
- [Troubleshooting Guide \(PDF\)](#)
- [User Manual \(PDF\)](#)

Online Resources:

- [Visit the CURT Store on Amazon](#)