



# ECHO® MOBILE BRAKE CONTROLLER INSTALLATION MANUAL

# 51180

## BEFORE YOU BEGIN

**⚠ WARNING** Read and follow installation manual carefully. Failure to do so could result in damage to the brake controller unit, loss of trailer brakes or poor brake performance.

- The vehicle must have +12V, ground and turn signals connected to the 7-way socket. Brake output to the 7-way socket is not required.
- See 'Vehicle-Specific Requirements'.
- An existing aftermarket or factory brake controller will not function if Echo brake controller is installed.
- No special wiring or connectors are required for use.
- Echo Smart Control **IS NOT** compatible with Apple CarPlay or Android Auto. However, it will not interfere with these features.
- Echo is designed to provide a Bluetooth connection, without obstruction, up to 50 ft. Connection may also be limited by the Bluetooth signal of your phone.

**⚠ WARNING** Avoid distracted driving. Only make adjustments when the vehicle is stationary.

**⚠ WARNING** Do not mount the Echo® near the exhaust pipe. Failure to do so may result in heat damage, loss of functionality and risk of fire.

**NOTICE** Prior to driving, test all trailer lights while the trailer is plugged into the Echo®.

## VEHICLE-SPECIFIC REQUIREMENTS

**NOTICE** If your vehicle comes with a trailering app or towing prep package, it may be necessary to activate a tow / haul mode using a push button or in-dash screen menu. This allows power at the 7-way connector of the vehicle.

See the vehicle owner's manual to enable this feature.

- The Echo brake controller uses the 7-way connector's +12V connection to power the brakes, and it shares this power with the trailer. Ensure the fuse for this connection is rated for 30 amps. See the vehicle owner's manual to determine the fuse location.  
*If the LED on the Echo does not light when plugged into the 7-way connector, the +12V power pin may not have power from the vehicle. Visit a CURT authorized installer to install a power wire to the battery.*
- If the phone application cannot connect to the Echo due to an incorrect or missing PIN, contact CURT Product Support. They will need the serial number located on the label of your Echo brake controller.
- Clean and store the Echo in a safe, dry place when not in use. We recommend applying dielectric grease to the terminals.

Some vehicles may require a trailer to be connected to detect a load and activate the +12V power.

Consult the vehicle owner's manual for vehicle-specific details or contact CURT Product Support if you are having trouble diagnosing the issue. Known vehicle-specific requirements are listed below:

### Ford F-150 (2018 to Current)

- Requires tow / haul mode activation and / or load detection on 7-way before the +12V output is activated on the 7-way connector. Activate tow mode and connect trailer before attempting Bluetooth connection to the Echo. The LED on the Echo must be on.

### Ford F-150 (15 - 17)

- These vehicles may turn off the +12V output to the 7-way connector when in park or during gear shifting, making the existing vehicle wiring incompatible with the Echo. To use Echo with these vehicles, visit a CURT authorized installer to install a power wire to the battery.

## DOWNLOAD THE MOBILE APPLICATION

Mobile applications are available for Apple and Android OS. They can be accessed in the App Store or Google Play by scanning the respective QR code below or searching for 'Echo® Smart Control'.

- Apple OS Requires IOS 5 or higher
- Android OS requires Android 4.3 or higher
- Bluetooth must be enabled on your device for pairing to occur
- After the app is installed, follow the prompts for setup



## INITIAL SETUP FOR BLUETOOTH CONNECTION

**NOTICE** The vehicle needs to be running or the ignition in the 'ON' position with the vehicle in park.

**NOTICE** At any moment during setup, if the LED on the Echo® is red, stop and refer to the 'Troubleshooting Guide'.

1. Enable Bluetooth in your mobile device settings.

**NOTICE** **DO NOT** pair the Echo® through your phone's Bluetooth menu. Bluetooth connection will be done through the app in step 3.

2. Prior to insertion you will need to install the safety strap.

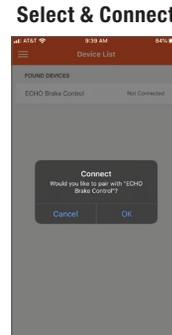
**NOTICE** The safety strap is located inside the cap of the Echo® unit.

See 'Installing Safety Strap' on adjacent page.

Once the strap and Echo® installed and inserted into the vehicle's 7-way, the LED will flash blue. The Echo® is now ready to pair with the mobile application.

3. Launch the app and scan for the Echo®. Once the 'Echo® Brake Controller' is visible, select it. You will then be prompted to enter the six-digit PIN, found under the cap of the brake controller unit or on the provided quick reference card. Once pairing is complete, the LED light will be solid blue.

4. Plug the trailer's 7-way connector into the Echo® brake controller while parked on a level surface. The LED light on the Echo® will flash yellow for five to eight seconds while calibration occurs. Once the device is calibrated the LED will turn solid green.



## INSTALLING THE SAFETY STRAP

1. Remove the button fastener from the strap.



2. Slide the strap through the clasp on the Echo®.



3. Insert button fastener facing outwards.



4. Then, insert Echo® into the 7-way.



5. Wrap the strap around the 7-way cover and pin to secure.



6. Once installed, return to Step 2 in 'Initial Setup for Bluetooth'.



## APPLICATION SETUP

After pairing with the Echo®, you will be directed to the 'Towing Profiles' screen to setup your trailer's profile. You can create and save profiles for multiple vehicles, trailers and load conditions.

**Note:** Setting configuration is required when trailer conditions change or the brake controller is being used for a different trailer or vehicle.

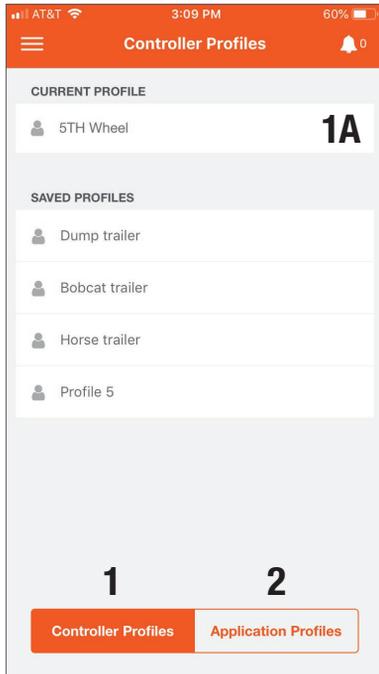
Within the 'Towing Profiles' screen, there are two different profiles menus for you to access.

### 1. Controller Profile

- In this menu, you can access the five most recently used settings. These settings are stored within the Echo device. This option allows you or others who borrow your Echo to access pre-configured tow settings quickly and easily.
- Your active profile will display at the top of the menu (1A)

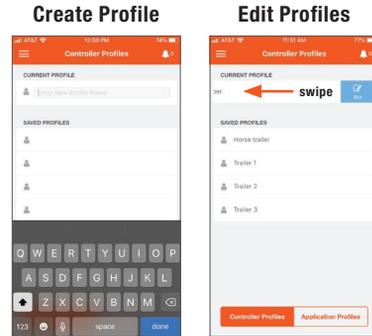
### 2. Application Profile

- In this menu, you can create an unlimited number of vehicle trailer profiles. These profiles are stored within the app on your phone.



## ADDING A PROFILE

1. On the 'Controller Profiles' menu, select the empty 'Current Profile' seat at the top of the menu.
2. Name the profile with descriptive information about the trailer you're towing.
3. Click 'Done' to confirm. You will then be directed to the 'Active Profiles' menu to begin set-up and adjustment.
4. You are also able to modify an existing trailer name by swiping left on the profile.
5. Repeat steps 1 – 3 for additional trailers (up to five saved on the device).



To create additional profiles, 6 or more, access the 'Application Profiles' section. This menu will allow you to create and store an unlimited number of profiles within the app. Select 'Add Profile' to begin and repeat steps 1 – 3.

## ACTIVATING A PROFILE

1. Click on a profile you would like to activate.
2. Follow the screen prompt by selecting 'Ok'.
3. The profile you selected is now the active 'Current Profile'.

## DELETING A PROFILE

1. In the 'Application Profiles' menu, select the profile you would like to delete.
2. Swipe left to open menu option.
3. Select 'Delete' to remove.

# CONFIGURING PROFILE SETTINGS

In your 'Active Profile' screen you can adjust settings.

## 1. Manual Brake Activation

Activate manual braking, press and hold the orange button.

Manual brake controller activation is used in situations where a slow reduction in speed is desirable. As the manual control is activated, the Echo® begins to apply the trailer brakes. Manual output can be activated by pressing and holding the orange button in the app.

## 2. Brake Output Indicator

The blue ring indicates current brake output level.

The blue ring is a visual indicator of the current level of power being applied to the trailer brakes. When the vehicle's brakes are fully applied, the level of power and position of the ring is determined by your Max Output setting.

## 3. Max Output

The maximum level of the brake controller.

The output control establishes the max amount of power available to the trailer brakes when braking. The output should be adjusted during initial setup, when trailer load changes, when different trailers are used or when adjustment is needed for changing road or driving conditions.

## 4. Sensitivity Level

The sensitivity of the braking power.

The sensitivity level adjusts trailer aggressiveness when activated during braking. Sensitivity adjustment has no effect on the manual brake controller. The sensitivity can be adjusted for individual driver preference, trailer load changes or changing road conditions.

## 5. Vehicle Hazard Lights

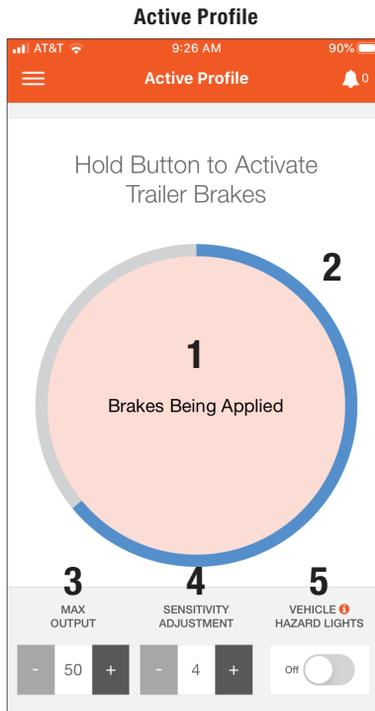
Turn on any time the vehicle's hazard lights are active.

When the vehicle's hazard lights are activated, the trailer brakes may pulse on and off as the lights flash. To prevent this from happening, toggle the switch on any time the vehicle's hazard lights are active.

## 6. Screen Theme

Change from light to dark.

Under the 'Settings' menu, the option to change for day or night driving situations or application preference is available.



## Hazard Lights



## Screen Theme



## TEST DRIVE & ADJUSTMENT

Both the output and sensitivity can be adjusted to achieve smooth, firm stops. Output and sensitivity adjustments should only be made while stopped, with the transmission in park or neutral, parking brake applied, foot off the brake pedal, and no manual control actuation. **Note:** Perform the adjustments in a safe environment with minimal vehicle traffic.

Starting with the output adjustment, drive forward on a dry and level paved or concrete surface. At approximately 25 mph, apply the vehicle's brakes. If trailer braking is insufficient, increase the max output setting in the brake controller application. If the trailer brakes lock up, decrease the max output. Repeat this process until stops are firm, just short of lock up.

Once the output is set, adjust the sensitivity by driving forward at approximately 25 mph and press the brake pedal. The vehicle and trailer should make a smooth stop. If the stop seems slow and more aggressive braking is desired, increase the sensitivity level through the brake controller application. If the stop seems too aggressive, decrease the sensitivity level in the application.

Make several stops at various speeds and adjust the sensitivity until stops are smooth and firm. Slight adjustment to the output control may also be desirable. **Note:** If any problems occur during setup, refer to the 'Troubleshooting Guide' on the last page of this manual.

## LED STATUS INDICATOR

A single LED on top of the Echo® shows the status of the brake controller unit. Refer to the icons and descriptions below.



Device not paired,  
no trailer connected  
**(flashing blue)**



Device paired,  
no trailer connected  
**(solid blue)**



Calibrating  
Echo®  
**(flashing yellow)**



Device not paired,  
trailer connected  
**(flashing green)**



Device paired,  
trailer connected  
**(solid green)**



Wiring error  
**(flashing red)**



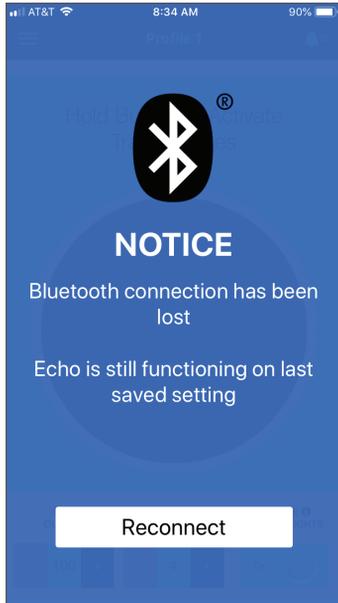
Hardware fault  
**(solid red)**



No power  
**(no light on)**

Indicator	Status
Flashing blue	Device not paired, no trailer connected
Solid blue	Device paired, no trailer connected
Flashing yellow	Calibrating Echo
Flashing green	Device not paired, trailer connected
Solid green	Device paired, trailer connected
Flashing red	Wiring error
Solid red	Hardware fault

## CONDITION NOTIFICATIONS



**NOTICE** If a communication error occurs between the mobile application and the brake controller, the 'Manual Brake Activation', 'Max Output' and 'Sensitivity Level' cannot be adjusted and condition notifications from the brake controller will not be sent. The brake controller will continue to function properly at the most recently programmed settings and braking operation will not be affected.



**WARNING** If the Echo® detects an overload to the trailer brakes a warning will pop up on your screen. Safely stop the vehicle, disconnect and reconnect the trailer 7-way. If the message reappears, a trailer wiring inspection is recommended.



**DANGER** If the trailer 7-way has become disconnected from the vehicle a warning will pop up on your screen. Safely stop the vehicle and reinstall your connection. Once connections has been restored, the application will resume with the most recently programmed settings.

## TROUBLESHOOTING GUIDE

Condition	Problem Cause	Possible Solution
LED does not light	No power to brake controller, no ground on vehicle 7-way	Check vehicle power and ground wiring Trailer mode not activated for vehicle Vehicle requires trailer to activate 7-way power
Unable to connect to mobile devices	No power to brake controller, no ground on vehicle 7-way Invalid Bluetooth PIN	Check Echo LED status for power Input PIN from label or quick reference card Enable Bluetooth or grant permissions Check smartphone compatibility
Solid red LED for more than 10 seconds	Hardware fault	Contact CURT Product Support
Flashing red LED	Contamination in trailer plug socket	Check for clean and dry trailer plug
	Short in trailer brake wiring	Locate and correct short
	Accelerometer error	Unplug the brake controller and plug it back in
	Short or overload in trailer brakes	Troubleshoot trailer brake circuit per brake manufacturer's instructions
No trailer brakes, pedal or manual	Mis-wired 7-way connector Improper or corroded trailer wiring Weak or missing ground	Confirm vehicle and trailer 7-way connections
No trailer brakes, pedal or manual (device notification of error)	Loss of trailer connection, unplugged or bad wiring	Confirm vehicle and trailer 7-way connections
No response on manual override or brake output	Mis-wired 7-way connector Improper or corroded trailer wiring No or intermittent power to brake controller Weak or missing ground Wireless connectivity error	Confirm vehicle and trailer 7-way connections Check Bluetooth and application settings
Reduced braking power on manual override or brake output	Weak or missing ground Improper max power or sensitivity settings Improper or corroded trailer wiring	Confirm vehicle and trailer 7-way connections Check Bluetooth and application settings Increase max power or sensitivity settings
Trailer brakes on all the time (LED shows red)	Mis-wired 7-way trailer connector	Confirm vehicle and trailer 7-way connections
App signals 'low voltage'	Low battery voltage	Check vehicle battery and replace if needed Confirm vehicle 7-way connections and wiring
App signals a 'disconnect'	Trailer connector is disconnected	Reconnect the trailer connector Confirm vehicle 7-way connections and wiring
App signals 'overload'	Trailer brakes are overloaded	Reconnect the trailer connector Confirm vehicle 7-way connections and wiring Check trailer brake wiring for short circuits

## PRODUCT REGISTRATION

CURT Group stands behind our products with industry-leading warranties.

Provide feedback and help us to improve our products by registering your purchase at [warranty.curtgroup.com/surveys](https://warranty.curtgroup.com/surveys)

## LET US KNOW WHAT YOU THINK!

Share the love and your experience with Echo by leaving a review on [curtmfg.com/51180](https://curtmfg.com/51180).

