RVibrake 3

Portable braking system for flat towing

Patented Technology:

US 8,887,879 B1

US 10,137,870 B2

US 8,662,262 B1

US D876,289 S

SETUP & USER GUIDE

CONTENT

Welcome: pg. 1

Introduction: pg. 1

RVibrake3 Setup: pg. 2-4

Pairing Steps: 2

Setup Steps: 3

Remove RVibrake3: 4

RVibrake3 Settings: pg. 5

Brake Type: 5

Vehicle Type: 5

Sensitivity: 5

Alerts & Warnings: 5

RVibrake3 Operations: pg. 6

How RVibrake3 Works: 6

Drive Mode: 6

Brake Test: 6

Troubleshooting: pg. 7

Compliance: pg. 8

Antenna Usage: 8

Warranty: pg. 9

Limited Warranty: 9

- How long is the warranty?
- What is covered?
- Where or how do I get assistance for my RVibrake3
- What is not covered?
- How state laws may apply

Contact Information: pg. 9

WELCOME

Innovation is the antidote to limits. -NIKE

We are thrilled you purchased RVibrake3, an "Official Command Center" product! Here at RVi, we exist to provide innovative, quality products that keep the fun and safety in RVing. We strive for this existence because it's what we want as customers of products, too.

Thank you for letting us be a part of your journey.

Happy RVing!

-The RVi Crew

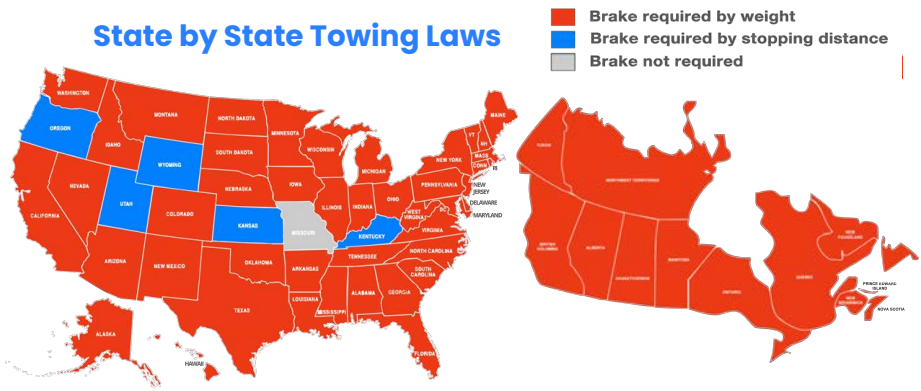
INTRODUCTION

RVibrake3 auxiliary braking system makes your towing experience as safe as possible by providing the most effective portable braking system available. We believe that this product has the ability to help you enjoy your RVing experience even more and could even save a life.

The use of RVibrake3 or any of its accessories in a manner inconsistent with these instructions could cause damage to the motorhome or towed vehicle and may cause serious injury or even death.

49 out of the 50 states and all of Canada require a braking system, and most require the Breakaway to be installed.

This document provides step-by-step instructions on how to use RVibrake3 accurately. If there are any questions while installing or using this product, please call Customer Service at 800-815-2159.



RVibrake3 SETUP

Prior to the setup of RVibrake3, remove all contents from the shipping packaging:

RVibrake3		Command Center System	
Breakaway System		Phantom Bracket Stop Plate	

***Note**: If there is ANY shipping damage, immediately call RVibrake3 Customer Service at 800-815-2159*

Before continuing we recommend watching our videos at rvivideo.com

Pairing Steps

RVibrake3 does ***not*** come paired with Command Center tablet and hub. The following steps will walk you through the one time pairing process.

***NOTE:** Pairing is not required for RVibrake3 to perform.*

1) Power on the Command Center tablet and hub. To power the tablet, press and hold the power button for 3 seconds. To power the hub connect it to the provided USB charger.



***NOTE**: See the Command Center User Guide for more info.*

2) Attach RVibrake3 claw to brake pedal.



3) (In this step, ignore the Audio Assistant on RVibrake3 during pairing process) Plug in RVibrake3 to 12-volt outlet.



4) On the tablet, click **Add Device** from the tablet **Dashboard**.



5) On the new screen, enable RVibrake3 by toggling the on/off slider to ON. At this time, the tablet will walk you through pairing.



6) You will be asked to pair to RVibrake3 by placing your powered Command Center hub on or near RVibrake3. Once RVibrake3 is found by the hub, you'll be asked to enter the RVibrake3's serial number (S/N).



***NOTE**: Tablet software 1.7.7 and older will ask you to pair with QR code. We recommend updating to 1.8.0 or newer.*

Boom! You're a genius!

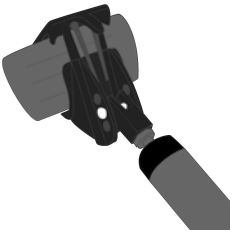
Setup Steps

IMPORTANT: *Before you install RVibrake3, you must make sure your towed vehicle is tow ready. Failure to do so can result in tire damage or excessive brake wear.*

1) In the vehicle being towed, adjust the driver's seat to the far back position and place RVibrake3 on the floorboard so the black brake pedal claw is directly in front of the brake pedal.

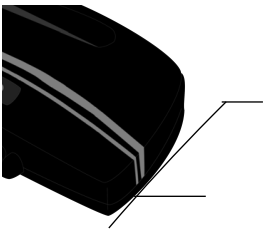
Note: *Carpeted floor mats do not need to be removed, but thicker rubber mats may need to be removed prior to using RVibrake3 to provide an adequate pushing surface.*

2) Leaving about an inch of space behind the brake and the rise in floorboard, attach the brake pedal claw to the brake pedal of the towed vehicle. The lower part of the claw should cradle the bottom of the brake pedal first, and then lift the upper part of the claw, that has the two fingers, over the top of the brake pedal.



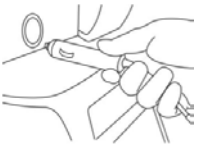
3) Slide RVibrake3 back towards the seat until RVibrake3 reaches the edge of the seat pan.

Note: *The seat pan is the slightly elevated area of the floorboard where the driver's seat is mounted.*



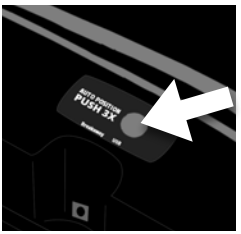
If the towed vehicle has a flat floorboard with no seat pan to push against, please refer to the **Stop Plate Installation Guide** inside the Stop Plate package. Some towed vehicles need adapters for the installation of the Stop Plate. See rvibrake.com for more info.

4) Plug RVibrake3's 12-volt adapter into a 12-volt receptacle in the towed vehicle.



Follow the Audio Assistants prompts for proper setup. The compressor may or may not come on at this time.

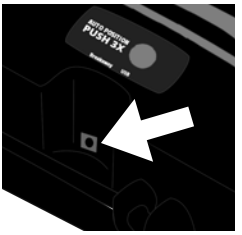
5) [Audio Prompt: Push the Auto Position button] The Auto Position process automatically positions RVibrake3 in the seat pan of the towed vehicle, and removes vacuum stored in the towed vehicles braking reservoir.



Note: *If the claw rotates off over the top of the pedal, use the lower hole in the back of the claw. If it rotates off under the pedal, then use the upper hole.*

WARNING: *Never push Auto Position button unless connected to a brake pedal.*

6) Lastly, plug the Breakaway plug into RVibrake3. If the towed vehicle becomes unattached from the motorhome, BREAKAWAY will display on the Command Center tablet and an audible alarm will sound. This means the Breakaway pin has been pulled on the junction box, RVibrake3 will apply the brakes on the towed vehicle, and it will be brought to a complete stop. The Audio Assistant will let you know that RVibrake is ready for towing.



Reference: *See the Breakaway Installation Guide for installation and operation.*

IMPORTANT*: Any time the towed vehicle's engine is started after setup of RVibrake3, the Auto Position process must be completed again to drain the vacuum in the braking reservoir.*
1) Unplug the 12-volt adapter.
2) Proceed to the above steps 4 and 5.

WARNING: Tire damage or excessive brake wear will result *if the brake pedal is manually depressed using your hand or foot during or after the Auto Position process. The air cylinder will be improperly positioned causing the brake pedal to ride the brakes. If this happens, the Auto Position process must be completed again for proper setup.*
1) Unplug the 12-volt adapter.
2) Proceed to the above steps 2 thru 5.

REMOVE RVibrake3

1) Unplug the 12-volt power cord.

2) Remove the claw from the brake pedal.

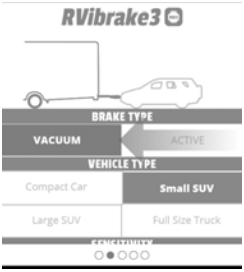
3) Retract the air cylinder to the home position by lifting up the cylinder and sliding it back so the claw legs are placed into the two holes of the RVibrake3 housing.

RVibrake3 SETTINGS

Your RVibrake3 has three settings: Brake Type, Brake Pressure, and Sensitivity. To change these settings, use the Command Center tablet, which must be paired with RVibrake3.

*(**NOTE**: If you do not have a Command Center, enter **Manual Mode** on RVibrake3 to change the settings. To enter Manual Mode, plug in RVibrake3, and after pressing the bong, hold the red Auto Position button for 10 seconds. Tap the to cycle through and select the correct brake pressure, then press and hold the button for 5 seconds to confirm your selection.)*

Brake Type

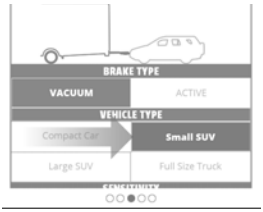


RVibrake3 is designed to work with both Vacuum and Active assist brake towed vehicles. Most vehicles are Vacuum assist vehicles, which means the car uses a master brake booster to boost the pressure when braking.

Active brake vehicles have constant electrical or hydraulic systems to assist in braking, whether the engine is running. Most hybrid and diesel vehicles use Active assist brakes.

To determine your vehicle's Brake Type, consult the Manufacturer's Owner's Guide or call Customer Service at 800-815-2159.

Brake Pressure



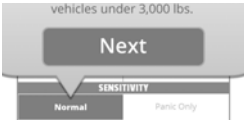
In Vacuum Brake Type, choose the vehicle type that most applies to your towed vehicle. In Active Brake Type, choose the PSI level for your car.

Brake Pressure determines how hard RVibrake3 will push on the brake pedal. The lighter the car, the lighter the pressure.

To ensure the correct Brake Pressure for your vehicle, see the Brake Test on page 6.

***Note**: If you tow an SUV, always begin in the Small SUV setting. If you have Active brakes, always begin at 5 PSI.*

Sensitivity



Most RVers pulling a towed vehicle will run in Normal sensitivity. Choosing Panic Only means RVibrake3 will only participate in emergency brakings.

ALERTS & WARNINGS

Make sure to heed all warnings and alerts from the Command Center tablet or audio prompts from RVibrake3. Failure to do so could result in brake damage.

RVibrake3 OPERATIONS

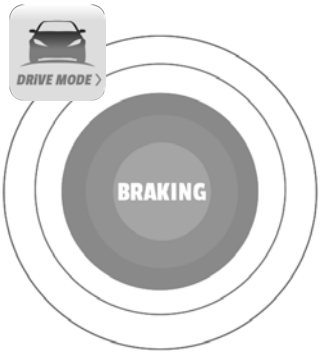
How RVibrake3 Works

Now that RVibrake3 is set up and settings are selected, it's time to start towing. The purpose of RVibrake3 is to take the towed vehicle's weight off the motorhome in a braking and reduce stopping distance. RVibrake3 is activated by an accelerometer that detects changes in inertia, the same force that draws your chest forward when braking in the motorhome. Because RVibrake3 is proportional, the more inertia it sees, the harder it knows to push on the brake pedal in the towed vehicle.

The slope sensing software will keep RVibrake3 from being more sensitive downhill and less sensitive uphill, giving you accurate braking at all times. This software keeps your brake pads from having excessive wear.

RVibrake3 will activate when there is enough inertia that you feel your body drawn forward while braking.

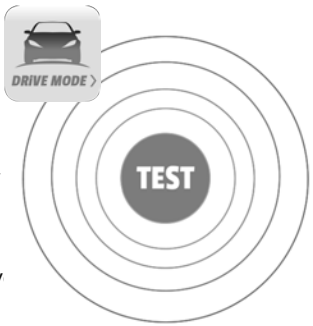
Drive Mode



From the tablet's Dashboard, you can enter DRIVE MODE by pressing the Drive Mode icon to monitor the performance of RVibrake3 while towing. When RVibrake3 pushes on the pedal, the braking rings illuminate in DRIVE MODE. The harder RVibrake3 pushes on the pedal, the more the braking indicator rings will grow.

Brake Test

You need to perform a Brake Test to ensure you have the correct brake pressure for your towed vehicle. The Brake Test is performed in DRIVE MODE.



In the motorhome, accelerate to approximately 30 MPH, then lift off the accelerator. While coasting, press the Test button in DRIVE MODE on the Command Center tablet; you should feel a gentle pull on the motorhome.

If you do not feel a gentle pull on the motorhome, increase your Brake Pressure setting in the RVibrake3 settings app for greater pull and repeat the test.

If you feel too much pull on the motorhome, decrease y a smaller vehicle type for less pull. Repeat the test.

TROUBLESHOOTING

Troubleshooting

Q. How do I know RVibrake3 is working?

A. The Command Center tablet gives you complete, continuous braking information — a glance at the tablet assures you that RVibrake3 is fully operational.

*(**Note**: If the Command Center tablet and hub are not powered on, RVibrake3 will still continue to work.)*

Q. What if I think it's braking too hard or not hard enough?

A. Braking force, which is determined by the Brake Pressure setting, can be modified on the fly from the Command Center tablet in your motorhome. No matter what, RVibrake3 will always respond with full pressure during an emergency stop.

Q. I have to disconnect my battery for towing. Can I power the RVibrake3 with the motorhome from my umbilical cord?

A. You never want to power your RVibrake3 off of the motorhome. If you have a breakaway, then the RVibrake3 no longer has power. You need it connected to the towed battery. If you have to disconnect your battery for towing or your stock 12V outlet is insufficient, you'll need to use our 12V Direct to Battery Kit and/or the Towed Battery Disconnect.

Q. Why do the tires on my tow vehicle squeal on my first 2-3 brakings of the day?

A. Most vehicles on the market use engine vacuum (Vacuum assist brakes) to assist in braking. This means that after the engine is turned off, 2-3 brakings of vacuum assist are stored in the master booster and must be depleted by the RVibrake3 in setup. If you let the engine run during or after installation of the RVibrake3, then the master boost will store vacuum assist, causing excessive braking for the first brakings of the day. Always unplug the RVibrake3 whenever the tow vehicle's engine is running.

Q. Can I set up or change the settings of my RVibrake3 without my tablet?

A. Yes, should something happen to your Command Center tablet or hub, you can press and hold the "Auto Position" button for 10 seconds, and you will hear an audio prompt. At this time, the BRAKE TYPE and BRAKE PRESSURE can be changed on RVibrake3. After making the selection, press and hold the "Auto Position" button for 3 seconds. The default setting is VACUUM:COMPACT CAR.

Q. What is the micro USB port on RVibrake3 for?

A. This is only for factory use to program units.

COMPLIANCE

Antenna Usage

This equipment has been tested and found to comply with the limits for a class B digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. FCC Radiation Exposure Statement to comply with FCC RV exposure requirements in section 1.1307, a minimum separation distance of 0.81 cm (0.3 inches) is required between the antenna and all persons. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

FCC ID:Z64-CC3100MODR1

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

Reorient or relocate the receiver antenna.

Increase the separation between the equipment and the receiver.

Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.

Consult the dealer or an experienced radio/TV technician for help.

The Installer of this radio equipment must ensure that the antenna is located or pointed such that it does not emit RV field in excess of Health Canada limits for the general population; consult Safety Code 6, obtainable from Health Canada's website *http://www.hc-sc.gc.ca/rpb*

This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement

IMPORTANT: *Changes or modifications not expressly approved by Danko Manufacturing LLC could void the user's authority to operate the equipment.*

WARRANTY

Limited Warranty

How long is the warranty?

RVibrake3 has a **three-year limited warranty** and a 30-day money-back guarantee from the original purchase date.

Command Center tablet and hub have a one-year limited warranty from the original purchase date.

What is covered?

It warrants your product to be free of mechanical and electrical defects in material and workmanship.

Where or how do I get assistance for my RVi product?

During the warranty period, RVi will repair or replace the product (at RVi's discretion), which will be your exclusive solution under this warranty.

Do NOT return the product; doing so may delay the processing of your claim and the repair or replacement of the product. For return instructions, please call RVi Customer Service.

What is not covered?

The warranty will not cover damage resulting from neglect or misuse of the product, use contrary to operating instructions, or disassembly, repair, or alteration by any person other than RVi's repair department. RVi is not liable for any incidental or consequential damages for breach of any expressed or implied warranty on the product.

How state laws may apply

Some states do not allow limitations on how long an implied warranty lasts or the exclusion or limitation of incidental or consequential damages, so the above limitation may NOT apply. This warranty gives specific legal rights, and you may also have other rights, which vary from state to state.

"This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation."

CONTACT INFO

RVi
624 Atchison Way #101
Castle Rock, CO 80109

800-815-2159
rvibrake.com
contact@rvibrake.com

Pairing QR Code

for tablet software 1.7.7 and older

PAIRING QUICK START GUIDE

(Only necessary if your brake comes with Command Center)

1) Power Up the Hub

Power on the Command Center hub. You can do this by pressing the power button or simply plugging it into USB power.



When fully charged, the hub's internal battery lasts 10-12 hours. You'll know it's operating when the blue LED on the hub begins to blink.

2) Power Up RVibrake3

To pair RVibrake3 to the Command Center tablet and hub, RVibrake3 must be powered.



NOTE: You do not have to run the Audio Assistant's prompts to pair.

3) Pair RVibrake3

Power on the tablet and tap the Add Device button to begin pairing.



Add Device

Follow the steps on the screen to complete the pairing.

rvibrake3.com