



User Manual



About this Manual

Throughout this manual, references are made to “Power System(s)”. This term is used in this manual to indicate the system or mechanism that is connected to and being controlled by the PowerMatePRO. Examples of “Power System(s)” for the RV industry are power slide out rooms, power awnings, power jacks and power stabilizers, however the use of this term is not limited to these particular systems or mechanisms.

The PowerMatePRO app screenshots displayed in this manual are from the Apple® version of the app. Android® screens will look slightly different but will operate in the same manner described in this manual with the exception of the method for moving back to previous screens. Left facing arrows like the one shown below are used for moving back to the previous screen in the Apple® version of the app. In the Android® version of the app the phone or tablet Back button will be used for this purpose.



Important Information about your PowerMatePRO

The PowerMatePRO is designed with features that allow it to give maximum performance and flexibility on both newer and older phones and tablets. Older phones and tablets may not have the necessary hardware specifications to handle multiple, simultaneous Bluetooth connections in a multi-unit PowerMatePRO installation while newer phones and tablets will be well equipped to handle this. To accommodate older phones and tablets, the PowerMatePRO app was designed to operate in 2 different connection modes which cause the app to either connect to each PowerMatePRO unit on demand or to connect to all PowerMatePRO units when the app is started. The default mode of operation is to connect to each PowerMatePRO unit on demand, or more simply put as they are selected in the app for use. After installing the first PowerMatePRO in a multi-unit installation, you can access the system settings through the app and switch the connection mode if desired. If your phone or tablet is equipped with the hardware to support multiple, simultaneous Bluetooth connections you may find it desirable to change the connection mode as switching control from one PowerMatePRO switch to another is instantaneous. Since it will be difficult to know which connection mode works best for your particular phone or tablet, trying each mode to see which works best is recommended. You can change this setting at any time and as many times as necessary.

IMPORTANT! READ THIS SECTION

Prior to Installation of the PowerMatePRO

To allow for testing the operation of the slide, awning or jack system after the installation of the PowerMatePRO, position the slides, awnings or jack systems to approximately the midway point of extension prior to disconnecting the power to your vehicle.

Installation of the PowerMatePRO will involve electrical connections relating to the power system you are intending to control. These electrical connections are used to control the DC motor that operates the power system. These electrical connections utilize relatively large amounts of electrical current, typically greater than 10 amps.

It is important that prior to you installing the PowerMatePRO, **DISCONNECT ALL POWER SOURCES TO YOUR VEHICLE INCLUDING EXTERNAL 120 VOLT AC POWER AND THE 12 VOLT BATTERY.**

FAILURE TO DISCONNECT ALL EXTERNAL AND INTERNAL POWER SOURCES PRIOR TO INSTALLATION COULD RESULT IN FIRE OR OTHER SEVERE DAMAGE TO YOUR VEHICLE DURING THE INSTALLATION PROCESS.

Read this manual completely prior to the start of your installation. The PowerMatePRO is designed to replace traditional polarity reversing rocker switches (see Installation and Setup section). If your installation uses a different type of switch or uses an electronic controller, contact our technical support department at 855-549-8199 prior to proceeding with this installation.

Limited Warranty

The warranty obligations of LogicBlue Technology (“LogicBlue”) for this product are limited to the terms set forth below.

What is Covered

This limited warranty covers defects in the materials and workmanship in this product.

What is not Covered

This limited warranty does not cover any damage, deterioration or malfunction resulting from any alteration, modification, improper or unreasonable use or maintenance, misuse, abuse, accident, neglect, exposure to excess moisture, fire, lightning, power surges, or other acts of nature. This limited warranty does not cover any damage, deterioration or malfunction resulting from the installation or removal of this product from any installation, any unauthorized tampering with this product, any repairs attempted by anyone unauthorized by LogicBlue to make such repairs, or any other cause which does not relate directly to a defect in materials and/or workmanship of this product.

Without limiting any other exclusion herein, LogicBlue does not warrant that the product covered hereby, including, without limitation, the technology and/or integrated circuit(s) included in the product, will not become obsolete or that such items are or will remain compatible with any other product or technology with which the product may be used.

How Long this Coverage Lasts

The limited warranty for LogicBlue products is 1 year from the original date of purchase. Proof of purchase from the customer will be required for all warranty claims.

Who is Covered

Only the original purchaser of this product is covered under this limited warranty. This limited warranty is not transferable to subsequent purchasers or owners of this product.

What LogicBlue Will Do

LogicBlue will, at its sole option, will repair or replace and product determined to be defective with regard to materials or workmanship.



As with all electronic devices, they are susceptible to damage by static electricity discharge. Before removing the cover of this product be sure to discharge the static electricity in your body by touching a piece of grounded metal.



FCC STATEMENT

1. 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.
- (2) This device must accept any interference received, including interference that may cause undesired operation.

2. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: 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. 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.

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 LevelMatePRO unit.
- Increase the separation between the equipment and receiver.
- Consult the dealer or an experienced radio/TV technician for help.

FCC Radiation Exposure Statement

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

IC Statement

This device complies with Industry Canada licence-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 audio CNR d'Industrie Canada applicable audio appareils radio exempts de licence. L'exploitation est autorisée audio 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.

The device meets the exemption from the routine evaluation limits in section 2.5 of RSS 102 and compliance with RSS-102 RF exposure, users can obtain Canadian information on RF exposure and compliance.

Le dispositif rencontre l'exemption des limites courantes d'évaluation dans la section 2.5 de RSS 102 et la conformité à l'exposition de RSS-102 rf, utilisateurs peut obtenir l'information canadienne sur l'exposition et la conformité de rf.

COFETEL La operación de este equipo está sujeta a las siguientes dos condiciones:

- (1) es posible que este equipo o dispositivo no cause interferencia perjudicial y
- (2) este equipo o dispositivo debe aceptar cualquier interferencia, incluyendo la que pueda causar su operación no deseada.

Switch Removal and Installation Prep

- 1)** Before disconnecting all power being supplied to the vehicle, extend about halfway all of the power systems that you intend to control with PowerMatePRO units.
- 2)** Insure that both 120v AC power and the 12v DC batteries have been disconnected. *Do not attempt to use breakers in lieu of disconnecting the AC and DC power sources as many vehicles have power system motors that are wired directly to the power source and do not pass through a breaker.*
- 3)** Insure that the power system switch you will be replacing is a polarity reversing type rocker switch as shown in Figure 1. Some may be a different color or use a different type of rocker switch, but if you find that your switch uses an electronic controller or has more than 5 wires as pictured please contact our technical support department at 855-549-8199 prior to proceeding with this installation.

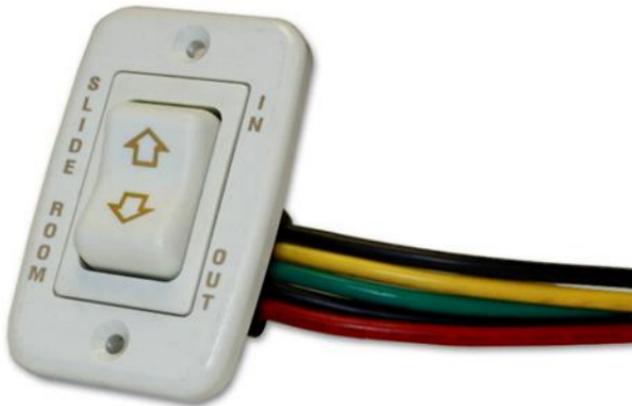


figure 1

- 4) Unscrew and remove the current power system switch from the wall.
- 5) Grab the wires on the back of the switch and pull all available slack in the wire through the hole in the wall where the switch was removed.
- 6) Using a piece of tape, temporarily secure the switch to the outside of the wall to insure that it doesn't accidentally get pulled back through the hole and end up inside the wall. *If the switch or any loose wiring makes its way down inside the wall it may be very difficult to retrieve it.*
- 7) The PowerMatePRO requires a mounting hole that may be larger than the current hole for the existing switch. The minimum mounting hole required for the PowerMatePRO is 1.75" (~45 mm) wide by 2.5" (~64 mm) high. If the existing mounting hole is smaller than required, go to step 8. If the existing mounting hole is already large enough you can skip to step 12.
- 8) A cut-out template is printed on the next to last page of this manual. Tear or cut the template page from the manual. Using scissors or a utility knife, cut out the rectangular opening in the template that sizes the required hole dimensions. Tape this cutout template over the existing hole, positioning it to minimize the amount of cutting required. Be sure that the top of the template outline is parallel to the floor/ceiling. Outline the section to be cut with a pen, pencil or fine point marker.
- 9) Using a keyhole or drywall hand saw, enlarge the existing hole in width and/or height to match the opening in the template. *Be sure not to enlarge the hole too high or the mounting plate screws will not have wall material to be secured to. Do not enlarge the hole too wide or the mounting plate will not cover the hole. WARNING! DO NOT ACCIDENTLY CUT THE WIRES CONNECTED TO THE SWITCH.*
- 10) You may optionally drill the holes for the two mounting screws. Use a 7/64" drill bit and drill two pilot holes, each in the center of the template mounting hole pattern.
- 11) Remove the template overlay from the wall.
- 12) If you have additional PowerMatePRO units to install, repeat the steps above for each unit.

Wiring the PowerMatePRO

WARNING: BE SURE POWER IS REMOVED FROM THE SWITCH WIRING BEFORE CONTINUING!

Your PowerMatePro has been furnished with four ScotchLok® tap and run crimp connectors (Figure 2) suitable for electrical connections to 12-gauge wiring. The connector is designed to be used to tap into an existing wire without the need for cutting or stripping the wires to be connected. The user snaps the connector with the open slot side onto the existing wire to be tapped. The wire to be added to the circuit is inserted into one of the adjacent holes such that the end of the new wire stops just past the metal plate. Use a pair of pliers to drive the metal plate down into the wires until the top of the plate is flush with the plastic. Close the plastic cover to complete the operation.

The PowerMatePRO has four wires fixed to the circuit board. They are:

- Red – Positive power, +12 volts DC.
- Black – Negative (Ground).
- Blue – Motor Wires (2). Each blue wire connects to one of the motor wires.

The existing switch has 4 or 5 wires. They are:

- Red - +12 VDC
- Black (1 or 2 wires) – Negative or ground
- Green – Motor Wire
- Yellow – Motor Wire

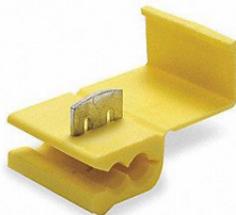


figure 2

For video instruction on the use of ScotchLok connectors for wire splicing, see the following YouTube video.

<https://www.youtube.com/watch?v=Uh8ca6J3vsU>

To connect the PowerMatePRO to the existing wiring, complete the following:

- 1)** Slide a ScotchLok connector onto one of the motor wires (typically either green or yellow and from the switch). If the switch being replaced has a plug in connector on the back of the switch, position the ScotchLok connector a few inches away from the plug-in connector so that there will be adequate loose wire for crimping.
- 2)** Insert one of the blue wires from the PowerMatePRO into the adjacent hole of the connector so that the end of the wire is located past the metal plate.
- 3)** Using a pair of pliers, compress the plate such that the top of the plate is flush with the plastic body of the connector. Tug on the finished connection to verify a successful crimp connection.
- 4)** Repeat the above steps for the other motor wire (yellow or green and from the switch) and use the second blue wire from the PowerMatePRO.
- 5)** Repeat steps 1-3 using **one** of the black wires from the switch and the black wire from the PowerMatePRO. If there is an additional black wire it should be terminated with the included wire nut and/or electrical tape.
- 6)** Repeat steps 1-3 using the red wire from the switch and the red wire from the PowerMatePRO.
- 7)** Once all of the wiring connections have been completed, the PowerMatePRO can be installed into the wall opening and secured in place with the 2 screws provided with the unit.
- 8)** If you have additional PowerMatePRO units to install, repeat the steps above for each unit.

Once all PowerMatePRO units have been installed and wiring is complete for each, external power can be reconnected to the vehicle. When power is applied, each PowerMatePRO unit will beep twice to indicate that it is receiving power.

Configuring the PowerMatePRO

Each PowerMatePRO can be configured so that the Open and Close buttons on the front of the PowerMatePRO will match the actual direction of travel for the power system. For each installed PowerMatePRO you will need to determine if the wiring polarity is correct and then change the configuration if necessary. Please complete the following steps for each installed PowerMatePRO.

- 1)** Press the Open or Close button on the PowerMatePRO (Figure 3) to determine if the powered system being controlled operates backward compared to the button pressed (ie. Opens when the Closed button is pressed or closes when the Open button is pressed). If the powered system operates as it should compared to the button pressed then no further configuration will be needed for this PowerMatePRO and you may skip to step 5. If the powered system operates backward compared to the button pressed proceed with the rest of the steps in this section to configure to reverse the direction.
- 2)** Place the PowerMatePRO into configuration mode by pressing both the Open and Close buttons simultaneously for 2 seconds. The PowerMatePRO will beep twice to indicate that the unit is in configuration mode.
- 3)** Within 10 seconds of entering the configuration mode, press and hold the **Close** button for 2 seconds. After 2 seconds, the PowerMatePRO will beep 4 times indicating that the Output Relay direction has been reversed.
- 4)** Press the Open or Close button to insure that the power system now operates as it should compared to the button pressed.
- 5)** Repeat the steps above for each PowerMatePRO in this installation.

There may be some occasions where it is desirable to reset the PowerMatePRO to factory defaults. Resetting the unit will erase all of the stored configuration including the name of the device. To reset the device complete the following steps.

- 1)** Press and hold both the Open and Close buttons simultaneously for 2 seconds. The PowerMatePRO will beep twice to indicate that the unit is in configuration mode.
- 2)** Within 10 seconds of entering the configuration mode, press and hold the **Open** button for 2 seconds. After 2 seconds, the PowerMatePRO will beep 4 times indicating that the unit has been reset to the factory defaults.

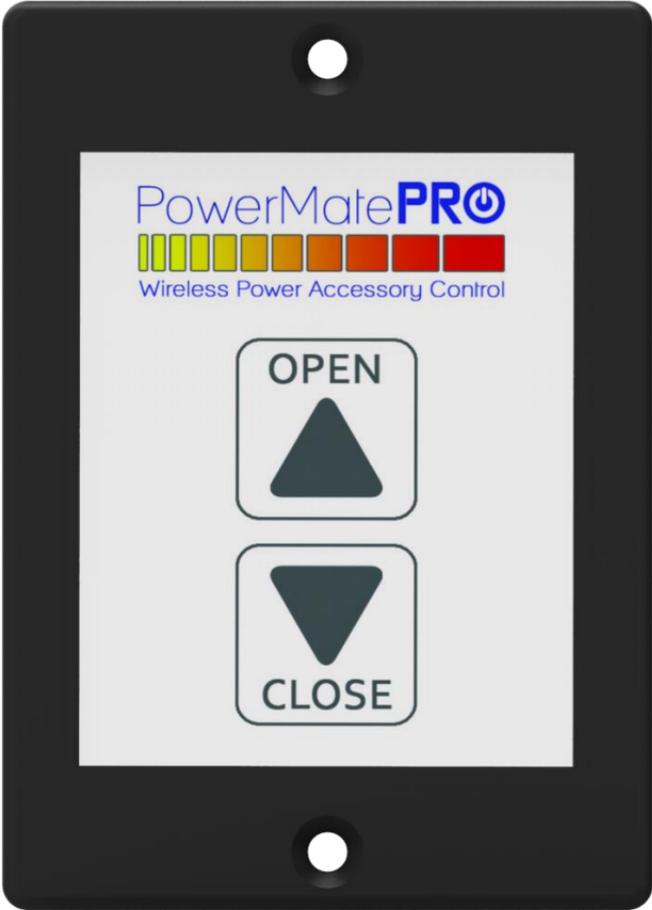


figure 3

PowerMatePRO App Setup

In addition to manual operation using the Open and Close buttons on the PowerMatePRO, it can also be operated remotely using a smartphone or tablet and the PowerMatePRO app. To setup the PowerMatePRO for use with a smartphone or tablet, complete the following steps.

- 1)** Download and install the PowerMatePRO app from the appropriate app store. The app is available for both Apple[®] and Android[®] devices.
- 2)** Open the PowerMatePRO app and the Passcode screen (Figure 4) will be displayed. The passcode can have 4-6 numeric characters. The passcode you enter will be required each time you start the app in order to secure it from unauthorized use. If you ever want to change the passcode this can be done through the app settings (See the PowerMatePRO App Settings section of this manual).
- 3)** After entering the passcode, the Add Device screen will be shown (Figure 5).
- 4)** Press and hold both the Open and Close buttons on the PowerMatePRO for 2 seconds. The PowerMatePRO will beep twice to indicate that the unit is in configuration mode. Once in configuration mode the PowerMatePRO app will be able to “learn” the device for 10 minutes.
- 5)** Within 10 minutes, press the Start button on the Add Device screen (Figure 5).
- 6)** Once connected, the PowerMatePRO app will display the Device Configuration screen (Figure 6). Enter a name for the device that describes what the device controls (ie. Bedroom Slide, Livingroom Slide, Awning, etc.). Tap the Save button and the app will then display the Operation screen (Figure 7).
NOTE: When “learning” a previously configured device, the Device Configuration screen (Figure 6) will not be shown. Instead you will be taken directly to the Operation Screen (Figure 7).
- 7)** If you have additional PowerMatePRO units to add to the PowerMatePRO app, tap the Gear icon in the upper right corner of the Operation screen (Figure 7) to enter the Settings screen (Figure 8). Once in the Settings screen tap on the Add New Device button to display the Add Device screen (Figure 5). Repeat steps 4-6 to add the device.
- 8)** If you still have additional PowerMatePRO units to add to the PowerMatePRO app, repeat step 7 and then steps 4-6 for each unit.



figure 4

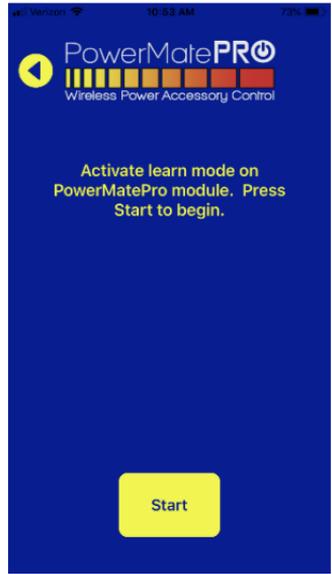


figure 5

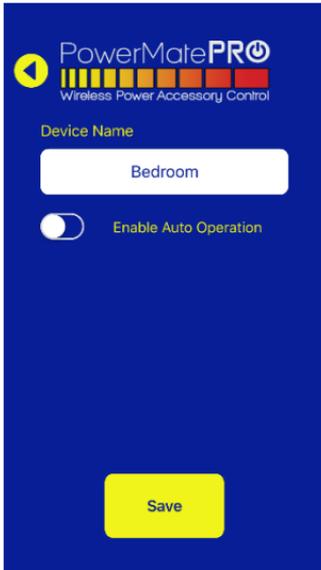


figure 6



figure 7

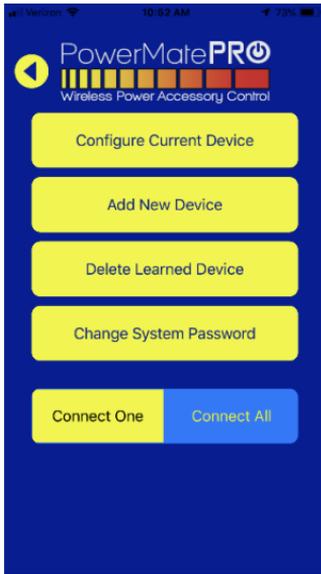


figure 8

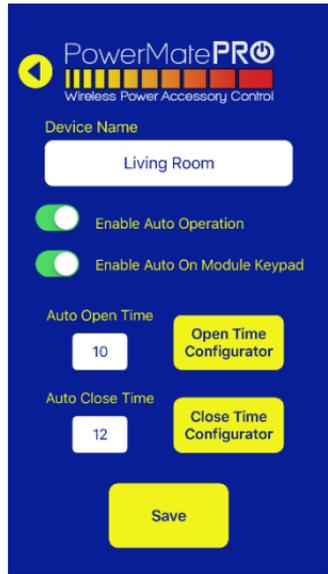


figure 9

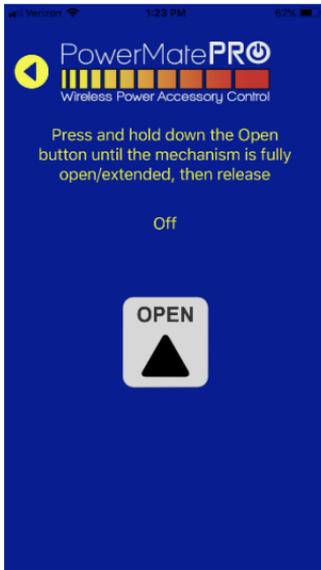


figure 10

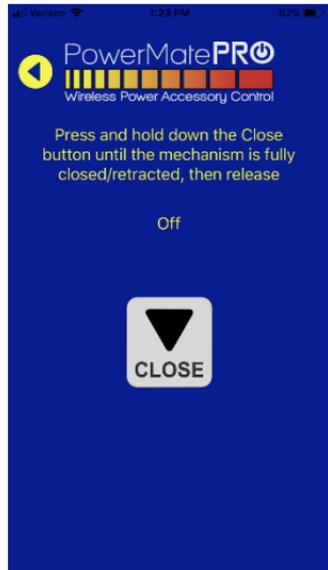


figure 11

Configuring Auto Operation

The PowerMatePRO has the ability to fully extend or fully retract power systems with the tap of a single app button or a double push of the keypad button through the use of the Auto feature. The Auto feature is designed to run the associated power system for a configured period of time which corresponds to the amount of time each system takes to fully extend or fully retract. Each PowerMatePRO can be configured for different Auto time periods for both extension and retraction. Auto times can be recorded automatically while the power system is being extended or retracted, they can be entered manually or a combination of both. Power systems such as power slide out rooms and power awnings that have the same extend and retract distances each time are the types of systems that the Auto feature is recommended for use with. The Auto feature is not recommended for use with power systems such as jacks or stabilizers that will have a different extend and retract distance each time they are used. Use the following steps to enable and configure the Auto functionality for each desired PowerMatePRO in your installation.

- 1)** From the Operation screen (Figure 7), if the device you would like to configure is not listed in the Device Name box at the top of the screen tap it to select a different device.
- 2)** Tap the gears icon at the top right of the screen to access the Settings screen (Figure 8).
- 3)** Tap the Configure Current Device button to access the Device Configuration screen (Figure 9).
- 4)** Tap the slider or checkbox labeled “Enable Auto Open/Close Operation” to display the Auto configuration options (Figure 9).
- 5)** It is recommended that you use the Time Configurators to automatically record the initial Open and Close (extend and retract) times. Start the configuration process by using the Close button on the PowerMatePRO (Figure 3) to fully retract the power system.
- 6)** Tap the Open Time Configurator button and the Open Time Configurator screen will be displayed (Figure 10).
- 7)** Press and hold the Open button (Figure 10) until the power system is fully extended and then release.
- 8)** Once the Open button has been released the Auto Open/Close configuration options (Figure 9) will again be displayed. The amount of time recorded (in

seconds) of the full extension during the previous step will now be displayed in the Auto Open Time box. This time may be manually adjusted if necessary by tapping the displayed time and entering a new value. If you accidentally released the Open button too soon or held it beyond the full extension of the power system, you can fully close the power system using the Close button on the PowerMatePRO (Figure 3) and then repeat steps 6-7 to measure and record a new Auto Open Time.

- 9)** With the power system fully open, tap the Close Time Configurator button (Figure 9) to display the Close Time Configurator screen (Figure 11).
- 10)** Press and hold the Close button (Figure 11) until the power system is fully retracted and then release.
- 11)** Once the Close button has been released the Auto Open/Close configuration options (Figure 9) will again be displayed. The amount of time recorded (in seconds) of the full retraction during the previous step will now be displayed in the Auto Close Time box. This time may be manually adjusted if necessary by tapping the displayed time and entering a new value. If you accidentally released the Close button too soon or held it beyond the full retraction of the power system, you can fully open the power system using the Open button on the PowerMatePRO (Figure 3) and then repeat steps 9-10 to measure and record a new Auto Close Time.
- 12)** If you would like to enable the Auto function on the keypad, tap the slider or checkbox labeled “Enable Auto On Module Keypad” and then tap Save. If you prefer not to enable the Auto function on the keypad just tap Save to complete the Auto configuration.

NOTE: Once the Auto function has been enabled on the keypad and the Open and Close times have been configured, the Auto function may be operated from the keypad to Auto Open or Auto Close the power system. Double pressing the Open or Close buttons on the keypad will start the Auto function. Once the Auto function has been started, pressing any key on the keypad will abort the function if needed.

Using the PowerMatePRO App

Once you have completed the PowerMatePRO App Setup you can use your smartphone or tablet to remotely control each PowerMatePRO by following the steps below.

- 1)** Open the PowerMatePRO app on your smartphone or tablet.
NOTE: As a safety precaution, the PowerMatePRO app will not run if the phone is determined to be moving more than 5 MPH. The app will only operate if the phone is moving less than 5 MPH.
- 2)** When the Passcode screen (Figure 4) is displayed, enter the passcode you originally entered during the app setup process.
- 3)** After entering the passcode the Operation screen (Figure 7 or Figure 12) will be displayed. At the top of this screen the currently active PowerMatePRO unit will be listed by the Device Name you entered during the initial setup of the unit. Tapping on the currently active device name will display a list of all PowerMatePRO units currently associated with the app. Tap a name in the list to make that unit the currently active device.
- 4)** If the device you have selected does not have Auto Operation enabled, use the Open or Close buttons (Figure 7) to operate the currently active device. If the device you selected does have Auto Operation enabled, use the Open, Close or either of the Auto buttons to operate the currently active device. Note that once you have initiated an Auto Open or Close operation a large red Abort button will be displayed (Figure 13). Tapping the Abort button at any time during the Auto operation of the power system will immediately cease the operation of the active power system.
- 5)** Once you have moved the currently active device to the desired position, you can once again tap the Device Name at the top of the screen to display the device list to select the next Device Name you would like to control using the app.

NOTE: As a safety precaution, if the Bluetooth connection is lost during the operation of any PowerMatePRO and the associated power system it will immediately cease operation.

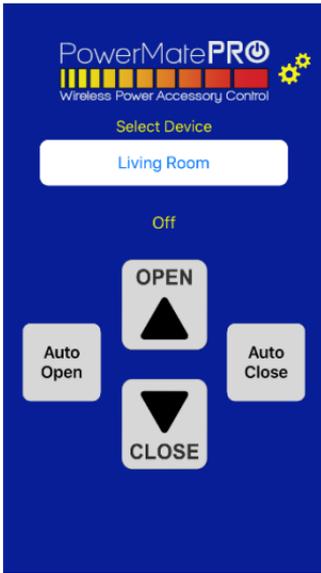


figure 12

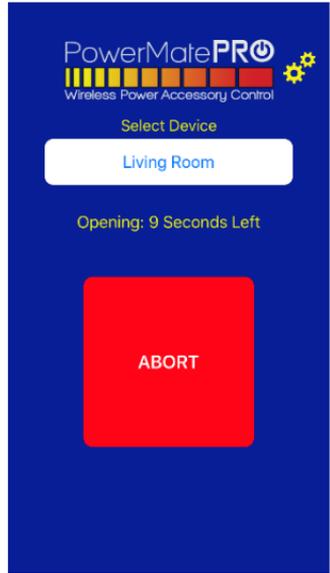


figure 13

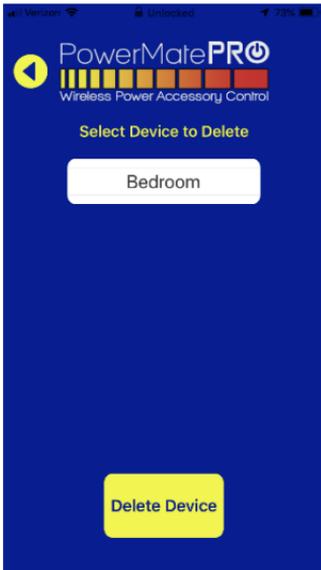


figure 14

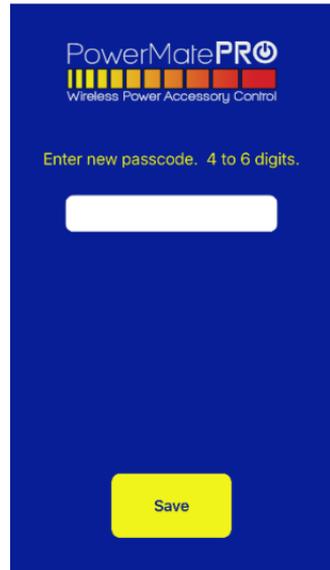


figure 15

PowerMatePRO App Settings

The PowerMatePRO system settings are on a single Setting screen (Figure 8) and can be accessed by tapping the Gear icon in the upper right corner of the Operation screen (Figure 7 or Figure 12). Below are detailed explanations of each setting option.

Configure Current Device

Tapping this button will display the Device Configuration screen. On this screen you can edit the name of the device, enable or disable Auto operation, access the Time Configurators and edit the current Auto times for both Open and Close operations.

Add New Device

Tapping this button will display the Add Device screen (Figure 5). Placing the PowerMatePRO in “learn” mode and then tapping the start button on this screen will cause the new device to be “learned” by the app. Once a new device is learned, the Device Configuration screen (Figure 6) will be displayed for the purpose of configuring the new device.

Delete Learned Device

Tapping this button will display the Delete Device screen (Figure 14). Tapping the Device Name will display a list of all devices so a selection can be made for deletion. Tapping the Delete button on this screen and the subsequent delete confirmation box will remove the currently selected device from the app. To exit this screen without deleting a device, tap the left facing arrow at the top left of the screen.

Change System Passcode

Tapping this button will display the Change Passcode screen (Figure 15). Enter the new passcode and tap the Save button to update the app with a new passcode. To exit this screen without changing the passcode, tap the left facing arrow at the top left of the screen. (For Android[®] devices, the back button on the phone or tablet will be used for this navigation)

Connect One / Connect All

The Connect One and Connect All buttons refer to the method the PowerMatePRO app uses to make Bluetooth connections to the PowerMatePRO devices. The default selection is Connect One which causes the app to drop the Bluetooth connection to the current PowerMatePRO and make a new Bluetooth connection each time a new PowerMatePRO is selected from the Operation Screen (Figure 7 or Figure 12). Selecting the Connect All option will cause the app to connect to all PowerMatePRO's that have been "learned" by the app each time the app is started. Using the Connect All option requires that multiple Bluetooth connections be maintained simultaneously and some phones and tablets may not have the resources required to do this. If you select the Connect All option and notice that the app doesn't perform optimally, you can change back to the Connect One option.

NOTE: Changing from Connect One to Connect All or vice versa will require that the PowerMatePRO app be shut down and restarted.

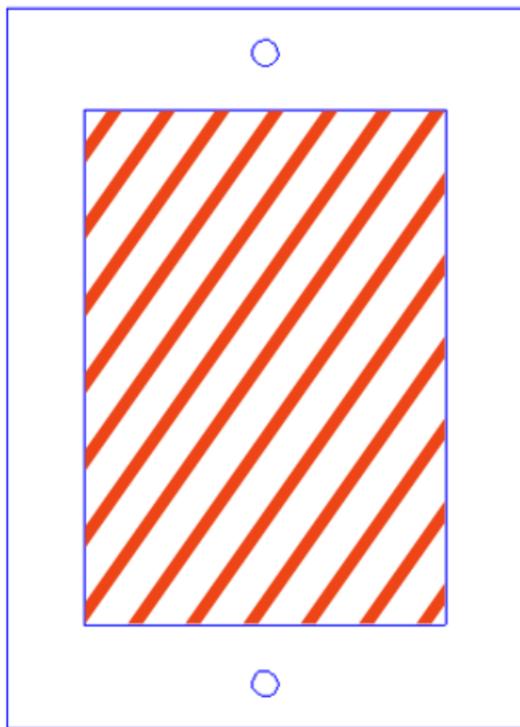
Product Support

Aside from our products, our customer support is something we place a very high value and priority on. We believe that prompt customer support is something that every company should be able to provide and to that end you will find that we are accessible and ready to help with any questions you might have about our products. Please contact us any time with questions about installation or use of our products.

Phone: 855-549-8199

Email: support@LogicBlueTech.com

Web: www.LogicBlueTech.com



The area with red diagonal lines is the required cutout size

About LogicBlue Technology

Formed in 2014 by two former coworkers, LogicBlue Technology began with plans to develop unique, patented products to fill spaces within industries where technical advantages weren't being realized. Being campers ourselves, we saw a need for technical products to simplify RV setup and increase safety and convenience. Overcoming a lot of technical challenges and other hurdles we finally made it to the marketplace with our first product in May 2016, the LevelMatePRO.

LogicBlue Technology is a testament to what can be done with good ideas, hard work and a never-give-up attitude. We love what we do and it is our passion to bring products to consumers that are useful, user friendly and work reliably and accurately. We are especially proud to say that all of our products are Made In The USA employing American workers.