PitBoss User Manual



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INTRODUCTION

How Does the PitBoss Work

Your PitBoss uses sensors to detect high water levels in your sump pit. When your PitBoss detects water, a loud audible alarm is sounded first, and then it sends text messages notifying you that it detected water to up to three phone numbers of your choosing.

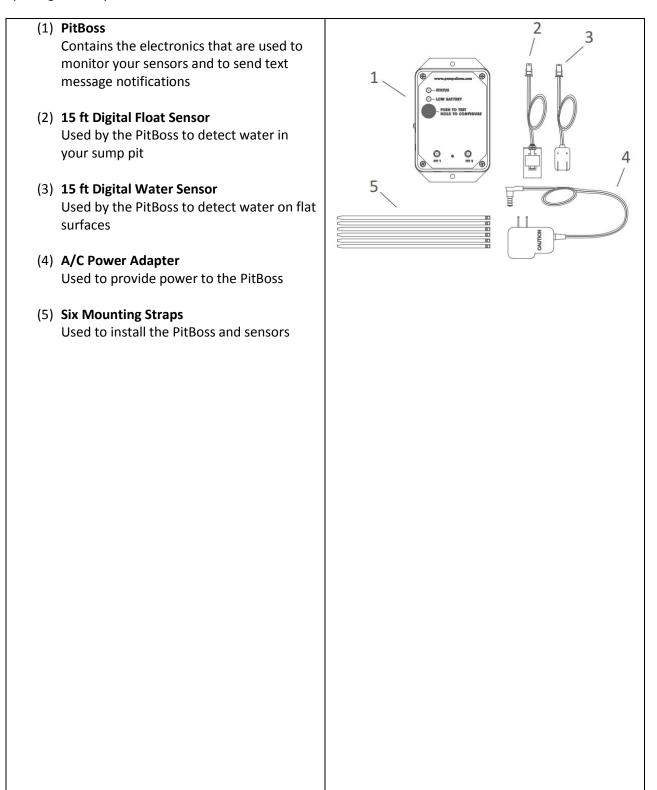
Your PitBoss has its own phone number, just like your cell phone does. You configure your PitBoss by sending SMS messages to your PitBoss' phone number from your cell phone (just as if you were texting your best friend.)

This manual describes the installation, configuration, and operation of your PitBoss. Please read it carefully.



What Comes With Your PitBoss

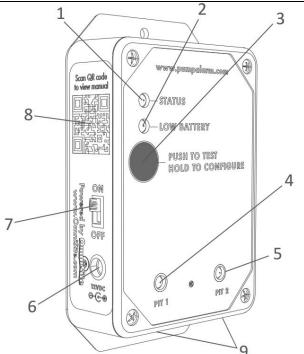
Your PitBoss comes with everything you need to monitor your sump pit. The items below come packaged with your PitBoss.



Getting to Know Your PitBoss

The following illustration describe the physical features of your PitBoss

(1) Status Light Indicates the status of the PitBoss Refer to the Light Blink Patterns section for a description of the blink patterns (2) Low Battery Light Indicates the backup batteries are low and should be replaced when the light is flashing Replace with (4) AAA alkaline batteries (3) Push To Test/Hold To Configure Button Momentarily pressing and releasing this button will send a test notification to all phone numbers configured in the unit Holding this button for 3 seconds will put the unit into configuration mode (4) Sensor 1 Status Light This light will blink on and off while sensor 1 detects an alarm condition (5) Sensor 2 Status Light This light will blink on and off while sensor 2 detects an alarm condition (6) Power Jack The power plug from the A/C power adapter plugs in here (7) On/Off Switch Turns the PitBoss on and off (8) QR Code Scan this QR code with your smartphone to download a copy of this manual (9) Sensor Input Jacks The included sensors plug into these jacks



INSTALLATION

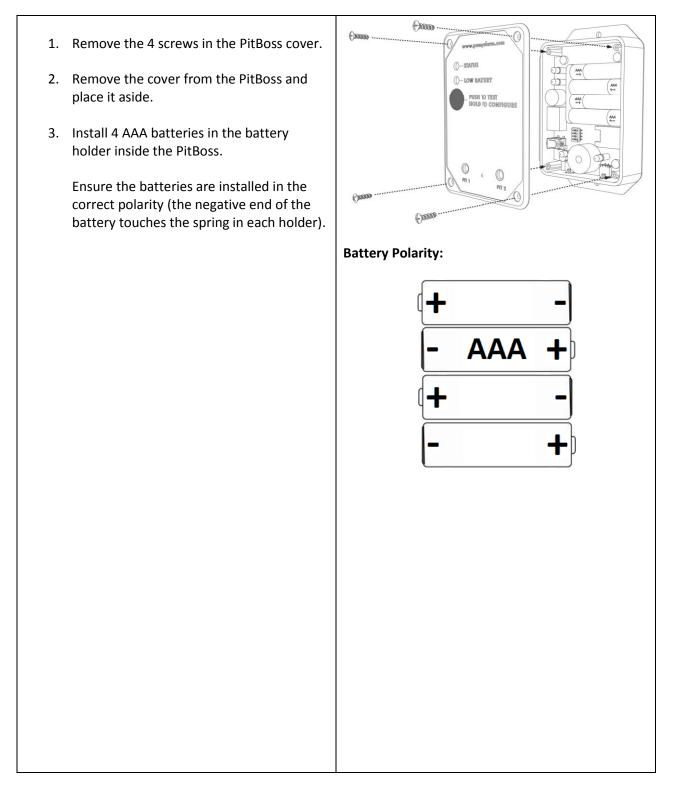
1. Device Activation

Your PitBoss must be activated before it will communicate on the cellular network. During the activation process, you'll select a payment plan and enter your billing information. Upon successful activation, you'll receive the phone number for you PitBoss.

1. Using a computer or smartphone, navigate to the following link: Unit ID#: 123ABC www.PumpAlarm.com/activate www.pumpalarm.com Top of Unit 2. Enter the 6 digit alphanumeric unit number on the top of your unit. 3. Select your payment plan and enter your billing information. Unit Activation 4. Once activation is complete, you'll receive 2 3 4 an email with the phone number of your UNIT PAYMENT BILLING CONFIRM unit. LOOKUP PLAN INFO ACTIVATION 5. Once you receive your PitBoss phone Enter the 6-digit alphanumeric Unit ID for the device you number, add the phone number to the wish to activate. contact list of your cell phone. Refer to the user's manual of your cell Unit ID: 123ABC phone for more details on how to add a new contact: NEXT a. Create a new contact b. Enter a name for the contact such as "My PitBoss" c. Enter the phone number of the PitBoss for the contact PitBoss add photo Last Company ● Mobile (555)123-4567 iPhone

2. Install Backup Batteries

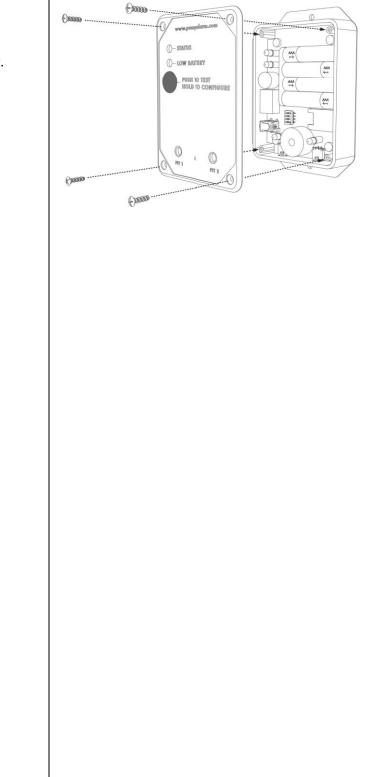
Your PitBoss uses 4 AAA alkaline batteries as a backup power source to keep itself powered up when electrical power is lost to your home. The backup batteries are not included, but must be installed prior to using the PitBoss.



3. Reinstall Cover

The cover can now be reinstalled.

- 1. Reinstall the cover onto the PitBoss.
- 2. Reinstall the 4 screws into the cover.



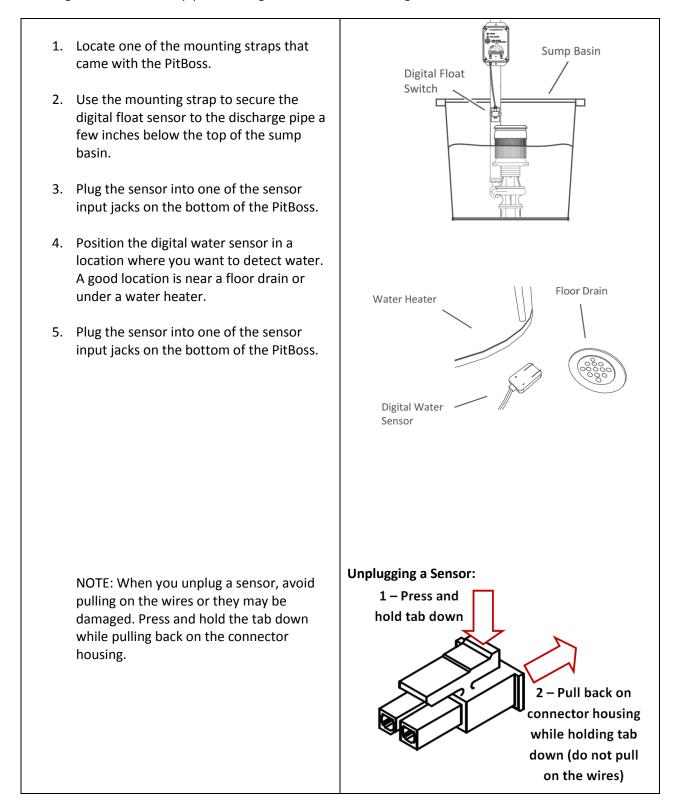
4. Mount the PitBoss

The recommended installation method is to strap your PitBoss to the discharge pipe of your sump pit. However, the PitBoss can also be wall mounted.

1. Locate two of the mounting straps that came with the PitBoss. 2. Run a mounting strap through the top hole Ð Æ of the PitBoss enclosure. w.pumpalarm ⊙—status 3. Wrap the mounting strap around the ⊙—low battery discharge pipe, but don't pull it tight yet. PUSH TO TEST HOLD TO CONFIGURE 4. Position the PitBoss so it is about 4 feet above the floor and then pull the top mounting strap tight. \odot \odot 5. Run the other mounting strap through the PIT 1 PIT 2 bottom hole of the PitBoss enclosure. 6. Wrap the mounting strap around the discharge pipe and pull it tight. 7. Plug the A/C power adapter into the PitBoss and then plug it into a 120VAC outlet.

5. Install Sensors

The PitBoss comes with two types of sensors designed for different applications. The digital float sensor is designed for use in sump pits. The digital water sensor is designed for use on flat surfaces.



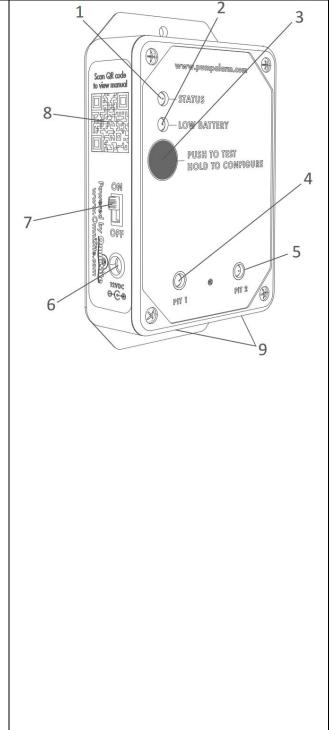
CONFIGURATION

1. Power On and Wait for Cellular Service

The PitBoss is now ready to be powered on. Once it is powered on, the PitBoss will attempt to connect to the cellular network.

- 1. Turn on the PitBoss by switching on the on/off switch (7).
- 2. While the PitBoss is attempting to connect to the cellular network, the status light (1) will blink green.
- 3. Wait for the status light to turn solid green; this can take up to 1 minute.

The status light may briefly turn red. If the status light stays red for **more than 1 minute,** refer to the Troubleshooting section of this manual.

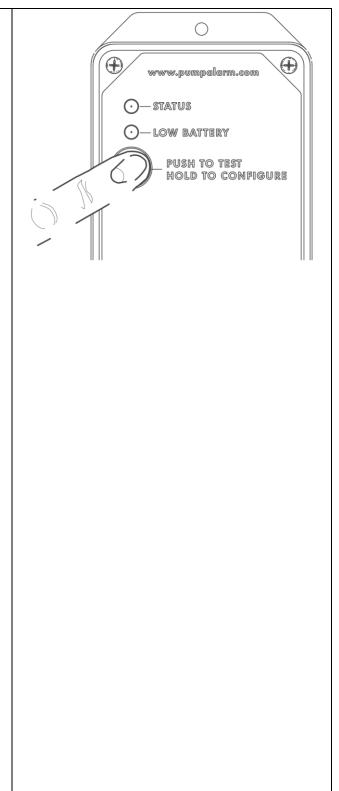


2. Put the PitBoss in Configuration Mode

The PitBoss must be in configuration mode before it will allow you to configure it.

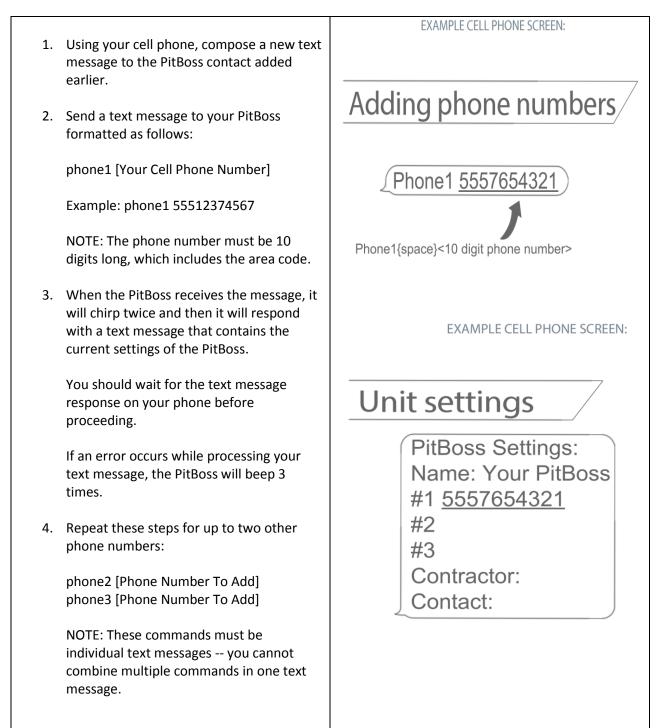
- 1. Press and hold the "Push to Test/Hold to Configure" button for 3 seconds until the PitBoss chirps twice.
- 2. The status light will begin to blink red and green.

NOTE: The PitBoss will stay in configuration mode for up to 1 hour, or until you press and hold the "Push to Test/Hold to Configure" button for 3 seconds.



3. Configure Notification Phone Numbers

The PitBoss will send notifications to up to three phone numbers. The phone numbers are configured by sending the PitBoss text messages from your cell phone. You must configure at least one phone number for text messaging notifications.



4. Configure the Name of Your PitBoss

You can give your PitBoss a name that it uses in the notification messages it sends.

- 1. On your cell phone, compose a new text message to your PitBoss' phone number.
- 2. Send a text message to your PitBoss formatted as follows:

name [Name]

Example: name John Doe Residence

3. When the PitBoss receives the message, it will chirp twice and then it will respond with a text message that contains the current settings of the PitBoss.

You should wait for the text message response on your phone before proceeding.

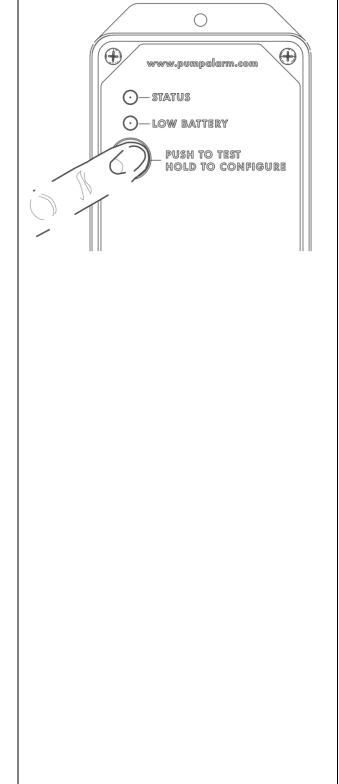
If an error occurs while processing your text message, the PitBoss will beep 3 times.

EXAMPLE CELL PHONE SCREEN: Naming the unit Name John Doe Residence EXAMPLE CELL PHONE SCREEN: Unit settings PitBoss Settings: Name: John Doe Residence #1 5557654321 #2 #3 Contractor: Contact:

5. Exit Configuration Mode

Configuration is complete, so you can exit configuration mode.

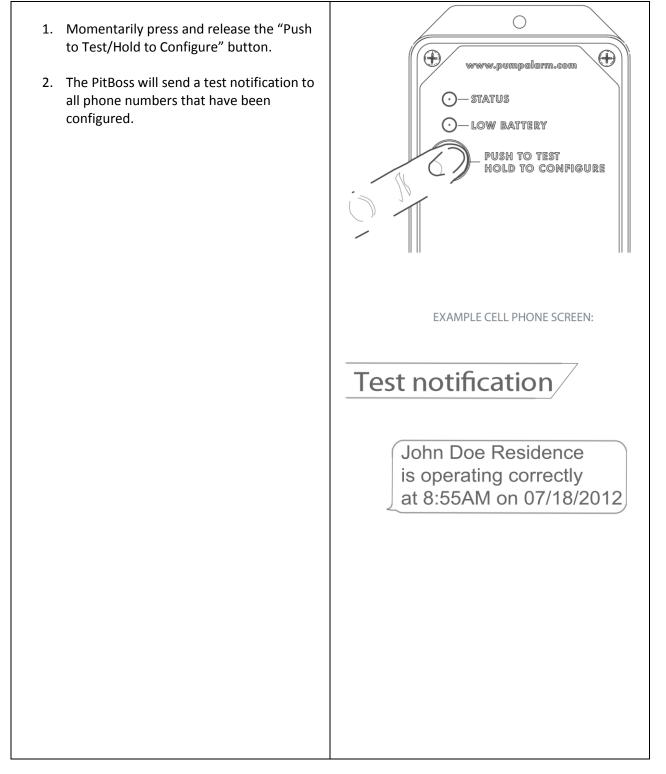
- 1. Press and hold the "Push to Test/Hold to Configure" button for 3 seconds until the PitBoss chirps twice.
- 2. The status light will stop blinking red and green.



TESTING YOUR PITBOSS

1. Test Your PitBoss

You can test your PitBoss at any time by pressing the "Push to Test" button.



2. Test Your Sensors

The sensors can be tested at any time by submerging them in water.

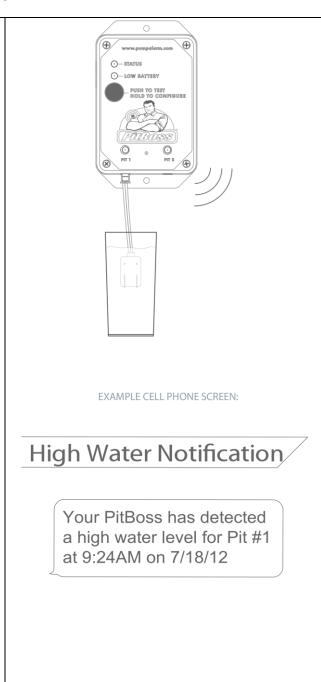
- 1. Fill a drinking glass with tap water.
- 2. Submerge the sensor in the drinking glass.
- The PitBoss should begin to sound its alarm and each phone number you configured will receive a notification text message.

You should wait for the text message notification on your phone before proceeding.

- 4. Remove the sensor from the drinking glass.
- 5. The PitBoss will stop sounding its alarm and each phone number you configured will receive a notification text message.

You may need to dry off the surface of the sensor if the PitBoss does not stop sounding its alarm right away.

6. Repeat the steps above for the other sensor.

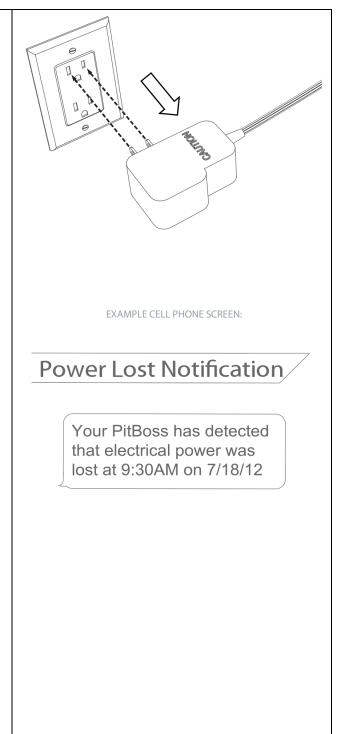


3. Test Your Backup Batteries

- 1. Unplug the A/C power adapter from the 120 VAC outlet.
- 2. Once the PitBoss detects that power was lost, each phone number you configured will receive a notification text message.

You should wait for the text message notification on your phone before proceeding.

3. Plug the A/C power adapter back into the 120 VAC outlet.



4. Testing is Complete

- 1. Your PitBoss has been tested and is working properly.
- 2. You should periodically perform these tests on the PitBoss to ensure you are always protected.



ADVANCED CONFIGURATION

Contractor Name and Contact Configuration

Your PitBoss allows you to configure a contractor name with associated contact information. When this information is configured, the PitBoss appends this contact information to the end of alarm notifications (input alarms, low battery, power loss, etc.) so you know who to call in an emergency. The PitBoss must be in configuration mode to process these commands.

For example, a pit input alarm will be formatted as follows:

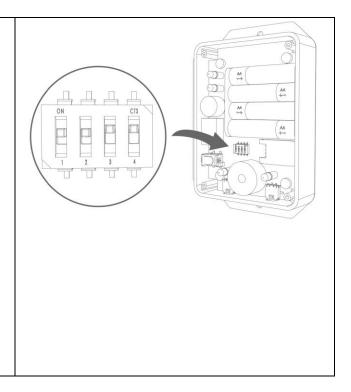
[PitBoss Name] has detected a high water level for Pit #1 at [HH:MM AM/PM] on [MM/DD/YY]. Please contact [Contractor Name] at [Contact Info] for assistance.

Command	Example	Description
contractor [name of contractor]	contractor Bob's Plumbing	Sets the contractor name, up to 20
		characters long
contractor none	contractor none	Clears the name of the contractor
	contact (555) 666-7777	Sets the contact information for the
contact [contact info of contractor]		contractor, up to 14 characters long
contact none		Clears the contact information for
contact none	contact none	the contractor

Configuration Switches

Your PitBoss has four configuration switches that allow you to customize your PitBoss. The switches are accessible by removing the cover of the PitBoss. Ensure that the PitBoss is powered off before making any changes to the configuration switches.

- (1) Switch 1 Audible Alarm Enabled
 On Enable audible water alarm
 Off Disable audible water alarm
- (2) Switch 2 Text Notifications Enabled On – Enable text message notifications Off – Disable text message notifications
- (3) Switch 3 Configuration Mode Bypass On – PitBoss will process incoming text message commands without being in Configuration Mode Off – PitBoss must be in Configuration Mode before it will process incoming text message commands
- (4) Switch 4 Not Used Not used



GENERAL OPERATION

Pit Sensor Inputs

The PitBoss has two inputs that can be used with PitBoss sensors. The PitBoss uses these sensors to detect water.

When the system detects water, it will sound an alarm, toggle the corresponding sensor status light, and send a text notification. The PitBoss will also send a text notification when it no longer detects water.

Backup Battery Operation

The PitBoss uses 4 AAA batteries as a backup power source. The PitBoss monitors these batteries and sends text notification if they are low or critically low.

When the batteries are low, the system has limited battery runtime and should be replaced soon. If the batteries are critically low, the system will not likely operate and the batteries should be replaced immediately. When the batteries are critically low, the PitBoss chirps every 30 seconds.

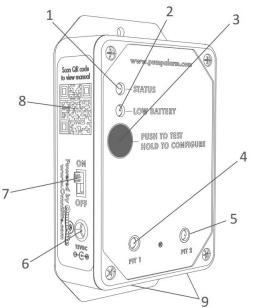
Power Loss Detection

The PitBoss sends a text notification when electrical power is lost and restored. Power must be lost for 5 seconds before the PitBoss will send the text notifications.

The PitBoss goes to sleep after 5 minutes to conserve the backup batteries while electrical power is lost. When the PitBoss detects that electrical power has been restored, it will wake up.

While the PitBoss is sleeping, it is still monitoring the pit inputs. If it detects water, it will wake up and send a text notification. It takes about 30 seconds for the PitBoss to wake up.

LIGHT BLINK PATTERNS



Status Light (1)

Green Flashing ¹	Sleeping, on backup battery power
Green Blinking ²	Not ready/Attempting to connect to cellular
Green Solid	Ready
Red Solid	Cannot connect to cellular network
Red/Green Blinking	Configuration mode
Red Blinking Fast	An error occurred

Low Battery Light (2)

Off	Batteries normal
Flashing	Batteries low or critically low

Pit Sensor Lights (4 and 5)

Off	Water not detected
Toggles On and Off with	Water detected
Sounder Alarm	

¹ Flashing = Light will turn on very briefly and then it turns off for two seconds ² Blinking = Light will toggle on and off every second

COMMANDS SUMMARY

The PitBoss accepts commands sent via text message. Upon receipt of commands, the PitBoss will chirp (beep) twice and send a text message response to all phone numbers configured in the unit. If an error occurs while processing command, the PitBoss will beep three times.

Command	Example	Description
name [name of PitBoss]	name Basement PitBoss	Sets the name of the PitBoss to be used in text notifications, up to 20 characters
		The default name is "Your PitBoss"
phone1 [phone number]	phone1 5556667777	Sets the first phone number to send SMS notifications to
phone1 none	phone1 none	Clears the first phone number
phone2 [phone number]	phone2 4445556666	Sets the second phone number to send SMS notifications to
phone2 none	phone2 none	Clears the second phone number
phone3 [phone number]	phone3 3334445555	Sets the third phone number to send SMS notifications to
phone3 none	phone3 none	Clears the third phone number
contractor [name of contractor]	contractor Bob's Plumbing	Sets the contractor name, up to 20 characters long
contractor none	contractor none	Clears the name of the contractor
contact [contact info of contractor]	contact (555) 666-7777	Sets the contact information for the contractor, up to 14 characters long
contact none	contact none	Clears the contact information for the contractor
settings	settings	Unit responds with the current settings of the PitBoss
status	status	Unit responds with the current status of the PitBoss

NOTIFICATION MESSAGES SUMMARY

Message	Description
[PitBoss Name] has detected a high water level for Pit #1 at [HH:MM AM/PM] on [MM/DD/YY].	Water is detected by sensor 1.
[PitBoss Name] has detected a high water level for Pit #2 at [HH:MM AM/PM] on [MM/DD/YY.	Water is detected by sensor 2.
[PitBoss Name] has detected a normal water level for Pit #1 at [HH:MM AM/PM] on [MM/DD/YY].	Water is no longer detected by sensor 1.
[PitBoss Name] has detected a normal water level for Pit #2 at [HH:MM AM/PM] on [MM/DD/YY].	Water is no longer detected by sensor 2.
[PitBoss Name] has detected that electrical power was lost at [HH:MM AM/PM] on [MM/DD/YY].	Electrical power was lost to the PitBoss.
[PitBoss Name] has detected that electrical power was reestablished at [HH:MM AM/PM] on [MM/DD/YY].	Electrical power has returned to the PitBoss.
[PitBoss Name] has low batteries at [HH:MM AM/PM] on [MM/DD/YY].	The backup batteries are low and should be replaced soon.
[PitBoss Name] has critically low batteries at [HH:MM AM/PM] on [MM/DD/YY].	The backup batteries are critically low and replaced immediately.
[PitBoss Name] is operating correctly at [HH:MM AM/PM] on [MM/DD/YY].	The response to the "Push to Test" button being pressed.
PitBoss Settings: Name: [PitBoss Name] #1: [Phone Number 1] #2: [Phone Number 2] #3: [Phone Number 3] Contractor: [Contractor Name] Contact: [Contractor Contact Info]	The response to any configuration command, and to the "settings" message.
PitBoss Status: Name: [PitBoss Name] FW: [Firmware Version] Pit 1: [N-Normal/A-Alarm] Pit 2: [N-Normal/A-Alarm] AC Power: [P-Present/NP-Not Present] Batt: [Battery Voltage] Signal: [Signal Strength]	The response to the "status" message

TROUBLESHOOTING

Problem	Cause	Remedy
		Locate the PitBoss to an area with better cellular reception
The status light is on solid red	Bad cellular signal strength	Locate the PitBoss away from metal objects
		Locate the PitBoss to a higher elevation
The status light is flashing red quickly	Some type of error has occurred	Power off the PitBoss for 10 seconds and then power it back on
	The batteries are not installed	Ensure the polarity of the batteries are correct
The low battery light is flashing	properly	The negative end of the battery touches the spring in each holder
even though I replaced the batteries	You are using low quality	Use only alkaline batteries such as Energizer or Duracell
	batteries	Do not use "heavy duty" batteries
	You did not power off the PitBoss before replacing the batteries	Power off the PitBoss for 10 seconds and then power it back on
		Replace the backup batteries
The PitBoss is chirping every 30 seconds	The backup batteries are low	Use only alkaline batteries such as Energizer or Duracell
		Do not use "heavy duty" batteries
		Replace the backup batteries
All of the lights are flashing on and off and the unit keeps beeping	The backup batteries are too low to power the PitBoss	Use only alkaline batteries such as Energizer or Duracell
		Do not use "heavy duty" batteries
The alarm is going off even	The sensor has residual water on	Power off the PitBoss,
though the sensor is not submerged in water	its surface The sensor is dirty	clean and dry the sensor, then power the PitBoss on

	The sensor is dirty	Power off the PitBoss, clean and dry the sensor, then power the PitBoss on
The alarm is not going off even though the sensor is submerged in water	A wire pulled out of the connector on the sensor or the connection to unit input jack is loose.	Push both wires firmly into the connector on the sensor and push connector firmly into input jack Contact us for a replacement sensor
Text messages arrive out of	Poor signal strength	Locate the PitBoss to an area with better cellular reception
order Text messages arrive late	Cellular network congestion	No remedy

SPECIFICATIONS

Operating Temperature: 32 degrees F to 150 degrees F Operating Humidity: 0-90% RH, non-condensing Cellular Radio: CDMA Dual Band 1xRTT (CDMA2000) 800/1900 MHz Certifications: FCC Parts 15, 22, 24; RoHS compliant; IC: RSS-132 & 133 Antenna: Integrated, on board Input Voltage: 12 VDC +/- 10% Input Current: 0.5 A (max) Backup Batteries: Non-rechargeable, AAA size, Requires 4 batteries Sounder: 2.9 kHz +/- 500 Hz, 100 dBA on 12 VDC, 75 dBA (estimated) on backup batteries Sensor Inputs: (2) Conductivity sensing or dry contact only Sensors: (1) Digital float sensor, (1) Digital water sensor Control Switches: (1) on/off power switch, (1) push-to-test momentary button Enclosure: NEMA 1 for indoor, basement, or crawlspace. Not recommended for outdoor use Protection: US Patents #7,228,129 B1, #7,778,633 B2, and #8,060,078 B2

SHIPPING AND WARRANTY STATEMENT

This warranty is good for two (2) years from the purchase date and covers all manufacturing defects.

If the product is damaged for whatever reason, PumpAlarm.com, LLC must first issue a Returned Material Authorization (RMA) number. This number can be obtained by calling PumpAlarm.com, LLC and a copy will be provided by email. A copy of the RMA must be included with any materials shipped to PumpAlarm.com, LLC.

For a unit to be reviewed, the entire assembly must be sent back (unless specifically listed otherwise on the RMA form) to PumpAlarm.com, LLC. The product or component parts will be inspected within 1-3 days from arrival at our facility. If the damage or defect is found to be the fault of PumpAlarm.com, LLC and the device is still under warranty, the device will be repaired at no charge and shipped as quickly as possible. However, **any damages found to be the fault of the Purchaser or any damages not covered under this warranty will not be repaired until a written purchase order is received.**

Any claim under this warranty must be presented during the warranty period and within 30 days after any covered condition has occurred. Upon receipt, the Purchaser should inspect the package contents immediately and file any delivery damage claims with the delivering carrier. PumpAlarm.com, LLC recommends saving the original box and packing material. The Purchaser is responsible for any damage to a product or component parts if returned improperly packaged.

The warranty period shall not be extended by the replacement of materials under this warranty but the remaining warranty period shall continue in effect and be applicable to the replaced or repaired products or component parts areas under conditions of the warranty.

Upon expiration of the warranty period, all liability of PumpAlarm.com, LLC shall be terminated. This warranty does not cover damage due to acts of God (fire, flood, lighting, etc.) nor product misuse and accidental damage.

PumpAlarm.com, LLC shall not be liable for any injury, loss or damage direct or consequential arising out of the use or the ability to use the product. This warranty gives specific legal rights. You may have other rights, which vary from state to state. Some states do not allow the exclusion or limitation of incidental or consequential damages, so that the above limitation of exclusion may not apply to you.

Payment of the Wireless Service Charge covers ONLY cellular transmission fees and in no way extends any portion of this warranty. This fee does not include out of warranty service or repair.

WARNING: The individual user should take care to determine prior to use whether this device is suitable, adequate or safe for the use intended. Since individual applications are subject to great variation, PumpAlarm.com, LLC makes no representation or warranty as to suitability or fitness of these devices for any specific application.

THIS LIMITED WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THOSE CONCERNING MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. THIS LIMITED WARRANTY IS ALSO IN LIEU OF ANY OTHER POSSIBLE LIABILITIES OF THE SELLER OR MANUFACTURER, WHETHER ALLEGED TO ARISE BY AGREEMENT OR BY OPERATION OF LAW. RESPECTING THE SALE , APPLICATION, USE OR FUNCTION OF PRODUCTS, INCLUDING BUT NOT LIMITED TO CLAIMS OF NEGLIGENCE, GROSS NEGLIGENCE, STRICT LIABILITY OR ANY OTHER TORT. IN NO EVENT SHALL THE SELLER OR MANUFACTURER BE LIABLE FOR PERSONAL INJURY OR PROPERTY DAMAGE, REAL OR PERSONAL, ATTRIBUTED TO ITS PRODUCTS, NOR FOR ANY EXCAVATION, REMOVAL, REAPPLICATION, DOWNTIME, CLEANUP, LOSS OF USE, LOSS OF OPPORTUNITY, LOSS OF MARKET VALUE, LOSS OF RENTAL VALUE OR FOR ANY LOSS OF PROFITS OR OTHER SPECIAL, INCIDENTAL, RESULTING, CONSEQUENTIAL OR EXEMPLARY DAMAGE.

Questions or problems with this product?

Contact PumpAlarm.com, LLC directly. Please do not return to your retailer.

> 888-454-5051 www.pumpalarm.com