



## zBoost Mobile1™ ZB245 Cellular Signal Booster

Need help?  [www.zBoost.com](http://www.zBoost.com)

 **Tech Support 800-871-1612**  
Mon. - Fri. Hours: 8:30 am to 5:30 pm EST



FAILURE TO DO THIS WILL VOID YOUR WARRANTY IN THE EVENT OF A POWER SURGE OR LIGHTNING STRIKE.

IT IS VERY IMPORTANT TO POWER YOUR SIGNAL BOOSTER USING A SURGE PROTECTED AC POWER STRIP WITH AT LEAST A **1000 JOULE RATING**.



THE SIGNAL BOOSTER UNIT IS DESIGNED FOR USE IN AN INDOOR, TEMPERATURE-CONTROLLED ENVIRONMENT (LESS THAN 150 DEGREES FAHRENHEIT). IT IS NOT INTENDED FOR USE IN ATTICS OR SIMILAR LOCATIONS SUBJECT TO TEMPERATURES IN EXCESS OF 150°F.

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**zBoost Mobile1™ 800 / 1900 MHz**  
Model ZB245 FCC: PWO460006

## Inside this Package



zBoost Mobile1



Mini-Magnet Mount Antenna  
(301126)



DC Plug-In Power Supply  
& USB cable  
(859963)



Vehicle Dash  
Adhesive  
Mounting Bracket



Adjustable Arms

## Optional Accessories



AC Power Supply  
(859969)



Antenna Window Mount  
(Used with Mini-Magnet  
Mount Antenna)  
(901128)



Adjustable  
Desk Mount  
(901137)



Mobile Power  
Supply  
(859984)



Gooseneck  
Suction Cup  
Cradle Mount  
(901120)



Cup Holder  
Cradle Mount  
(901130)



Vehicle Dash  
Mounting Kit  
-Rugged/Screw Mount-  
-Adhesive Mount-  
-Vent Clip Mount-  
(901134)  
(included in some kits)

\* All 3 available together in the Home Accessory Kit - ZB246  
Carrying case included

Appearance of device and accessories may vary.

2

Need help?



[www.zBoost.com](http://www.zBoost.com)

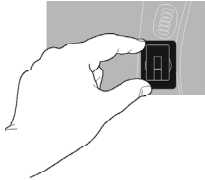


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## Installation Options

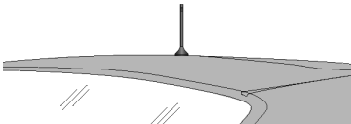
### Vehicle Installation Option

1. Attach the Mounting Bracket to the vehicle's dashboard.
  - Clean the area where the bracket is to be mounted with the alcohol wipe included. Allow the area to dry.
  - Peel the backing to expose the adhesive and press the bracket onto the desired location on the dashboard. **NOTE:** Be sure the tab is positioned vertically.

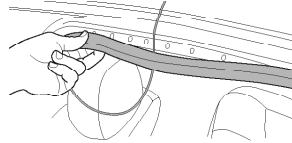


2. Install the Outside Antenna. Select a location on top of the car that is:
  - Near the center of the vehicle's roof.
  - At least 12 inches from any other antennas.
  - Free of obstructions.
  - At least 6 inches from any windows (including sunroofs).

The Outside Antenna must be installed vertically.



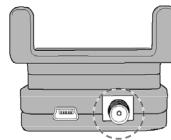
3. Run the Outside Antenna cable into the car. The cable is strong enough that it may be shut in most vehicle doors without damaging the cable. For a cleaner look, carefully pull down the door seal, run the cable under the seal, and push the seal back into place. This method reduces wear on the cable as the door opens and closes.



4. Attach the zBoost Mobile1 to the Mounting Bracket. After waiting 24 hours for the adhesive on the bracket to cure, attach the zBoost Mobile1 by aligning the rectangular hole on the back of the zBoost Mobile1 with the tab on the Mounting Bracket, grasping the sides of the zBoost Mobile1, and sliding it downward approximately ¼ inch into place. The Mounting Bracket is designed to swivel for more convenient viewing angles. Once the zBoost Mobile1 is in place, you can adjust the angle of the bracket by loosening the knurled nut, applying gentle pressure to the top or bottom of the zBoost Mobile1, and then tightening the nut when the desired angle is achieved.



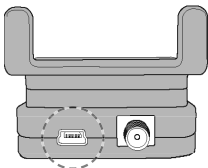
5. Attach the antenna to the zBoost Mobile1. Connect the cable from the Outside Antenna to the antenna connector on the bottom of the zBoost Mobile1. Do NOT plug in the power supply (next step) until the Outside Antenna cable is connected to the zBoost Mobile1.



**Note:** The zBoost Mobile1 has a convenient mini-USB charging port located on the right side of your booster. This port allows for charging your phone or device. zBoost offers several cables for this purpose

- 859966, mini-USB to mini-USB
- 859979, mini-USB to iPhone (up to 4S)
- 859967, mini-USB to micro-USB

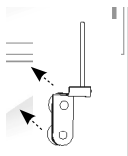
- Power up your zBoost Mobile1. Connect the power cable to the mini-USB port on the bottom of the zBoost Mobile1. Then insert the adapter into the vehicle 12V DC power source. Use only the supplied zBoost power supply. While the zBoost Mobile1 may remain on, leaving the zBoost Mobile1 on in a vehicle when it is not running may discharge the battery in a day or two. Also note that some 12V DC power sources are shut down when the vehicle ignition is turned off. Use a Bluetooth headset, wired hands-free device or speakerphone for talking on the phone.



## In-Building Installation Option

**Note: Indoor Accessory Kit ZB246 sold separately**

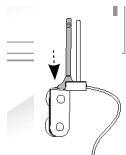
- Install the Outside Antenna to a window. For best results:
  - Select a window on the side of the building where you get the strongest cell signal.
  - Attach the suction cup bracket (sold separately) to the inside of a window so the cable will reach the location of the Mounting Bracket and zBoost Mobile1. Place the bracket as high on the window as possible.



**NOTE:** Many modern energy efficient dual pane windows use a metal coating that may decrease the strength of a cellular signal, reducing the effectiveness of the zBoost Mobile1. If you have dual pane windows, consider a zBoost signal boost product that provides an option for mounting an antenna on an outside wall or roof of a building.

- With the bracket in place, attach the

magnet base of the antenna to the flat surface of the bracket. The antenna must be mounted vertically for the best signal.



- Install the Mounting Bracket and zBoost Mobile1.

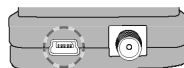


Put your zBoost Mobile1 in the Mounting Bracket (see instructions under Vehicle Installation) and place it in a convenient location such as a desk or table top in the room where you will use the phone. The location should be at least three feet from the Outside Antenna to avoid oscillation (feedback). Your cell phone must be in the cradle for the zBoost Mobile1 to amplify the signal. Use a Bluetooth headset, wired hands-free device or speakerphone for talking on the phone.

- Attach the antenna to the zBoost Mobile1. Connect the cable from the Outside Antenna to the antenna connector on the bottom of the zBoost Mobile1. Do NOT plug in the power supply (next step) until the Outside Antenna cable is connected to the zBoost Mobile1.



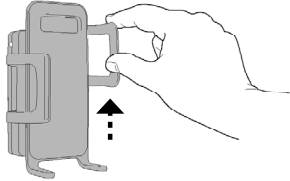
- Power up your zBoost Mobile1. Connect the power cable to the mini-USB port on the bottom of the zBoost Mobile1. Then insert the adapter into the AC power supply (859969), sold separately. Use only the supplied zBoost power supply.



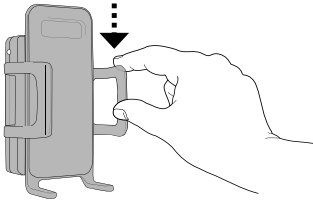
## Adjusting the zBoost Mobile1 Arms

Various sized arms are included with your zBoost Mobile1. These provide you with options to customize the zBoost Mobile1 to fit virtually any cell phone.

- To change arms, gently lift the arm upward until the arm slides free from the zBoost Mobile1.

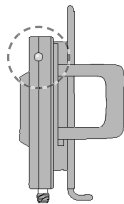


- To reposition arms, move the arm above a different slot on the zBoost Mobile1 and gently slide the arm down until the arm is firmly in place.



## Troubleshooting & Understanding the Light

The light on the side of the zBoost Mobile1 indicates whether the system is working or if there are problems. Take the following steps based on the indicator light color when using the zBoost Mobile1.



**Light off:** If the light is not on:

- Check connections on the power supply to see that it is firmly plugged into both

the zBoost Mobile1 and the power source.

- If using a DC power supply in your vehicle, ensure the power supply is properly inserted. Then check the 12 volt power from the car socket and the fuse. Replace the fuse if necessary.
- If using a power strip in a building, ensure the power strip is plugged in and turned on and that power is coming from the outlet.

**Red light:** A red light indicates the zBoost Mobile1 has powered down to protect the cell tower. Separation between the zBoost Mobile1 and the Outside Antenna is important to prevent oscillation (feedback), similar to when a microphone is too close to a speaker. When oscillation occurs, the zBoost Mobile1 shuts down in order to prevent interference in the cell tower.

If the light is red, move the Outside Antenna farther away from the zBoost Mobile1. On a vehicle, that usually means moving it farther toward the back of the car. Remember to keep the antenna at least 6 inches from any window or sunroof.

In a building, move the location of the zBoost Mobile1 farther from the window where the antenna is mounted. Once you have separated the Outside Antenna and the zBoost Mobile1, reset the zBoost Mobile1 by disconnecting the power and then reconnecting the power supply. If the light is green, the zBoost Mobile1 is working properly. If the red light is still on, move the Outside Antenna farther away and repeat the process.

**Green light:** A green light indicates the zBoost Mobile1 is working properly.



## Additional FAQ:

### What hours can I contact tech support?

Technical Support can be reached from 8.30am to 5:30pm EST by calling (800-871-1621), or by email, at [support@zBoost.com](mailto:support@zBoost.com).

### How does weather affect the performance of my Outside Antenna?

Water vapor (e.g. rain, fog, snow or other precipitation) creates an effective filter to cellular signal. In times of heavy precipitation, you may see less performance.

### What's the difference between the 800 MHz and the 1900 MHz bands? How do I know which MHz band my cell phone uses?

The zBoost Mobile1 works with all major North American cellular providers on the 800 & 1900 MHz frequencies. Traditionally, 800/1900MHz are associated with voice and 3G data; while 700MHz and 1700/2100MHz are associated with 4G data. For more detail see below.

### United States Carrier Frequency Use

We recommend visiting [www.wirelessadvisor.com](http://www.wirelessadvisor.com) for information regarding the frequency band used by your cell service provider in a specific geographical location.

#### Mobile Antennas

##### Mini-Mag

- 30'1126 w/ 12.5 RG174 cable- SMA
- 30'1113 w/ 12.5 RG174 cable - FME

##### 12" Mag Mount w/ 12.5' RG174

- 311103
- 311125
- 311128
- 311703
- 314202

##### Trucker antenna w/10.5' RG58

- 311101
- 311701

##### Trucker antenna w/13.5' RG58

- 311119
- 311133

##### NMO Antenna's w/ RG174

- Kit 311104-17410
- 800/1900 NMO antenna
  - 10' RG174 cable

##### Kit 311112-17410

- 800/1900 NMO antenna
- 10' RG174 cable

##### Kit 314203-17410

- 800/900/1900 NMO antenna
- 10' RG174 cable

##### Marine Antenna

- Kit 311130-5810
- Marine Antenna
  - 10' RG58 cable

##### Glass Mount w/14' RG58 cable

- 311102
- 311114 (Mini Glass Mount)

##### NMO Antenna's w/ RG58

- Kit 311104-5810
- 800/1900 NMO antenna
  - 10' RG58 cable

##### Kit 311112-5810

- 800/1900 NMO antenna
- 10' RG58 cable

##### Kit 314203-5810

- 800/900/1900 NMO antenna
- 10' RG58 cable

##### NMO Antenna's w/ LMR400

- Kit 311104-40015
- 800/1900 NMO antenna
  - 15' LMR400 cable

- Kit 311112-40015
- 800/1900 NMO antenna
  - 15' LMR400 cable

- Kit 314203-40015
- 800/900/1900 NMO antenna
  - 15' LMR400 cable

#### Outside Fixed Antennas

##### 50 Ohm Outside Antenna Kits

- Kit 314453-5825
- 50 Ohm Pole Mount Panel Antenna
  - 25' RG58 Cable

- Kit 314411-5825
- 50 Ohm Wide Band Directional
  - 25' RG58 Cable

- Kit 301111-5850
- Yagi Directional Antenna
  - 50' RG58 Cable

- Kit 311124-5840
- 1900 MHz Yagi Directional
  - 40' RG58 Cable

- Kit 311203-5820
- Omni-Directional antenna
  - 20' RG58 Cable

##### Kit 311129-5830

- 800 MHz Yagi Antenna
- 30' RG58 Cable

##### Kit 314411-40075

- 50 Ohm Wide Band Directional
- 75' LMR400 Cable

##### Kit 311203-40020

- Omni-Directional antenna
- 20' LMR400 Cable

##### Kit 301111-400170

- Yagi Directional w/ N-Female
- 170' LMR400

##### Kit 311124-400100

- 1900 MHz Yagi Directional
- 100' LMR400 Cable

##### Kit 311129-400100

- 800 MHz Yagi Antenna
- 100' LMR400 Cable

##### Kit 314453-40075

- 50 Ohm Pole Mount Panel Antenna
- 75' LMR400 Cable

##### 75 Ohm Outside Antenna Kits

##### Kit 301111-0675

- Yagi Directional Antenna
- 75' RG58 Cable
- N-Male to F-Female adapter

##### Kit 311201-0620

- Omni Directional w/ F-Female
- 20' RG6 Cable

##### Kit 311124-0660

- 1900 MHz Yagi Directional
- 60' RG6 Cable
- N-Male to F-Female adapter

##### Kit 31129-0650

- 800 MHz Yagi Directional
- 50' RG6 Cable
- N-Male to F-Female adapter

##### Kit 314473-0640

- 75 Ohm Pole Mount Panel Antenna
- 40' RG6 Cable

##### Kit 314475-0630

- 75 Ohm Wide Band Directional
- 30' RG6 Cable

##### Kit 311141-0620

- 75 Ohm Grey Brick Antenna
- 20' RG6 Cable

##### Kit 301111-11140

- Yagi Directional Antenna
- 140' RG11 Cable
- N-Male to F-Female adapter

##### Kit 311201-1120

- Omni Directional w/ F-Female
- 20' RG11 Cable

##### Kit 311124-11110

- 1900 MHz Yagi Directional
- 110' RG11 Cable
- N-Male to F-Female adapter

##### Kit 311129-1180

- 800 MHz Yagi Directional
- 80' RG11 Cable
- N-Male to F-Female adapter

##### Kit 314473-1175

- 75 Ohm Pole Mount Panel Antenna
- 75' RG11 Cable

##### Kit 314475-1175






- 75 Ohm Wide Band Directional
- 75' RG11 Cable

##### Kit 311141-1120

- 75 Ohm Grey Brick Antenna
- 20' RG11 Cable



## Safety and Recommendations

-  **WARNING:** Connecting the Signal Booster directly to the cell phone with use of an adapter will damage the cell phone.
-  **WARNING:** Use only the power supply provided in this package. Use of a non-zBoost product may damage your equipment.
-  **WARNING:** To uphold compliance with network protection standards, all active wireless devices must maintain at least 18" of separation distance from mobile inside antennas, 4' of separation distance from desktop antennas and 6' of separation distance from Panel and Dome antennas.
-  **WARNING:** The Signal Booster unit is designed for use in an indoor, temperature-controlled environment (less than 150 degrees Fahrenheit). It is not intended for use in attics or similar locations subject to temperatures in excess of that range.
-  **RF SAFETY WARNING:** Any antenna used with this device must be located at least 8 inches from all persons. The FCC requires that a cell phone with cradle attached may only be used with the cradle mounted as illustrated in this installation guide. A cell phone held near the ear must be without the cradle attached.

This is a CONSUMER device.

**BEFORE USE, you MUST REGISTER THIS DEVICE with your wireless provider and have your provider's consent. Most wireless providers consent to the use of signal boosters. Some providers may not consent to the use of this device on their network. If you are unsure, contact your provider.**

**You MUST operate this device with approved antennas and cables as specified by the manufacturer. Antennas MUST be installed at least 20 cm (8 inches) from any person.**

**You MUST cease operating this device immediately if requested by the FCC or a licensed wireless service provider.**

**WARNING. E911 location information may not be provided or may be inaccurate for calls served by using this device.**

This device complies with Part 15 of FCC rules. Operation is subject to 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. Changes or modifications not expressly approved by zBoost could void the authority to operate this equipment.



## Limited 1 Year Warranty

### Warranty Registration at [www.zBoost.com](http://www.zBoost.com)

zBoost warrants every zBoost product to be free from defects in material and workmanship under normal use for the warranty period of one year.

#### Who Is Covered?

You must have proof of purchase to receive warranty service. A sales receipt or other documentation showing the product purchased and the purchase date is considered proof of purchase. This limited warranty extends only to the original consumer purchaser or any person receiving the product as a gift from the original consumer purchaser and to no other purchaser or transferee.

#### What is Covered?

Warranty coverage begins the day you purchase the product. For one year from the original date, the zBoost Cell Phone Signal Booster will be repaired or replaced with a new, repaired, refurbished or comparable product (whichever is deemed necessary by zBoost) if it becomes defective or inoperative. The exchange will be made without charge to you for parts and labor. You will be responsible for the cost of shipping to the location designated by zBoost. If zBoost cannot reasonably repair or replace the unit then zBoost may, at its sole discretion, refund the price you paid for the product or the price of the unit. All products, including replacement products, are covered only for the original warranty period. When the warranty on the original product expires, the warranty on the replacement product also expires.

#### What is Excluded?

Your warranty does NOT cover:

- Labor charges for set up of the unit.
- Product replacement because of misuse, accident, lightning damage, unauthorized repair or other cause not within the control of zBoost.
- Incidental or consequential damages resulting from the product. Some states do not allow the exclusion of incidental or consequential damages, so the above exclusion may not apply to you.
- Any modifications or other changes to the product, including but not limited to software or hardware modifications in any way other than as expressly authorized by zBoost will void this limited warranty.
- Product that has been modified or adapted to enable it to operate in any country other than the country for which it was designed, manufactured, approved and/or authorized, or repair of products damaged by these modifications.

All zBoost products that are packaged with other zBoost accessory products are intended for resale and use as a single unit, and such product kits are required to be sold to the end user or subsequent reseller as packaged. The "de-kitting" and sale as a standalone product of any one or more components of such a product kit is in violation of zBoost warranty. No "de-kitted" product will be eligible for return for any reason. The sale of separate, not-kitted cable, antennas and other accessories is allowed and fully warranted

#### Make sure you keep...

Please keep your sales receipt or other document showing proof of purchase. Attach it to this User Manual and keep both nearby. Also, keep the original box and packing material in case you need to return your product.

#### Before requesting repair service...

If red light is on, system is receiving signals from either the mobile device or the base station transceiver which are too strong for proper operation. Please unplug your system. Re-orient your External Antenna and/or Base Unit to reduce the excessive signal source. Plug your system back in. If still solid red, call customer support 1-800-871-1612.

#### To get warranty service...

Warranty service will be provided by zBoost. If you believe you need service for your unit, contact zBoost at 1-800-871-1612 or [support@zBoost.com](mailto:support@zBoost.com). A representative will go through a diagnostic checklist with you. If it is determined that the product needs to be returned for service or exchanged, you will receive a return merchandise authorization (RMA) number. The representative will give you complete shipping details. Do not return products to zBoost without a Return Authorization Number (RMA).

#### To get out of warranty service...

To obtain out of warranty service, contact zBoost at 1-800-871-1612 or [support@zBoost.com](mailto:support@zBoost.com) for information on the possibility of any costs for repair or replacement of out-of-warranty products.

#### Reminder

Record the model and serial number found on the product below:

Model #: \_\_\_\_\_

Serial #: \_\_\_\_\_

Purchase Date: \_\_\_\_\_





# Signal Booster Specifications

zBoost Mobile1		
Model Number	ZB245	
Connectors	SMA-Female	
Antenna Impedance	50 Ohms	
Frequency	824-894 MHz/1850-1990 MHz	
<sup>3</sup> Power output for single cell phone (dBm)	800 MHz	1900 MHz
	Uplink Downlink	22.9 -28.0
Noise Figure (typical downlink/uplink)	3 dB nominal	
Isolation	> 40 dB	
Power Requirements	5.5 V 1A	

Each Signal Booster is individually tested and factory set to ensure FCC compliance. The Signal Booster cannot be adjusted without factory reprogramming or disabling the hardware. The Signal Booster will amplify, but not alter incoming and outgoing signals in order to increase coverage of authorized frequency bands only. If the Signal Booster is not in use for five minutes, it will reduce gain until a signal is detected. If a detected signal is too high in a frequency band, or if the Signal Booster detects an oscillation, the Signal Booster will automatically turn the power off on that band. For a detected oscillation the Signal Booster will automatically resume normal operation after a minimum of 1 minute. After 5 (five) such automatic restarts, any problematic bands are permanently shut off until the Signal Booster has been manually restarted by momentarily removing power from the Signal Booster. Noise power, gain, and linearity are maintained by the Signal Booster's microprocessor.

**Disclaimer:** The information provided by zBoost is believed to be complete and accurate. However, no responsibility is assumed by zBoost for any business or personal losses arising from its use, or for any infringements of patents or other rights of third parties that may result from its use.

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U.S. Patent Nos. – 7,221,967; 7,729,669; 7,486,929; 7,409,186; 7,783,318; 8,583,034; 8,583,033; 7,684,838; D626,953; 8,473,018



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