

By **Wi-Ex**.com

## **zBoost YX200 User Guide**



30 day money back guarantee when you buy directly from Wi-Ex®. If product is purchased from a reseller or third party, you must use their return policy.

**1 Year Manufacturer Warranty. Register your zBoost® product at [www.Wi-Ex.com](http://www.Wi-Ex.com)**

About zBoost® from Wi-Ex®

**Wi-Ex® is the leader** in cell phone signal boosters. zBoost® enhances the performance of your cell phone, PDA and wireless data card.

**Compatibility** – Dual Band zBoosts are compatible with 800MHz and 1900MHz regardless of technology- including CDMA and GSM.

1-year manufacturer warranty – register your product at [www.Wi-Ex.com](http://www.Wi-Ex.com).

**zBoost® products have more awards, more sales and more locations than all other signal boosters ...COMBINED.**

### **FCC Information**

**Warning:** Changes or modifications to this device not expressly approved by Wi-Ex® 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 the 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 receiving antenna
- Increase the separation between the equipment and 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

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter. In accordance with FCC requirements of human exposure to radiofrequency fields, the radiating element (antenna) shall be installed such that a minimum separation distance of 20cm (8in) is maintained from all persons.

### **Industry Canada Regulations**

This Class B digital apparatus meets all requirements of the Canadian Interference Causing Equipment Regulations. 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.

The term "IC:" before the radio certification number only signifies that Industry Canada technical specifications were met.

**RF Exposure:**The manufacturer's rated output power of this equipment is for single carrier operation. For situations when multiple carrier signals are present, the rating would have to be reduced by 3.5 dB, especially where the output is re-radiated and can cause interference to adjacent band users. This power reduction is to be by means of input power or gain reduction and not by an attenuator at the output of the device.

Cet appareillage numérique de la classe [B] répond à toutes les exigences de l'interférence canadienne causant des régléments d'équipement. L'opération est sujette aux deux conditions suivantes: (1) ce dispositif peut ne pas causer l'interférence nocive, et (2) ce dispositif doit accepter n'importe quelle interférence reçue, y compris l'interférence qui peut causer l'opération peu désirée.

Le fabricant nominale de la puissance de sortie de ce matériel est simple transporteur. Pour les situations lorsque plusieurs signaux porteurs sont présents, l'évaluation devrait être réduite de 3.5 dB, en particulier lorsque le signal de sortie est ré-émise et peut provoquer des interférences adjacentes à la bande utilisateurs. Ce pouvoir est de la réduction par le biais de la sortie d'alimentation ou la réduction de gain et non par un atténuateur à la sortie du dispositif.

Please note: This unit has been approved for use in Canada under RSS 131, however, consent for the use of this device to improve cellular or PCS coverage, must be obtained through your cellular or PCS provider, prior to placing the unit in operation. Please refer to the Industry Canada document CPC 2-1-05, Section 6.1 available or viewable at:

<http://www.ic.gc.ca/epic/site/smt-gst.nsf/en/sf08942e.html>

### Safety and Product Warranty Information

#### Copyright Notice

This manual is copyrighted. All rights reserved. This manual, whole or in part, may not be copied, photocopied, reproduced, translated or reduced to any electronic medium or machine readable form for distribution. This manual whole or in part, may not be modified without prior consent, in writing, from Wireless Extenders.

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#### Trademarks

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#### Safety Guidelines

In accordance with FCC requirements of human exposure to radiofrequency fields, the radiating element (antenna) shall be positioned such that a minimum separation distance of 8 inches (20cm) is maintained between the radiating element and the user and/or general population.

#### Limited Liability

In no event shall Wireless Extenders be liable for any direct, indirect, special, punitive, incidental, exemplary or consequential damages, or any damages, whether in an action under contract, negligence, or any other theory, arising out of or in connection with the set up of, use of, inability to use, or performance of the information, services, products, and materials available from this manual. These limitations shall apply notwithstanding any failure of essential purpose of any limited remedy. Because some jurisdictions do not allow limitations on how long an implied warranty last, or the exclusion or limitation of liability for consequential or incidental damages, the above limitations may not apply to you. For full warranty guidelines, see page 7.



#### Note

Changes or modifications not expressly approved by Wi-Ex® could void the user's authority to operate this equipment and/or void the product warranty.

### Package Contents: zBoost® YX200

**Before you begin, make sure all of the following parts came with your zBoost® YX200.**

#### Literature Contents:

- ① Set-up overview for zBoost® YX200  
(User Guide online only)

#### Product Contents:

- ② Bi-Directional In-Vehicle Amplifier Unit
- ③ Indoor (patch/re-rad) Antenna
- ④ Exterior Magnetic Mount Antenna with Cable
- ⑤ 12V DC Cigarette Lighter Adapter

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**Table of Contents**

**About zBoost® from Wi-Ex® .....i**  
    FCC Information..... i  
    Industry Canada Regulations ..... i  
**Safety and Product Warranty Information .....ii**  
    Copyright Notice..... ii  
    Trademarks ..... ii  
    Safety Guidelines ..... ii  
    Limited Liability ..... ii  
**Package Contents: zBoost® YX200-PCS-CEL..... iii**  
**Table of Content .....1**  
**Warnings.....2**  
**Overview.....3**  
    Why Indoor Signals Can Be Weak ..... 3  
**Setting Up Your zBoost® Signal Booster .....4**  
**zBoost® Base Unit Light Indicators .....5**  
**YX200 PCS-CEL Technical Specifications .....6**  
**Frequently Asked Questions .....7**  
**zBoost® Warranty Information.....8 & 9**

## Warnings for the YX200

- The YX200-CEL/PCS complies with FCC regulations. Follow all guidelines and read this information completely before beginning the installation procedure.
- Never operate the system in an unintended application.
- All cellular phones in the vicinity of the amplifier should be turned off during installation. Only after unit is installed should cellular phones be turned on and tested with the system.
- Make sure to connect to a 12-Volt source that is not providing power when vehicle is turned off or unplug 12V adapter. Otherwise the battery will drain.
- Unit must first be turned on without antennas connected for system calibration. Ensure that the LED light on the Amplifier Unit is Green before connecting antennas. Amplifier Unit must remain on while connecting antennas.
- Only the provided power cable is to be used with the Wi-Ex Car Extender systems. Using any other power cable will harm the system. The Wi-Ex Car Extender warranty will be voided if any other power cable is used.
- Only the antennas provided with the Wi-Ex Car Extender system may be used. Use of any other antenna could adversely impact the performance of the system, cause damage to the unit and would void the warranty.
- Changes or modifications not expressly approved by Wi-Ex will void the user's authority to operate the equipment.

## Overview

Thank you for choosing zBoost®. You will now be able to use your cell phone in your car. Gone are the days when you had to go to the window upstairs or walk outside to use your cell phone. Like a skylight that brings sunlight into your vehicle, zBoost® transports and amplifies the outdoor cellular signals into your vehicle.

By following the easy instructions in this user guide, you will be Extending Cell Zones™ into your vehicle.

### Why Indoor Signals Can Be Weak

There are several obstacles that can contribute to the poor reception you receive in your vehicle:

#### 1. Location of the Cell Phone Tower in Relation to Your Vehicle

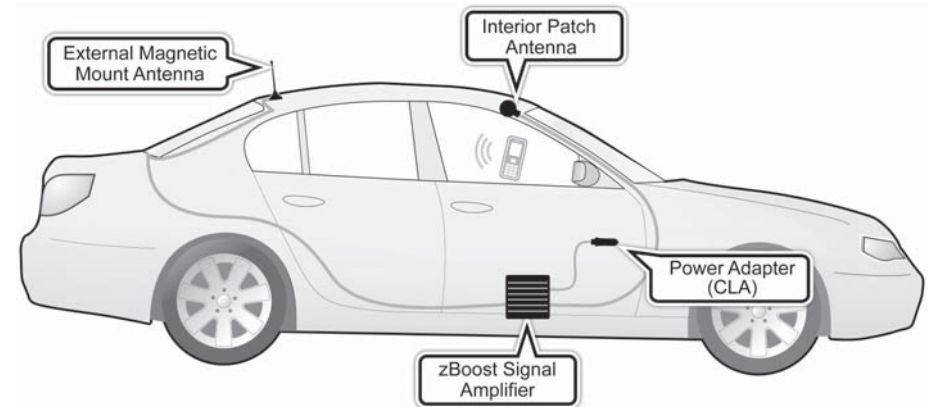
While cell phone providers have tried to place cell phone towers to provide the best overall coverage, local ordinances and terrain features can impose restrictions on where these towers can be placed, thus, limiting the signal strength available at your location.

#### 2. Obstructions Caused by Buildings, Terrain and Trees

Cell phone signals can be completely blocked or reflected by buildings, walls, trees, hills and other terrain features resulting in low signal strength.

#### 3. Energy Efficient Windows

These new windows can also affect signal penetration into the house



### Note

Cell phone signal bars are approximate and vary from phone to phone. The number of bars can fluctuate widely, depending on the location of the phone, the position or angle of the phone, weather, etc. Most cell phone signal meters update every 6 to 10 seconds. An increase of only one bar typically indicates a 4x to 10x signal increase.

## Setting Up Your zBoost® Signal Booster

① Position Amplifier Unit - Position Amplifier Unit within interior of vehicle and within a 3-4 ft. reach of cigarette lighter. Choose a location where it rests flat and is not a hazard to driver (i.e. under seat).

② Attach DC Power Cable - Attach one end of the adapter to the cigarette lighter plug within vehicle. Attach remaining end of DC power cord to Amplifier Unit.

**NOTE: To avoid draining battery, check that amplifier is not receiving power with vehicle turned off.**

③ Examine LED light on Amplifier -The LED light on the Amplifier Unit indicates the level of signal enhancement. Attempt to achieve the optimal signal enhancement when positioning Antennas before making the Antenna placement permanent. Before any Antenna is connected to the Amplifier Unit, the Amplifier Unit must be powered on. The LED should be Green. Be sure that all cell phones in the vicinity of the amplifier are turned off during installation. Attach both Antennas and position them to achieve a Green LED. See the LED Light Indicator chart on page 5.

**IMPORTANT: Unit must first be turned on without Antennas connected for system calibration. Ensure that the LED light on the Amplifier Unit is Green before connecting antennas. Amplifier Unit must remain on while connecting antennas.**

④ Position Exterior Magnetic Mount Antenna -Position Exterior Magnetic Mount Antenna between trunk and rear window, or as far back as possible, making sure magnet is secured to metal surface. Connect Exterior Magnet Antenna to the Amplifier Unit.

**NOTE: Cord will run from exterior to interior of vehicle. Cord is designed to withstand pressure when closed in door. Connections to Amplifier Unit are specific to the Antennas.**

⑤ Position Interior Antenna -Position the Small (patch) Antenna as close to, and with the best unobstructed view to, where the cell phone would normally be used. Avoid placing this Antenna behind any metallic objects (i.e. mirror in sun visor). Do not make contact with any metal surface. Connect Small Antenna to the Amplifier Unit.

**IMPORTANT: There is only one location where Small Antenna can be connected to Amplifier Unit. For optimal performance, do not affix Small Antenna to the front windshield.**

⑥ Achieve Optimal Enhancement -Once your LED is Green, you may permanently affix both the Magnetic Mount and Small Antenna. If LED is yellow, adjust the position of the Magnetic Mount Antenna until the LED is Green.

⑦ Quick System Check -Put your cell phone antenna directly next to the Small Antenna. Check signal strength bars. Next, turn the system off (unplug unit). You should notice a decrease in signal bar strength. The exception is if you are in an area where, with the system off, your phone is at full signal strength. Please note when you turn the system on, if your phone is receiving maximum signal strength you will not see a difference. In order for this quick test to work, you will need to test unit in a less than maximum signal strength area.

## zBoost® Base Unit Light Indicators

### LED Light Indicator

GREEN Light	Optimal Signal Enhancement
YELLOW Light	Good Signal Enhancement
RED Light	Poor Signal Enhancement

### Important:

The LED light on the Amplifier Unit indicates the level of signal enhancement. Attempt to achieve the optimal signal enhancement when positioning Antennas before making the Antenna placement permanent. Before any Antenna is connected to the Amplifier Unit, the Amplifier Unit must be powered on. The LED should be Green. Be sure that all cell phones in the vicinity of the amplifier are turned off during installation. Attach both Antennas and position them to achieve a Green LED.

If you are receiving a Red LED even after trying different Antenna positions, try unplugging both Antennas and turn the power off and on again before plugging in the Antennas. If the Antennas are connected and too close to each other when the Amplifier Unit is turned on, it will be impossible to achieve a Green LED until you do the preceding.

## Technical Specifications

### Product Specifications for zBoost® YX200 – Dual Band

#### PCS and CEL Frequency Bands

Frequency	824-849 MHz/1850-1910 MHz 869-894 MHz/1930-1990 MHz
System Gain	50dB
Networks	CDMA, GSM (Class V), TDMA, AMPS
Output Power	25dBm

#### General

Power Source	12V Adaptor
System Certifications	FCC Parts 15 & 24 (PCS), Parts 15 & 22 (CEL), Industry Canada
Base Unit Size and Weight	1in x 3 in x 6.375 in; 21 oz.
Operating Conditions	-30 to 60° C

## Frequently Asked Questions

### What can I expect my cell phone signal range and strength to be inside my car?

The closer you are to the Interior Patch Antenna, the stronger the signal. This will vary with different conditions. Some of the conditions that will affect the improved coverage area are signal strength outdoors, the type of building materials in the vehicle, the placement of the Interior Patch Antenna and the antenna's proximity to cellular towers.

You can expect that your coverage will be improved inside your vehicle. You will be able to make calls where you couldn't before. The degree of improvement will depend upon many factors. The intent of this zBoost® product is to bring outside coverage inside the vehicle. Just as the signal bars move up and down when outside, the boosted signal will fluctuate in a similar fashion.

### Is a cellular phone signal booster the same as a wireless router; will it help my WiFi signal?

The Wi-Ex® unit will not help your WiFi service. This unit is designed to work with wireless PCS and Cellular phones and devices. The WIFI in your home or office operates on a different frequency.

### Is your product available for international use?

Yes, we have products that work on European frequencies. Our zBoost® YX520-I- Dual band works on 900MHz and 1800Mhz.

We also sell zBoost® ONE YX400-U for UMTS/HSPA devices on the 2100MHz Frequency, a frequency used for voice and data overseas.

### Why isn't my cell phone indicating more signal with more bars?

You may not always observe more bars that gain on your signal meter because of the signal spreading out from the antenna. If your phone has a dB meter, 3dB is a significant increase of 2x, 6dB is 4x, and 10dB is 10x. On a four bar phone, one "bar" equals about 10dB.

The increase in signal you will see depends upon:

- The level of signal at the Signal antenna (outdoor)
- The care of the antenna placement
- The signal already present inside the vehicle
- The distance of your phone/device from the Interior Patch Antenna (signal spreads or diminishes rapidly with distance.)

### Does the zBoost® work if you have no bars?

No, if no signal is present outdoors zBoost® products will not work for you. Also, keep in mind if your best signal is 1 bar at the Signal Antenna, your coverage will be limited.

## Warranty Information

### Limited 1 Year Warranty

#### Register your product at [www.Wi-Ex.com](http://www.Wi-Ex.com)

Wi-Ex® warrants every Wi-Ex® 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. This warranty does NOT extend to commercial users.

#### What is Covered?

Warranty coverage begins the day you purchase the product. For one year from the original date, the Wi-Ex® Cell Phone Signal Booster will be repaired or replaced with a new, repaired, refurbished or comparable product (whichever is deemed necessary by Wi-Ex®) 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 Wi-Ex®.

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 Wi-Ex®.
- 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 Wi-Ex® 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.

#### Make sure you keep...

Please keep your sales receipt or other document showing proof of purchase. Attach it to this User Guide 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 Signal 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 Wi-Ex®. If you believe you need service for your unit, contact Wi-Ex® at 1-800-871-1612 or [support@wi-ex.com](mailto:support@wi-ex.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 Wi-Ex® without a Return Authorization Number (RMA).

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

To obtain out of warranty service, contact Wi-Ex® at 1-800-871-1612 or [support@wi-ex.com](mailto:support@wi-ex.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:** \_\_\_\_\_