



By **Wi-Ex**.com

zBoost Metro YX540 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

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.

Patented technologies protect the carrier network.

1-year manufacturer warranty – register your product at www.Wi-Ex.com.

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

FCC Information

FCC ID: SO4YX545-PCS-CEL

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

IC ID: 5544A-YX545PCSCCEL

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 règlements 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-émission 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

Wireless Extenders, Wi-Ex, the Wi-Ex logo, zBoost, the zBoost logo and Extending Cell Zones are registered trademarks of Wireless Extenders, Inc.

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 10.

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® Metro

Before you begin, make sure all of the following parts came with your zBoost® Metro:

Literature Contents:

- ① Set Up Overview

Product Contents:

- ② Base Unit Antenna - 2 dBi
- ③ zBoost® Base Unit
- ④ Power Supply
- ⑤ RG-59 (mini) Coaxial Cable - 40 ft
- ⑥ Signal Antenna
- ⑦ Short Suction Cup Attachments
- ⑧ Long Suction Cup Attachments

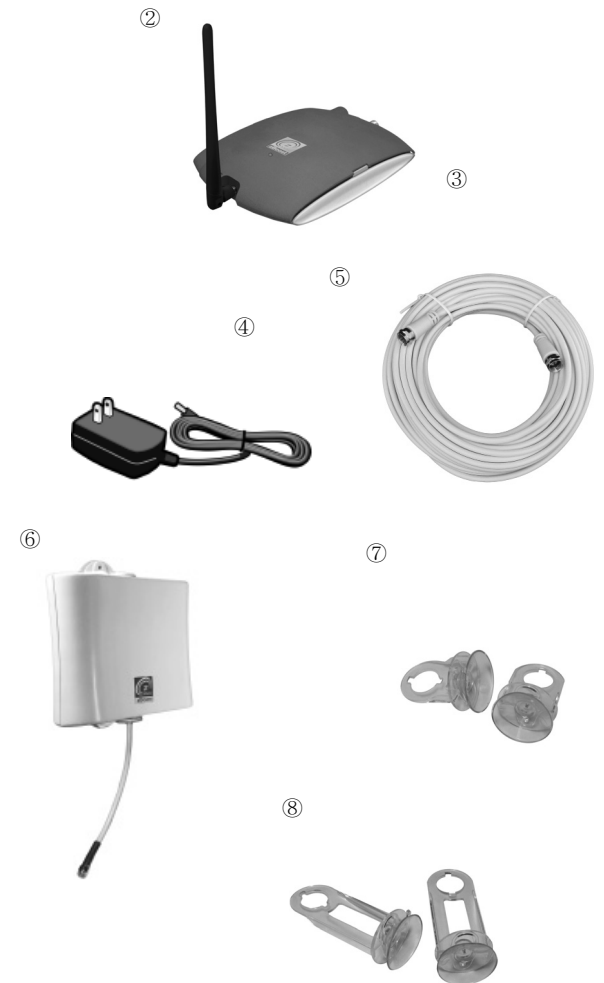


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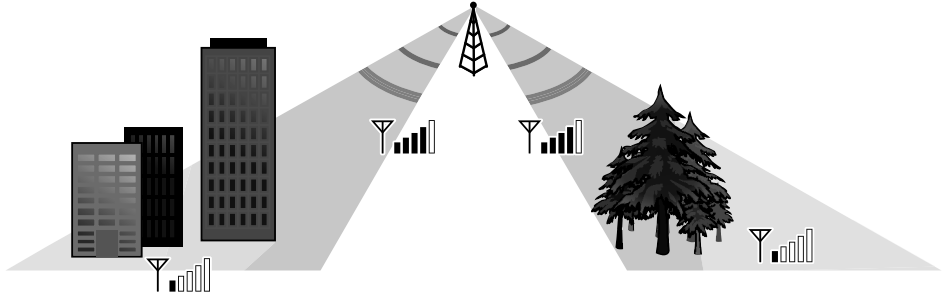
Overview

Designed for consumers in urban settings, the zBoost METRO™ cell phone signal booster extends a Cell Zone™ for multiple users/devices operating on 800 and 1900 MHz frequency bands (except Nextel/iDEN). You will now be able to use your cell phone INSIDE. Gone are the days when you had to go to the window or walk outside to use your cell phone. Like a skylight that brings sunlight into your home, zBoost® repeats and amplifies the outdoor cellular signals into your home or office.

Why Indoor Signals Can Be Weak

There are several obstacles that can contribute to the poor reception you receive in your condo, apartment or dorm room:

- 1. Location of the Cell Phone Tower in Relation to Your Home/Office**
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, 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.



Preparing to Set Up Your zBoost® Product

Check for Signal Strength

Before placing a zBoost® in your home, make sure that you can place calls near the window or wherever you plan to place the Signal Antenna. zBoost® can only bring signal into your home when signal reaches the Signal Antenna.

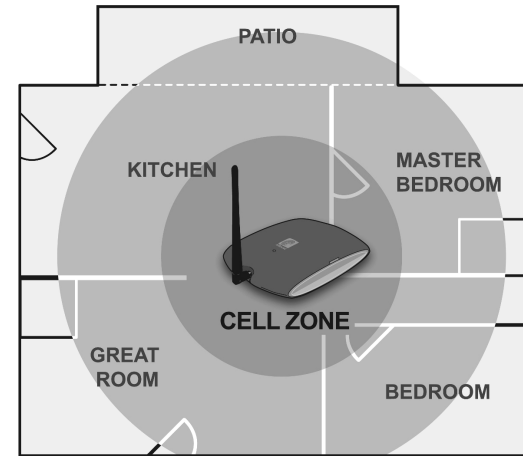
Using your cell phone, place a call near this location to confirm that enough signal is present to complete the call.

If you can reliably make and receive calls at that location then zBoost® can bring the signal into your home.

If only one signal bar is displayed on your cell phone, indoor coverage will be limited to one small room.



Setting Up Your zBoost® Signal Booster



The METRO boosts signal up to 1500 square feet, making it perfect for apartments, condos and lofts. No outside antenna placement is required.

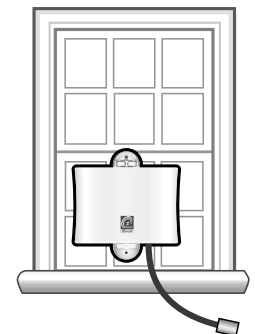
Boost voice and data transmission and improve call clarity in 4 easy steps:

FIRST: Place the Signal Antenna on the interior of a window located in the area of best signal

Determine the location that provides the strongest signal using the signal strength indicator on your cell phone. Find the location on the window that provides the most bars of signal strength. Before proceeding, make sure that the intended surface is clean and clear of any dust. Then choose the suction cup attachments appropriate for your setting (short or long), fasten to the Signal Antenna, and secure to your window.

In order to capture the strongest signal, you may do one or all of the following:

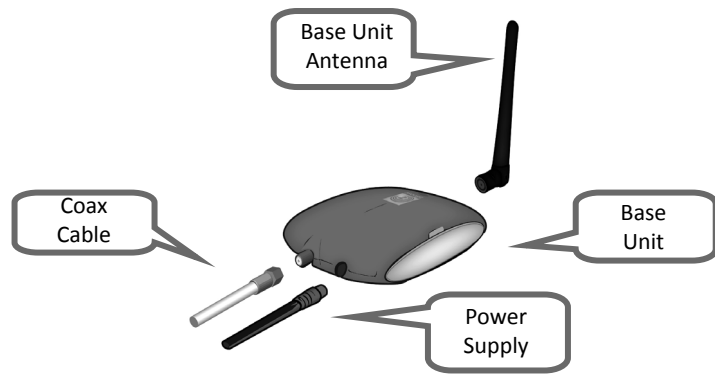
1. Move the antenna around the window – higher is usually better.
2. Use the long suction cup attachments provided, in order to create a greater angle in which to capture the signal. The suction cups must be vertical on the window (as pictured, with cable at the bottom – not on the side). Avoid draping the coax near the antenna.
3. Keep the Signal Antenna 2 feet from any metal.



SECOND: Place the zBoost Base Unit where you want to create a Cell Zone™

Connect the Base Unit Antenna and coax to the Base Unit and place it where you need signal. For the widest possible signal area, it is recommended that you position the Base Unit near the middle of a room or mount it on an interior wall. This Base Unit uses an omni-directional antenna that delivers signal in a circular pattern around the antenna. The zBoost METRO does not require vertical separation; however, the Signal Antenna and Base Unit Antenna should have at least 8 feet of horizontal separation. Increasing separation of the 2 antennas will optimize zBoost performance.

The Base Unit can be mounted either directly on a wall or placed on a flat surface (e.g. a bookshelf, desk, end table, etc.). For best results, keep the Base Unit off the floor and at least 2 feet away from other cords, metal objects or other wireless devices such as wireless routers or wireless access points. The zBoost METRO performs best when there are no obstructions between the zBoost Base Unit and your mobile device.



THIRD: Run the provided coaxial cable between the Base Unit and Signal Antenna

Use the provided RG-59(mini) coaxial cable to connect the Signal Antenna and the Base Unit. Coaxial connections can loosen when the cable is moved. Be sure the connections stay hand-tight.



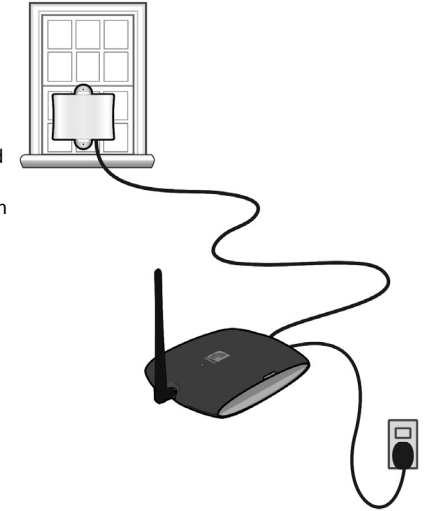
Note

Avoid placing the Signal Antenna near metal such as wiring, things likely in/near a window (e.g. window edge frame, A/C unit, metal siding, etc..)

FOURTH: Connect the zBoost Base Unit to the provided power supply and plug into a power outlet

Upon initial power up, a solid green LED should appear indicating normal conditions. If a red light appears, adjustments may be needed. See LED Indicator section on page 7 for more information.

NOTE: The Base Unit can be plugged into a standard 2 or 3 prong 110 VAC receptacle using the Included power supply. The power supply consumes less than 10W (less than 0.2A AC).



Additional Cable Requirements

If the distance between the Signal Antenna and the Base Unit requires cable longer than the provided 40 feet, contact Wi-Ex customer service at 1-800-871-1612 or email Support@Wi-Ex.com.

Confirm That Your zBoost® is Working Properly

Perform the following steps to confirm that the unit is now working properly:

1. Unplug the Base Unit power cord.
2. Turn on your cell phone and check the signal meter.
3. Plug the power cord into the Base Unit.
4. Hold your cell phone about 3 feet from the Base Unit and then turn it on. Wait up to 1 minute for the cell phone to register the signal coming from the Base Unit.
5. If the signal meter shows improvement, your zBoost® unit is working properly.



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.

zBoost® Base Unit Light Indicators

At Initial Power Up Only

Solid GREEN	Normal condition at power up.
Slowly Alternating RED and GREEN	zBoost® is working, but at reduced performance and coverage due to “non-ideal” setup. Solution: Increase the distance between antenna and amplifier to achieve maximum performance and coverage.
Fast Flashing RED	Indicates insufficient distance between the antenna and the amplifier. The amplifier is operating at significantly reduced coverage. Solution: Increase space between base unit and antenna.
Solid RED	System is receiving signals from either the mobile device or the base station transceiver which are too strong for proper operation. Solutions: ① Move away from receiving antenna with your cell phone. ② Move antenna away from other devices..
Fast Alternating RED and GREEN followed by no light	The amplifier is disabled. Solution: Unplug and start over.

After Initial Power Up

Solid GREEN	Normal condition.
Solid RED	System is receiving signals from either the mobile device or the base station transceiver which are too strong for proper operation. Solution: 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..

Improving Your Coverage Area

When your zBoost® system is in place and fully connected, you should walk throughout the room and see that you are able to reliably place calls.

Remember, coverage varies based on outdoor signal level, building construction, and antenna placement. Coverage in adjoining rooms (next to, above, or below) will be reduced due to walls or ceiling/floors.

Should you desire to improve coverage, you may:

- Move the Base Unit and/or adjust the angle of the Base Unit Antenna.
- Move the antenna around the window – higher is usually better.
- Move the Base Unit farther from the Signal Antenna or around a wall.

Product Specifications for zBoost METRO – YX540 – Dual Band

PCS band	
Frequency	Uplink: 1850 to 1910 MHz Downlink: 1930 to 1990 MHz
System Gain	54dB
PCS bands supported	A, D, B, E, F, C
Networks	CDMA, GSM, GPRS, EDGE, EVDO, 1xRTT, UMTS, HSPA, 3G
Cellular band	
Frequency	Uplink: 824 to 849 MHz Downlink: 869 to 894 MHz
System Gain	52dB
CEL bands supported	A, B, A', B'
Networks	CDMA, GSM, GPRS, EDGE, EVDO, 1xRTT, UMTS, HSPA, 3G
General	
Power Consumption – Power Supply Current	3W standby; 7W max signal - 2.0A Max
Wall Supply Input ; Voltage	100-240VAC 50-60 Hz ; 5.0VDC
System Certifications	FCC Parts 15 & 24 (PCS) and Parts 15 & 22 (CEL), Industry Canada
Base Unit Size and Weight	5" x 7" x 1.25" – 9 oz.
Operating Conditions	Indoor Use Only (40° - 105° F)
Coverage (open areas)	Over 1500 sq ft
This product uses patented technology to protect the carrier network	

This product is covered by patent US 7,706,744. Other U.S. and foreign patents pending.

Frequently Asked Questions

What can I expect my cell phone signal range and strength to be inside my home or office?

The closer you are to the base, 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 home, the placement of the unit and the antenna’s proximity to cellular towers.

You can expect that your indoor coverage will be improved. You will be able to make calls where you couldn’t before. The degree of improvement will depend upon many factors. The intent of zBoost® products are to bring outside coverage inside. 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 (two feet away from metal, adequate antenna separation [8 feet recommended])
- The signal already present inside (related to building losses)
- The distance of your phone/device from the Base Unit (signal spreads or diminishes rapidly with distance.)

There are usually several cell phones in use at one time in my home, will your product boost all of our signals simultaneously?

The zBoost® Metro is designed to cover multiple signals simultaneously and will allow multiple users to operate at the same time.

Warranty Information

Limited 1 Year Warranty

Register your product at 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®. If Wi-Ex® cannot reasonably repair or replace the unit then Wi-Ex® 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 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. 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.

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 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: _____