

zBoost® CI: YXC-40K Installation Overview



ZBOOST INSTALLATION

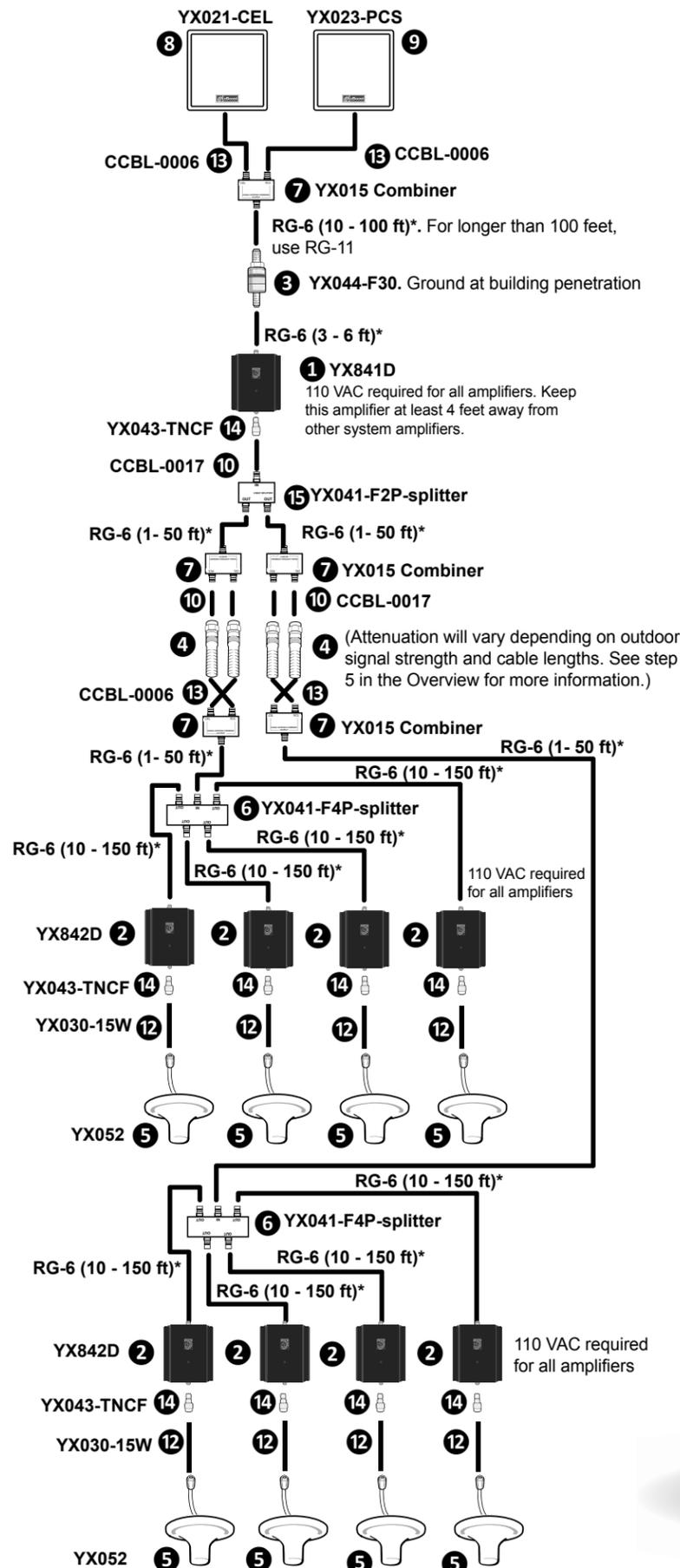
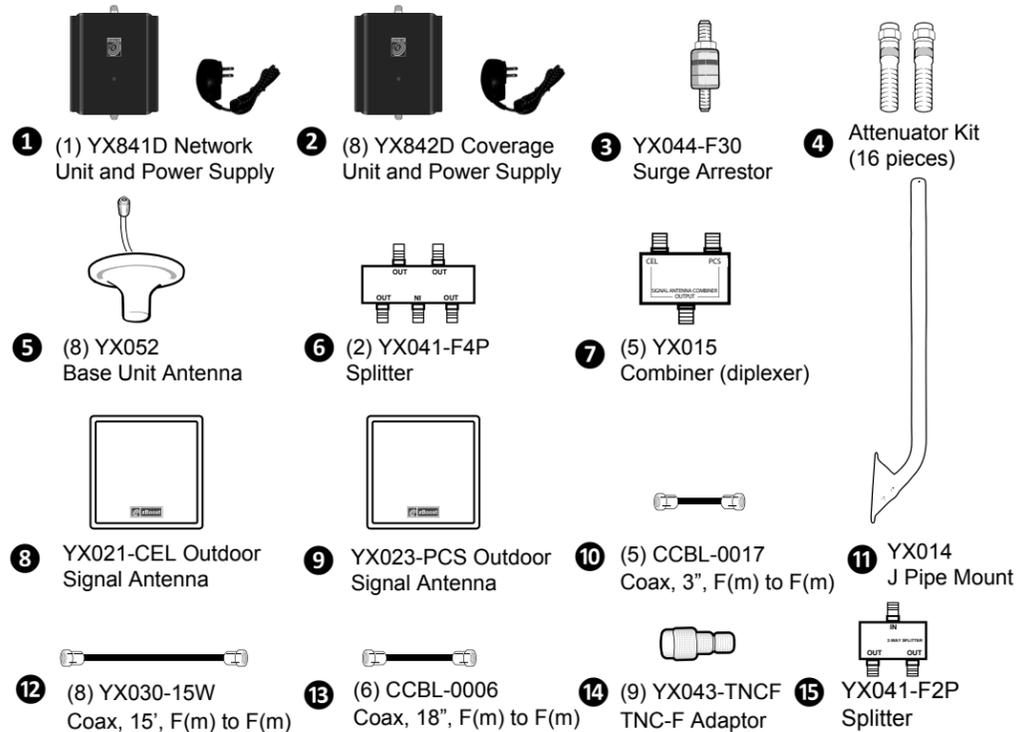
This YXC-40K zBoost indoor coverage kit provides a complete solution for improving cellular voice and data signal within buildings up to 40,000 square feet. The kit provides the key components and design elements to allow professional installation over a wide variety of building conditions with proven technology from zBoost. zBoost indoor coverage kits use a network of active amplifiers and antennas configured to provide optimum signal strength for multiple cellular providers while protecting the integrity of the carrier network using patented technology.

OVERVIEW:

1. Connect the system according to the diagram. Customer supplied RG-6 or RG-11 coax will vary in length according to your particular installation.
2. Orient the two Signal Antennas (YX021 and YX023) with the face of the panel antenna pointing toward the nearest cell tower. The Signal Antennas should be mounted at least 3 feet away from any metal using the provided YX014 Mounting pole. Ensure that the 18" coax jumper connected to each antenna (YX021 and YX023) is connected to the correct port on the YX015 combiner (i.e. YX021-CEL connected to CEL port).
3. The YX044-F30 should be placed at the coax entrance to the building and grounded to a suitable connection.
4. The YX841D Network Unit should be located indoors, as close to the antennas as possible, but away from the other amplifiers. **Warning:** Do not use this as a Coverage Unit (Part YX842D). If the YX842D and YX841D are mixed, your zBoost system will not work.
5. Several values of attenuators are included in the kit. The value used will depend upon signal strength and cable lengths. Ensure that the attenuator connects from the CEL port of one YX015 to the CEL port of the other YX015. Connect the attenuator on the PCS ports in the same way. A tool to calculate the final value needed can be found in the Commercial Solutions Division section of our website when logged into your dealer account.
6. Locate each of the eight YX842D Coverage amplifiers and associated YX052 ceiling mount antennas throughout the desired indoor coverage area. (*Note 110 VAC is required for each YX842D amplifier). Each amplifier and associated ceiling mount antenna will cover approximately 5,000 sq ft depending on outdoor signal strength.

IMPORTANT: Customer supplied RG-6 coax will vary in length according to your particular installation. The maximum length of RG-6 coax is indicated on the drawings. Should additional length be required, use RG-11 coax.

The following contents are included in your zBoost system:



*Long runs of RG-6 cable not included with kit

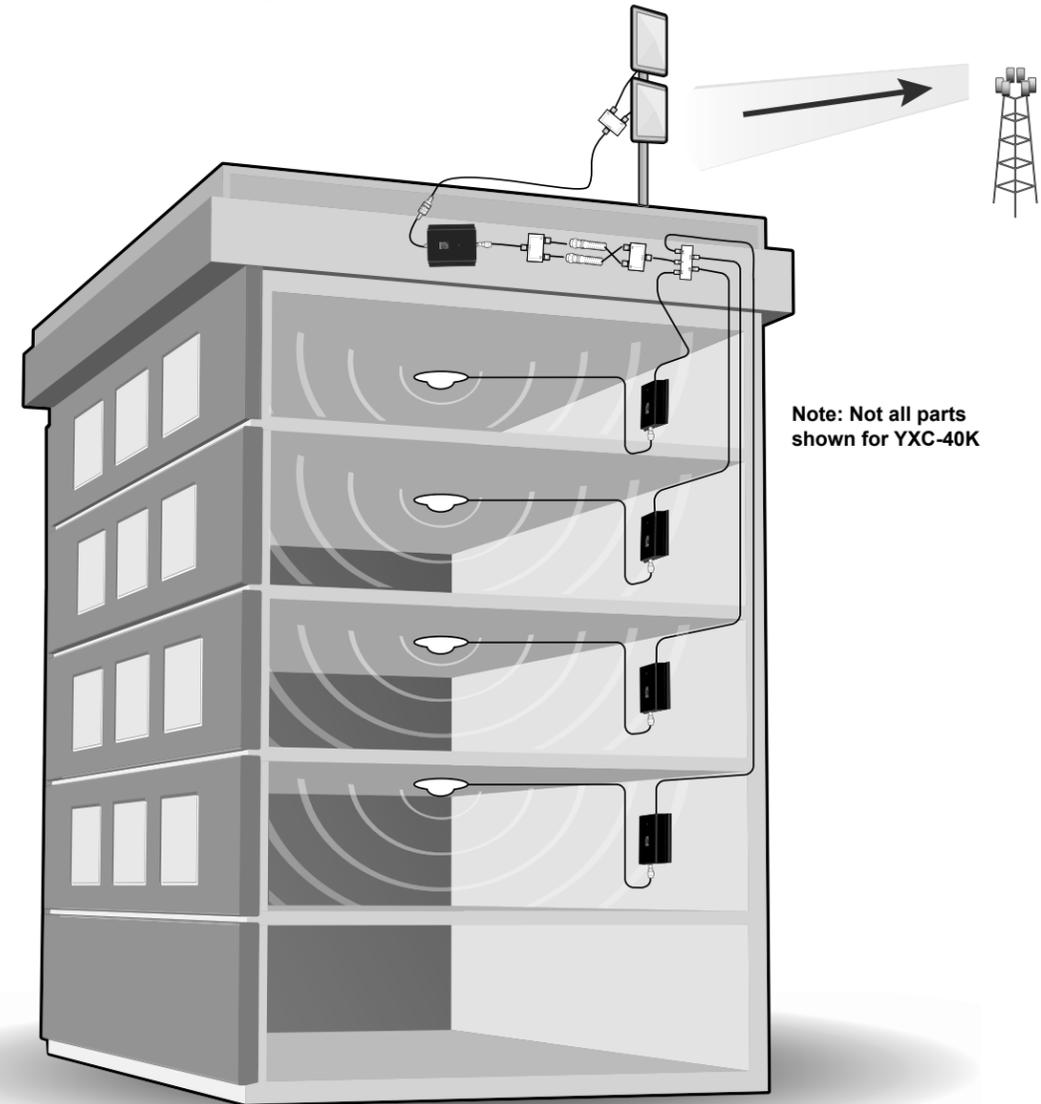
CHECK YOUR SYSTEM FOR PROPER OPERATION

YXC-40K Works with 800 MHz and 1900 MHz Devices

To verify proper operation of your zBoost system:

1. Apply power to each of the YX842D Coverage amplifiers. Once power is connected, check that the LED light on each YX842D is a solid green. If the light on any amplifier is solid or flashing red, additional attenuation may be required. Contact technical support for assistance at 1-800-871-1612.
2. Using your cell phone or a YX699 signal meter, check various areas of your desired indoor coverage area for improved signal strength.
3. Place a phone call near one of the YX842D amplifiers and verify that you get a flashing green LED light on the nearest YX842D.
4. If the Signal Light does not flash green, but you are experiencing improved signal strength, your system is still operating properly. If the signal light does not flash green and you are not experiencing improved signal strength, contact our technical support for assistance at 1-800-871-1612.

Contact zBoost technical support at support@zBoost.com, or call 1-800-871-1612 for assistance.



Note: Not all parts shown for YXC-40K

Base Unit LED Conditions

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 Signal Antennas and Base Unit Antenna to achieve maximum performance and coverage.
Fast Flashing RED	Indicates insufficient distance between the Signal Antennas and Base Unit Antenna. The amplifier is operating at significantly reduced coverage. Solution: Increase distance between Base Unit Antenna and Signal Antennas.
Solid RED	System is receiving signal from either the mobile device or the base station transceiver that is 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 signal from either the mobile device or the base station transceiver that is too strong for proper operation. Solution: Please unplug your system. Re-orient your Signal Antenna and/or Base Unit Antenna to reduce the excessive signal source. Plug your system back in. If still solid red, call customer support 1-800-871-1612.

FCC Information

FCC ID: SO4YX545-PCS-CEL

Warning: Changes or modifications to this device not expressly approved by zBoost 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 radio frequency 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

Canada IC: 5544A-YX545PCSCSEL

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.

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>

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-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.

YXC-40K Product Specifications

	PCS Frequency	CEL Frequency
Frequency	1850 - 1990 MHz	824 - 894 MHz
Band Supported	ALL: A,D,B,E,F & C	ALL: A,B, A' & B'
Antenna Signal	13 dBi Panel; F-type female	8 dBi Panel; F-type female
Antenna- Base Unit	3 dBi Omni Ceiling Mount	2 dBi Omni Ceiling Mount
Cable Loss	3000 MHz RG-6, approx. 1 dB/10 ft	3000 MHz RG-6, approx. 0.6 dB/10 ft
Both PCS and CEL Frequencies		
Network Format	CDMA, GSM, TDMA, AMPS, GPRS, EDGE, EVDO, HSPA, 3G	
Base Unit RF Connectors	F-type female and TNC female	
Wall Supply Unit	100-240 VAC 50 Hz-60Hz	
Power Consumption	3W standby; 7W max signal - 2.0A Max	
System Certifications	UL, FCC Parts 15 & 24 (PCS), FCC Parts 15 & 22 (CEL), Industry Canada	
Base Unit Size and Weight	5" x 7" x 1.375" - 12 oz.	
Base Unit and Power Supply	Indoor Use Only, 5° to 40° C (40° to 105° F)	
Coverage (open areas)	4-5 signal bars at the roof antenna; 40' radius at 360° width per internal antenna; 3-4 signal bars inside; up to 40,000 sq. ft.	

WARRANTY INFORMATION

LIMITED 1 YEAR WARRANTY | [REGISTER 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 1 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 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. 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.

Make sure you keep...

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

Before requesting repair service...

Please review the BASE UNIT LED INDICATORS section listed in this overview - This may save you a call.

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. 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 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: _____

CUSTOMER SERVICE



For questions or assistance, contact zBoost customer service at 1-800-871-1612 or email Support@zBoost.com