


Stealth Z6 4G LTE

High Power Building Boosters Z660 Z665 Z670 Z675

High Power Building Amplifier Z660 Z665 Z670 Z675

 **6 BANDS**
MULTI-BAND
60 -75dB
 Multi Bands
6 BANDS

User Manual-User manual

BBCZ6 Series
Canada

Cellular *RX/TX* **60-75dB 6BAND**
Signal Booster **MULTIBAND 60-75dB**
 High Power Building Booster
 High Power Building Amplifier

2G, 3G, 3G+, 4G, 4G+

GSM, HSPA, CDMA, LTE, LTE A

Band 12.17 700MHz Lower

Band 13 700MHz Upper

Band 5 850MHz

Band 4 1700/2100MHz

Band 2.25 1900MHz ext



model shown: BBCZ660



SPECIFICATIONS Stealth Z6 4G LTE		2G, 3G, 3G+, 4G, 4G+, GSM, HSPA, CDMA, LTE, LTE A			
Frequencies - Frequencies MHz	700 upper	700 lower	850	1700/2100	1900
Model- Model	BBCZ660	BBCZ665	BBCZ670	BBCZ675	
Gain	60	65	70	75	
Max Power/Power-TX: dBm	24.0	24.0	24.0	24.0	
Max Power/Power-RX: dBm	0.0	0.0	0.0	0.0	
Operating temp - Temp. operational -22 F	185 F -30 C + 85 C		Power supply-120V AC/DC power supply		
Dimensions	L 5.0 x W 4.75 x H 1.25 (inch)		L 12.7 x W 12.0 x H 3.2 (cm)		

1-877-726-3444

Smoothtalker.com

Contents-Content

Inside antenna
Indoor Antenna
SRBL1



Power-supply
Power supply

Cell Booster
Amplifier



SEMO

Optional outside antennas
Optional external antenna



SEMDP1



SEMDA2

NOTE: Only one of the outside antennas is included in this kit (check model)

All kits include necessary brackets and coaxial cables for assembly.

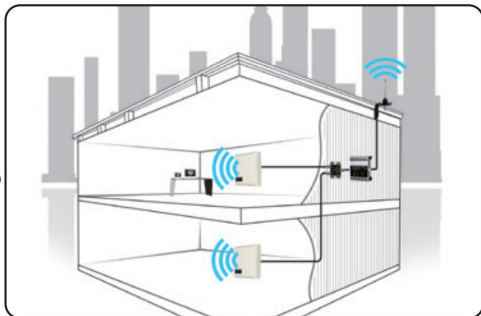
NOTE: Only one of the outdoor antennas are included in this kit (check the model)

All kits include the necessary brackets and coaxial cables for mounting.

Typical Installation (Fig. 1)
(All parts are included/
The kit included)



Optional (Fig. 2)
Dual Inside Antenna Installation
(Additional parts required which
are not included in Booster kit.)
Desktop Application
(Additional parts required, which
are not included in the kit.)



1) **Setup:**

Connect the inside antenna and the outside antenna as shown in Fig. 1.

2) **Outside antenna:**

a) Place outside antenna outside of the house in the area that has the best signal. b) If outside location is unavailable, place the outdoor antenna on a window with the best signal.

3) **Inside Antenna:** Connect the inside antenna as shown in Fig. 1

4) **Separation:** Increase the distance of the outside and inside antenna as much as possible to maximize coverage and avoid gain reduction.

5) **Power:** Connect the power supply to the booster and turn it on.

6) **Coverage:** Use your cell phone to determine if coverage is OK. If coverage is not adequate, please look at the Green and Orange lights to determine if the booster has automatically turned down its gain per LED Gain Chart on back cover.

If so pls try to separate or move antennas as per explanation on Pg.4.

Important: Use only the power supply included with the booster. Connecting any other power supply at any time will result in damage to the booster and will void the warranty. Do not turn on the power switch until ALL cables have been screwed or plugged into the booster or you can cause damage to the booster.

1) **Setup**

Connect the indoor antenna and the outdoor antenna as shown in the figure. 1.

2) **Outdoor Antenna:** a)

Place the outdoor antenna outside the house in the area that has the best signal.

b) If the outdoor

location is not available, place the outdoor antenna on a window with the best signal.

3) **Indoor Antenna:** Connect the indoor antenna as shown in the figure. 1

4) **Separation:** Increase the distance from the antenna indoors to outdoors as much as possible to maximize coverage and avoid gain reduction.

5) **Power supply:** Connect the power supply to the amplifier and turn it on.

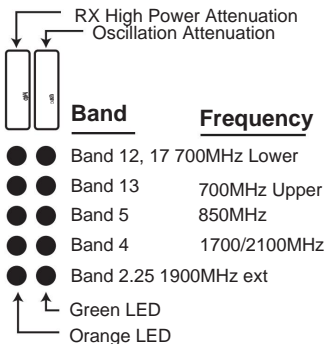
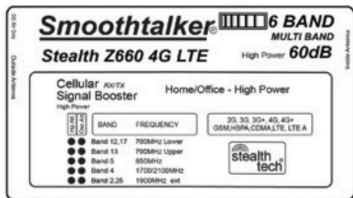
6) **Coverage:** Use your cell phone to determine if coverage is good. If the coverage is inadequate, please watch the Green and Orange lights to determine if the amplifier is automatically reduced in gain by the Gain LED graph on the back cover.

If yes please try to separate or relocate the antennae according to explanation on Pg. 6.

Important: Use only the power supply supplied with the amplifier. Connecting any other power source at any time will result in damage to the amplifier and will void the warranty.

Do not turn on the power switch until all cables have been screwed or plugged into the amplifier or you may cause damage to the amplifier.

Understanding the LED Indicators



The LED lights on the booster face plate indicate the operating gain state of the booster.

The Green and Orange lights indicate the gain status in each operating band
When Both Green and Orange LED's are "SOLID ON" it means that the booster is operating normally with full gain (No Automatic Gain Reduction)

When one or both of the LEDs are flashing (Per the chart on back page) it indicates that the gain has been automatically reduced due to either:

- High RX outside signal level (close to cell tower)
- Loop Oscillation, caused when the inside antenna is located too close to the outside antenna.

Optional Dual Inside Antenna Installation (Fig. 2)

(Additional parts required which are not included in Booster kit)

- Choose a splitter model for your needs. For 2 interior antennas use a 2 way splitter and for 3 interior antennas use a 3 way splitter etc...
- Mount the interior antennas in the areas which need cellular coverage 3) Evenly distribute the antennas throughout the rooms and areas to cover
- Turn on Booster unit and check signal strength improvement as needed

If you need help pls contact techsupport@smoothtalker.com and we will help you determine your cell tower location and get you setup.

techsupport@smoothtalker.com Tel: 1 877 726 3444

LED Lights Explanation and Troubleshooting

**Each ash indicates 3dB of gain reduction also known as gain attenuation.
For example: three ashes equals 9dB of attenuation.**

Green LED indicates loop oscillation status. When ashing it means reduction of gain. To improve you need to spread the distance between the inside and outside antennas. If you spread them far enough away, the Green LED will become SOLID ON.

Orange LED indicates RX (outside signal) status.

There are 5 Orange LED lights: 700 Mhz Lower, 700 Mhz Upper, 850 Mhz, 1700/2100 Mhz, 1900 Mhz ext. LED ON state indicates that the RX (Receive Signal) function of the band is functioning normally. LED OFF state indicates that the band is shut down.

When Orange LED is ashing it indicates reduced gain also known as attenuation of gain. You cannot prevent this condition. It means that the outside signal is very strong and the booster has reduced it's gain in order to protect the closest cell tower. If the cell tower which is close is the one you are using, then you can ignore the gain reduction and you will still get enough signal strength to cover your area. In this case this is the normal operating process.

If the close cell tower is not the one you are using, then you can try to relocate your outside antenna away from this cell tower and face it or point it to the cell tower you are using in order to get more gain.

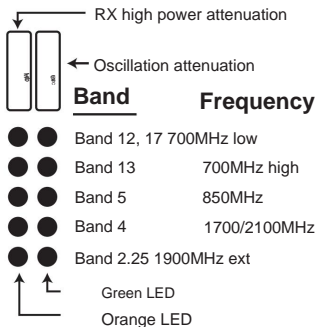
Optional Dual Indoor Antenna Installation (Fig. 2)

(Additional parts required which are not included in the Amplifier kit.

- 1) Choose a divider model for your needs. For 2 indoor antennas use a 2 way splitter and for 3 indoor antennas use a splitter 3 way etc...
- 2) Mount indoor antennas in areas that need cellular coverage
- 3) Distribute antennas evenly across floors and areas to be covered
- 4) Turn on the Amplifier unit and check the signal strength improvement as required

If you need help, please contact techsupport@smoothtalker.com and we'll help you determine the location of the cell tower and help you set it up.

Understanding LED Indicators



LEDs on the face of the amplifier indicate operational gain status.

In a given frequency band there is a Green and Orange LED which indicate the gain status of the band. When both of these LEDs are "SOLID ON", the amplifier is operating normally and with full gain (no attenuation) in that band. If the amplifier has reduced its gain, one or both LEDs will flash. (via the table on the back cover)

Any reduction in gain will be due to either: A)

High signal level outside (near the tower)

B) Oscillation loop caused when the indoor antenna (either on the bracket or the patch antenna) and the outdoor antennas are located too close together.

When the booster is off, it will be indicated as follows: When the indoor and outdoor antennas are extremely close together the Green LED will flash rapidly and the Orange LED will turn off indicating the booster is off due to the oscillation loop.

NOTE: It is normal for the booster to be quite warm while the phone is in use state.

NOTE: It is normal for the amplifier to be quite hot during operation

What do the flashing LEDs mean?

Each blink indicates this 3dB of gain reduction also known as gain attenuation. For example: three flashes equals 9dB of attenuation.

The green LED indicates oscillation loop status. When it flashes, it means a reduction in gain. To improve you must extend the distance between the antennas from the inside and outside. If you spread them far enough, the green LED they will become LIT SOLID.

Orange LED indicates RX status (outdoor signal strength).

There are five amber LED lights: 1) for 700 Mhz Low 2) for 700 Mhz High 3) for 850 Mhz, 4) for 1700/2100 Mhz, 5) for 1900 Mhz PCS.

State On/Flashing indicates that the RX(signal reception) of the band works normally. Off state indicates that the tape is stopped.

When flashing indicates reduced gain also known as gain attenuation.

You cannot prevent this condition. This means that the signal outside is very loud and the amplifier has reduced this jack to protect the nearest cell tower. If the cell tower that is near is the one you use, you can ignore the gain reduction and you'll still have enough signal strength to cover your area. In this case, this is the normal process Operating. If the nearby cell tower is not the one you are using, you can try moving your outdoor antenna away from this cell tower and aront it or point it at the cell tower that you use year to get more gain. If you need help please contact techsupport@smoothtalker.com and we'll help you determine the location of your cell tower and you get the conguration.

Industry Canada Information to Users

This product meets the applicable Industry Canada technical specifications. The Class [B] digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulation.

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 signal 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. To comply with ICAN MPE limits: Antennas MUST be installed at least 20 cm (8 inches) from any person. Changes or modifications not expressly approved by Mobile Communications Inc., the party responsible for compliance, could void the user's authority to operate the equipment.









Industry Canada Information for users This product complies with Industry Canada specifications.

Class [B] digital apparatus complies with all requirements of the Equipment Regulation jammer from Canada. Rated the manufacturer output power of this equipment is unique for carrier operation. In situations where multiple carrier signals are present, the note would have to be reduced by 3.5 dB, especially when the output signal is re-radiated and may cause interference to adjacent band users. This power reduction is performed by means of input power or gain reduction, not by an attenuator at the device output. To meet ICAN MPE limits: Antennas must be installed at least 20 cm (8 in) from any person. Changes or modifications not expressly approved Mobile Communications Inc., the party responsible for compliance, may void the user's authority to operate the equipment.

Operational bands - operational groups	Band 12/17	Band 13	Band 5	Band 4	Band 2/25
Nominal Bandwidth	28.2MHz 28.2MHz 40.3MHz 79.2MHz 79.4MHz				
Nominal Bandwidth					
Rated Mean Output (uplink)	23.6dBm 24.0dBm		25.3dBm	28.4dBm	28.4dBm
Average Rated Yield (Uplink)					
Rated Mean Output (downlink)	6.4dBm	6.2dBm	9.9dBm	8.2dBm	10.7dBm
Average rated yield (downlink)					
Nominal Passband Gain	72.5dB	72.1dB	71.2dB	71.5dB	72.2dB
Nominal bandwidth gain					
Impedance (input/output)	50 Ohm - 75 Ohm		weight-weight 1.5 lb 0.660 kg		
Impedance (input/output)					

LED Lights Indicate Gain Status

LED lights indicate gain status

<p>Attenuation - Attenuation (Att)</p> <p>Each ash indicates up to 3dB of gain reduction also known as gain attenuation. For example: three ashes equals 9dB of attenuation.</p> <p>Each ash indicates up to 3dB of gain reduction also known as gain attenuation. For example: three flashes equals 9dB of attenuation.</p>	<p>ORANGE LED</p> <p>High Power high power</p>	<p>GREEN LED</p> <p>Oscillation</p>
<p>Orange Solid ON = Full Gain & Green Solid ON = Full Gain No Flashing = Full Gain</p> <p>Orange On Solid = Full Gain & Green On Solid = Full Gain Not flashing = full gain</p>	 <p>Solid On-Solid On</p>	 <p>Solid On-Solid On</p>
<p>Orange Solid ON & Green Slow Flashing = Oscillation Att Each Flash = up to 3dB gain reduction</p> <p>Orange On Solid & Green Slow Blink = Oscillation Att Each ash = up to 3dB of gain reduction</p>	 <p>Solid On-Solid On</p>	 <p>Slow Flashing Slow Blink</p>
<p>Orange O & Green Fast Flashing = Oscillation Shutdown Fast Flashing = booster shutdown (please troubleshoot)</p> <p>Orange Off & Green Fast Blink = Disable Oscillation Fast flashing = amplifier closed (please troubleshoot)</p>	 <p>OFF/Off</p>	 <p>fast-flashing Fast Blink</p>
<p>Orange Slow Flashing & Green Solid ON = RX High Power Att Each Flash = up to 3dB gain reduction</p> <p>Slow Blinking Orange & Solid Green On = RX High Power Att Each ash = up to 3dB of gain reduction</p>	 <p>slow ashing slow flashing</p>	 <p>Solid On-Solid On</p>

In 2001 SmoothTalker produced the first digital mobile cellular signal booster in North America with FCC and ICAN approval. We continue to lead with the most powerful and intelligent boosters in the world.

Our dynamic adaptive proprietary algorithms make them very network friendly. We call it STEALTH TECH technology.

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Automatic power control protects the Cellular Network

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