Abnormal LED Light status & Trouble Shooting

Abnormal state:

- **LED blinking Red :** Increase the vertical and/or horizontal spacing of the outdoor and indoor antenna, or **adjust** the orientation/position of the outdoor and/or indoor antenna until all LED indicators appear solid red, or green.

Note: 1・Before the adjustment procedures to eliminate the LED indicators blinking red, the main unit **must be** powered off first and then power on (reset).

2・Whether it is during the installation or regular use, LED indicators blinking Red **must be** eliminated and then reset the power until they appear solid red, green.

- **LED blinking Green :** The cell tower in this frequency band is very close to the house. When the outdoor antenna receives a strong signal, the main unit will automatically shut off the corresponding frequency band. The cellphone is directly connected to the cell tower, no longer boosted through the cellphone signal booster.

The cell tower may not be the carrier to which the user registered, and it may belong to other carriers:

1・Nearby cell tower belongs to the **carrier** to which the **user** is registered: If the indoor reception is good in other frequency bands or the bands that blink green, continue to use the booster. Ignore the blinking Green LEDs, as there is no need to adjust the orientation of the outdoor antenna.

2・The nearby cell tower belongs to **other carriers** and the cell tower of the **user** registered is **far away**: It is necessary to set a new outdoor antenna position. Use the house as an obstacle to **block** outgoing signals from the cell towers of other carriers to **receive more** cell tower signals from the carrier to which the user is registered. Follow procedures in **Step D** to find the orientation for the best reception, and then secure the outdoor antenna.

Note: 1. When eliminating the frequency bands of LEDs blinking Green, the main unit can still be powered. Move the orientation of the outdoor antenna away from the nearby cell tower until the LEDs stay solid green, and then reset the booster to make sure that it works properly.

2. Adjusting the orientation / location of the outdoor antenna may change the reception of other frequency bands. If the reception results of other frequency bands are therefore reduced, the new location of the outdoor antenna must be changed. Follow the procedures of Step D to find the orientation of the outdoor antenna with the best reception.

- **LEDs appear solid green, but the cellphone reception is not good :** The cell towers belonging to other carriers are **far** from the house, and their signal strength makes the LED of the booster appear solid green. However, the cell tower of the carrier to which the user registered is **even further** from the house.

  It is necessary to get a new location for the installation of the outdoor antenna. Use the house as an obstacle to block out side signals from the cell towers of other carriers. Follow procedures in Step D to receive more cell tower signals from the carrier to which the user is registered.

- **LED lights blinking orange (red and green lit together) :** If the cellphone gets too close to the indoor antenna, the main unit will blink orange. Keep the cellphone further away from the indoor antenna, and the booster operation should return to normal.

  Note: It is recommended that cellphone be used at least 3 ft away from the indoor antenna.

- **During calls, it is easy to get disconnected, moreover, reception bars can fluctuate, or internet access may become unstable :**

  The condition can be improved by adjusting the orientation of the outdoor antenna to aim at one cell tower only.

  Try to avoid an orientation of the outdoor antenna that points between two cell towers, as this can easily lead to the above mentioned reception bar fluctuations.

- **LED indicators appearing solid red or green without any improvement in reception :**
  Check all outdoor and indoor antenna connectors, adapters, coaxial cable connectors, and main unit connectors, then make sure that they are secured. Fasten by hand (without tools) if necessary.

- **No LED indicators light up :**
  Check if the power socket or power strip is properly powered by 110 V AC from the AC-DC adapter included in the Booster kit. If there is a problem with the AC-DC adapter, please contact your dealer for a replacement.

Booster Safeguard Features

- **Anti-oscillation :**
  The booster detects an oscillated signal and shuts down within 0.3 and 1.0 sec for UL and DL CKT respectively. Operation re-initiates detection after 60 sec for no more than 5 times then shuts down permanently until the users reset the booster.

- **AGC, power control / power down and noise limitation :**
  The booster amplifies but does not alter incoming signals from cell towers and cellphones without distortion by automatically controlling the booster's gain and power within a manageable input range. When the incoming signal level exceeds this range, the booster may shut down or power down the UL and / or DL CKT to reduce output noise. This may occur in the following scenarios:
  1. Loop oscillation
  2. Outdoor antenna is nearby a cell tower
  3. Cell phone in use close to indoor antenna
  4. UL CKT deactivated within 5 min after a call has ended

  The booster reduces both gain and/or power for UL and DL CKT. The outdoor antenna reception level enables DL AGC CKT as the variable gain function.

  Each signal Booster is individually tested and factory-set to comply with FCC and IC guidelines. The signal Booster cannot be set or adjusted by user both software/hardware. Only the factory can program the device.

- **FCC and IC information :**
  This device complies with class B digital device guidelines pursuant to part 15 of FCC Rules under reasonable protection against harmful interference in residential house installation. Operation is subject to two conditions:
  (1) This device may not cause harmful interference.
  (2) This device must accept any interference received, including interference that may cause undesired operation.

- **IC: (The term "IC" refers to Industry Canada technical specifications.)**
  Class B digital devices meet all requirements of the Canadian Interference Causing Equipment Regulations. Operation is subject to two conditions:
  (1) This device may not cause harmful interference.
  (2) This device must accept any interference received, including interference that may cause undesired operation.

Users Safety Reminders

⚠ Ensure the signal booster operating temperature remains between 59° to 113 °F (15 to 45 °C) in an indoor environment.

⚠ Do not connect the booster directly to any cell phone/device, as this may damage the cellphone signal booster.

⚠ **AWS Warning:** Do not install the outdoor ANT higher than 10 m above ground.

⚠ For **RF safety,** Either outdoor or indoor ANT must remain at least 8 inches (20 cm) away from all personnel.

Any Changes or modifications not expressly approved by the party responsible for compliance 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 this 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:

- Rotate/move the outdoor ANT orientation/location.
- Increase separation between outdoor and indoor ANT.
- Consult your dealer or a CATV/SATV/TV/Ham radio expert for assistance.

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator& your body.
This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter

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.

In Canada, **BEFORE USE** you must meet all requirements set out in ISED- CPC-2-1-05.

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 ISED in Canada) or 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 may be operated **ONLY** in a fixed location for in-building use.

Authorized Accessories List

Item Name	Model No.	Quantity & Accessories
Outdoor Antenna	LPA-F78	1 pc and A1, A2 3D Bracket 1 set/ea. w Adaptor AD-N1F0-06 1 pc
Indoor Antenna	PA-F45	1pc and B1, B2 Bracket 1 set/ea. w Adaptor AD-N1F0-06 1pc
33ft RG-06/U Coaxial Cable	CL06-33F1F1-06	1 pc w Adaptor AD-N1F0-06 1pc
17ft RG-06/U Coaxial Cable	CL06-17F1F1-06	1 pc w Adaptor AD-T1F0-06 1pc
11ft RG-06/U Extension Coaxial Cable	CL06-11F1F1-06	1 pc w Adaptor AD-F0F0-06 1pc
110VAC 5V2A DC Power Adaptor	RH-050200US	1 pc

Note : ⚠ Use only the AC-DC Adaptor in the cell booster kit package. A non-ClearCast AC-DC Adaptor may damage the signal booster.

⚠ Use only the Outdoor and Indoor ANT in the cell booster kit package. A non-ClearCast Outdoor/Indoor ANT may cause extra problems.

⚠ Use only the coaxial cable and/or Extension coaxial cable in the cell booster kit package. A non-ClearCast coaxial cable may cause roblems.

INFORMATION ON REGISTERING YOUR SIGNAL BOOSTER WITH YOUR WIRELESS PROVIDER BERORE USE THIS DEVICE

- Verizon Wireless:
  https://www.verizon.com/solutions-and-services/accessories/register-signal-booster/
- AT&T: https://securec45.securewebsession.com/attsignalbooster.com/
- T-Mobile/Sprint/MetroPCS:
  https://www.t-mobile.com/support/coverage/register-a-signal-booster
- UScellular: https://www.uscellular.com/support/fcc-booster-registration

Specifications

ID No.	FCC : 2AHY2US4G-65 IC :		
Model No.	US4G-65		
Band Frequency	Band	UL (MHz)	DL (MHz)
	B12/17	698~716	728~746
	B13	776~787	746~757
	B5	824~849	869~894
	B4	1710~1755	2110~2155
	B2/25	1850~1915	1930~1995
Maximum Gain	B12/7/13/5 : 60dB, B4/2/25 : 65 dB		
Noise Figure	6dB		
RF Power Output	UL (dBm)	DL (dBm)	
Conduction (GSM, AWGN)	17~20	2 (typ.)	
EIRP (GSM, AWGN)	27 (max.)	7 (typ.)	
Power Support	110V AC Input 5V2A DC Output		
Connectors	OUT door Antenna Port : F (F) Indoor Antenna Port : TNC (F)		
Size Dimension, Weight	4.4 x 8.0 x 1.3 in (W x D x H) 0.7 lbs.		

2 YEAR WARRANTY

ClearCast warrants its products for 2 years from the date of purchase against defects in workmanship and / or materials.

Warranty cases may be resolved by returning the product directly to the reseller with a dated proof of purchase in original , unmodified condition.

The warranty does not apply to any cellphone signal Boosters determined by ClearCast to have been subjected to misuse , abuse , neglect , or mishandling that alters or damages physical or electronic properties.
ClearCast shall at its option , either repair or replace the product.

The returned replacement products may include refurbished ClearCast products that have been recertified to meet with product specifications.