

AN-CPAL50-01

Cell Phone Signal Booster

User Manual



Introduction

With the popularity of mobile communications, people want to make a call anytime, anywhere, so the coverage requirement of communication network is higher and higher, but the reality is not so, sometimes mobile phone signal is not very good, you want to make a smooth call, even in some places cell phone cannot dial out. In these cases, cell phone signal booster can solve this problem to a certain extent.

Features

- AGC(Automatic Gain Control): When the downlink output signal is too strong or self-oscillated, the uplink and downlink can automatically reduce the gain and reduce the interference signal
- Self-Oscillation elimination: The system detects self-Oscillation, first reduces the link gain, then detects the loop, and finds that the self-oscillation is eliminated, the system returns to normal working state, otherwise, the power is turned off to prevent interference signal.
- Inactivity Mode: When no user calls, the device is in standby mode, the uplink power amplifier is switched off, and the static power is decreased by 30%, so as to achieve the purpose of energy saving.

SAFETY WARNINGS

WARNING:

This equipment should be installed and operated with minimum distance 20cm (8 inches) between the radiator& your body.

FCC Cautions:

- Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.
- 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.
- 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:
 - -- Reorient or relocate the receiving antenna.
 - -- Increase the separation between the equipment and receiver.
 - -- Connect the equipment into 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. End users must follow the specific operating instruction for satisfying RF exposure compliance.
- This transmitter must not be co-located or operating in conjunction with any other Antenna or transmitter.

SAFETY WARNING:

- End users must follow the specific operating instruction for satisfying RF exposure compliance.
- Do not remove the covers during working.
- Do not try to repair or replace any components inside of the equipment. Alteration or abuse of the equipment or other components will void this product's warranty, and could be dangerous to the user.

PACKAGE CONTENTS

(1) Packages include the following :

- ① 1Pcs AN-CPAL50-01 Booster with FME Male connectors.
- ② DC Car Charge.
- ③ Screws Mounting Kits.
- ④ User manual (this document).

(2) Booster interface description:

LED light : The corresponding LED on the right is used to indicate the following different working conditions of the booster.

LED Indicator	Booster working conditions
LED LIGHT	Continuous GREEN @normal ;
	Twinkly GREEN @input signals may be not enough ;
	Continuous YELLOW @ stronger input signals, AGC is working ;
	Twinkly YELLOW@ self - oscillation happen ,AGC is working.
	Continuous RED@ power supply is shut down ;
	Twinkly RED@ self - oscillation happen but power supply is NOT shut down.

②Power supply jack: The booster uses a power input range of DC 5-12V.

③INDOOR and OUTDOOR port : The two ports are used to connect outdoor and indoor antennas.

(3)Antennas and Cables:

In order to use the Booster, you still need the corresponding indoor antenna 1pcs, outdoor antenna 1pcs, outdoor cable 1pcs and indoor cable 1pcs.

Antennas and cables kitting information are as follows

Name		Model	Gain/Loss	
Indoor Antenna	Patch Antenna	PTE-PA-800-2500	3dbi @698-787MHz 3dbi @824-894MHz 3.5dbi @1850-1990MHz 3.5dbi @1710-2155MHz	
	Indoor Panel Antenna	PTE-PN-800-2500	7dbi @698-787MHz 7dbi @824-894MHz 8.5dbi @1850-1990MHz 8.5dbi @1710-2155MHz	
Outdoor Antenna	Magnet Antenna	PTE-MA-800-2500	3dbi @698-787MHz 3dbi @824-894MHz 3.5dbi @1850-1990MHz 3.5dbi @1710-2155MHz	
	Omni Tube Antenna	PTE-GF-700-2500	3dbi @698-787MHz 3dbi @824-894MHz 5dbi@1710-1755MHz 5dbi @1850-1990MHz 5dbi @2110-2155MHz	
Indoor Cable	20feet 3D-FB Coaxial cable with N male connector	PTE-3D-FB-5NB	2.19db@698-787MHz 2.29db @824-894MHz 2.42db @1710-1755MHz 2.55db @1850-1990MHz 2.86db @2110-2155MHz	
Outdoor Cable	40feet 3D-FB Coaxial cable with N male connector	PTE-3D-FB-10NB	5.21db@698-787MHz 5.49db @824-894MHz 5.89db @1710-1755MHz 6.25db @1850-1990MHz 6.86db @2110-2155MHz	

Notes : The above model antennas are suitable for AN-L50VA-01 booster.

Warning :Unauthorized antennas ,cables and/or coupling devices are prohibited

by FCC rules. Please contact FCC for details : 1-888-CALL-FCC

The antenna, cables, and other accessories of the booster kits shall not be modified without the approval of the ANNTLENT company, otherwise it shall be deemed invalid.

INSTALLATION INSTRUCTIONS

(1) Installation of Outdoor Antenna

- The outside antenna comes with a strong magnet, simply put it on the roof of your vehicle. Run the cable of the outside antenna from the nearest door to the booster and connect the connectors by hand, please do not use any tools, otherwise it will be over installed to break the connectors.
- Note: Place the antenna at least 6 inches away from any windows including sunroofs, and 12 inches away from any antennas on the vehicle.

(2) Installation of Indoor Antenna

- The inside patch antenna should be stuck on the back of the front seat and face the space you need to use your phone.
- Note: Please don't mount it on any metal surface. The vertical installation is better than the horizontal way. The inside antenna and outside antenna should be at least 6ft (2m) apart, if possible.

Notes :

Booster transmitting in 1710-1755 MHz should be install/operate in one of two ways:

- (i) the antenna for the device must be installed to comply with the 10 meter above ground maximum antenna height limitation OR**
- (ii) the antenna for the device has a 10 meter above ground maximum antenna height limitation when the device is used with a handset that covers the 1710-1755 MHz band and that owners could be subject to potential FCC enforcement action for noncompliance.**

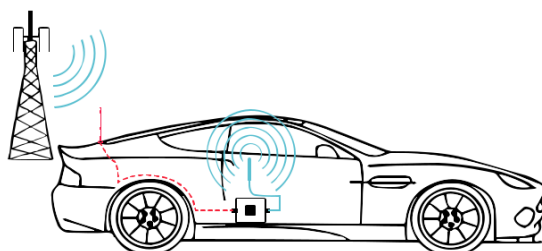
(3) Connect the Power Cord:

- Connect the DC power cord into the vehicle's DC power source, verify that all of the connections to the booster are tight and secure, plugging the power cord to the booster, the green LED light will glow, indicating that the booster is ready to use.
- **WARNING:** The booster is rated for DC 5~12V input voltage. **DO NOT** use the booster with a high-voltage power supply. This could damage the booster or cause personal injury.

(4) Mounting the booster (optional):

- Select a location to install the booster that is away from excessive heat, direct

sunlight or moisture and that has proper ventilation. Recommended installation locations are:



TROUBLESHOOTING AND SUPPORT

Problem	Resolution
LED is not light	1.Find an alternate DC Car Charge and try again. 2.Check the power outlet, the power adapter plug maybe is poor connected. 3.If the problem is still not solved, please contact our company support at support@ANNTLENT.com
Booster has no effect	1. Check whether the direction of the booster is wrong connected. 2. Make a call to your mobile phone operator to determine if the frequency band is correct. 3. Check whether the indoor and outdoor antenna is installed correctly 4. At the location where the outdoor is installed, if your mobile phone is able to receive a stable 2 bars cell phone signal, If not, find a location where the mobile phone can receive a better signal to install the outdoor antenna.
Booster has effect ,but the effect is not ideal	Check if your outdoor signal is very weak. If you can only receive one or two bars cell phone signal in the outdoor. If so, contact our customer service and ask to replace the booster or antenna with a higher gain alternative.
Mobile phone can receive full signal, but can not normally make a call	It Usually means that the booster is self-oscillated, please make the distance between the indoor and outdoor antenna as far as possible, it is better to use a wall or metal to Separate the indoor antenna and the outdoor antenna.

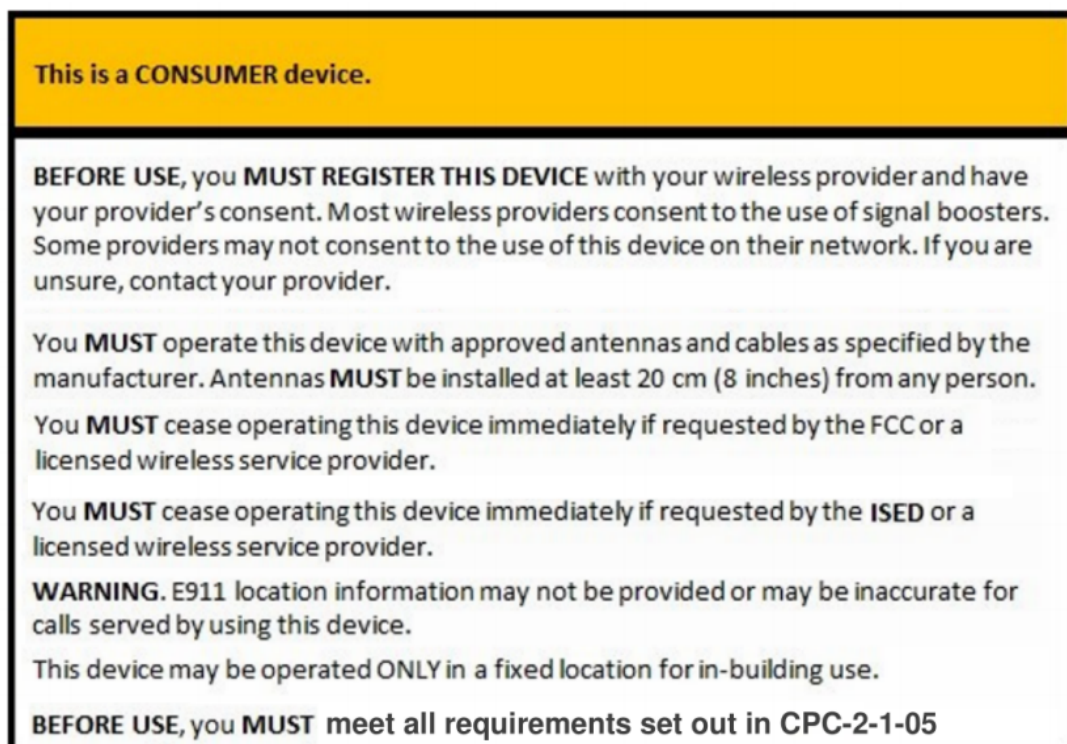
During using your Booster, if the Booster interferes with your radio or other electronic device, move the Booster further away from those devices, you might be able to solve it yourself.

If necessary , please contact your local dealer or send e-mail to our support team by the following methods:

E-mail: support@ANNTLENT-tech.com

If you want to know about ANNTLENT Company and products for more information, please visit at: www.ANNTLENT.com

Consumer booster warning label:



A subscriber must have the consent of a wireless provider to operate a Consumer Signal Booster. Subscribers may obtain provider consent in a variety of ways. For example, AT&T, Sprint, T-Mobile, and Verizon Wireless have voluntarily committed to allow their subscribers to use properly certificated Consumer Signal Boosters (i.e., boosters that meet the new rules) on their networks. Also, a signal booster manufacturer could seek authorization for use of a particular booster model on behalf of all subscribers of individual providers. Alternatively, a provider may specify a testing protocol that if satisfied would result in licensee consent to specific booster models. A subscriber may also seek a licensee's express consent to operate a signal booster, e.g., by phone call or e-mail

The following selected information about wireless providers' Consumer Booster

registration mechanisms supplements the requirements and information , and the FCC Signal Boosters website (<http://wireless.fcc.gov/signal-boosters/>).

Sprint Nextel will allow consumers to register their signal boosters by calling their toll-free number. They have already trained their calling center and have designated an engineer to handle inquiries. They may eventually allow consumers to register on their website but they want to gauge how the process works via phone first.

- T-Mobile online registration link: (www.T-Mobile.com/BoosterRegistration);
(<https://saqat.t-mobile.com/sites/SignalBooster#>).
- Verizon's online registration link:
(<http://www.verizonwireless.com/wcms/consumer/register-signal-booster.html>).
- AT&T will allow online registration and will inform OET Lab with the weblink when it is ready.
- U.S.Cellular :
(<http://www.uscellular.com/uscellular/support/fcc-booster-registration.jsp>).

WARRANTY

Warranty information applicable to your Booster

- Warranty Period: 2 year.
- Type of Warranty Service: Customer Replaceable Unit and Customer Carry-In or Mail-In Service.
- ANNTLENT Company is not responsible for Shipping Cost.

For Warranty service consult the telephone list at [www.ANNTLENT-tech.com/contact us](http://www.ANNTLENT-tech.com/contact-us).

What this Warranty Covers

ANNTLENT warrants that each Machine 1) is free from defects in materials and workmanship and 2) conforms to ANNTLENT's Official Published Specifications which are available on request.

The warranty period for the Machine starts on the original date of installation. The date on your invoice or sales receipt is the date of installation unless ANNTLENT or your reseller informs you.

This warranty does not cover the following:

Failure resulting from misuse, accident, modification, unsuitable physical or operating environment, or improper maintenance by you;

The warranty is voided by removal or alteration of identification labels on the Machine or its parts.

IC Statement

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation,

Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

- (1) This device may not cause interference; and
- (2) This device must accept any interference, including interference that may cause undesired operation of the device.

The term "IC: " before the certification/registration number only signifies that the Industry

Canada technical specifications were met. This product meets the applicable Industry Canada technical specifications.

Cet appareil contient des émetteurs / récepteurs exemptés de licence conformes aux RSS (RSS) d'Innovation, Sciences et Développement économique Canada.

L'exploitation

est autorisée aux deux conditions suivantes :

- (1) l'appareil ne doit pas produire de brouillage,
- et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même s'il

brouillage est susceptible d'en compromettre le fonctionnement.

Vous devez utiliser cet appareil avec des antennes et des câbles approuvés comme spécifié par le fabricant. Les antennes doivent être installées à au moins 20 cm (8 pouces)

de toute personne.

This product meet all requirements set out in CPC-2-1-05, URL:

<http://www.ic.gc.ca/eic/site/smt-gst.nsf/eng/sf08942.html>

Ce produit répond à toutes les exigences énoncées dans CPC-2-1-05, URL:

<http://www.ic.gc.ca/eic/site/smt-gst.nsf/eng/sf08942.html>

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