SolidRF

SOLID WIRELESS CONNECTION

What bands and wireless providers are served with this booster?

Frequency Bands: LTE-707(Band12, 17)/LTE-781(Band13)/Cellular850 (Band5)/PCS-1900(Band2, 25)/AWS2100 (Band4).

This equipment is a multiband signal amplifier which supports: Cellular 850 MHz, PCS 1900 MHz, AWS and 700 MHz for both AT&T and Verizon-4G networks as well as the Sprint 4G G-Block of 1900 MHz.

SolidRF SR25502001 Delivers up to 50 dB of gain and supports CDMA, GSM, EVDO, LTE, HSPA+ and WCDMA technologies.

How does it work?

1. The outside antenna receives week signal from base station and sends it to the booster through outside cable. The booster can filter and amplify the signal. Then the inside antenna broadcasts the improved signal to inside space to enhance the cellphone signal.
2. When user's mobile terminal transmits, the booster amplifies the cellphone's signal from the inside antenna and sends it to outside antenna through cables. The amplified signal will be transmitted to the wireless provider's tower. The whole process of the communication link is established.

Why use a Booster ?

Someone using mobile devices cannot connect to the base station signal; experiences call failure, or are unable to connect to the internet. Which this occurs, it is generally due to one of two reasons:

1. Location of the nearest cell tower – cell towers are situated to provide broad coverage; however, there are many areas in which signal strength may be reduced by topographic features or by local government restrictions on the height or placement of the towers themselves. Rural areas generally have fewer cell towers than urban regions.
2. Natural and man-made obstructions – signal strength can also be negatively affected by trees, hills, buildings, weather, and other obstructions. You may be relatively close to a cell tower but still unable to make a call. This often occurs in homes and other buildings in which stucco, concrete or metal walls may block the signal.

Easily solve these problems by installing a SolidRF booster.

Overview of installation

1. Select installation location away from direct sunlight, heat, water and proper ventilation. Do NOT install in a sealed enclosure.
2. Before powering up the Signal Booster, verify that both the Outside Antenna and the Inside Antenna are connected and check that all connections are tight. *Note: Be careful when plugging the connectors in so as not to bend the center pins on the connectors*.

Warning: Connecting the Signal Booster directly to a cell phone with use of an adapter will damage the cell phone and/or the Signal Booster.

Booster function

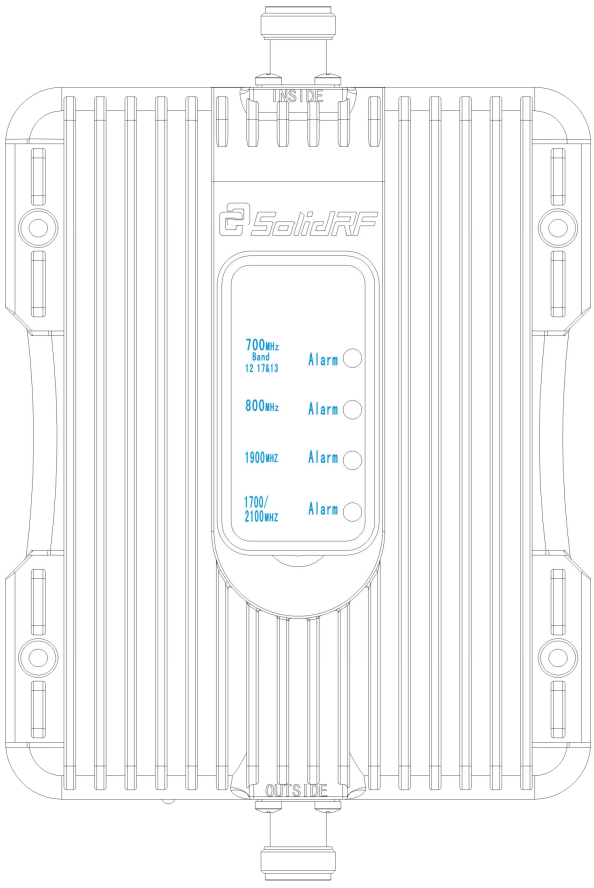


Figure 1

OUTSIDE：to connect with outside cable, outside antenna.

INSIDE: to connect with inside cable, inside antennas.

Band lights: it shows the status of indicated band. Flicker means the booster fail on the band.

Power light: It indicated whether the power is turn on.

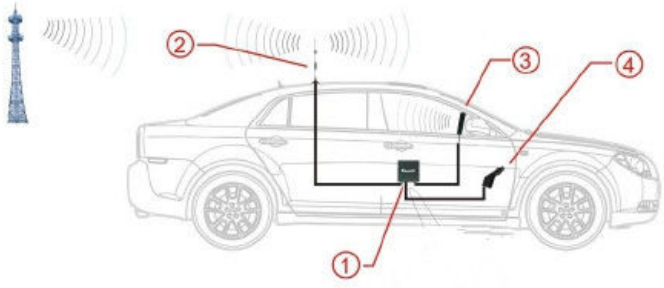
Signal booster joint types：SMA \ FME \ N

Notifications

- ⚠ Do NOT plug in the power supply until outside antenna and inside antenna are connected to the amplifier.
- ⚠ For wireless amplifier, do NOT attempt to connect the amplifier directly to mobile devices, this can cause serious damage to both of amplifier and mobile devices.
- ⚠ For the purpose of vehicle use, do NOT use any type of glass-mount antenna. Outside antenna and inside antenna must be shielded from each other to prevent oscillation.
- ⚠ Use only the power supply provided in this package, Or approved by the SOLIDRF power adapter
- ⚠ If the vehicle has a sunroof, the outside antenna and inside antenna must be separated from each other as far as possible. It aims to prevent self-oscillation of the amplifier.

Before installation

Complete Installation Diagram



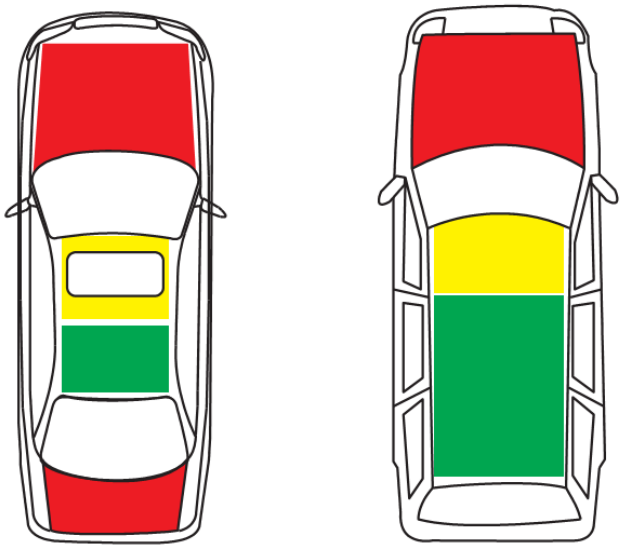
① : SR25502001 signal booster

② : Outside antenna

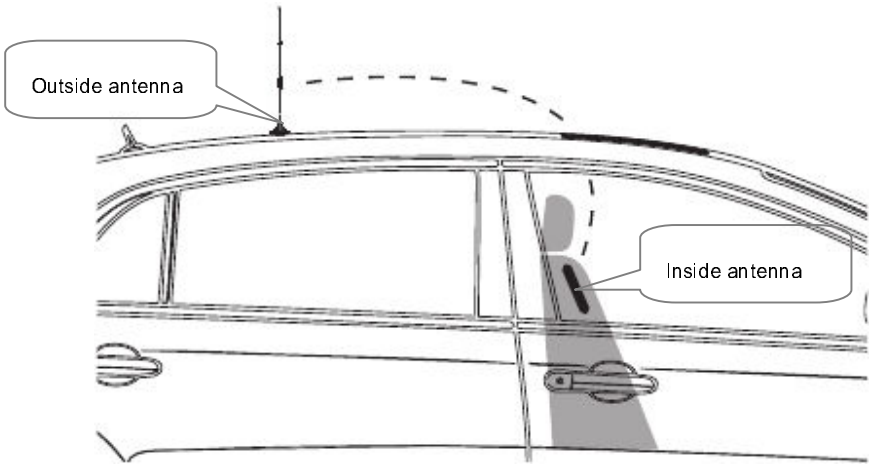
③ : Inside antenna

④ : Power adapter

Location for outside antenna: Recommend Satisfactory Prohibited



Outside antenna and inside antenna distance of not less than **5** feet.



Warnings and Recommendations

⚠ **Warning: This consumer booster is for Consumer use only.**

⚠ **Warning: Unauthorized antennas, cables, and/or coupling devices are prohibited by FCC regulations. Please contact FCC for details: 1-888-CALL-FCC.**

⚠ **Warning: Outside antenna orientation must be back side of inside antenna is to prevent the indoor antenna receiving the signal emitted by outside antenna. Otherwise it will cause self-oscillation of booster.**

⚠ **Warning: RF safety, any antenna used with this device must be located at 20 cm (8 inches) away from persons or by bystanders.**

⚠ **Warning: It will damage the mobile device and the booster if connect them with a cable directly.**

⚠ **Warning: Use the power supply provided by SolidRF only. Other power supplies may cause damage of the booster.**

⚠ **Warning: Antenna installation is restricted to 10 meters or less height above ground, even if the antenna is installed inside when used with a mobile device that operates in the 1710-1755 MHz band. Violation of this requirement may subject the owner of the booster to potential FCC enforcement actions.**

⚠ **Warning: Never point the front of a directional antenna toward the inside antenna. Verify that both the outside antenna and the inside antenna are connected to the booster before powering up the booster.**

Antenna Kitting Information

	Prod No.	Gain/Loss				
		LTE-707	LTE-781	800MHz	1900MHz	1700MHz\ 2100MHz
Outside Antenna	SR-30200100	2dBi	2dBi	2dBi	2dBi	2dBi
Inside Antenna	SR-10200220	1.5dBi	1.5dBi	1.5dBi	2dBi	2dBi
Outdoor Cable	SRG58-15FN 15Feet	2.35dB	2.4dB	2.56dB	3.9dB	3.7dB\4.1 dB

Description of network protection features:

The SolidRF SR25502001 including safeguards to protect the cellular network from interference. Each Signal Booster is individually tested and factory set to ensure FCC compliance.

1. The Signal Booster cannot be adjusted without factory reprogramming or disabling the hardware.
2. The Signal Booster will amplify, but **ONLY** incoming and outgoing signals in order to increase coverage of authorized frequency bands.
3. If the Signal Booster is not in use for five minutes, it will reduce gain until a signal is detected.
4. If a detected signal is too high in a frequency band, or if the Signal Booster detects an oscillation, the Signal Booster will automatically turn the power off on that band.
5. For a detected oscillation the Signal Booster will automatically resume normal operation after a minimum of 1 minute. After 5 times consecutive such automatic restarts, if the detected oscillation still remains, any problematic bands are permanently shut off until the Signal Booster has been manually restarted by reconnecting power supply to the Signal Booster.
6. Noise power, gain, and linearity are maintained by the Signal Booster's microprocessor.

This is a CONSUMER device
BEFURE USE ,you **MUST REGISTER THIS DEVICE** with your wireless provider and have your provider's consent .Most wireless provider consent to the use of signal boosters .Some provider may not consent to the use of this device on their network .If you are unsure ,contact your provider. You **MUST** operate this device with approved antenna and cables as specified by the manufacturer .Antennas **MUST** be installed at least 20cm (8inches) from any person. You **MUST** cease operating this device immediately if requested by the FCC or a 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 complies with Part 15 of FCC Rules. 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 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

Contact information for providers

A subscriber must have the consent of a wireless provider to operate a consumer signal booster. Please register your booster with your wireless service provider, refer to contact information for providers:

Sprint:

signalbooster@sprint.com

T-Mobile:

www.T-Mobile.com/BoosterRegistration

https://support.t-mobile.com/docs/DOC-9827

Verizon:

http://www.verizonwireless.com/wcms/consumer/register-signal-booster.html

AT&T:

https://securec45.securewebsession.com/attsignalbooster.com/

U.S. Cellular:

http://www.uscellular.com/uscellular/support/fcc-booster-registration.jsp

Metro PCS

https://www.metropcs.com/support/signal-booster