

User Manual & Instructions

Series: BRM22050



For use with:
2G, 3G & 4G Cellular Devices

The BRM220-50 Dual Band RX/TX 800/1900Mhz
Signal Booster with Smoothtalker proprietary
" Stealthtech Signal Technology "

Increases your Cellular and PCS Band Signals, expands your service coverage area, enhances voice call quality and significantly increases Data speeds

The Intelligent CPU monitors the environment in which the amplifier is operating and continuously adjusts itself to prevent Oscillation and also automatically prevents any RX/TX overload to both the Cell Phone and Cellular Tower while giving you maximum signal improvement. It is easy and simple to install and you can be up and running in minutes

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.

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 a licensed wireless service provider.
WARNING. E911 locator information may not be provided or may be inaccurate for calls served by using this device.

Initial Setup Assembly & Installation

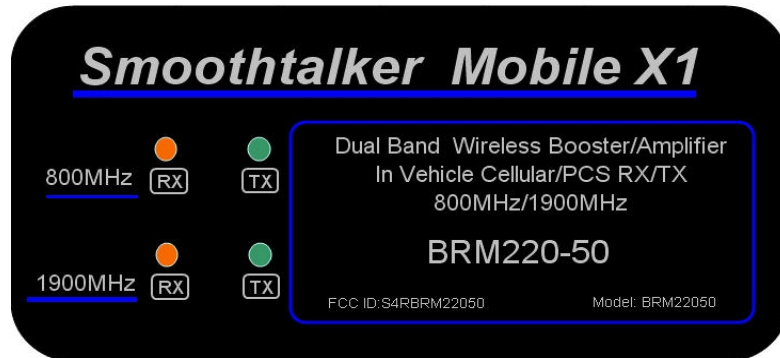
1-First make sure that no power is connected to the booster. Connect the inside antenna, the outside antenna and power supply to the booster. Please make sure to connect each item in to the correct ports as indicated on the booster.

2-Place the antenna on the outside of the vehicle or building and keep it separated as far as possible from the inside antenna or cell phone holder.

3-Turn the power switch to ON position and the single Green LED on the side of the unit will become Green, constant ON, to indicate that power is reaching the booster and that it is turned on.

Operation: PLEASE NOTE: It is normal for the booster to be quite warm during cell phone "in use" state.

LED Light Indicators on Panel Label:



Orange LED Lights (RX):

There two orange LED lights, one for the 800MHz cellular band and one for the 1900MHz PCS band. 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.

Green LED Lights (TX):

There two Green LED lights, one for the 800MHz cellular band and one for the 1900MHz PCS band. Solid ON state indicates that the TX (Transmit Signal) function of the indicated band is on and is at maximum gain.

Flashing Green LED in either 800MHz or 1900MHz indicates gain reduction in that band

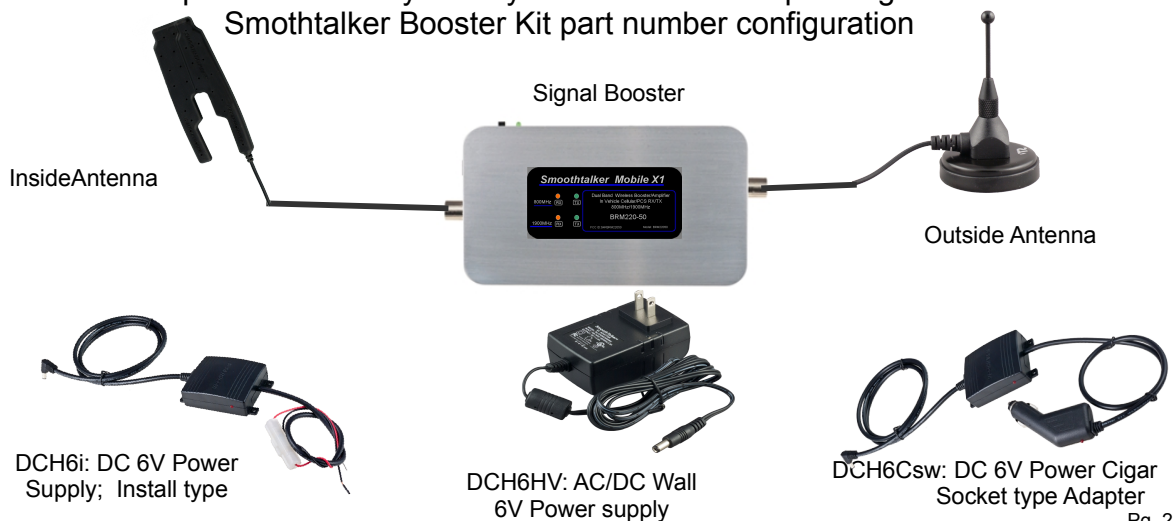
Each flash equals 3db reduction in gain. One flash represents a 3dB reduction, two flashes represents a 6dB reduction etc. until the total gain of the booster has been suppressed.

Causes of Flashing Green LED Lights:

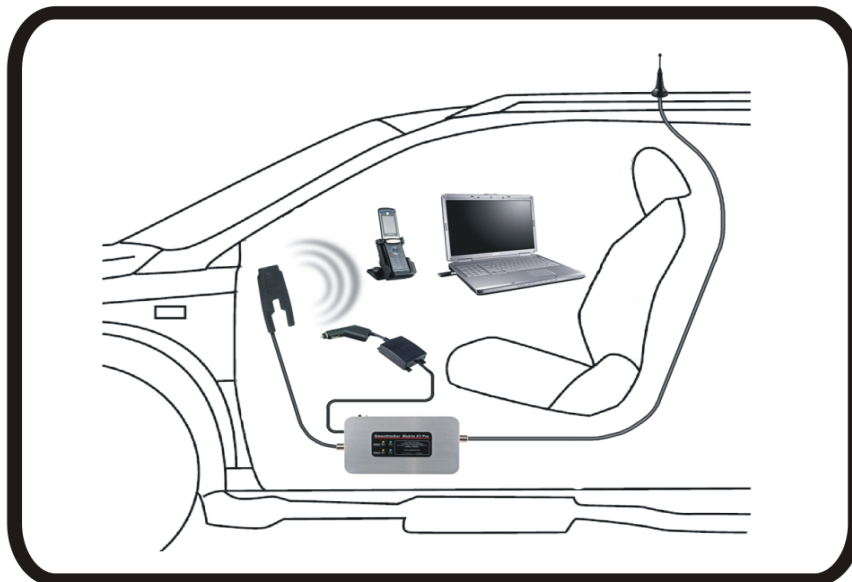
1-If the outside antenna is located too close to the inside antenna or phone holder the booster will reduce gain in order to suppress any oscillation (feedback loop) and the Green LED will flash. To achieve higher gain or max gain further separation of the inside and outside antennas is required.

2-If the booster is close to a cellular tower (Strong cell tower signal) it will automatically reduce its gain to protect the network. This condition will change as the booster approaches or leaves a cellular tower. This is normal and cannot be defeated or altered by the user.

All parts shown may or may not be included depending on the Smoothtalker Booster Kit part number configuration



Typical Vehicle Installation



Typical Home Installation



Contact us at: www.smoothtalker.com

To comply with FCC rules, this booster must only be operated with cables, antennas and coupling devices that have been approved for use with this equipment

For specifications of any of the Smoothalker FCC approved part numbers listed below visit smoothtalker.com

Authorized Magnetic base Antennas

SEM244MMF
SEM2MX, SEM2MF
SEM11MX, SEM11MF
SEM15MX, SEM15MF
SEM2MaX, SEM2MaF
SEM11MaX, SEM11MaF
SEM15MaX, SEM15MaF
SEM2MaXL, SEM2MaFL
SEM11MaXL, SEM11MaFL
SEM15MaXL, SEM15MaFL
SEM2LGMX, SEM2LGMF
SEM11LGMX, SEM11LGMF
SEM15LGMX, SEM15LGMF
SEM26LGMX, SEM26LGMF
SEM2LGMXL, SEM2LGMFL
SEM11LGMXL, SEM11LGMFL
SEM15LGMXL, SEM15LGMFL
SEM26LGMXL, SEM26LGMFL

Authorized thru-hole Antennas

SEM2THX, SEM2THF
SEM11THX, SEM11THF
SEM15THX, SEM15THF
SEM26THX, SEM26THF
SEM2THXL, SEM2THFL
SEM11THXL, SEM11THFL
SEM15THXL, SEM15THFL
SEM26THXL, SEM26THFL

Authorized Inside antennas

SEMR P1X
SEMR P1XL
SEMR1

Authorized Co-ax Cables

ACX100 extension cable
ACX900 extension cable
AC series antenna connection

Authorized directional Antennas

SEMD1XL, SEMD1FL
SEMDA2XL, SEMDA2FL

BRM220-50 Specifications	
Operational Bands	800MHz Cellular and 1900MHz PCS
Impedance	50 Ohms
Gain	50dB
Output Power	1 watt EIRP
Oscillation Control (Automatic)	Dynamic 1db steps
Oscillation Control Timing	< 1 sec
RX High Power Control	Dynamic up and down < 10 milliseconds
TX High Power Control	Dynamic up and down < 20 milliseconds
Current Draw @ 12V	1.1 Amp - 1.8 Amp
Voltage	6V
Noise Figure	< 5dB
Operating Temperature	-32F to +85F
Outside Antenna Connector	MCT Male
Inside Antenna Connector	MCT Male
Dimensions	6.25x3.5x1.125 inches
Weight	1.0 Lb
FCC ID (2014 rules)	S4RBRM22050

Important:

- 1-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.
- 2-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.
- 3-It is the user's/operator's responsibility to maintain a minimum distance of 8 inches separation from the antennas to any person.

Notes:

- 1-This booster is not user configurable. User changes are a violation under FCC rules and will void the user's authority to operate the equipment.
- 2-User changes changes or modifications will void warranty.

Warranty: 2 Year on manufacturing defects.
Does not include misuse or customer damage.
Original Bill of Sale is required for all Warranty Claims

Contact us at: smoothtalker.com