

## Declaration of Conformity

In accordance with EU Directives and Regulations

Mobile Communications Inc.

230 Earl Stewart Dr. Aurora, ON. Canada L4G6V8,

As the manufacturer hereby declares under our sole responsibility that the, Product(s):

Mobile Network Signal Enhancer, Model name/s: Smoothtalker :

BMEUX450 - BMEU453 Mobile X4

Is/are in conformity with the requirements of the RE Directive 2014/53/EU:

The radio equipment meets the following essential requirements:

Article 3.1 a): Health and Safety Conform

Article 3.1 b): Electromagnetic Compatibility Conform

Article 3.2: Effective and Efficient Use of Radio Spectrum Conform

Article 3.2: Radio EN 301 908-1 V11.1.1, EN 301 908-11 V11.1.2, EN 301 908-15 V11.1.2, EN 303 609 V12.5.1

Article 3.2: EMC EN 301 489-1 V2.2.0, EN 301 489-50 V2.2.0

Article 3.1(b) Safety EN 62368-1: 2014

Article 3.1(a) Health RF Exposure EN 62311: 2008

An EU Type Examination Certificate for this Product was issued in accordance with Annex III (Module B) of the 2014/53/EU Radio Equipment Directive by Bay Area Compliance Laboratories Corp. (2014/53/EU Radio Equipment Directive Notified Body Identification Number 1313)

This product has been tested and certified CE, RoHS , EU RE Directive

Made In Canada

For Inquires please contact info@smoothtalker.com



Automatic power control protects the Mobile Network Network

[Smoothtalker.com](http://Smoothtalker.com)

**Mobile X4 & Mobile X4 Pro 4G LTE**

**4 BAND  
MULTI BAND**

**Wireless Amplifier Extreme Power  
Mid Size (50 dB) & Large Size (53 dB) Vehicle**

**50 & 53dB**

## User Manual

**Mobile Network 50 & 53dB 4 BAND  
Signal Amplifier MULTI BAND 50 & 53dB  
Wireless Amplifier Extreme Power**

**2G, 3G, 3G+, 4G, 4G+  
GSM,HSPA,CDMA,LTE, LTE A**

**Band 20 800MHz**

**Band 8 900MHz**

**Band 3 1800MHz**

**Band 1 2100MHz**



model shown: BMEUX450



## SPECIFICATIONS

2G, 3G, 3G+, 4G, 4G+, GSM, HSPA, CDMA, LTE, LTE A

Frequencies MHz	800MHz	900MHz	1800MHz	2100MHz
Model Series	BMEUX450		BMEUX453	
Gain	50 dB		53 dB	
Max Power-TX: Watts EIRP	3		3	
Operating temp	-30 C TO + 85 C	Power Supply	Input - 12-24V Output- 5.5V Current: 3.0A	
Dimensions	L 12.7 x W 12.0 x H 3.2 (cm)		Weight 0.530 kg	

**1-905-726-3444**

**[Smoothtalker.com](http://Smoothtalker.com)**

## Approved Equipment List

For specifications of any of the Smoothtalker European approved part numbers listed below visit [smoothtalker.com](http://smoothtalker.com)

European requirements prohibit the use of unauthorized Antennas, Cables, and/or Coupling devices.

You MUST operate this device with approved antennas and cables as specified by the manufacturer. Antennas MUST be installed at least 8 inches from any person. You MUST cease operating this device immediately if requested by the European or a licensed wireless service provider.

CABLES	
ACX100, ACX900	
CBXmaXfe10,20,30,40,50,60	
CBNmaNfe10,20,30,40,50,60	
CBGmaGfe 10,20,30,40,50,60	
ANTENNAS	
SEM2, 11, 14, series	
SEM2M, 11M, 14M, series	
SEM2LGM, 11LGM, 14LGM, 26LGM series	
SEM2LGML 11LGML, 14LGML, 26LGML series	
SEM2TH, 11TH, 14TH, 26TH series	
SEM2THL, 11THL, 14THL, 26THL series	
SEMTHMM series	
SEMTHPB series	
SEMRP1X , SEMRP1XL	
SRBL series	
SEMD1 series	
SEMDA2 series	
SEMO series	
SEMDP1 series	
SEMDY series	
SEMDYD series	
SEMDT1 series	

## Installation

1) Connect the outside antenna to the side of the Amplifier marked as "outside antenna"  
Connect the inside antenna to the side of the Amplifier marked as "inside antenna"

### 2) Placement

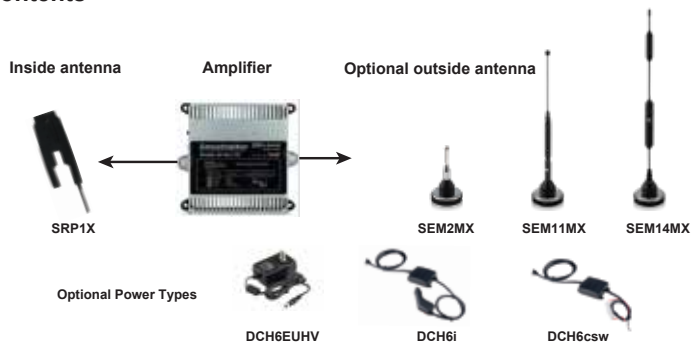
Place the outside antenna in the middle of the vehicle roof. If the vehicle has a sunroof please place the antenna on the roof towards the back window. Place the Patch (inside) antenna in desired location. For cars and trucks the console between the front seats is recommended. Connect the Amplifier as shown in Fig. 1 & 2 on Pg.1 or Fig. 3 on Pg. 4.

Important: Use only the power supply included with the Amplifier. Connecting any other power supply 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 can cause damage to the Amplifier.



The Mobile X450 - X453  
Can easily be moved from the vehicle to a trailer

[techsupport@smoothtalker.com](mailto:techsupport@smoothtalker.com)



NOTE: Only one of the outside antennas is included in this kit (check model) All kits include necessary brackets and co-axial cables for assembly. It is normal for the Amplifier to be quite warm while the phone is in use state.

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

Applications

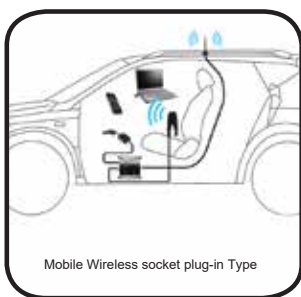


Fig. 1

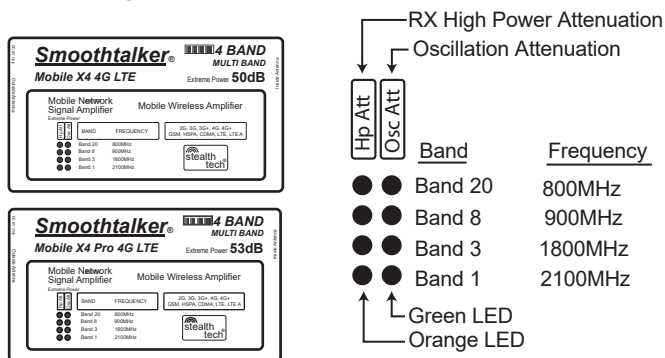
Typical Vehicle Installation (Fig. 1)  
(All parts are included)



Fig. 2

Optional Desktop (Fig. 2)  
(Additional parts required which are not included in Amplifier kit.)

Understanding the LED Indicators



The "LEDS" on the face of the Amplifier indicate operating gain state. In any given frequency band.

The Green and Orange LED which indicate the gain status in each operating band. When both of these LEDs are "SOLID ON" it means that the Amplifier is operating normally and with full gain (No Automatic Gain Reduction).

When one or both of the LEDs are flashing (Per the chart on Pg. 6) it indicates that the gain has been automatically reduced due to either:

- A) High RX outside signal level (close to cell tower)
- B) Loop Oscillation, which is due to the inside antenna (either on holder or Patch antenna) and the outside antennas are located too close together.

When the Amplifier is off it will be indicated as follows:  
When inside and outside antennas are extremely close together the Green LED will fast flash and the Orange LED will turn off indicating that the Amplifier is off due to loop oscillation.

LED Lights Indicate Gain Status

Attenuation (Att)	ORANGE LED RX High Power	GREEN LED Oscillation
Each flash indicates 3dB of gain reduction also known as gain attenuation. For example: three flashes equals 9dB of attenuation.	ON	ON
Orange Solid ON = Full Gain & Green Solid ON = Full Gain No Flashing = Full Gain	SOLID ON	SOLID ON
Orange Solid ON & Green Slow Flashing = Oscillation Att Each Flash = up to 3dB gain reduction	SOLID ON	SLOW FLASHING
Orange Off & Green Fast Flashing = Oscillation Shutdown Fast Flashing = Amplifier shutdown (pls troubleshoot)	OFF	FAST FLASHING
Orange Slow Flashing & Green Solid ON = RX High Power Att Each Flash = up to 3dB gain reduction	SLOW FLASHING	SOLID ON

Operational description:

This devices comprise with International NPS (Network Protection Standard): NPS and other compliance/safeguard features for AGC and anti-oscillation have been implemented. NPS and other compliance/safeguard features are defaulted to be "On" (in operation). NPS and other compliance/safeguard features can not be field reconfigured, disabled or removed. This Amplifier is not user programmable, does not need fine tuning or adjustment.

In 2001 SmoothTalker produced the first digital mobile Mobile Network signal Amplifier in North America with FCC and Industry Canada approval. We continue to lead with the most powerful and intelligent Amplifiers in the world. Our dynamic adaptive proprietary algorithms make them totally network friendly. We call it STEALTH TECH technology.

LED Lights Explanation and Troubleshooting

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

Green LED indicates loop oscillation status. When flashing 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 4 Orange LED lights: 800 Mhz, 900 Mhz, 1800 Mhz, 2100 Mhz. LED ON state indicates that the RX (Receive Signal) function of the band is functioning normally.

LED OFF (Green or Orange): indicates that the band is shut down. When flashing it means reduction of gain also known as attenuation of gain. You cannot prevent this condition. As you drive away from the nearby cell tower and get far enough away the flashing Orange will automatically stop flashing which indicates that the Amplifier is no longer attenuated. As you approach another nearby cell tower the Orange may begin flashing again and will stop flashing as you get farther away. This is the normal operating process.



Typical RV Installation (Fig. 3)  
(All parts are included)