



Installation Guide



AMPS IN VEHICLE

Bi-directional Amplifier

PART# 801101

FCC ID: PWO824WV

IC: 4726A-824WV

IDEN IN VEHICLE

Bi-directional Amplifier

PART# 804002

FCC ID: PWO806WV

IC: 4726A-806WV

Wilson Electronics, Inc.

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For additional technical support go to

www.wilsonelectronics.com

Phone: 1-866-294-1660

Fax: 1-435-656-2432

The term "IC:" before the radio certification number only signifies that Industry of Canada technical specifications were met.

1. PURPOSE OF THE 801101/804002

The **801101/804002** Bi-directional Amplifier greatly improves RF coverage for areas in which low signal strength or no signal is a problem when using your portable **AMPS/iDEN** phone inside the car.

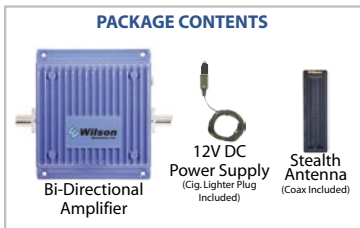
2. PACKAGE CONTENTS

2.1 801101/804002

Bi-directional Amplifier

2.2 12V DC Power Supply (Cig. Lighter Included)

2.3 Stealth Antenna (Coax Included)



3. HOW THE 801101/804002 FUNCTIONS

The signal is received by the outside antenna from the cell site. It is then AMPLIFIED and transmitted to your **AMPS/iDEN** phone through the inside antenna. When the phone transmits, the signal is received by the inside antenna. It is then AMPLIFIED and transmitted to the cell site through the outside antenna (not included).

4. AMPLIFIER SYSTEM INSTALLATION (See Illustration on pg. 4)

4.1 Mounting the Amplifier

4.1.1 Mount the AMPLIFIER under the dash or vehicle seat.

NOTE: The amplifier should be mounted to the selected location using mounting screws. (Mounting screws not included.)

NOTE: Mount the AMPLIFIER away from direct sunlight, excessive heat and/or moisture. The amplifier needs proper ventilation. DO NOT place the amplifier in an air-tight enclosure.

4.2 Installing the **Wilson Cellular** Inside Antenna (Included)

4.1.1 Connect the Inside Antenna to the side labeled “INSIDE ANTENNA” on the AMPLIFIER.

4.2.2 The inside antenna should be mounted about 1-2 feet from where the phone is used. The best place to mount the inside antenna is shoulder height on the side of the drivers seat. Do not mount on a surface within 4 inches of metal. (Metal found in the seat should not effect the antenna)

NOTE: Do not mount on a windshield.

NOTE: If the vehicle has a sunroof, place the outside antenna away from the sunroof so that the inside antenna is shielded.

WARNING: The inside antenna used with this amplifier must be mounted with a separation distance of at least 8 inches (20cm) from all persons and must not be co-located or operating in conjunction with any other antenna or amplifier.

4.3 Installing the **Wilson Cellular** Outside Antenna (Sold Separately)

4.3.1 Select an outside mounting location. For best performance try to keep the antenna centered on the car's/truck's roof.

4.3.2 The outside antenna should be located in an area with at least a 12" radius clear of obstructions, and other radiating elements.

NOTE: When using a magnet mount, NMO or trucker antenna, keep the separation distance between the inside and outside antennas at least 4ft. When using a glass mount antenna, keep the separation distance between the inside and outside antennas at least 5ft.

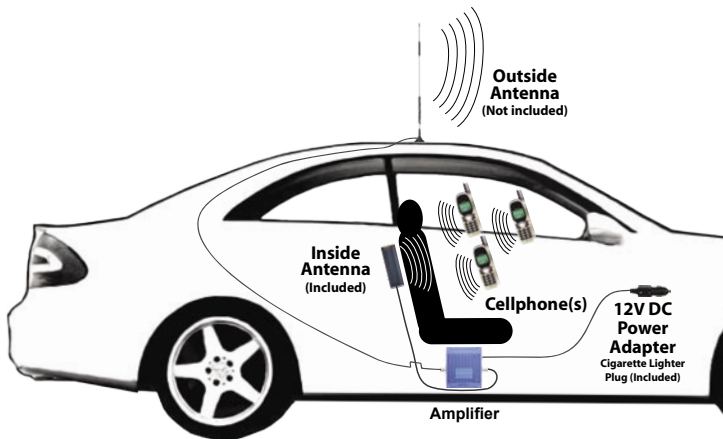
WARNING: The outside antenna must be mounted with a separation distance of at least 15.5 inches from any of the vehicle occupants or nearby persons and must not be co-located or operating in conjunction with any other antenna or amplifier. Use of a cellular amplifier with antenna gains higher than 5.12dBi is in violation of FCC regulations for which the offender is fully liable. All Wilson Mobile Antennas are 5.12dBi or less.

4.3.3 Connect the Outside Antenna to the AMPLIFIER side labeled "OUTSIDE ANTENNA".

4.4 Connect the 12V Power Supply

4.4.1 Connect the large end of the 12V Power Supply into your cigarette lighter and the other end into the input on your amplifier labeled "DC 12V IN".

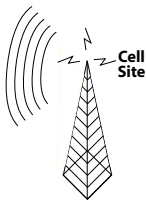
NOTE: If the power light does not turn on, press the on/off switch (white button) on the power supply.



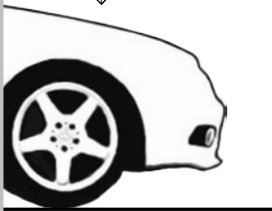
5. AMPLIFIER SPECIFICATIONS FOR **AMPS** MODEL

Part #: 801101

Frequency	824-849MHz Uplink 869-894MHz Downlink
Gain (up/down)	(37dB/37dB)
Flatness (up/down)	(+/- 3dB / +/-4dB)
Max RF (up/down)	(+35dBm/+15dBm)
Noise Figure (down)	(4.5dB)
Isolation	Uplink/Downlink More than 90dB
Power Consumption	12V, 1.5A



MOBILE AMPLIFIER LAYOUT



AMPS/iDEN AMPLIFIER PHYSICAL SPECIFICATIONS

Connectors	FME-Male 50 Ohms
Dimensions	5.5x4.3x1.4 (inch) or 14.0x10.8x3.5 (cm)
Weight	1.32 Pounds or 600G

AMPLIFIER SPECIFICATIONS FOR iDEN MODEL

Part #: 804002

Frequency	806-821MHz Uplink 851-866MHz Downlink
Gain (up/down)	(37dB/37dB)
Flatness (up/down)	(+/- 3dB/+/-3dB)
Max RF (up/down)	(+35dBm/+15dBm)
Noise Figure (down)	(4.5dB)
Isolation	Uplink/Downlink More than 90dB
Power Consumption	12V, 1.5A

6. FEATURES

Wireless Operation - No Physical Connection to Cellphone

The **801101/804002** Amplifier greatly improves signal strength inside a vehicle without a physical connection to your phone. It also allows multiple phones to be used simultaneously.

Advanced Electronics Receive & Transmit Better Than Your Cellphone

The Wilson Cellular Amplifier has a better receiver than what's in your cellphone. Its advanced electronics are very sensitive and able to receive small signals that would go undetected by most cellphones. It also has a better transmitter with double the power of your cellphone. This allows your voice to be heard by distant cell sites, increasing coverage up to 50 miles or more.

7. OPTIONAL ACCESSORIES/ANTENNA OPTIONS

7.1 Outside Antenna Options

See page 8

7.2 N-Female To FME-Female Adapter - Adapts 9913 Coax to fit the **801101/804002** Bi-directional Amplifier

8. TECH SUPPORT

If you need further assistance with your installation:

- 1) Call us Toll-Free at 866-294-1660
- 2) E-mail tech support at tech@wilsonelectronics.com
- 3) Go to www.wilsonelectronics.com

Our Hours of Operation are: 8:00 AM – 4:30 PM (Mountain Time)

9. NOTES & WARNINGS

NOTE: When using a magnet mount, NMO or trucker antenna, keep the separation distance between the inside and outside antennas at least 4ft. When using a glass mount antenna, keep the separation distance between the inside and outside antennas at least 5ft.

WARNING: Verify that both the outside antenna and then inside antenna are connected before powering up the amplifier.

WARNING: The outside antenna must be mounted with a separation distance of at least 15.5 inches from any of the vehicle occupants or nearby persons and must not be co-located or operating in conjunction with any other antenna or amplifier. Use of a cellular amplifier with antenna gains higher than 5.12dBi is in violation of FCC regulations for which the offender is fully liable. All Wilson Mobile Antennas are 5.12dBi or less.

WARNING: The inside antenna used with this amplifier must be mounted with a separation distance of at least 8 inches (20cm) from all persons and must not be co-located or operating in conjunction with any other antenna or amplifier.

The Manufacturer's rated output power of this equipment is for single carrier operation. For situations when multiple carrier signals are present, the rating would have to be reduced by 3.5 dB, especially where the output signal is re-radiated and can cause interference to adjacent band users. This power reduction is to be by means of input power or gain reduction and not by an attenuator at the output of the device.

Leaving the amplifier on in an unused vehicle for days may drain your battery. This can be avoided by plugging into an ignition switched outlet or by using the small white switch located on the power supply.

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 this device.

1. In order to prevent input levels in excess of this maximum input level from distorting or otherwise overdriving this amplifier. For uplink, the maximum RF output is 31 dBm. For downlink, the maximum RF output is 15 dBm. When the RF output is higher than the maximum level due to the input, a switch circuit of this amplifier will be active, and it will drop the RF output by as much as -50 dB.
2. The voltage and current into the final amplification stage are:

TX: 5VDC 300mA-1.5A

RX: 3.6VDC 50mA

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OUTSIDE ANTENNA OPTIONS



Mini
Glass



Mini
Magnet



Magnet
Mount



Glass
Mount



NMO
Mount



Trucker

Pictures are not to scale - Not All Outside Antenna Options Are Shown

For more options visit www.wilsonelectronics.com

15 DAY MONEY BACK GUARANTEE

All Wilson products
have a 15 day
money back
guarantee with
Proof of Purchase

1 YEAR WARRANTY

The Wilson amplifier is warranted for one year against defects in workmanship and/or materials and will be repaired or replaced, at the discretion of the manufacturer, to the original purchaser with dated proof of purchase or sales receipt.

If you have questions about your amplifier please call technical support call 1-866-294-1660 or E-mail tech@wilsonelectronics.com

Most warranty cases can be handled by taking the amplifier and the receipt to the store where it was purchased. If inconvenient, the amplifier and a copy of the receipt, may be sent to the factory, at purchasers expense, where it may be repaired or replaced and returned shipping paid. Warranty does not cover damages caused by abuse, misuse, and negligence.