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# **IDEN MOBIL Bi-Directional Amplifier for In Vehicle Installation Guide**

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Rev 1

MODEL: BD800NM

PART#: 804002

## TABLE OF CONTENTS

|                                  |            |
|----------------------------------|------------|
| 1. PACKAGE CONTENTS.....         | page 3     |
| 2. ANTENNA OPTIONS.....          | page 3     |
| 3. PURPOSE OF THE IDEN.....      | page 4     |
| 4. HOW THE IDEN FUNCTIONS.....   | page 4     |
| 5. FEATURES.....                 | page 4     |
| 6. AMPLIFIER SPECIFICATIONS..... | page 4     |
| 7. AMPLIFIER INSTALLATION.....   | page 5 & 6 |
| 8. TECH SUPPORT.....             | page 6     |
| 9. NOTES & WARNINGS.....         | page 6     |

## Package Contents



**Bi-Directional  
Amplifier/Repeater**



**12V DC  
Power Supply**  
(Cig. Lighter Plug Included)



**Stealth  
Antenna**  
(Coax Included)

Pictures are not to scale

## Outside Antenna Options

(Outside Antenna Not Included)



**Mini  
Glass**



**Mini  
Magnet**



**Magnet  
Mount**



**Glass  
Mount**



**NMO  
Mount**



**Trucker**

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

## 1. PURPOSE OF THE IDEN

The IDEN Bi-Directional Amplifier greatly improves RF coverage for areas in which low signal strength or no signal is a problem when using your portable iDEN phone inside the car.

## 2. HOW THE IDEN FUNCTIONS

The signal is received by the outside antenna from the cell site. It is then AMPLIFIED/REPEATED and transmitted to your iDEN phone through the inside antenna. When the phone transmits it is received by the inside antenna. It is then AMPLIFIED/REPEATED and transmitted to the cell site through the outside antenna.

## 3. FEATURES

### **Wireless Operation - No Physical Connection to Cellphone**

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

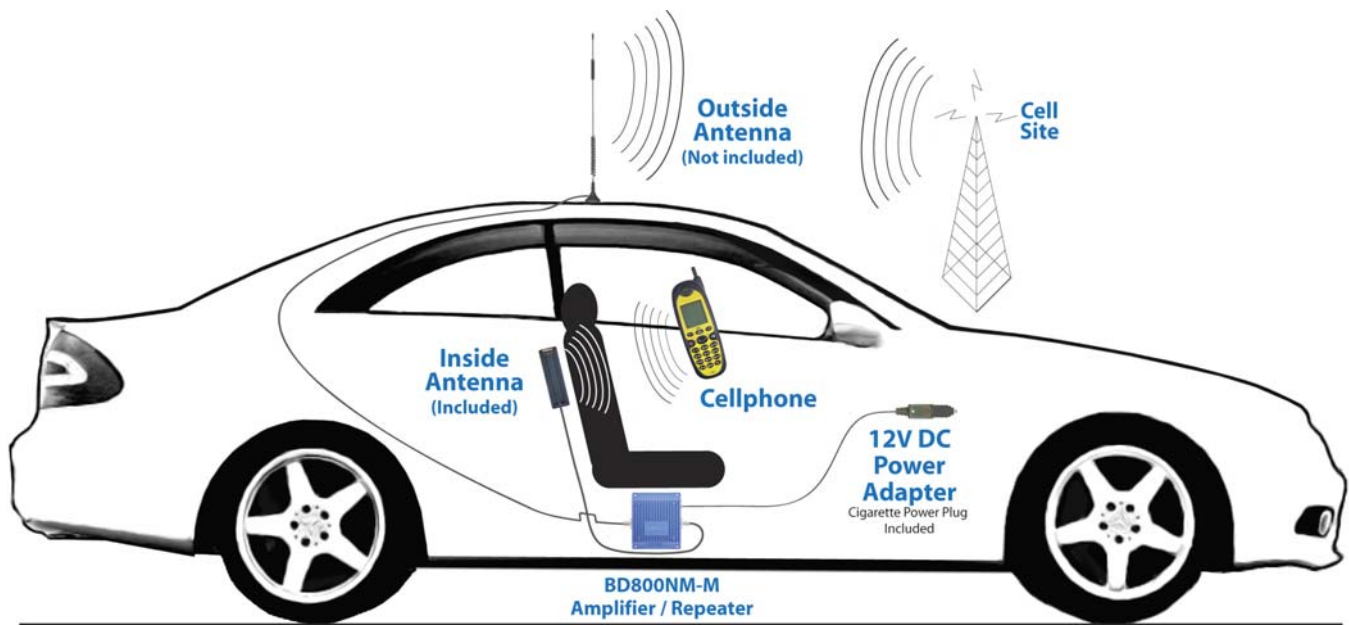
### **Advanced Electronics Receive & Transmit Better Than Your Cellphone**

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.

## 4. AMPLIFIER SPECIFICATIONS

|                                |                                                    |                      |
|--------------------------------|----------------------------------------------------|----------------------|
| Frequency.....                 | 806-821 MHz Uplink                                 | 851-866 MHz Downlink |
| Gain.....                      | 37dB Uplink                                        | 37dB Downlink        |
| Flatness.....                  | +/- 3dB Uplink                                     | +/- 3dB Downlink     |
| Max RF Output Power.....       | +31dBm Uplink                                      | +15dBm Downlink      |
| Noise Figure.....              | 5dB Uplink                                         | 5dB Downlink         |
| Uplink Downlink Isolation..... | More than 90dB                                     |                      |
| Power Consumption.....         | 12V, 1.5A                                          |                      |
| Connecter.....                 | FME-Male 50 Ohms                                   |                      |
| Dimensions.....                | 5.5 x 4.3 x 1.4 (inches) OR 14.0 x 10.8 x 3.5 (cm) |                      |
| Weight.....                    | 1.32 pounds or 600 grams                           |                      |
| Model #.....                   | IDEN                                               |                      |
| Part #.....                    | 804002                                             |                      |

## 5. AMPLIFIER INSTALLATION (REFER TO ILLUSTRATION)



ILLUSTRATION

### 5.1 Mounting the Amplifier

5.1.1 Mount the AMPLIFIER under the dash or car seat.

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

### 5.2 Installing the Outside Antenna (Sold Separately)

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

5.2.2 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 used with this amplifier must be mounted with a separation distance of at least 10 inches(25cm) from all persons and must not be co-located or operating in conjunction with any other antenna or amplifier.

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

### 5.3 Installing the Inside Antenna (Included)

- 5.3.1 Connect the Inside Antenna to the side labeled “INSIDE ANTENNA” on the AMPLIFIER.
- 5.3.2 The Inside Antenna should be centered in the vehicle. It can be placed in the seat back between the seat cushion and fabric or in the vehicle headliner.

**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.

### 5.4 Connect the 12V Power Supply

- 5.4.1 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”.

## 7. TECH SUPPORT

If you need further assistance with your installation please call us Toll-Free at 866-294-1660 or send an E-mail to [tech@wilsonelectronics.com](mailto:tech@wilsonelectronics.com)

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

## 8. 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:** The outside 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.

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