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# **BD800NM-M Bi-Directional Amplifier/Repeater for iDEN In Vehicle Installation Guide**

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Rev 1

MODEL: BD800NM-M

PART#: 804002

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## 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 BD800NM-M

The BD800NM-M Bi-Directional Amplifier/Repeater 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 BD800NM-M 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 BD800NM-M Amplifier / Repeater greatly improves signal strength inside a vehicle without a physical connection to your phone. It also allows multiple phones to be used simultaneously.

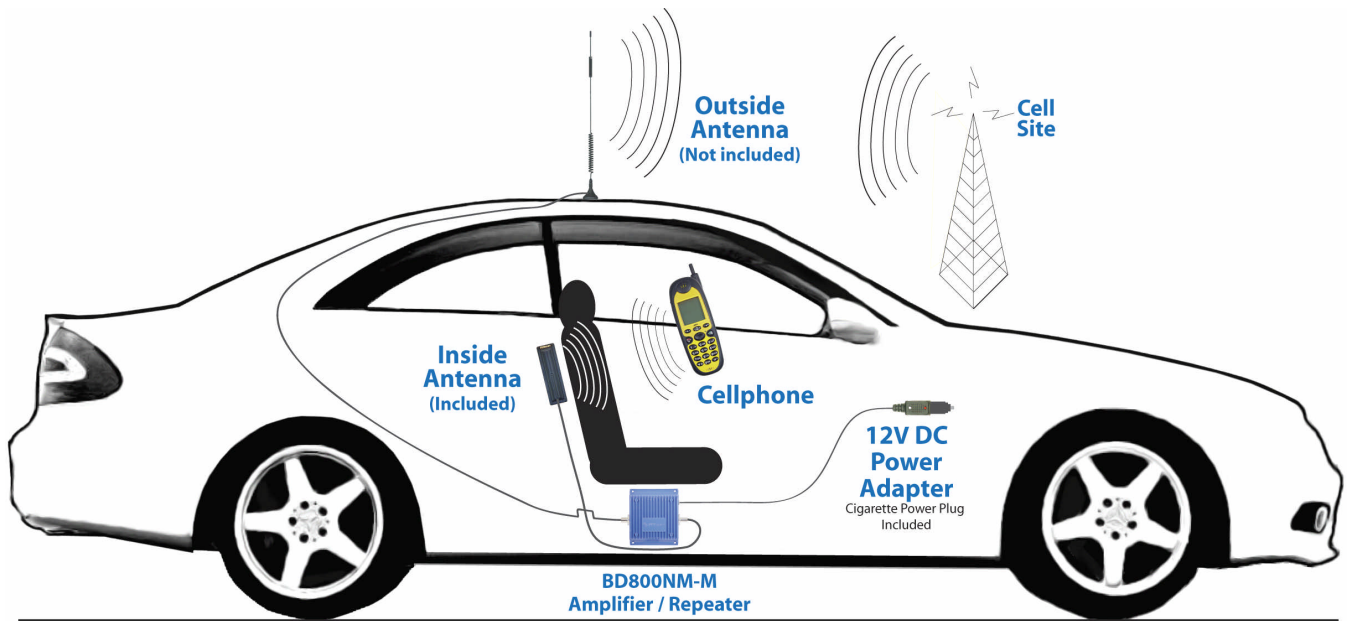
### **Advanced Electronics Receive & Transmit Better Than Your Cellphone**

The Wilson Cellular Amplifier / Repeater 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	
Connector.....	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 #.....	BD800NM-M	
Part #.....	804002	

## 5. AMPLIFIER/REPEATER INSTALLATION (REFER TO ILLUSTRATION)



ILLUSTRATION

### 5.1 Mounting the Amplifier/Repeater

5.1.1 Mount the AMPLIFIER/REPEATER 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 8 inches 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/REPEATER 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/REPEATER.
- 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 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 from all persons and must not be co-located or operating in conjunction with any other antenna or amplifier.

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