



Installation Guide



**AMPS
DIRECT
CONNECTION
AMPLIFIER**

Part# 811101

FCC ID: PWO824D

IC: 4726A-824D

**iDEN
DIRECT
CONNECTION
AMPLIFIER**

Part# 814001

FCC ID: PWO806D

IC: 4726A-806D

**DUAL BAND
DIRECT
CONNECTION
AMPLIFIER**

Part# 811201

FCC ID: PWO819D

IC: 4726A-819D

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

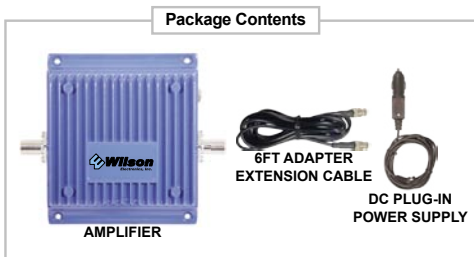
The term "IC:" before the radio certification number only signifies that Industry of Canada technical specifications were met.

1. PURPOSE OF THE DIRECT CONNECTION AMPLIFIER

The Direct Connection Bi-directional Amplifier improves RF coverage in areas with no signal or low signal strength. Part# 811101 Amplifies the signal on 800MHz up to 3 watts and allows for the full benefit of the outside antenna on 1900MHz frequencies. Part# 814001 Amplifies the iDEN (Nextel) frequencies up to 3 watts.

2. PACKAGE CONTENTS

- 2.1 Bi-directional Direct Connection Amplifier.
- 2.2 DC plug-in power supply with ON/OFF switch.
- 2.3 6ft. Adapter Extension Cable.



3. HOW THE DIRECT CONNECTION AMPLIFIER FUNCTIONS

When using 800 MHz the signal is received by the outside antenna from the cell site. The signal is then AMPLIFIED and sent into your phone through the adapter (sold separately). When the phone transmits, the signal is sent to the amplifier through the adapter then AMPLIFIED and transmitted to the cell site through the outside antenna. When using 1900MHz (PCS) the signal bypasses the amplifier's circuitry while getting full benefit from the outside antenna.

NOTE: Amplifier #814001 does not have a 1900MHz (PCS) bypass as iDEN (Nextel) does not utilize this frequency.

4. AMPLIFIER INSTALLATION (see illustration on pg.4)

4.1 Installing the **Wilson Cellular** Antenna

4.1.1 See antenna packaging for model specific instructions.

WARNING: Verify that both the outside antenna and adapter extension cable are connected before powering up the AMPLIFIER.

RF SAFETY WARNING: (MOBILE ONLY) 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: (IN-BUILDING ONLY) Lightning protection is recommended for all in-building installations.

RF SAFETY WARNING: (IN-BUILDING ONLY) When using in-building, the outside antenna must be fixed-mounted on an outdoor permanent structure with a separation of at least 20 feet from all persons during normal operation.

4.2 Installing The Amplifier

4.2.1 Select a suitable location to mount the AMPLIFIER.

- In vehicle installation - under the dash or vehicle seat
- In building installation - on a wall or ceiling

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. Use #6 screws to mount the amplifier.

4.2.2 Connect the outside antenna to the AMPLIFIER side labeled “OUTSIDE ANTENNA”.

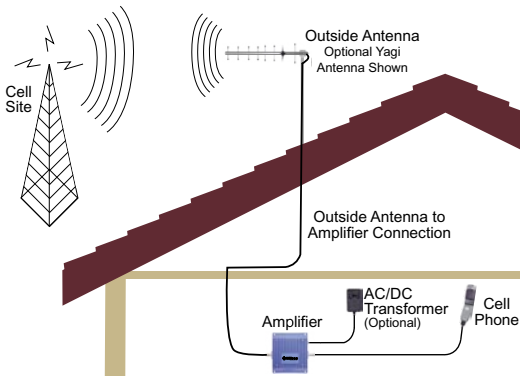
4.2.3 Connect the ADAPTER EXTENSION CABLE to the AMPLIFIER side labeled “CELLULAR PHONE”.

4.2.4 An external antenna adapter is required (sold separately) to connect the AMPLIFIER to the cellphone. External antenna adapters connect directly to the antenna extension cable.

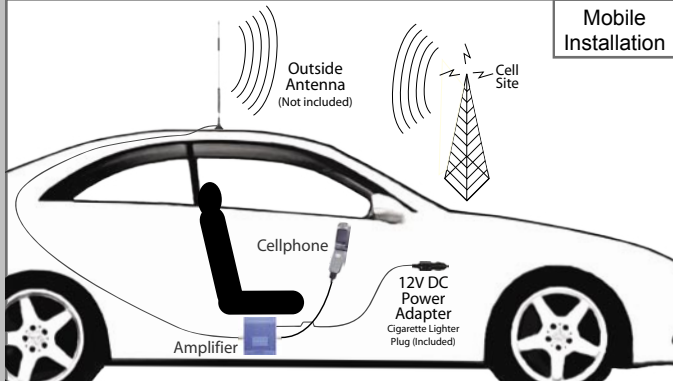
4.2.5 Connect the DC power supply to the AMPLIFIER. Verify that both the OUTSIDE ANTENNA and the ADAPTER EXTENSION CABLE are connected before powering up the AMPLIFIER.

NOTE: Visit our website at www.wilsonelectronics.com for the latest adapter cross

In-Building Installation



Mobile Installation



reference chart. If your phone's adapter is not available from your retailer contact us at 1-866-294-6996 and we will help you locate one in your area. For further assistance contact our technical support Toll-Free at 1-866-294-1660.

NOTE: **iDEN Antennas** are recommended for **iDEN Amplifier 814001**.

5. AMPLIFIER SPECIFICATIONS

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

	iDEN #814001	AMPS #811101
Frequency	806-821MHz Uplink 851-866MHz Downlink	824-849MHz Uplink 869-894MHz Downlink
Gain (up/down)	Cell Site Controlled-Max 10/10db	Cell Site Controlled-Max 10/10db
Flatness (up/down)	(+/-2dB / +/-3dB)	(+/-2dB / +/-3dB)
Max RF (up/down)	(+35dBm / +15dBm)	(+35dBm / +15dBm)
Noise Figure (down)	(3.5dB nominal)	(3.5dB nominal)
Isolation	Uplink/Downlink 90dB	Uplink/Downlink 90dB
Power Consumption	1.5A@12V	1.5A@12V

	Dual Band #811201 PCS 1900 Specifications	Dual Band #811201 AMPS Specifications
Frequency	1850-1910MHz Uplink 1930-1990MHz Downlink	824-849MHz Uplink 869-894MHz Downlink
Gain (up/down)	Cell Site Controlled-Max 11db/11db	Cell Site Controlled-Max 10db/10db
Flatness (up/down)	(+/-2dB / +/-2dB)	(+/-2dB / +/-3dB)
Max RF (up/down)	(+33dBm / +15dBm)	(+35dBm / +15dBm)
Noise Figure (down)	(3.5dB nominal)	(3.5dB nominal)
Isolation	Uplink/Downlink 90dB	Uplink/Downlink 90dB
Power Consumption	1.5A@12V	1.5A@12V

The information provided by Wilson Electronics, Inc. is believed to be complete and accurate. However, no responsibility is assumed by Wilson Electronics, Inc. for any business or personal losses arising from its use, or for any infringements of patents or other rights of third parties that may result from its use.

6. OPTIONAL ACCESSORIES/ANTENNA OPTIONS

- 6.1 Coax Cable Extensions 50Ω (see chart on pg.7)
- 6.2 Antenna Options (see chart on last page)
- 6.3 N-Female To FME-Female Adapter - Adapts 9913 Coax to the **814001** Bi-directional Amplifier.
- 6.4 Lightning Suppressor (In-Building application)
WARNING: Lightning protection is recommended for all In-Building installations.
- 6.5 Hardwire Power Supply Kit.



7. WARNINGS

WARNING: Verify that both the outside antenna and adapter extension cable are connected before powering up the AMPLIFIER.

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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)

EXTENSION CABLE CHART (RG 58 - FME connectors / 9913 - N connectors)

951101	5' Extension Cable RG 58 Low Loss Coax	(0.6 db loss)
951102	10' Extension Cable RG 58 Low Loss Coax	(1.2 db loss)
951103	15' Extension Cable RG 58 Low Loss Coax	(1.8 db loss)
951104	20' Extension Cable RG 58 Low Loss Coax	(2.4 db loss) Used with the Yagi Antenna - (N-Male to FME Female)
951108	20' Extension Cable 9913 Ultra Low Loss Coax	Only use 9913 Low Loss Coax for extensions 20' or longer (0.8 db loss)
951105	30' Extension Cable 9913 Ultra Low Loss Coax	(1.2 db loss)
951106	50' Extension Cable 9913 Ultra Low Loss Coax	(2.0 db loss)
951107	100' Extension 9913 Low Loss Coax	(4.0 db loss)

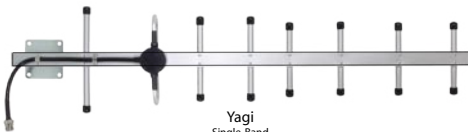
The Manufacturer's rated output power of this equipment is for single carrier operation. For situations when multiple carrier signals are present, the rating would have to be reduced by 3.5 dB, especially where the output signal is re-radiated and can cause interference to adjacent band users. This power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

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.

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.

Outside Antenna Options

For more options visit
www.wilsonelectronics.com



Yagi
Single-Band
(Recommended for Buildings Only)



Trucker
Mirror Mount
Dual-Band

Pictures Are Not To Scale
Not All Outside Antenna
Options Are Shown

Questions?
1-866-294-1660

www.wilsonelectronics.com



Mini Magnet
Dual-Band



Mini Glass
Dual-Band



Magnet
Mount
Dual-Band



NMO
Mount
Dual-Band



Glass
Mount
Dual-Band

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.