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**USER'S GUIDE
FOR THE
IDEN IN BUILDING
BI-DIRECTIONAL
AMPLIFIER/REPEATER**

MODEL: BD800NB

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WARNING:

The outside and inside antenna should be placed at least 12in from any people or children.

A lightning rod should be added if the outside antenna is in any danger of being hit by lightning.

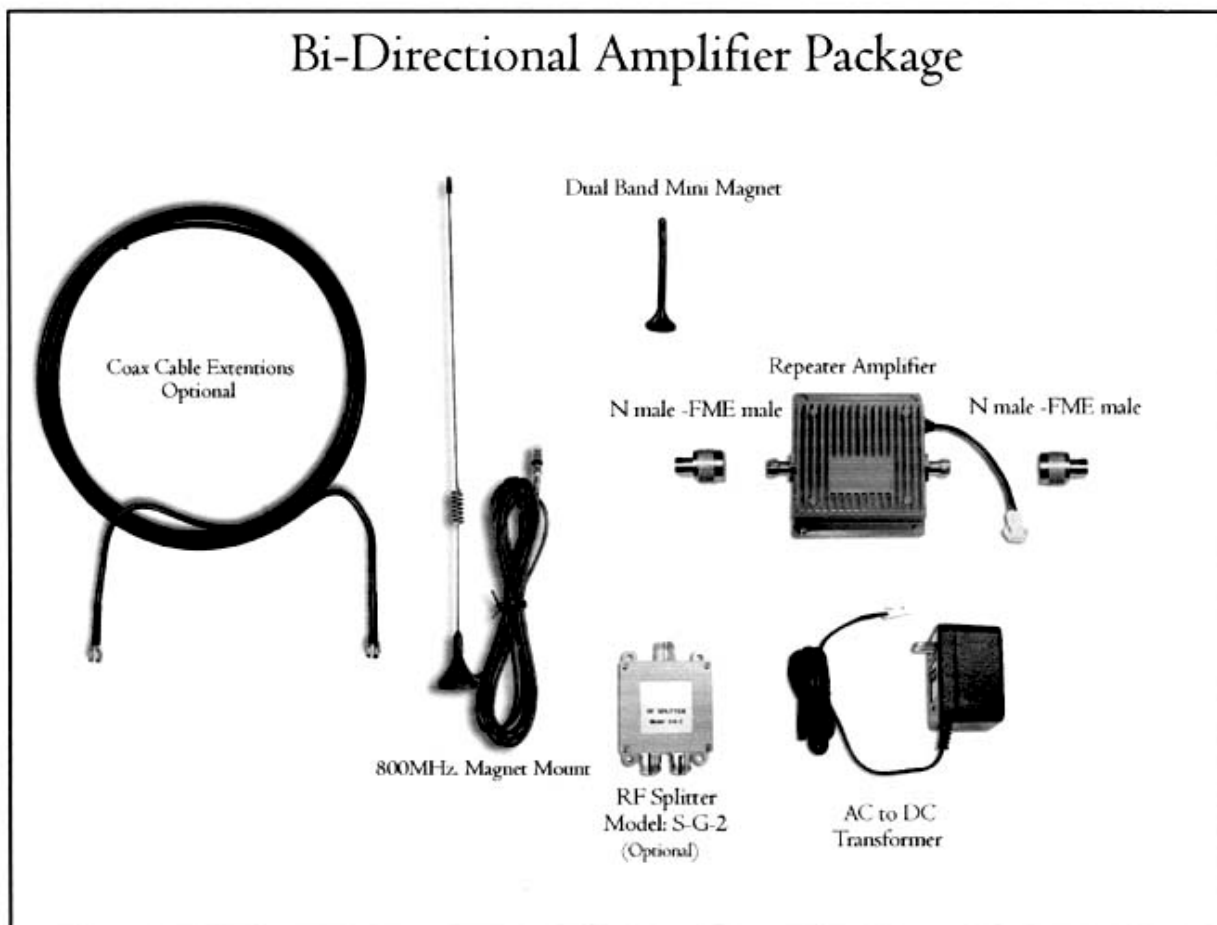
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- 1.1 Amplifier/Repeater
- 1.2 AC-to-DC Transformer
- 1.3 Antennas: 800MHz Magnet Mount (outside), Short 800MHz Magnet (inside)
- 1.4 2 N-Male To FME-Male Adapters

2. OPTIONAL ACCESSORIES

- 2.1 RF Splitter
- 2.2 Coax Cable Extensions 50Ω



3. AMPLIFIER

3.1 About

The Amplifier greatly improves signal strength when using your portable iDEN phone inside the building. The signal is received by the outside antenna from the cell site. It is then AMPLIFIED/REPEATED and then 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 then transmitted to the cell site through the outside antenna.

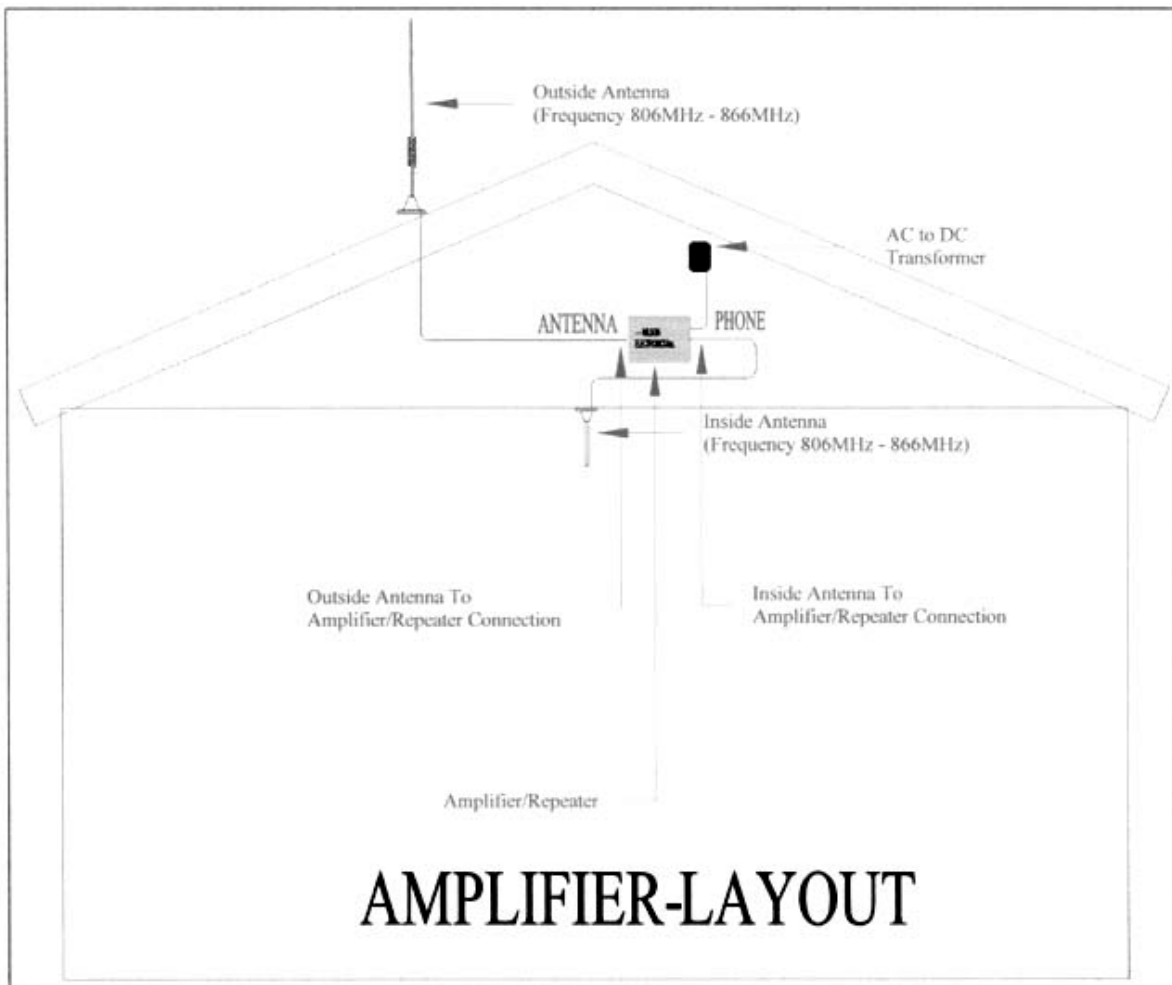
3.2 Specifications:

| | |
|----------------------------|---|
| FREQUENCY: | 806-821 MHZ UPLINK 851-866 MHZ DOWNLINK |
| GAIN: | 50 DB UPLINK 50 DB DOWNLINK |
| FLATNESS: | UPLINK +/- 3 DB DOWNLINK +/- 3DB |
| MAX RF OUTPUT POWER: | UPLINK 1W DOWNLINK 0.01W |
| NOISE FIGURE: | UPLINK/DOWNLINK (LESS THAN OR EQUAL TO 8DB) |
| UPLINK DOWNLINK ISOLATION: | MORE THAN 60 DB |
| POWER CONSUMPTION: | 13.8V, 1.5A |
| CONNECTOR: | N-FEMALE 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 600G |

4. AMPLIFIER/REPEATER INSTALLATION (REFER TO ILLUSTRATION)

4.1 Installing the Outside Antenna

- 4.1.1 Select a location on the roof using your iDEN phone in test mode to find the best signal strength.
- 4.1.2 The Outside Antenna should be located in an area with at least a 3' radius clear of obstructions and other radiating elements.



ILLUSTRATION

4.2 Installing The Amplifier/Repeater

- 4.2.1 Mount the AMPLIFIER/REPEATER on a wall or ceiling.
- 4.2.2 Connect the Outside Antenna to the AMPLIFIER/REPEATER side labeled "ANTENNA" using one of the supplied adapters (N-Male to FME-Male).

4.3 Installing The Inside Antenna

- 4.3.1 Connect the Inside Antenna to the side labeled "PHONE" on the AMPLIFIER/REPEATER.
 - 4.3.2 The Inside Antenna should be centered in the weak signal area
 - The INSIDE ANTENNA should be at least 8' from the ground.
- 4.4 When covering large areas a splitter can be used to allow for the addition of inside antennas. Extension cables can also be used if the weak signal area is located far from the location of the outside antenna.

NOTE: A minimum of 20' coax extension is recommended for isolation between antennas.