



Note: Before installing your Cyfre™ Wireless Booster, You Must Read the Entire Contents of this Manual to Insure Proper Amplifier Operation and Performance.

Section # 1 Parts List

Item	Qty	Description
1	1	Small Home/Building Wireless Booster
2	1	External Omni Directional Antenna
3	1	120 VAC power supply
4	1	Interior mounted ceiling antenna
5	1	25ft length low loss cable
6	1	15 foot length low loss cable

 The image shows the components listed in the parts list: a white rectangular wireless booster, a long silver external omni-directional antenna, a black power supply unit with a power cord, a white interior ceiling antenna, and two black coaxial cables of different lengths.

Section # 2 WARNINGS!

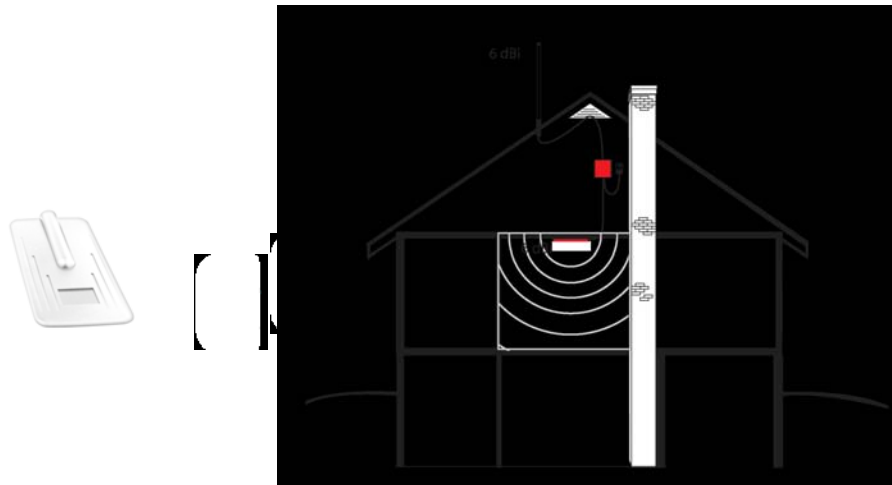
- External antennas must be mounted outside any building. If mounting an external antenna on the exterior portion of a building, a minimum of 6 feet of vertical separation is needed between the antenna and booster. Failure To do so may result in booster failure, and will void your warranty. The external antenna must be a MINIMUM distance of 40 cm (15.75 inches) away from any person.
- Internal antennas must be mounted a MINIMUM distance of 40 cm (15.75 inches) away from any person. The internal antenna should be on top of the ceiling material so it can maintain that distance or greater.
- All Installations must use the included 120-volt AC to 12-volt DC converter power supply. Failure to do so will void your warranty.
- Never power up your booster without first properly connecting the supplied internal and external antennas to the booster. Failure to do so will void your warranty.
- For optimum performance and compatibility with your service provider's requirements, it is recommended that the external antenna never be place near any windows.
- Use of cellular boosters with exterior / interior antennas of higher gain than 5dBi is in violation of FCC regulations for which the offender will be fully liable, and void your warranty.
- Never combine external or interior antenna cables with other non-Cyfre coaxial cables. The additional cable length and connections could greatly diminish the performance of the booster if using non-Cyfre cables.
- Cyfre strongly recommends only qualified and informed installation technicians install this Cyfre strongly recommends only qualified or informed installation technicians install this product. Installation by any other person is at the risk of the owner and operator.
- When installing an omni directional antenna the antenna must be a minimum of 18' above any roofline or obstruction.
- When installing an external Yagi antenna inside an attic space of a building the walls and roof area must be made of wood, or wood with vinyl siding covering, asphalt style roof shingles, or cedar style roof shingles. This antenna will not work if the exterior walls are brick or concrete, or the roof is of metal composition, or metal decking.

Section # 3 Selecting a Suitable Location to Install Your Booster

- All antennas must be mounted a minimum distance of 40 cm (15.75 inches) away from any person(s).
- All installations must be in a dry area away from any fumes, hazardous materials or dangerous location. In addition, the booster's location should be easily accessible and mounted away from moving parts, excessive heat or moisture.
- When installing the exterior omni directional antenna the antenna must be a minimum of 18" above any roofline or obstruction.
- If installing an external Yagi antenna inside an attic space of a building the walls and roof area must be made of wood, or wood with vinyl siding covering, asphalt style roof shingles, or cedar style roof shingles. This antenna will not work if the exterior walls are brick or concrete, or the roof is of metal composition, or metal decking.
- There is a minimum of six feet of vertical separation needed between the booster and antennas making sure there is a solid wall between the booster and antenna.
- Interior antenna(s) must be mounted in a position on the ceiling in an area that offers the widest range of coverage. If the area is larger than the antenna can cover, an optional power splitter / divider and antenna may be purchased from www.cyfreadapters.com
- After installing the booster if you do not realize an increase in signal levels, it may be due to location of the exterior or internal antennas. This can be overcome by re-positioning the antennas.
- The automatic gain control in the booster requires the exterior and interior antennas be connected **PRIOR** to powering up the booster. The green LED on the booster will blink while the unit is determining the proper gain level to prevent oscillation and interference, when the LED becomes solid the setting is permanent for that installation. If the power is disconnected, the booster will need to go through this process again. **WARNING: REMEMBER Prior to moving either antenna the booster's power must be disconnected. Only after re-positioning the antennas should the booster be powered up again.**

Section # 4 Installation Procedures When Installing your Interior Mount Antenna

- Place the interior patch antenna in a central location on the top floor of building. Place the adhesive side of the antenna flush with the ceiling. If the ceiling is fire rated style with foil backing, you must peel the foil backing away from the area the antenna will be placed in, to allow the full penetration of the RF signal through the material. Note: Make sure the interior antenna is a MINIMUM distance of 20 cm (7.87 inches) away from any person and 6ft from the booster.
- Home or business installation requires following the standard installation procedures detailed in the prior section of this installation manual. The drawing that follows is a typical installation in a home or business.




Section # 5 Final Installation Procedures

- If sections of the building are still experiencing low signal levels, it may require the purchase of a power divider /splitter and additional interior antennas. These antennas should be installed in the ceiling of the area where the signal is weakest. Attached the antennas to the power divider / splitter and then to the booster. Power the booster up and make sure the pilot light is solid.

Section # 6 Optional Accessories

Cyfre Adapters



Cellular Phone & Data Card Adapters

- Connect directly to Cyfre Signal Boosters
- Compatible with all Phones

1. Choose your phone type
2. Choose your phone model
3. Buy from our online store

Cyfre Antennas

Gain even more reception with Cyfre antenna upgrades



Magnetic Mounts



Window Mounts



Hole Mounts



Mirror Mounts

818-777-1100 - www.CyfreAdapters.com

Section # 7 Installation Procedures When Installing an optional Yagi Antenna

- The optional external Yagi antenna comes with 16ft of low loss cable with male TNC RF end. The Yagi includes a U style clamp that allows the antenna to be installed in either a vertical or horizontal position. It is recommended to use the antenna in a horizontal position. The U clamps are designed to fit around a rigid PVC, or metal pipe, 1 inch diameter. This will allow you to rotate the antenna to find the highest signal level.

The components shown in the picture above are a one (1) inch pipe flange, a 2 1/2 foot piece of 1" PVC schedule 40 pipe, a male socket adapter, and if required a one in 90 degree male thread and socket combination. These items are available at any local hardware store.

- When installing on a building with a metal sheeting roof, metal pan pour roof, or cement tile roof, it is recommended to place the antenna on a vertical pipe mount. If the roof is of wood frame, or metal bar joist, it is recommended to install the antenna within the attic space using a vertical pipe mount.

CAUTION: Make sure the antenna nuts, (10 mm) are tight enough to prevent the antenna from sliding down but still allow for the rotation of the unit

- When aiming the Yagi antenna, rotate the antenna clockwise no more than 10 degrees at a time then stop wait thirty seconds while the unit is determining the proper gain level. The rotation should be no more than 10 degrees at a time. You must wait at least 30 seconds each time the antenna is moved to allow the signal strength to stabilize on your handset. Rotate the antenna through a full 360 degrees, and note the position where you record the highest constant reading on your handset.

- To help find the best direction to aim your Yagi, we have attached a compass that you can cut out, place over the PVC pipe to mark your rotation signal strength.



Once satisfied with the highest signal strength, tighten the U clamp nuts to hold the unit in place. Remove the power from the booster and wait one minute before re-connecting the booster to reset the proper gain level. Next Shut off your handset, wait a minute and turn you handset back on. You should see your highest signal strength level at this time. If you do not have this level, either you're external Yagi antenna may have moved during the tightening of the U clamp. **NOTE: Never unplug the booster when moving the antennas.**

5. If you do not have a flat surface to mount the pipe flange on, you may fasten the Yagi antenna to the side of a roof truss. If so you, you can use a 90-degree socket elbow attached to the pipe flange allowing you to make adjustments as describe above.

Section # 8 Limited 1 Year Warranty

Cyfre™ warrants that this product is free from any defects in material or workmanship for a period of one year. If a defect in material or workmanship is found, Cyfre™ agrees to repair or replace the product at its own discretion, free of charge, to the original purchaser excluding all shipping charges. To return product, all parts, packaging, and accessories along with original receipt from where you purchased your product must be included with your return. Failure to return all product, parts, packaging, and accessories will result in product The warranty is void if the product has been modified, abused, tampered with, or subjected to abnormal conditions. Any use of non Cyfre™ antennas or cables will void your warranty.



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Section # 9 Industry Canada RSS-131 Requirements

IVWA819 Specifications per paragraph 5.3

1. The nominal passband gain is 53 dB.
2. The nominal bandwidth is, CDMA 1.2 MHz, TDMA 40 KHz, GSM 300 KHz
3. The measured maximum output power:
 - 0.812 W (29.12 dBm) 824.020-848.980 MHz
 - 0.794W (29.01 dBm) 1850.020 – 1909.980 MHz
 - 0.048 W (16.81 dBm) 869.020 – 893.980 MHz
 - 0.026 W (14.16 dBm) 1930.020 – 1989.980 MHz
4. The Pmean output power:
 - 0.230 W (23.64 dBm) 824.020-848.980 MHz
 - 0.272 W (24.30 dBm) 1850.020 – 1909.980 MHz
 - 0.015 W (11.78 dBm) 869.020 – 893.980 MHz
 - 0.085 W (9.11 dBm) 1930.020 – 1989.980 MHz
5. The Prated output power:
 - 0.224 W (23.50 dBm) 824.020-848.980 MHz
 - 0.251 W (24.00 dBm) 1850.020 – 1909.980 MHz
 - 0.014W (11.50 dBm) 869.020 – 893.980 MHz
 - 0.008 W (9.00 dBm) 1930.020 – 1989.980 MHz
6. The input and output impedance is 50 ohms
7. Notice: The Manufacturer's rated output power of this equipment is for single carrier operation. For situations when multiple carrier signals are present, there is no change in the rating of the unit. Regardless of the input to the unit, the device will not exceed the rated level of output. The output power per band is the same regardless of whether it is single or multi-carrier operation.

