

PRO 710i

Industrial Class In-Building Cell Signal Amplifier
Supporting Band 71 (600MHz)



Installation Guide

NEED HELP?

 wilsonpro.com

 866.294.1660

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Package Contents

Kit 460064



Pro 710i

Pro 710i

Industrial Class In-Building Cell Signal Amplifier
Supporting Band 71 (600MHz)



Up to +25 dBm uplink power and 85 dB gain for maintaining connections with far-away cell towers



Up to +25 dBm downlink power for improved indoor cell coverage area

XDR TECHNOLOGY

eXtended Dynamic Range (XDR)
for Continuous Connectivity



Color touch screen, for easy installation and displaying detailed amplifier status



The Pro 710i industrial class, in-building, cell signal amplifier provides significantly enhanced band 71 (600MHz) signal strength, supporting 4G LTE and 5G technology. The Pro 710i can be installed as either a “stand-alone” amplifier providing exclusive band 71 amplification, or it can be combined with a new or existing WilsonPro amplifier system, supporting multiple bands. Because the Pro 710i is an industrial class amplifier, local band 71 carrier approval must be obtained for every installation.



The Pro 710i also incorporates Wilson Electronics’ state-of-the-art XDR (eXtended Dynamic Range) technology that prevents signal overload conditions which can, in accordance with regulations, force the amplifier to shut down. When the Pro 710i senses that any incoming cell signal is too strong and threatens to overload the system, XDR automatically reduces amplifier gain to compensate while maintaining signal coverage throughout the building. The Pro 710i incorporates an easy-to-use color LCD touch screen, and both antenna ports are located on the top of the unit for simple installation. Like all WilsonPro cell signal boosters, the Pro 710i amplifier system is universal: it works for all cellular devices, all services and all U.S. and Canada cell phone carriers using band 71 (600MHz).

Key Features



Industrial Class Amplification: Up to 100,000 sq. ft. of band 71 (600MHz) coverage with a single amplifier (local carrier approval required for each installation).



Extended Dynamic Range (XDR) for continuous connectivity: XDR lets the Pro 710i system work with an incoming signal and never shuts down due to a strong outside signal.



Onboard Software for Better Control: The amplifier is automatically controlled with automatic onboard software, ensuring great connectivity throughout large spaces and multi-story buildings. The amplifier will adjust its gain level up or down as required by the conditions of the immediate signal environment.



Color LCD Touch Screen: The Pro 710i utilizes a color LCD touch screen, for assessing amplifier performance, making adjustments to the outside antenna, and turning bands on and off.

Post Install Setup

The Pro 710i is designed with advanced internal programming, which allows it to automatically adjust for a variety of conditions, while still amplifying weak signals.

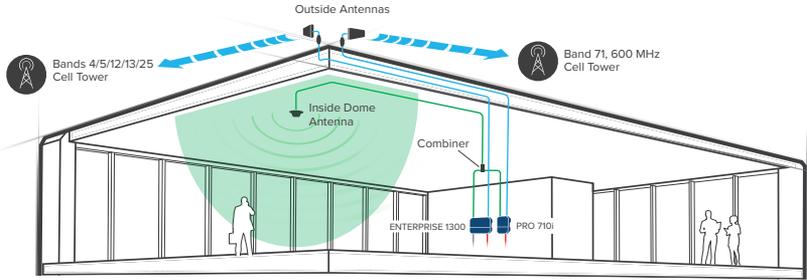
Once the antenna cables are connected, turn the unit on by connecting the power supply cord, at the bottom.



Installation Diagram

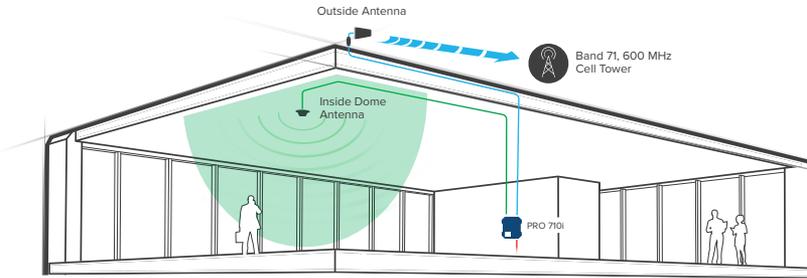
A Wilson Lightning Surge Protector is recommended for all building installations. Make sure the protector is installed outside the building. Connect it to suitable ground and in line, between the Outside Antenna and the Signal Amplifier.

Combined



Pro710i and Enterprise 1300 (Common Mode) combined.

Stand Alone



Stand-alone installation, providing cell coverage for band 71 only.

Menu System

The Pro 710i takes about 5 seconds to boot up. Once boot up is complete, the home screen will appear, showing the amplification and status of each port and band.



Start Up Screen

Band Menu Color Description



A solid green color indicates that a band is operating correctly with maximum allowable gain.



A solid yellow color indicates band gain reduction because of an oscillation condition. Reposition antennas (increase separation between indoor and outdoor antennas, and point in opposite directions) and then reboot (turn the unit off & on) the Pro 710i to reactivate the band and maximize performance. When adequate separation is achieved, the yellow color will return to green upon reboot.

Note: when the color is yellow, the band is operational; however, performance is reduced.

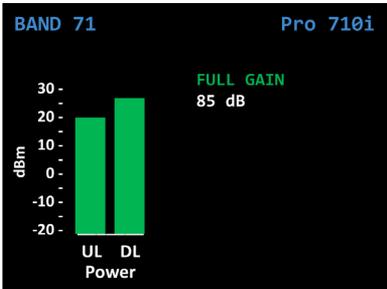
(MENU SYSTEM cont.)



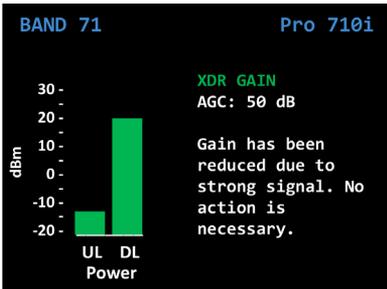
A red color indicates a band has been shut down because of a severe oscillation condition or repeated oscillation. Reposition antennas (increase separation between indoor and outdoor antennas, and point in opposite directions) and then reboot (turn the unit off & on) the Pro 710i to reactivate the band and maximize performance. When adequate separation is achieved, the red color will return to green upon reboot.

Settings Screen

“Full Gain” is displayed if there is a weak outside signal requiring the amplifier to operate with maximum allowable gain. The amplifier is functioning normally; however, a stronger signal might be obtained with some antenna adjustments.

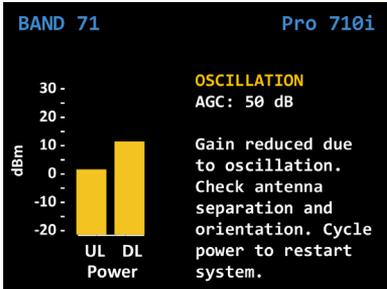


“XDR Gain” is displayed, indicating that the amplifier has reduced its gain to accommodate a moderate to strong outside signal. The amplifier is functioning normally and no adjustments are needed.

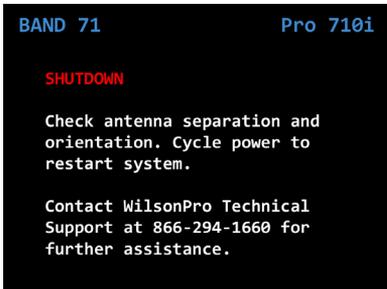


(MENU SYSTEM - SETTINGS SCREEN cont.)

Significant oscillation is occurring. Additional separation (isolation) is needed between inside and outside antennas.



Severe or repeated oscillations have occurred and amplifier has shut off.



Safety Guidelines

Warnings

WARNING: Changes or modifications not expressly approved by Wilson Electronics will void the user's authority to operate the equipment.

WARNING: E911 location information may not be provided or may be inaccurate for calls served BY USING THIS DEVICE.

To uphold compliance with network protection standards, all active cellular devices must maintain at least 6 feet of separation distance from Panel and Dome antennas.

Use only the power supply provided in this package. Use of a non-Wilson Electronics product may damage your equipment.

RF Safety Warning: Any antenna used with this device must be located at least 8 inches from all persons.

WARNING. This is **NOT** a **CONSUMER** device. It is designed for installation by **FCC LICENSEES** and **QUALIFIED INSTALLERS**. You **MUST** have an **FCC LICENSE** or express consent of an FCC Licensee to operate this device. Unauthorized use may result in significant forfeiture penalties, including penalties in excess of \$100,000 for each continuing violation.

WARNING: This is **NOT** a **CONSUMER** device. It is designed for installation by an installer approved by an **ISED licensee**. You **MUST** have an **ISED LICENCE** or the express consent of an ISED licensee to operate this device.

AVERTISSEMENT: Ce n'est **PAS** un appareil **CONSOMMATEUR**. Il est conçu pour être installé par un installateur agréé par un **licencié ISED**. Vous **DEVEZ** détenir une **LICENCE ISED** ou le consentement exprès d'un titulaire de licence ISED pour utiliser cet appareil.

FOR MORE INFORMATION ON REQUIREMENTS SET OUT IN ISED CPC-2-1-05, SEE BELOW:

<http://www.ic.gc.ca/eic/site/smt-gst.nsf/eng/sf08942.html>

Specifications

Model Number	460064
FCC ID	PWO460064
IC ID	4726A-460064
Connectors	N-Female
Antenna Impedance	50 Ohms
Max Gain	85 dB
Frequency	617-652 MHz, 663-698 MHz
Power output for single cell phone (Uplink) dBm	600MHz Band 71 24.2
Power output for single cell phone (Downlink) dBm	600MHz Band 71 24.5
Noise Figure	5 dB nominal
Isolation	> 90 dB
Power Requirements	120V AC 0.5A

Each Signal Booster is individually tested and factory set to ensure FCC compliance. The Signal Booster cannot be adjusted without factory reprogramming or disabling the hardware. The Signal Booster will amplify, but not alter incoming and outgoing signals in order to increase coverage of authorized frequency bands only. If the Signal Booster is not in use for five minutes, it will reduce gain until a signal is detected. If a detected signal is too high in a frequency band, or if the Signal Booster detects an oscillation, the Signal Booster will automatically turn the power off on that band. For a detected oscillation the Signal Booster will automatically resume normal operation after a minimum of 1 minute. After 5 (five) such automatic restarts, any problematic bands are permanently shut off until the Signal Booster has been manually restarted by momentarily removing power from the Signal Booster. Noise power, gain, and linearity are maintained by the Signal Booster's microprocessor.

This device complies with Part 15 of FCC rules. Operation is subject to two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. Changes or modifications not expressly approved by Wilson Electronics could void the authority to operate this equipment.

Antenna Specifications

This radio transmitter has been approved by the FCC and Innovation, Science and Economic Development Canada to operate with the maximum permissible antenna gain below. Antenna that have a gain greater than the maximum gain indicated for any type listed are strictly prohibited for use with this device.

	B71
Outside antenna maximum permissible antenna gain (dBi) 50Ω	6.5
Inside antenna maximum permissible antenna gain (dBi) 50Ω	6.0

Warranty

✓ 30 DAY MONEY-BACK GUARANTEE

All WilsonPro products are protected by WilsonPro 30-day money-back guarantee. If for any reason the performance of any product is not acceptable, simply return the product directly to the reseller with a dated proof of purchase.

✓ 3 YEAR WARRANTY

WilsonPro Amplifiers are warranted for three (3) years against defects in workmanship and/or materials. Warranty cases may be resolved by returning the product directly to the reseller with a dated proof of purchase.

Signal Amplifiers may also be returned directly to the manufacturer at the consumer's expense, with a dated proof of purchase and a Returned Material Authorization (RMA) number supplied by WilsonPro. WilsonPro shall, at its option, either repair or replace the product.

This warranty does not apply to any Signal Amplifiers determined by WilsonPro to have been subjected to misuse, abuse, neglect, or mishandling that alters or damages physical or electronic properties.

Replacement products may include refurbished WilsonPro products that have been recertified to conform with product specifications.

RMA numbers may be obtained by contacting Customer Support.

DISCLAIMER: The information provided by WilsonPro is believed to be complete and accurate. However, no responsibility is assumed by WilsonPro 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.

MARKETING APPROVAL: Installer and end customer hereby grants to Wilson Electronics the express right to use installers or end customers company logo in marketing, sales, financial, and public relations materials and other communications solely to identify Customer as a Wilson Electronics customer.



3301 East Deseret Drive, St. George, UT
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