



# Cel-Fi™ DUO+ Quick Start Guide



NETWORK UNIT



COVERAGE UNIT

## Cel-Fi DUO+ Smart Signal Booster™

A true plug-and-play system that doesn't require the installation of antennas or cables.

### To use this product you need:

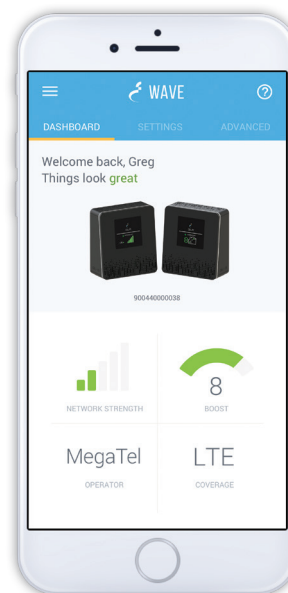
- A 3G, 4G, LTE compatible mobile phone with qualifying service
- An area inside your home that receives at least one bar of 3G, 4G, LTE coverage
- Power Outlets

### In this package you will find:

- Network Unit
- Coverage Unit
- Two Power Adapters
- Two Mounting Brackets with hardware

## Get More from Cel-Fi WAVE

Cel-Fi WAVE is an application available on both smartphones and desktop computers that allows users to interact with Cel-Fi, to access advanced and supplementary features.



### Dashboard:

Glance-able view to the state of your Cel-Fi environment.

### Settings:

Change the default Operator, setup an external antenna, name your Smart Signal Booster, and more.

### Advanced Mode:

Get a real-time technical overview of the installation of your Cel-Fi Smart Signal Booster.

### Booster Updates:

Keep your Cel-Fi Smart Signal Booster up-to-date as new software versions become available.

For more information, and software, go to:

[www.cel-fi.com/wave](http://www.cel-fi.com/wave)



Cel-Fi Safe

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# BEFORE You Begin

If you can find a place in your home that gets at least one bar of 3G, 4G, LTE signal, the revolutionary **Cel-Fi DUO+** Smart Signal Booster system brings you smoother video and surfing, and improved coverage throughout your home. **Cel-Fi DUO+** Smart Signal Booster is a true plug-and-play system that doesn't require the complicated installation of antennas or cables.

## Step 1

### Find the location with the best coverage:

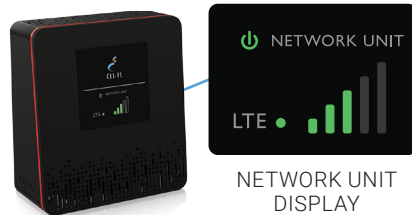
The first step in setting-up your **Cel-Fi DUO+** Smart Signal Booster is to find the location with the best mobile network signal. Use your phone to identify the area with the best signal. Typically, the best service will be near a window in the highest floor of your space.



## Step 2

### Plug-in the Network Unit:

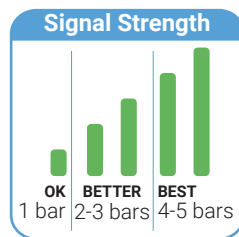
Plug the **Network Unit** into an easily accessible outlet near the area with the strongest 3G, 4G, LTE signal. (Note: the power supplies in your kit are identical.) Make sure that at least one bar is displayed on the signal strength indicator on the front of the **Network Unit**. If you do not see at least one bar, try a different location.



## Step 3

### Optimize the Network Unit Placement:

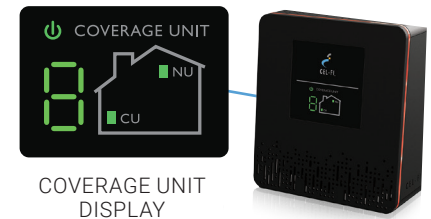
The bars on the front of the device indicate the strength of the mobile network signal in the area. Moving the **Network Unit** to a different location may increase the signal, and can improve the quality of your service.



## Step 4

### Place the Coverage Unit:

Place the **Coverage Unit** as far away, inside the space, as possible from the **Network Unit** or where you need coverage the most, making sure that you have enough distance between the two units. After several minutes, the numeric display will stop cycling.



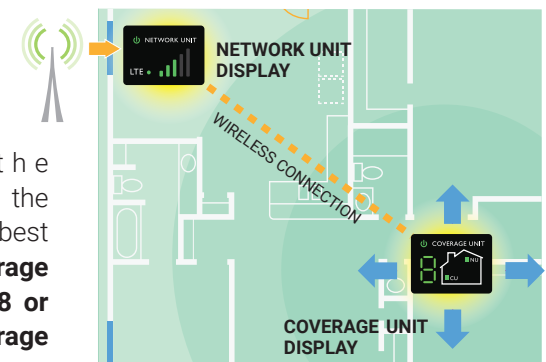
If your device is set-up properly, the green icons will appear on the display as seen above. It is possible to place the **Coverage Unit** too close or too far from the **Network Unit**. If this happens, a red icon will illuminate indicating that you need to move the **Coverage Unit** either closer to, or farther away from the **Network Unit** (see below).

OK	TOO FAR	TOO CLOSE
Two green icons indicate that the <b>Coverage Unit</b> is functioning normally.	Four red icons & a scrolling display indicate that the <b>Coverage Unit</b> needs to be moved closer to the <b>Network Unit</b> .	A zero on the numeric display indicates that the <b>Coverage Unit</b> needs to be moved farther away from the <b>Network Unit</b> .

## Step 5

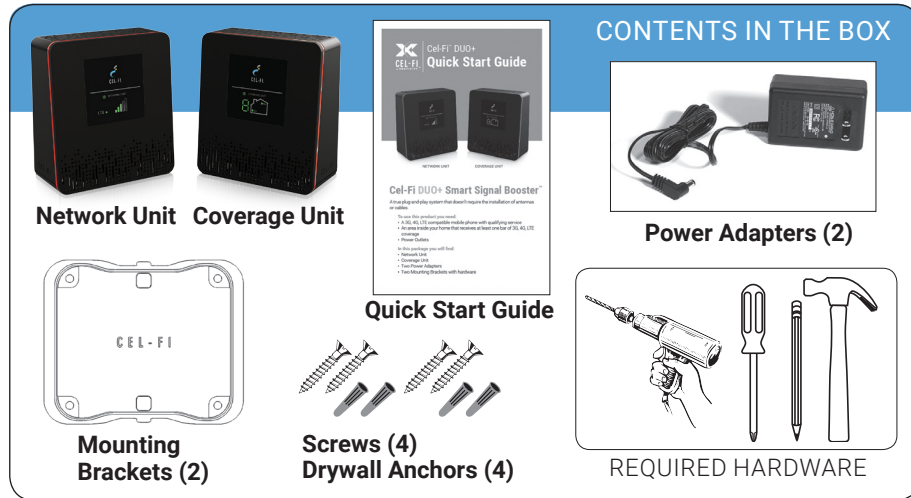
### Optimize The Coverage Unit Placement:

The number on the front of the **Coverage Unit** display indicates the quality of the placement. For the best service experience, move the **Coverage Unit** around your home until an **8** or **9** displays. Based on the **Coverage Unit** number, you may need to move farther/closer to the **Network Unit**.



5 For the best service, move the Coverage Unit until an 8 or 9 displays.

# Mounting Instructions



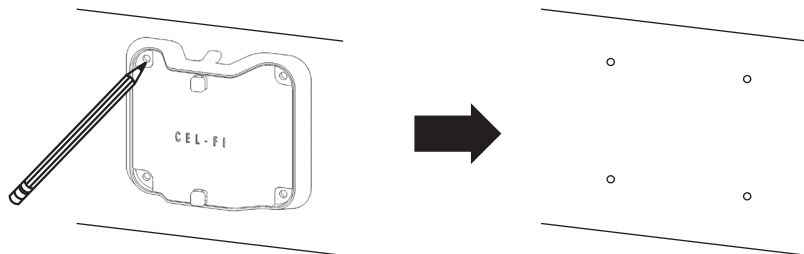
Each Cel-Fi device is supplied with mounting brackets and hardware to mount both (or either) the **Coverage Unit** and the **Network Unit**.

**NOTE:** The brackets come equipped with screws and inserts for mounting in standard drywall. Before you install the mounts, make sure there are no wires or other objects, or metal plates, behind the drywall layer that will interfere with the inserts, screws, mount, or mounted units.

## 1 Determine Cel-Fi Device Location (refer to other side)

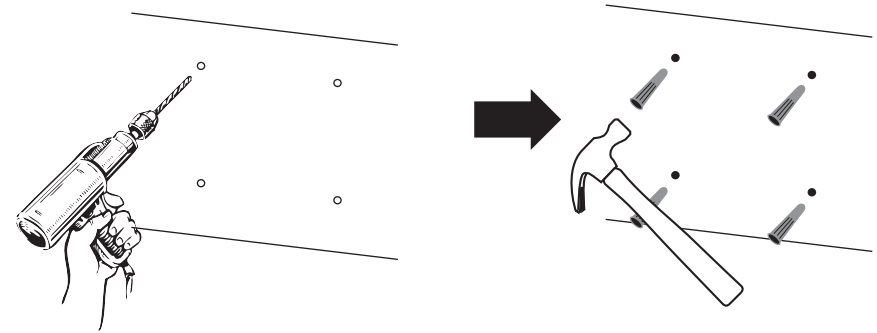


## 2 Determine Mounting Hole Locations



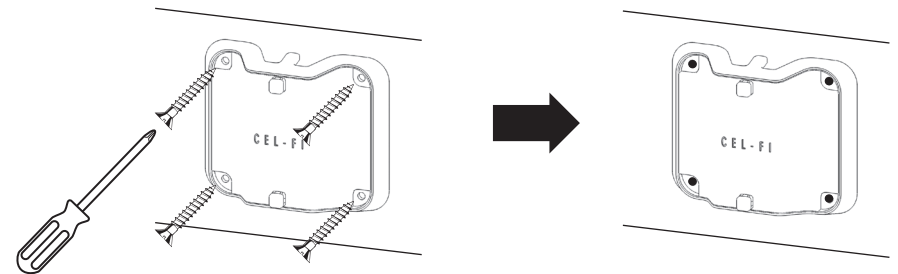
## 3 Drill Anchor Holes (Drywall)

In each marked spot, use a 3/16" **drill bit** to drill guide holes for the anchors.

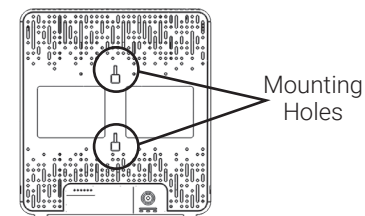


## 4 Install Anchors (Drywall)

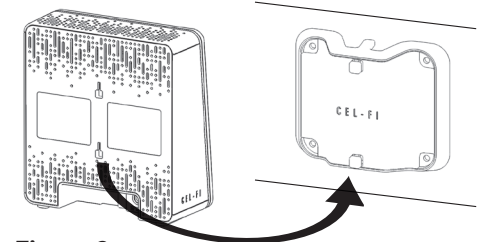
## 5 Install Mounting Bracket



## 6 Attach the Cel-Fi Unit to the wall mounted bracket



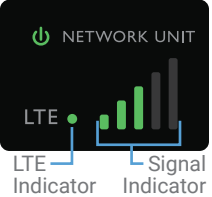




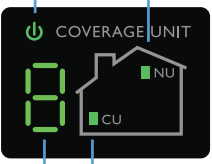





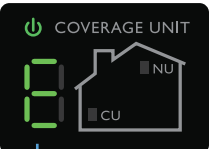
**Figure 1**  
Back view with mounting holes.



**Figure 2**  
Backside of unit fits onto bracket hooks.

**IMPORTANT:** Your **Cel-Fi DUO+ Smart Signal Booster** is electronic equipment. Both units must be kept indoors and in a dry, cool, well-ventilated area.

# Troubleshooting

NETWORK UNIT DISPLAY			
<p>Power &amp; Status Indicator</p>  <p>LTE Indicator      Signal Indicator</p>	Indicator	Issue	Try This
	 No lights on the <b>Network Unit</b> display.	The device is not receiving power.	<ol style="list-style-type: none"> <li>1. Is the unit plugged in?</li> <li>2. Is there power at the outlet?</li> <li>3. Try exchanging the power supplies with the <b>Coverage Unit</b> to determine if the power supply is defective.</li> </ol>
	 Power indicator is red.	<b>Network Unit</b> hardware issue.	Please check the <b>Coverage Unit</b> for an alternating error number to determine the proper solution from the list of Error Messages below.
	 Power indicator is green but no bars on the <b>Network Unit</b> display.	<b>Network Unit</b> does not have a 3G, 4G, LTE signal.	Try moving the <b>Network Unit</b> to another room or area where you have more coverage. (Use your mobile phone to find the best 3G, 4G, LTE coverage).
	 Power indicator is Flashing Green.	<b>Network Unit</b> Is setting up communications with <b>Coverage Unit</b> .	Wait a few moments, once a path has been set up, the light will stop flashing.
	LTE indicator is lit or not lit (what does this mean?)	The LTE indicator means that LTE is available and is also being boosted.	If you have bars of signal on your <b>Network Unit</b> but the LTE indicator is not lit, you still have boosted high speed 3G/4G service.
COVERAGE UNIT DISPLAY			
<p>Power &amp; Status Indicator</p> <p>Network Unit Indicator</p>  <p>Coverage Unit Indicator</p> <p>Seven Segment Display</p>	Indicator	Issue	Try This
	 No lights on the <b>Coverage Unit</b> display.	The device is not powered.	<ol style="list-style-type: none"> <li>1. Is the unit plugged in?</li> <li>2. Is there power at the outlet?</li> <li>3. Try exchanging the power supplies with the <b>Network Unit</b> to determine if the power supply is defective.</li> </ol>
	 <b>Coverage Unit</b> Power Indicator is red	System Error.	Please check the seven segment display for an alternating Error Messages to determine the proper solution from the list of Error Messages below.
	 Seven segment display cycling for more than a minute.	The <b>Coverage Unit</b> still trying to wirelessly connect to the <b>Network Unit</b> .	<ol style="list-style-type: none"> <li>1. Wait for the display to stop cycling. This could take several minutes.</li> <li>2. Make sure that all other electronic devices (Wi-Fi routers, home phones, computers, etc.) are at least 1 meter from the <b>Coverage &amp; Network Units</b>.</li> </ol>
	 Zero displayed.	The <b>Coverage Unit</b> is "Too Close" to the <b>Network Unit</b> .	Move the <b>Coverage Unit</b> farther away from the <b>Network Unit</b> . The separation distance may be over 20 meter for a residence, and much farther for open commercial spaces. Try and get an 8 or 9 on the display.
	 The <b>Coverage Unit</b> and <b>Network Unit</b> icons are red with two arrows.	The <b>Coverage Unit</b> is "Too Far Away" from the <b>Network Unit</b> .	Move the <b>Coverage Unit</b> closer to the <b>Network Unit</b> .
PERFORMANCE			
<p>The Coverage Unit has a boosted signal but only in a small area.</p>	Indicator	Issue	Try This
	Low <b>Coverage Unit</b> number or <b>Network Unit</b> input signal.	<b>Network Unit</b> and <b>Coverage Unit</b> are too close together or <b>Network Unit</b> signal level is low.	Move the <b>Coverage Unit</b> away from the <b>Network Unit</b> to get a higher coverage number. This can mean putting the <b>Coverage Unit</b> on the opposite end of your home. Higher numbers indicate better coverage. You can also move the <b>Network Unit</b> to an area with a stronger signal. More bars is always better.
ERROR MESSAGES DISPLAY			
 <p>Alternating E and Numeric Error Code</p>	Indicator	Issue	Try This
	E1	No 3G, 4G, LTE signal at the <b>Network Unit</b> .	Try moving the <b>Network Unit</b> to another room or area where you have coverage. (Use your cell phone to find the best 3G, 4G, LTE coverage).
	E3	<b>Coverage Unit</b> is overheating.	Make sure that the vents on the unit are not blocked. Move the unit to a cooler area. The system will start working normally when it cools down.
	E4	<b>Network Unit</b> is overheating.	
	E5	Registration Required.	Register your address with your mobile network provider, using the <b>Cel-Fi WAVE app</b> .
	E7	Unit disabled by network.	Please call your cell phone provider.
	E8	Input signal at <b>Network Unit</b> too strong.	Your <b>Network Unit</b> is too close to a cellular tower. This may result in a reduced output power (smaller coverage bubble) to limit network interference. Note: If you have satisfactory boost in cellular service you can ignore this message. Otherwise move your <b>Network Unit</b> to another location. You might need to move your <b>Network Unit</b> to the other side of your home/office.
	E9	Your system was moved from its original address. Registration required due to location lock.	Either move the system back to its original location or register your new address with your mobile network provider, using the <b>Cel-Fi WAVE app</b> .

If you see any other error messages or for additional information about **Cel-Fi DUO+ Smart Signal Booster** Installation go to: [www.cel-fi.com/support](http://www.cel-fi.com/support)