

## R4 Repeater



Boosting mobile signal into your home

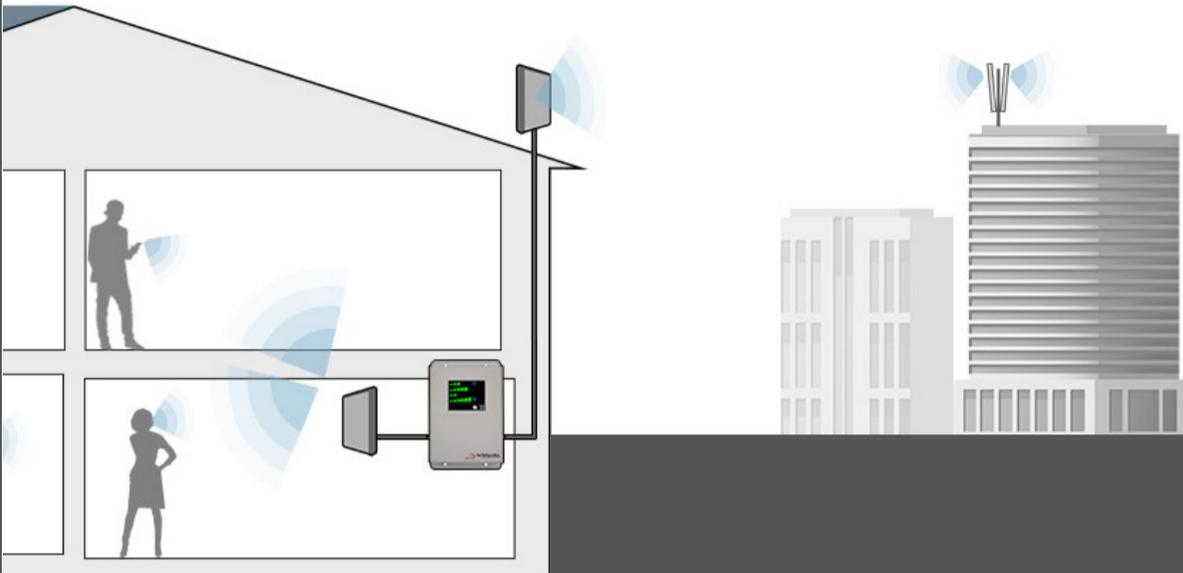
Do not use Stella Doradus repeaters with non stella doradus equipment.

Stelladoradus repeaters operate silently on the operators network.  
By using our equipment with competitors equipment you break this control system and could potentially harm the operators network. Doing so will void warranty.

## How it works

The R4 is ideal for providing mobile signal coverage in your home. As long as there is mobile signal outside your house, this booster will amplify it and send the signal about inside your house.

For the R4 to work you must have at least 2 bars of mobile signal outside your house on your phone. This repeater is quite powerful and will provide coverage for about 4 rooms.

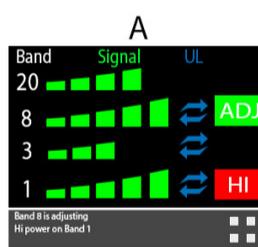


## Features

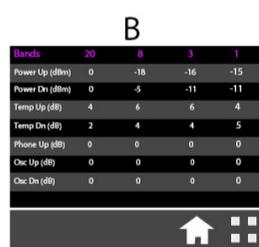


- Coverage: ~4 rooms
- Compatible with all mobile operators
- Voice and 4G data
- Control band on/off and attenuation
- Full color touch screen
- Legal and fully compliant to the EU standards.

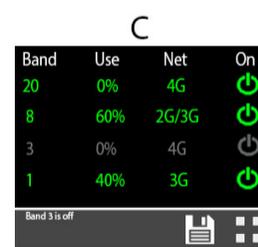
## Touch LCD



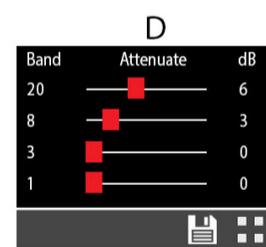
Main screen



dB screen

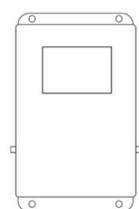


ON/OFF screen



Attenuate screen

## Inside the kit



StellaBoost L4



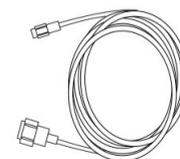
Indoor Antenna  
Omni



Outdoor  
Antenna



Power  
Supply



12m outdoor  
Cable

## The LCD explained

### MAIN SCREEN



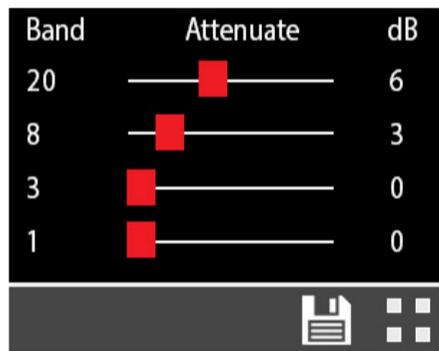
The band number refers to a frequency:

Band	Frequency	Service
20	800MHz	4G
8	900MHz	GSM/ 3G
3	1800MHz	4G
1	2100MHz	3G

UL refers to the uplink channel. If the blue arrows are visible for a particular band, then this band is active. This means there is a voice call or data session on this band.

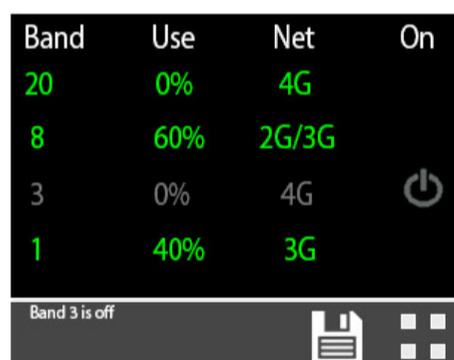
The coloured boxes with messages to the right of each band mean the following:

- ADJ - Adjusting the gain of the band to an optimal level.
- OSC - Oscillation. This means you have the indoor and outdoor antenna too close. You need to separate them more.
- HI - Hi power. This is just a warning that there is a lot of power coming in from the outdoor antenna. You do not have to do anything, so you can ignore this.
- OFF - The band is switched off, either automatically, or it has been manually shutdown.



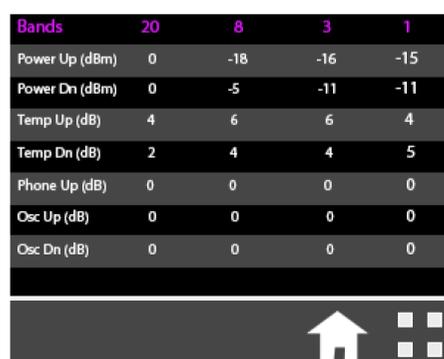
#### Settings - Attenuate

On this screen you can add attenuation to any band. For example, if the outdoor signal on band 3 is too strong and is automatically shutting down all the time, you can add some attenuation to prevent this.



#### Settings - Band On/Off

On this screen you can switch off any band. For example, if band 3 is very weak, but your phone is still using it, and you are getting a poor service, then you can try switching off the band to force the call over another (more powerful) band.



#### Decibel page

- Power up/dn - This is the absolute signal power both up and down.
- Temp up/dn - These are AGC values. The higher the values here, the more AGC you have, the more powerful the signal is.
- Phone up - This value goes high when your phone has cranked up its power to reach the base station.
- Osc up/dn - Oscillation occurs when the indoor and outdoor antenna are too close to each other. If you see tokens here, create more separation between these two antennas.

# R4

- Model number: SD-LCD-LGDW
- Frequency(MHz): 800/ 900/ 1800/ 2100



## Frequency Specifications:

Frequency bands(MHz):	(791 - 862) + (880 - 960) + (1710 - 1880) + (1920 - 2170)
Coverage:	800m <sup>2</sup> (open space) or ~4 rooms
Number of People:	unlimited
Gain:	Uplink Gp > 45dB      Downlink Gp > 55dB
Pass band ripple:	< 4dB
I/O impedance:	50 ohm/SMA female connector
Max uplink/downlink signal strength:	17dBm / 10dBm
Ambient Temperature:	-30°C to +70°C
Power supply input:	110 - 240V AC
Power supply output:	12v DC
Oscillation Control	Automatic
Level Control:	Automatic*
Uplink Switch Off	Yes**
AGC Range	30db
Surge protection	SMA connectors DC grounded, 12V DC port MOV protected

## Antenna Specifications:

### Indoor / outdoor antenna

Nominal Gain	6.4dBi / 9.4dBi
3dB beam Pattern	60° x 60°
Bandwidth	790-960MHz + 1710-2700MHz
VSWR	<1.4
Front to Back Ratio	> 20dB
Polarization	Vertical
Power Rating	50W
Impedance	50-OHM
Termination	SMA male
Cross Pol. Discrimination	-20dB
Dimensions	210 x 180 x 43mm
Weight	0.68kg
Wind velocity	126km/hr
Working temperature	-40°C to +65°C

## Power Supply Specification:

AC	100-240V	50-60Hz
DC input	12V	2A
Typical power usage	15	

## Mechanical Specification:

Length	21cm
Width	16cm
Depth	3.5cm
Weight	1.3kg
Mounting	4 x 5mm holes for mounting

\* Automatically adjusts during installation. Thereafter, automatically adjusts for seasonal variation in pathloss between Base station and Outdoor Antenna.

\*\* The uplink amplifiers switch off when the repeater is not in use, thus reducing the uplink noise to almost zero. When the repeater is in use (eg phone call being made), the uplink amplifier switches on for the duration of the call and a blue LED switches on indicating this is the case.

Note: Specifications subject to change without notice.