

# Universal Installation Guide

- MRE001                       MRE028
- MRE061                       MRE039

## Package Includes



**1 x Mobile Repeater Unit**  
MRE001 & MRE061 are blue color  
MRE028 & MRE039 are black color



**1 x External Aerial**  
with 1xFlat Hook, 4xScrews  
and 4xExpansion Screws



**1 x 10 Meter Coax**  
with N male connectors



**1 x Whip Aerial**  
with N male connector

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## Section 1 : Introduction

Thank you for purchasing through Mobile Repeater!

Your product is designed to enhance mobile phone coverage for indoor applications by capturing a signal externally, amplifying and re-transmitting a clear and reliable signal within the desired coverage area.

The performance of your Mobile Repeater kit will depend on the external signal strength, which is provided as input to the repeater base unit.

The document provides a step-by-step guide to a basic installation and offers some trouble-shooting tips. If you are having any difficulty getting your kit to work please contact us.

## Section 2 : External Aerial Installation

The most important part of the installation is the location and orientation of the external aerial. The external aerial should be separated from the base repeater as much as possible to avoid potential feedback between the two units. When installing the external aerial please consider the following:

### Physical Location

The external aerial should ideally be mounted as high as possible outside to provide the best signal input to the base repeater unit. Please find the location outside where you have the strongest signal on your phone. Please check to make sure able to place a call on your phone at this location.

### Orientation

The panel aerial is directional and should be installed so that it points towards to local base station for your network provider. The external aerial applies the highest amount of signal gain when pointed in the direction - The stronger the input signal to the repeater the better the indoor coverage will be.

*Note - you can use [www.sitefinder.ofcom.org.uk](http://www.sitefinder.ofcom.org.uk) to locate base stations in your postcode or call your network provider to check.*

If you have the MR Yagi aerial it should be mounted with the tip pointing horizontally outwards and the face in the vertical plane with the two small drainage holes facing down.

Please seal the connection of the cable connector of the aerial on the end of the coax so that it is waterproof.

## Section 3 : Mobile Repeater Installation

### Section 3-1 : Location of the Mobile Repeater Base Unit

Mobile Repeater kit comes with an omni-directional whip aerial which install directly on Mobile port of repeater unit. Since the whip aerial is omni-directional, the signal broadcast is in a circular radius around the base unit. Considering this it is best to locate the base repeater unit in a central area or in a particular spot where signal is needed. The range of the indoor broadcast will depend on the strength of the signal coming from the external aerial.

Please note that the location for the repeater unit will require a standard mains power supply and the base unit should be mounted on a flat surface either ex. on a desk or cabinet or mounted on the wall.

The whip aerial when attached to the repeater should be oriented vertically.



## Section 3-2 : Location of the Mobile Repeater Base Unit

After determining the best cable route from the external aerial to the BTS port of repeater connect the cable at both ends.

Provide a firm connection of the coaxial cable with the outdoor antenna through the connector fixed at the cable end and connect the other side of the cable to the port on the booster base unit labeled 'BTS'. When routing cable ensure that the cable is supported and does not sag.

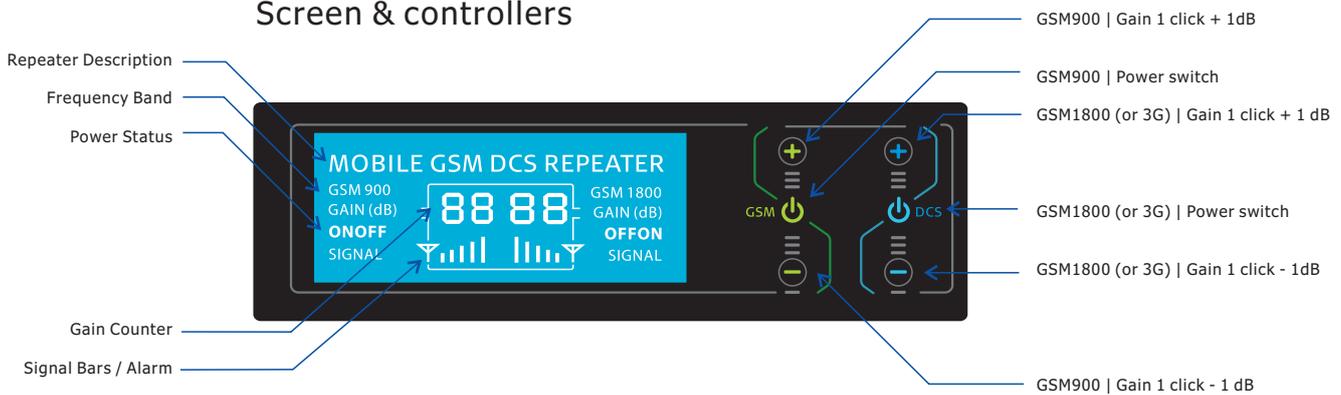
*NOTE – it is extremely important that there are no coils or loops of excess cable between the outdoor aerial and the repeater. This in addition to sharp bends and kinks can cause signal oscillation on the system and a false reading of signal bars on the base unit. Please make sure you have no spare cable coiled or kinked. If you have excess cable you should either use it to raise the height of the external aerial, move the base repeater further away from the external aerial or take an indirect path as to not coil the cable at either end.*

*NOTE – Please do not remove connectors from the cable, repeater or aerial unless you have the necessary tools to do so. Mobile Repeater will not warranty any equipment that has been tampered with. If you have any concern please contact Mobile Repeater customer support.*

## Section 4 : System Commissioning

Before turning the repeater unit on please ensure that you have the connectors for the outdoor aerial and the indoor whip aerial fastened firmly. Connect the AC mains to the DC adapter and connect the DC adapter cord to the DC input of the repeater unit. When active the screen will glow on.

### Screen & controllers



Model	Gain	Power
MRE001	24~60dB	Max 18dBm
MRE028	29~65dB	Max 19dBm
MRE061	24~60dB	Max 18dBm
MRE039	29~65dB	Max 19dBm

1) After turn on repeater unit, default gain is max 65dB (or 60dB depends on repeater model).

2) The signal bars will show actual signals the repeater can processes. Its not as same as outdoor signal strength.

### Signal Bars

If no signal input, the outline border of signal bars will blink.

If have input signals, signal bars will show up. Input -50dB signal will get full bars. Input -55dB get 4 bars. Input -60dB get 3 bars. Input -65dB get 2 bars. Input -70dB get only 1 bar. If signal is less than -70dB will blink outline border of signal bars.

\*\* If input signal is bigger than -45dB, or get oscillation, or get interference from other RF signal sources, full bars will blink.

### Gain Controller

If full bars blinks you should click gain - button of related frequency band to reduce the gain, the counter of repeater gain will change. Click 1 time will reduce 1 dB gain. Reduce 5 dB gain, signal bar will reduce 1 bar.

Once the signal bar stays in 3~5 bars, you can re-boot your mobile phone and check to see if it is receiving a signal. You can adjust the direction of the external aerial to try and maximize the indoor signal coverage. Mobile Repeater also supplies signal splitters and indoor coverage aerials that can be used to distribute signal over a building with heavy partition walls.

If you are not able to place calls due to a low outdoor signal level you may need a higher gain external aerial.

**Power Switch** If do not need to boost any frequencies, you can turn off related booster by simply click on the power switch.

## Section 5 : Trouble-Shooting Tips

### **If you get a signal off the repeater but coverage radius is low.**

If you have established that you are now able to place and receive calls when in range of the repeater and want to extend coverage inside the building its important to ensure the proper orientation of your external aerial and to ensure that it is pointed towards the local base station for your network provider.

### **If get signal bars but you are not getting a signal on your phone.**

Please check if have full bars links or outline of bars blinks. If outline of bars blinks you need to check cable connections to ensure they are tight. Also check if able to get signal in mobile phone the position of external antenna. If full bars blinks you need to reduce the gain until it stop blink.

Interferences could also cause false reading of the signal bars on the base unit.

- 1) First check to make sure you have the maximum separation possible between the external antenna and the repeater. Its very important that there is no spare cable coiled in loops at any point. If you have the cable coiled please unroll the whole cable and re-check the signal on your phone next to the repeater.
- 2) The external aerial should not be within 5 meters of an active TV or satellite aerial.
- 3) External aerial should be at least 5 meters away from repeater unit, its better to have a solid wall between external aerial and repeater unit.

### **If your phone shows a strong signal but the call quality is not clear.**

This is either a result of coiled cable, a sharp bend or due to external aerial direction. If your cable run is straight and you have not coiled excess cable please check the direction of external aerial and ensure that it points towards the local base station. As the aerial is directional it needs proper orientation to ensure a reliable communication channel between the external aerial and the nearest base station for your network.

## Section 6 : Contact Information

Mobile Repeater UK  
Unit 1A, Learoyd Road  
Mountfield Industrial Estate  
New Romney, Kent TN28 8XU  
United Kingdom

UK Freefone - 08082 344257  
UK Fax - 08082 342379

## Section 7 : 30-Day Return Policy

MobileRepeater.co.uk is proud to provide high quality products that are guaranteed to increase signal quality and extend mobile coverage. If you are not satisfied with the performance quality of your repeater we will give your money back! All returns must be received within 30 days of the delivery date.

In order to return your product you must first speak with Mobile Repeater technical support to see if we can resolve your issue. If we are not able to solve your coverage problem you may request an RMA code, which includes a special returns address along with that authorization. Any returns received without an RMA authorization, outside of 30 days from the original delivery date, or to the wrong address will not be refunded. Damaged equipment returned even with an RMA will be subject to a 20% restocking fee. Orders for pre-cut lengths of cable are non-refundable.

Customers are responsible for shipping charges of the return delivery. All returns are subject to a £4.95 re-stocking fee. Your order will be refunded upon receiving the product in its original packign. Please note that postage costs for the original order are not refundable.

To process a return request please contact customer service at sales@mobilerepeater.co.uk or call us.