## Aristel Networks <br> R-168 DECT Repeater <br> User Manual



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## 1. GENERAL

This product is a DECT system Repeater which is intended to extend the radio coverage of your DECT base station. The radio coverage of base station can be extended by setting up multiple Repeaters at appropriate positions and places.

The Repeaters can be used to extend the coverage area in all directions, including up and down (e.g. to cover several floors in a building).
If the Repeaters are placed correctly (overlapping the coverage of the base station), you can move from the base station coverage area to a Repeater's coverage area while speaking on the DECT handset without losing the call.

You can subscribe a maximum of 6 Repeaters to a DECT base station. The number of handsets to be operated depends on the type of the base station installed.

## Warning!

Each Repeater installed reduces the maximum number of handsets by 1. (Aristel DC209 has a maximum of 15 handsets). See your system manual for information regarding your particular system

## Important notes:

1. The Aristel DC209 model does not support the use of repeaters. The R-168 Repeater will work only with the DC209 $R$ model. e.g. Base Serial Number C209003431000113R
2. It is possible that not all the features of your particular base station that this Repeater is registered to, will be available due to variations of different brand base station protocols. This Repeater supports full Aristel DC209 feature operation
3. It is strongly recommend that you place this Repeater in an upright position, at least $\mathbf{2 . 0}$ metres above the floor/ground.
4. Try to avoid all possible obstructions (metal walls, insulated walls etc) and radio interference devices (microwave ovens, other cordless phones, etc) between the Repeater and the base station.
5. All Repeaters must be installed within the base station coverage area. It is not possible to install repeaters in series.

## 2. Registration of Repeater,



Before the Repeater is installed, it must be registered to your base station. You will require a previously registered handset. The handset as well as the base must be powered on and ready for operation. The system should be in idle condition. i.e. No calls in progress.

The method of registering the Repeater to a DC209 is semi-automatic and quite easy, but the method may vary depending on the brand of your DECT system.

## Registration Procedure for Aristel DC209:

1. Make sure the Repeater power is turned off.
2. Set the base station to registration mode by:-
a) Using a registered handset, press down arrow until BS setting is selected
b) Press INT/OK
c) Enter the PIN (default=1590)
d) Press INT/OK
e) Press down arrow until New HS is selected
f) Press INT/OK
g) Enter Sub PIN (default=1590)
h) Press INT/OK
i) Select the handset number to be allocated to the Repeater (any number is suitable, Press INT/OK for auto selection of number).
3. Power on the Repeater. The LED on the Repeater flashes quickly.
4. Press and hold the registration key for $5 \sim 10$ seconds.
5. LED starts to flash at slower rate.
6. The registration is successful.

The registration of repeater is completed. You can now disconnect the power and place the Repeater in the selected location.

For other brands of Base station, please consult your system manual for instructions on how to place your particular DECT base station in registration mode.

## 3. Placement of the Repeater.

To have the best coverage, it is important to place the Repeater at the best location. Avoid obstacles like thick walls and radio transmitting devices that can interference the Repeater operation.
Keep at least 10 metres spacing between Repeaters when you wish to overlap the coverage areas of multiple repeaters.
If the Repeater LED flashes quickly, the Repeater is too far away from the base station (i.e. out of base range). Move the Repeater toward the base station or remove obstacles from in between the base and the Repeater.
It is strongly recommend to place this Repeater in an upright (wall mounted) position at least 2.0 meters above the floor/ground.
All repeaters must be installed within the base stations coverage area. It is not possible to install repeaters in series.

## 4. TECHNICAL DATA

1. Interface: DECT
2. Standard: ETS 300700
3. Support mode 0 (without encryption)
4. Operation of 2 simultaneous handset calls per repeater ( 2 calls) depends on the type of base station in use
5. Supports intra-cell handover
6. LED status indication

Not registered/out of range: Flash fast
Operating OK: Flash slow
Repeater in use on call: On
7. Power source: AC 110/230 V adaptor, DC 9V/300 m A
8. Operating Temperature: $0^{\circ} \mathrm{C}$ to $40^{\circ} \mathrm{C}$
9. Storage Temperature: $0^{\circ} \mathrm{C}$ to $40^{\circ} \mathrm{C}$
10. Range: up to 300 metres outdoors, up to 50 metres in buildings
11. Radio frequency range: 1880 MHz to 1900 MHz
12. Transmission power: 250 mW peak

