

Instructions for installation  
and configuration of a KIRK  
Repeater 1.9 GHz



We recommend you to use the instructions in point A.

You can use instructions in point B as an alternative configuration method (if you do not have access to the KIRK Programming Kit and a PC)

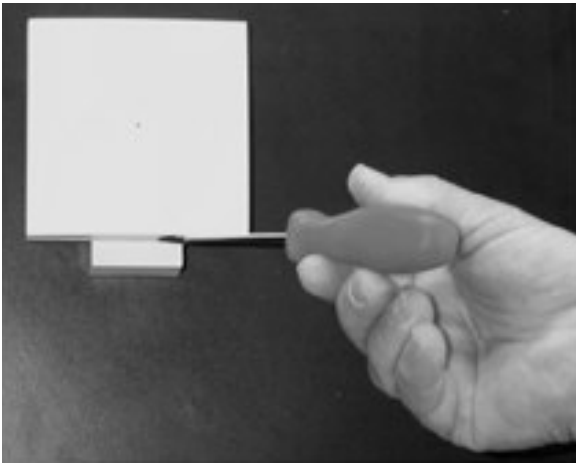
A .

To install a Repeater you will need a configuration program, the Repeater programming kit and documentation of how to connect the cables.

The KIRK Programming Kit can be found at [www.kirktelecom.com](http://www.kirktelecom.com). Download of the program and documentation is free of charge.

The documentation and program may also be requested from your dealer.

Pull the wire from the power supply through the wall suspension and mount the wall suspension on the wall. Connect the wire to the plug on the rear of the repeater and "click" the it on the wall suspension.



If you need to remove the repeater please separate it from the suspension holder with a gentle push of a screwdriver.

For further information and technical support please also refer our web address [www.kirktelecom.com](http://www.kirktelecom.com)

B.

(if you do not have access to the KIRK Programming Kit and a PC)

- 1 Turn on the base station and a subscribed handset.
- 2 Turn on the KIRK Repeater for more than 1 second and less than 5 seconds (note 1). Turn off the KIRK Repeater and turn it on again. The repeater is now in subscription mode. This is indicated by a flashing LED immediately after power is switched on. In this mode the KIRK Repeater is searching for a Fixed Part in subscription mode. This mode is active for maximum 5 minutes. If the subscription procedure is not completed within this time, the KIRK Repeater restarts in normal mode with previous subscription data.

- 3 For KIRK Wireless Server 500 & 600 only  
Start subscription mode in the base station.  
The usual procedure is pressing the button on the base station for some seconds. This is the mode normally used when subscribing a handset to the base station (note 2).
- 4 The KIRK Repeater is synchronised with a base station in subscription mode. This is indicated by a fast flashing LED.
- 5 Verify that the KIRK Repeater is synchronised with the requested base station. This is done by pressing the Hook-key or INT-key on the handset. The LED on the KIRK Repeater (visible at the front center of the repeater) should light up steadily. If the LED does not light up after pressing the Hook-key or INT-key a few times, the KIRK Repeater is probably synchronised with another base station. If this is the case the subscription procedure has to be repeated from step 2.

6 Select Radio Part Number (RPN). Hook off and press a number on the handset in the range 2 7. When the number is accepted by the KIRK Repeater this is acknowledged by the LED flashing the number of times corresponding to the digit. Digits may be entered several times. Only the last accepted digit is recorded (note 3). If you are using more repeaters on the same base station they must have different RPNs.

7 Accept subscription identities by hook off and pressing the \*-key. When the key is accepted by the KIRK Repeater the LED indicates that the key is turned off for 2 seconds. Alternatively the subscription can be accepted by pressing the #-key (note 4).

8 The KIRK Repeater now restarts with the new subscription identities in normal mode. The LED is turned on steady for 5 seconds and the KIRK Repeater is then ready to use.

Note 1: In normal operation mode the LED will light up steadily for the first 5 seconds after powering up. Afterwards the LED is flashing when the KIRK Repeater is unsynchronised and the LED becomes steady when synchronised to a base station. Whenever a connection is established via the KIRK Repeater a short flash appears on the LED.

Note 2: Subscription mode is indicated by broadcasting DECT FP-Capabilities (bit a44=1)

Note 3: When the KIRK Base Station is a residential single cell base station the valid RPN is in the range 2 7. When the KIRK Repeater is used on PEX or public systems the RPN may be in the range 0 255. In this case the KIRK Repeater accepts up to 3 digits to be entered. The last 3 valid digits are recorded only.

Note 4: If the #key is used to accept the subscription identities an inspection tone is enabled. The KIRK Repeater will then, when relaying connections, insert a short tone every 2 seconds in the audio path to handsets. This feature can be used for inspection and verification of the KIRK Repeater placement. When the operation has been verified the inspection tone should be disabled.

Performing step 2 only of the subscription procedure will disable the inspection tone. When the LED has started flashing in subscription mode, just turn off the KIRK Repeater and then on again. The KIRK Repeater is then back in normal mode without affecting the subscription identities and the inspection tone has been disabled.



Important Safety Instructions and Product Information

Before using your telephone equipment, you should always follow basic safety instruction to reduce the risk of fire, electrical shock and injury to persons, and damage to property.

- 1 Read and understand all instructions
- 2 Follow all warnings and instructions including those marked on the product
- 3 Unplug this product before cleaning. Do not use liquid cleaners or aerosol cleaners. Use damp cloth for cleaning
- 4 Do not install the telephone equipment in the bathroom or near a wash bowl, kitchen sink, or laundry tub, in a wet basement, or near a swimming pool
- 5 Slots or openings in the cabinet back and bottom of the equipment are provided for ventilation to protect it from over-heating. These openings must not be blocked or covered.

- 6 The product should be operated only from the type of power source indicated on the instructions. If you are not sure of the type of power supply, consult your dealer or local power company.
- 7 Do not overload wall outlets and extension cords as this can result in fire or electrical shock.
- 8 Never push objects of any kind into this product through cabinet slots as they may touch dangerous voltage points or short out parts that could result in fire, electrical shock, or injury. Never spill liquid of any kind into this product.
- 9 To reduce the risk of electrical shock or burns, do not disassemble this product. Opening or removing covers may expose you to dangerous voltages, dangerous electrical current, or other risks. Incorrect reassemble can cause electrical shock when the appliance is subsequently used. If the product need repair, consult your dealer.
- 10 Refer servicing to qualified service personnel under the following conditions:

- A Q If liquid has been spilled into the product
- B Q If the product has been exposed to rain or water
- C Q If the product does not operate normally when following the operating instructions in the manual. Adjust only those controls that are covered by the operation instructions. Improper adjustment of other controls may result in damage and will often require extensive work by qualified service personnel to restore the product to normal operation.
- D Q If the product has been dropped or cabinet has been damaged
- E Q If the product exhibits a distinct change in performance
- 11 Avoid using telephone during an electrical storm. There may be a risk of electrical shock from lightning
- 12 Do not use the telephone to report a gas leak in the vicinity of the leak
- 13 Do not place the unit near microwave ovens, radio equipment, or non-ground connected televisions. These appliances may cause electrical

interference to the base or handset

- 14 The unit must be installed on a hard, plane surface and connected to a functional 120 volt AC power net adapter and plug the adapter into the power outlet
- 15 The system will not operate in the event of a blackout. Please keep a backup phone for emergencies

#### Intrinsic safety

Do not install the unit in conditions where there is a danger of electrically ignited explosions.

#### Exposure to sunlight, heat and moisture

Do not expose the unit to direct sunlight for long periods. Keep away from excessive heat and moisture.

#### Spare parts and accessories

Use only approved spare parts and accessories. The operation of non-approved parts cannot be guaranteed.

ed and may even cause damage.

Power failure

In the event of a power failure, you cannot use the wireless system to make or receive calls.

NOTICES

NOTICE: Before installing this equipment, users should ensure that it is permissible to be connected to the facilities of the local telecommunications company. The equipment must also be installed using an acceptable method of connection. The customer should be aware that compliance with the above conditions may not prevent degradation of service in some situations.

Repairs to certified equipment should be coordinated by a representative designated by the supplier. Any repairs or alterations made by the user to this equipment, or equipment malfunctions, may give the telecommunications company cause to request the user to disconnect the equipment.

Users should ensure for their own protection that the electrical ground connections of the power utility, telephone lines and internal metallic water pipe system, if present, are connected together. This precaution may be particularly important in rural areas.

**CAUTIONS:** Users should not attempt to make such connections themselves, but should contact the appropriate electric inspection authority, or electrician, as appropriate.

If your telephone equipment causes harm to the telephone network, the telephone company may ask you to disconnect the system from the line until the problem has been corrected or they may discontinue your service temporarily. If possible, they will notify you in advance. But if advance notice is not practical, you should be notified as soon as possible. You will be informed of your right to file a complaint with the FCC.

Your telephone company may make changes in its facilities, equipment, operations, or procedures that could affect the proper functioning of your telephone system. If they do and it is possible, you will be notified in advance to give you an opportunity to maintain uninterrupted telephone service. If you experience trouble with this telephone system, disconnect it from the network until the problem has been corrected or until you are sure that the equipment is not malfunctioning.

Note: This equipment has been tested and found to comply with the limits for a class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment

does cause harmful interference to radio or television reception, which can be determined by turning the equipment

off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

**Power Outage:** In the event of a power outage, your cordless telephone will not operate. The cordless telephone requires electricity for operation. You should have a telephone which does not require electricity available for use during power outages.

**Information to user:** The users manual or instruction manual for an intentional or unintentional radiator shall caution the user that changes or modifications



not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

LIMITED WARRANTY

This limited, non-transferable warranty is provided to the original purchaser. The product is warranted to be free from defects in materials and workmanship under normal installation, use and service for a period of one (1) year from the date of purchase as shown on the purchaser's receipt.

Our obligation under this warranty is limited to repair or replacement (at our option) of the product or any part(s) which are defective provided that the product is returned to the original place of purchase or an authorized service location during the warranty period. Products returned must be accompanied by a copy of the purchase receipt. In the absence of a purchase receipt, the warranty period shall be one (1) year from the date of manufacture. Repair or replacement of the product is your sole and exclusi-

ve remedy.

If the product is repaired, reconditioned component parts or materials may be used. If the product is replaced, we may replace it with a new or reconditioned product of the same or similar design. The repaired product will be warranted for either (a) 90 days or (b) the remainder of the original one (1) year warranty period, whichever is longer.

This warranty does not apply to the defects outside of our control, including but not limited to acts of God, fire, flood and damage while in transit to service facility. We do not warranty that the product will be compatible with any telephone equipment, systems or party lines.

This warranty shall be void if the product is damaged as a result of defacement, misuse, abuse, neglect, accident, destruction or alteration of the serial number, improper electrical voltages or currents, repair, alteration or maintenance by any person or party other than our authorized service facility, or any violation of

instructions furnished by us.

This warranty is also void if this product is removed from the country in which it was purchased by the original purchaser, if it is used in a country in which it is not registered for use, or if it is used in a country for which it was not designed. Due to variations in telephone systems and communications laws, this product may be illegal for use in some countries. We assume no responsibilities for damages or penalties incurred resulting from the use of this product in a manner or location other than that for which it was intended.

THIS LIMITED WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES EXPRESS OR IMPLIED. ANY IMPLIED WARRANTIES INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, SHALL BE LIMITED TO THE DURATION OF THIS WRITTEN LIMITED WARRANTY. WE DISCLAIM ANY LIABILITY FOR DAMAGES

FOR LOSS OF USE OF THE PRODUCTS, LOSS OF TIME, INCONVENIENCE, INJURY TO ANY PERSON, OR DAMAGE TO PROPERTY CAUSED BY THE PRODUCT, LOSS OF REVENUE OR PROFIT OR DAMAGES FOR ANY FAILURE TO PERFORM. IN NO EVENT SHALL WE BE LIABLE FOR ANY SPECIAL, INCIDENTAL, PUNITIVE OR CONSEQUENTIAL DAMAGES EVEN IF WE ARE ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

Some states do not allow limitations on how long an implied warranty lasts, so the above limitations may not apply to you.

This warranty is the sole and exclusive warranty provided for the product. There are no other express warranties. This warranty gives you specific legal rights, and you may also have other rights, which vary from state to state.

Note:

The Repeater can be fitted with an external antenna to increase the coverage area further. Professional

installation is required for the external antenna.  
The Repeater and the antenna used for this transmitter are to be fixed-mounted on indoor permanent structures providing a separation distance of at least 20 cm from all persons during normal operation and must not be co-located or operating in conjunction with any other antenna or transmitter.

The product must not be disposed of with unsorted waste, but must be collected separately.



Appropriate RF safety/installation information

The Repeater is intended to be installed by authorized personal. The Base Station shall be installed in accordance with FCC rules.

The Repeater shall be placed at a location in such a way, that there is at least 20 centimetres between the base transmitter and the users body or any other nearby persons.



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