BX-RTX4002 DECT Range Repeater A repeater is used when you need to extend the range of your cordless DECT telephone to include areas where reception was previously not available.

The DECT Range Repeater is especially suited to be used together with the JACOB JENSEN $^{\rm TM}$ Telephone 80. Simply follow the Auto registration guide.

All the usual mobile unit functions are supported by the base station in this extended radio range.

The repeater and base station have wireless connections with each other, just as the repeater and handset have wireless connections. Signals are exchanged without the user hearing or noticing the difference.



System with multiple repeaters Up to 6 repeaters can be registered at a base station. The number of mobile units to be operated only depends on the type of the base station installed.

All repeaters must be installed within the base stations coverage area, as shown in the drawings. It is not possible to install repeaters in series.

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 area of the base station), you can go from one area (cell) to the other while speaking on the mobile unit.

The mobile unit will automatically switch from cell to cell without this being noticed during the telephone call.

Before the repeater is installed, it must be registered to the base station.

The repeater can be registered to a base station in two ways, automatic or manual registration.



- Auto registration
- 1. Ensure that the repeater is switched off (disconnect the power plug).
- Set the base station in registration mode. On most base stations, the procedure is started by holding down the "Registration" or "Page" key for several seconds. Consult your base station user guide for more information. For the JACOB JENSEN™ Telephone 80, press the PAGE key for a minimum of 5 seconds.
- 3. Switch on the repeater (connect the power plug).
- 4. The LED on the repeater flashes. After a short while the LED stays on permanently indicating that registration is complete and the unit is ready for operation.

Note! If the registration is not immediately successful, the LED will flash continuously. In this case, repeat the procedure.

Note! Before reinstalling the repeater (e.g. at another base station), please reset the repeater beforehand as described below:

- Switch off the unit (disconnect the power plug).
- Switch on for 1 to 5 seconds and switch off again.
- Switch on for 25 to 35 seconds and switch it off again.

Now the repeater is ready for a new auto registration.

Manual registration

The repeater registration procedure varies depending on the base station installed. The base station, a mobile unit (handset) and the repeater must be accessible before registration can be performed. If you are connecting more than one repeater, registration must be performed separately for each repeater.

Preparations

The base station and a mobile unit should be ready for operation, the repeater must *not yet* be connected to the main supply.

The following procedure is also shown as a quick guide on the back of this user manual.

- Set the repeater in registration mode. Insert the repeaters power plug for 1-5 seconds in the socket and then remove it. Insert it once more and leave it there. The LED on the repeater flashes slowly after the start. You now have five minutes to carry out the registration. If the procedure is not carried out within this period you must start over again.
- Set the base station in registration mode. On most base stations, the procedure is started by holding down the "Registration" or "Page" key for several seconds. Consult your base station user guide for more information.
- 3. The LED on the front of the repeater flashes. If the LED flashes very quickly without interruptions go to step 5. If the LED flashes very quickly with brief interruptions go to step 4.
- 4. Registration of the handset: If the base code has been changed, it must be set to "0000". You must repeat the registration procedure even if the mobile unit used was already registered at the base station, (consult your base station user guide for more information). Now the LED flashes very quickly without interruptions.
- 5. Assign a repeater number:
 - You must now assign a repeater number to the repeater (selection: 2-7, for up to 6 repeaters).

Please note that each number can only be assigned once, when using more than one repeater. These numbers are independent of the mobile unit extension numbers.

Hook off by pressing the *O*-key (the LED stops flashing). Press a number between 2 and 7. When the repeater has accepted the chosen number, the LED will flash a corresponding number of times. Accept the registration by pressing the *-key and then the *O*-key (hook on). The repeater is now automatically restarted. The LED goes off for 2 seconds, flashes for a brief moment and the LED remains continuously illuminated.

The registration of the repeater is completed. You can now disconnect the power and move the repeater to the selected location (disconnecting the power will not delete the registration.)

Placement

To get the best operation conditions for the repeater, it is important to place it correctly.

- Here are a few tips for placing of repeaters:Choose a raised position with a good base station reception.
- When positioning you should avoid obstacles that can interfere with a radio transmission, such as thick walls, radiators etc.
- You should avoid interference from other electrical appliances, such as micro-wave ovens, hi-fi equipment, computers etc. close to an electric socket.
- A distance of minimum 10 meters should be observed when installing two repeaters in an overlapping reception range.

To find the best possible location for the repeater, you have to try different locations. Establish a call and walk around with the handset to determine the base stations coverage area. You can install the repeater at a location, in the edge of the coverage area, where you still have a good connection between the handset and the base station. A new coverage area will now be available around the repeater.

Note: The LED must remain on constantly after the device has been switched on. If the LED flashes, the repeater is too far away from the base station or reception is being hindered by thick walls or metal objects (e.g. radiators)

Verification tone

The verification tone enables you to establish whether or not the mobile unit is working in the extended area of the repeater. This tone is audible on the activated mobile unit as long as the unit is connected to the repeater.

Carry out the procedure described below on your repeater in order to switch the verification tone on and off:

- Switch off the repeater (disconnect the power plug)
- Switch on for 1-5 seconds and switch it off again.
- Switch on again. The LED on the repeater is flashing slowly, switch off again.
- Switch it on again. The verification tone is then activated or deactivated.
- Maintenance

Simply wipe the repeater with a damp cloth or an antistatic wipe. Never use solvents or a dry cloth (static discharge).

