

Adding M5 repeaters in a multicell environment

 The Snom M5 Repeater can be used to extend the DECT coverage area between one base and handsets. **A repeater cannot extend the coverage area between one base and another base.**

 Here can you find a step by step guide, [how to install a M5 Repeater](#).

Adding a repeater to an M700 multi-cell installation is not recommended and should be avoided as this will halve the maximum number of bases with each repeater per base. However, if you decide to add one or more repeaters, please make sure you read the tips and tricks below to ensure proper functionality.

1. Make sure your installation complies with the limits.

In a multicell, you can have:

- a. **50** base stations with **3 repeater per base station**
- b. or **127** base station with maximum **1 repeater per base station**
- c. or **254** base stations and **no repeater**

After deciding which of these options to use, please configure this in the web interface under Multicell:

Base station settings

Number of SIP accounts before distributed load:

SIP Server support for multiple registrations per account: (used for roaming signalling)

System combination (Number of base stations/Repeaters per base station):

2. Use **latest firmware version** on the bases and on the repeater - look for latest version here: [DECT M-Series Firmware](#)
3. Automatic vs manual mode: when using repeaters in a multicell we recommend to use **manual** registration, because automatic registration means that you cannot control to which base the repeater is registered to, so you might have unexpected connections. You can also try automatic, but if that fails please switch to manual.
4. When using manual registration, you must enter the RPN of the base to which the repeater should connect to. To find out the RPN of a base, you can look in the bases table in the Multicell section, find the IP address of your base and for that row of the table get the value under the RPN column (**not the "DECT sync source" column**). For example in the below image, the RPN for IP address 10.110.30.112 is RPN08:

Base Station Group

DECT sync source recovery: [Restore saved tree](#) / [Save current tree](#)

ID	RPN	Version	MAC Address	IP Address	IP Status	DECT sync source	DECT property	Base Station Name
0	00	450.7	XXXXXXXXXX	10.110.30.102	This Unit	Level 3:RPN14 (-50dE)	Locked	M700 Küche 6.OG
1	04	450.7	XXXXXXXXXX	10.110.30.105	Connected	Select as primary	Primary	M700 Drucker 6.OG (abgeschirmt)
2	08	450.7	XXXXXXXXXX	10.110.30.112	Connected	Level 1:RPN10 (-64dE)	Locked	M700 IT-Büro 7.OG
3	0C	450.7	XXXXXXXXXX	10.110.30.108	Connected	Level 1:RPN10 (-64dE)	Locked	M700 Serverraum 7.OG

5. Make sure that all bases use the same **time server** and that the **time server works correctly**
6. It is also important that the DECT-dBm-level between repeater and base is **not less than -75dBm**
7. Whenever you need to re-configure a repeater or having problems re-connecting, you should **reset** it and try again.

Here is the reset procedure:

- a. Plug out
- b. Plug in for 1 to 5 seconds, then plug out
- c. Plug in for 25 tot 35 seconds, then Plug out

8. **Access code must be 0000** in order for a repeater to be able to connect. See also [Why I'm not able to add a repeater to M300/M700 ?](#)

9. Make sure you register the repeaters **one by one**



Further Information

- [VoIP Essentials](#)
- [Visit the Snom Forum](#)
- [Open a support ticket](#)
- [Find a local partner](#)

Related articles

- [Adding M5 repeaters in a multicell environment](#)
- [Can I daisy-chain M5 DECT repeaters](#)
- [DECT - 1. Multicell Deployment Guide](#)
- [DECT - 2. Physical installation](#)
- [DECT - 3.0 Multicell setup](#)
- [DECT - 3.1 Add Extensions](#)
- [DECT - 4. Site Survey](#)
- [DECT - 5. Measuring with DECT Discovery Mode](#)
- [DECT - 6. Best Practises](#)
- [How to register an M5 repeater to a base station](#)
- [How to reset an M5 DECT repeater](#)
- [How to update M-Series - DECT handsets](#)
- [How to update M300,M700,M900 DECT Base Station](#)
- [M5](#)
- [M700](#)
- [M900](#)
- [M900 - Outdoor](#)
- [Setting up a M700,M900 Multicell with 3CX](#)
- [Switching to Peer-to-Peer Multi-cell Configuration](#)
- [What does the error -Multi cell system version conflict , Provider conflict , Primary conflict IP- mean?](#)