

# FAQ - Satellite Control Protocol (SCP)

Valid for: ~~N640~~ N670 N870 N870E Embedded Integrator Virtual Integrator

## Satellite Control Protocol (SCP)

The SCP is used for communication between the DECT Manager and the base station. Numerous mechanisms of the DHCP protocol are reused in this. In this case, the N870 DECT manager acts as an SCP server and the base stations as SCP clients.

Due to the fact that a "**common broadcast domain**" is needed, SCP **cannot be used between different subnets or sites**, which are interconnected by means of a VPN. This is due to the protocol being used and the layers:

e.g. VPN (OSI) is layer 3, **the broadcast domain, however, is layer 2**. Lower layers are not just able to use higher layers. In this instance, each subnet requires its own separate, independent DECT manager.



### Important

You must install the DECT base stations in the same subnet due to it must be in the same broadcast domain.

19 Mar 2020 [See here](#) about a new development how to install a DECT base in a different subnet.

## Overview about the DECT discovery protocol/procedure.

DECT base is connected to Power.

DECT base starts a network interface without IP-network after start-up

Broadcast message via layer 2 is, send by DECT Base station:

Source	Destination	Protocol	Info
0.0.0.0	255.255.255.255	UDP	Source port: 4712 Destination port: 4711

The moment you accepted the DECT Base station in the web-interface of the DECT Manager, the DECT Manager will respond with:

Source (IP DECT Manager)	Destination	Protocol	Info
192.168.178.17	255.255.255.255	UDP	Source port: 4711 Destination port: 4712

DECT base will start DHCP procedure.

Source	Destination	Protocol	Info
0.0.0.0	255.255.255.255	DHCP	DHCP Discover - Transaction ID 0x43ab9d52

## Overview

- Layer 1 is your network cable
- Layer 2 is based on MAC address and can not travel to other networks without level 3
- Layer 3 is the IP address and is used to communicate between devices/networks

SCP is using Layer 2 and can not communicate with devices in other networks.

