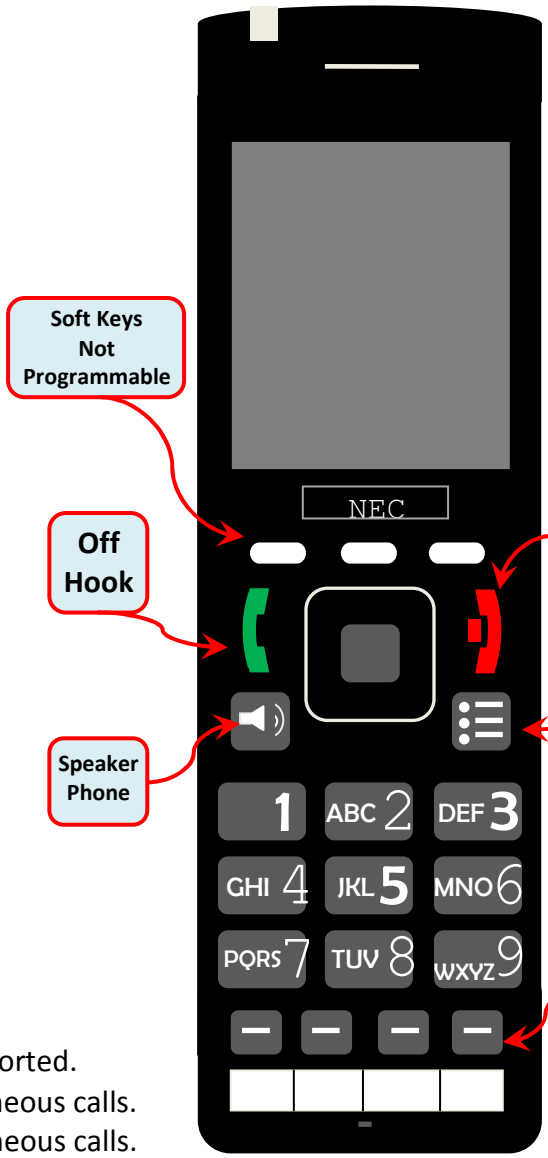
NEC ML 440

The NEC ML440 consists of the AP20 access point and the ML440 handset shown below.
The AP20 is powered by POE (802.3af) ONLY.

Status Lamp See chart on page X for description



Soft Keys Not Programmable

On Hook

Off Hook

Menu Key

Speaker Phone

Multi-function keys 1~4 assigned in Prog15-07

Some Quick ML440 Facts

- Maximum number of handsets is 200.
- Maximum number of AP's is 40.
- Seamless Roaming between AP's is supported.
- Single AP site supports up to 10 simultaneous calls. A multi AP site supports up to 8 simultaneous calls.
- Voice Announce is NOT supported (there is no alert Tone).
- ML440 uses NEC i-SIP so each handset requires one IP Phone license (license 5101).
- ML440 only supports G711.
- ML440 does not work with UCB or Desktop Suite/Attendant.
- Maximum handsets that can register to one AP20 is 30.
- AP20 can be defaulted by depressing the small button on the rear side until the Status light turns red.

Programming

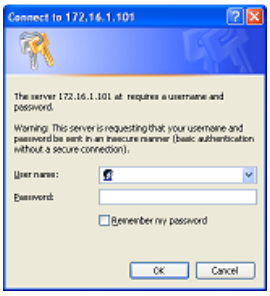
1. From default an IP address can only be assigned to the AP20 via DHCP. This can be done with the built in DHCP server on the SV8100 (10-13-01), via the customers DHCP server, or by using a 3rd party application such at Tftpd32. Once the AP20 has an IP address the status light will be a steady green.

2. Take a ML440 handset and press the key followed by * 4 7 * you should then see something like the following…..

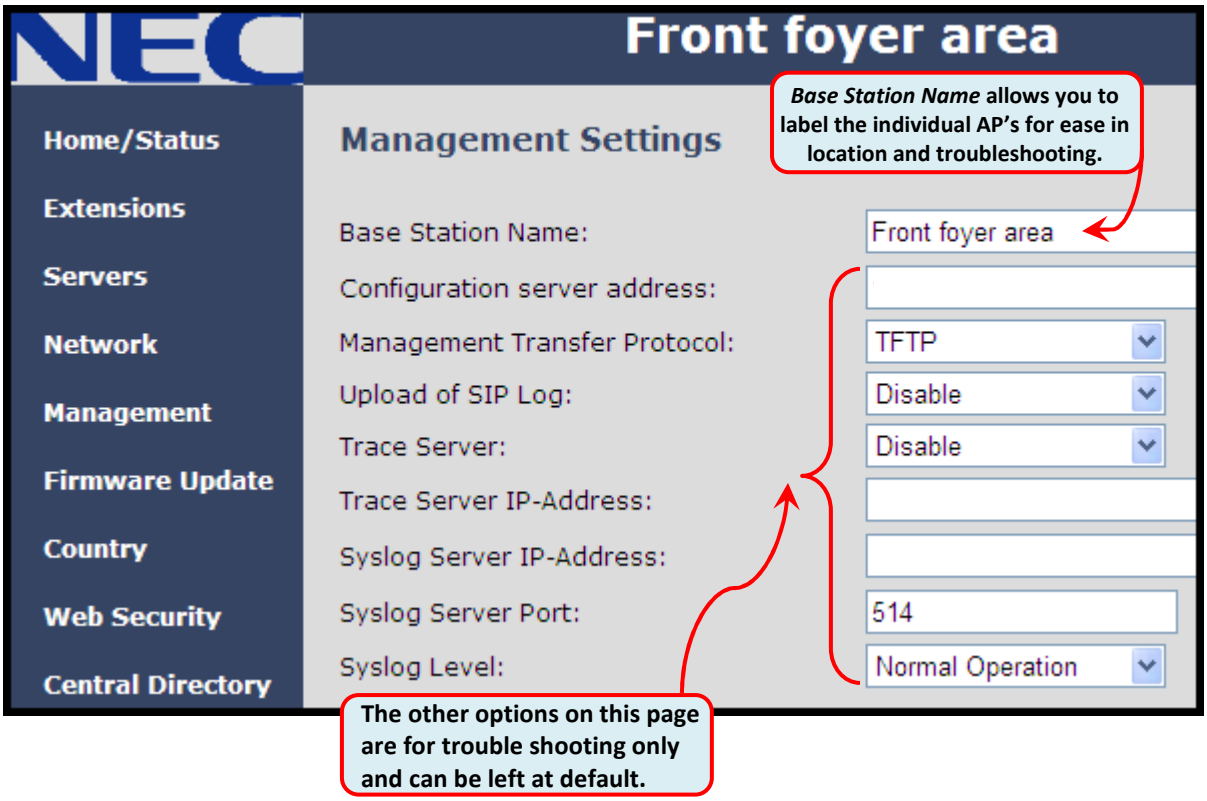
   IP Search
   MAC: 00:08:7B:07:E1:13
   IP: 172.16.1.101

   Take note of the IP address and access this from a browser on the same network.

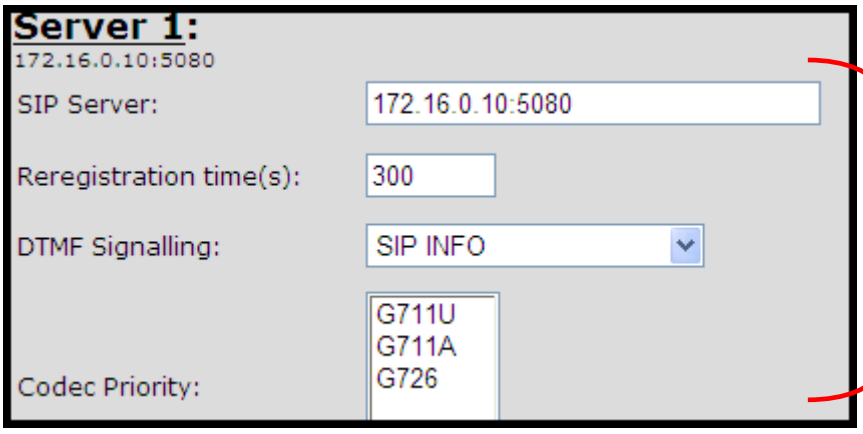
3. Once connected you will be prompted for a login and password. The default is "**admin**" and "**admin**". The user name and password can be changed from the "**Web Security**" option within the AP20.



4. You will be taken to the Home/Status screen. Select "**Management**" from the side menu.

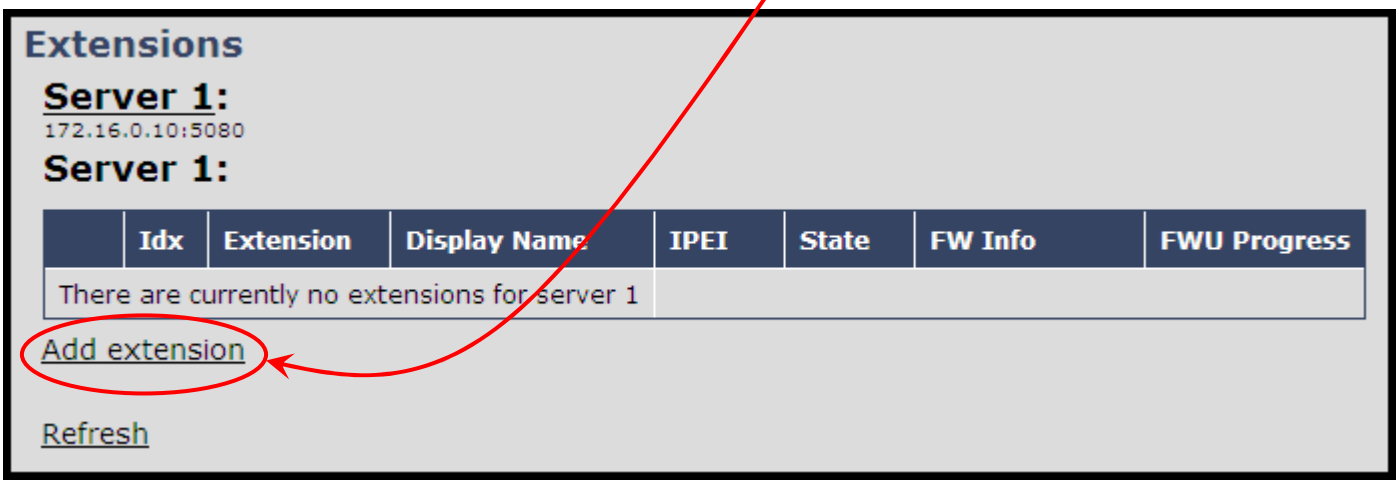


5. From the side menu select the option "**Servers**" to add the SV8100 IP Address.



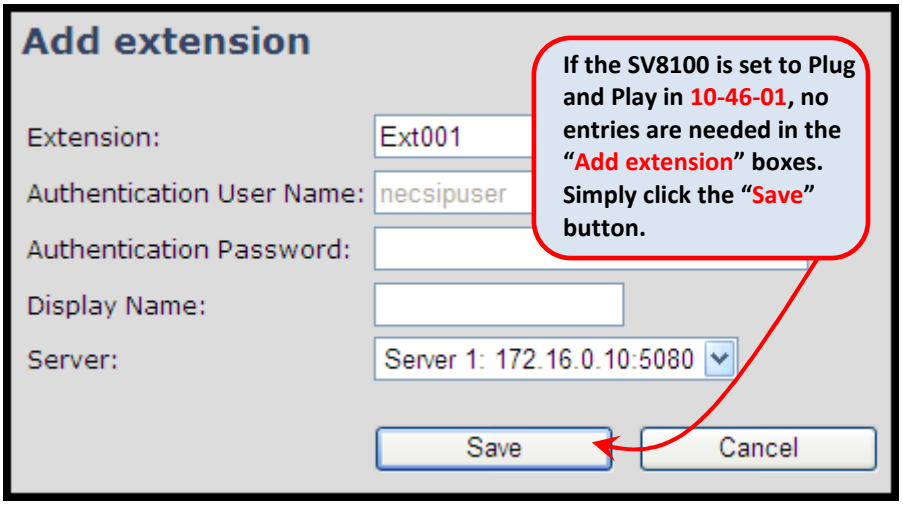
Enter the IP address from 10-12-09 along with :5080. The Registration time(s) should be left at default. DTMF Signaling should be set to *SIP INFO* to follow i -SIP signaling. The Codec Priority must be left at *G711U* as this is all that is supported at this time.

6. Select "**Extension**" from the side Menu then the "**Add Extension**" link.



Adding a Station (Plug And Play)

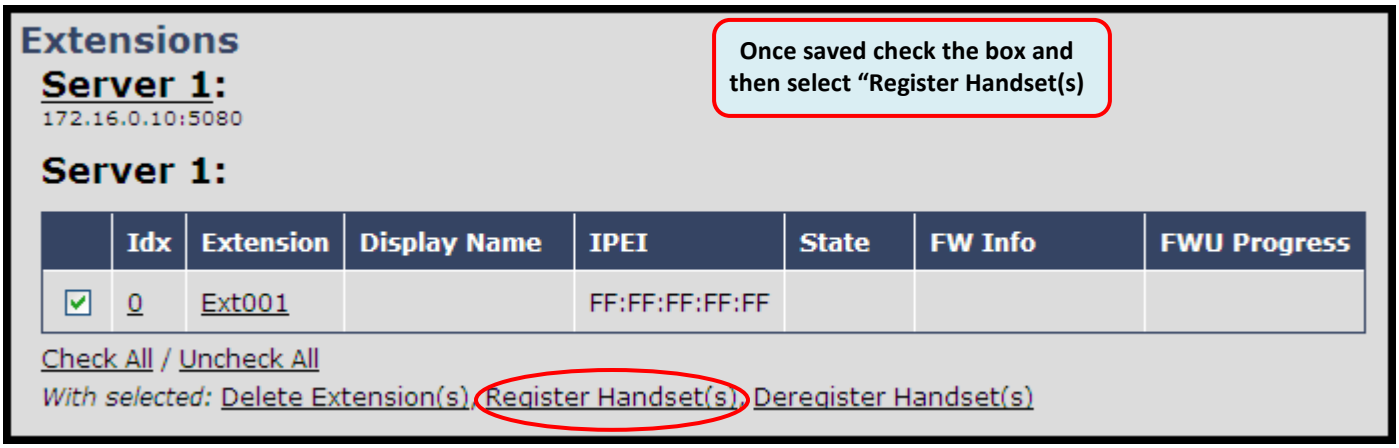
7.



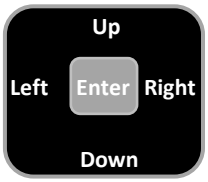
If the SV8100 is set to Plug and Play in 10-46-01, no entries are needed in the "Add extension" boxes. Simply click the "Save" button.

Make sure the ext numbers are assigned in the SV8100 (11-02). The system will automatically allocate the ext numbers to the handsets, starting with the first un-equipped port above the port number assigned in 10-46-10 (default =1).
***Note:* You must have an ME50 installed to use ports 64 and above. Each handset *ALSO* uses a port license as well as an IP station license**

8.



After selecting "Register Handsets(s)" take the first handset and press the "Menu" button.

Press "**Down**" 

to the icon and select "**Enter**".

9. The icon will be highlighted. Select "Enter". You will then be prompted for the Access code

Enter the default "**Access code**" of " **0 0 0 0**" followed by the left Soft Key directly below "**Ok**".

10. After a few seconds the handset display will change to the station name (**15-01-01**) directly above the ext number (**11-02-01**).

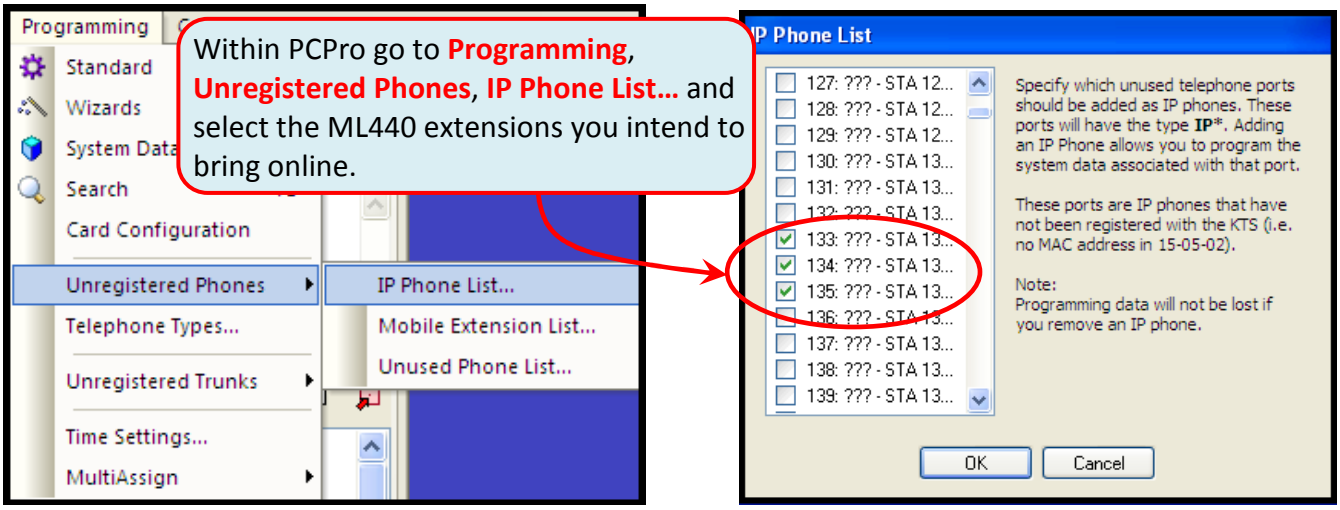
11. Using **20-06** assign the ML440 handset extensions to their own unique Class of Service for all Night Modes utilized. E.g. COS 2 for all modes.

ML440 does NOT support intercom Voice Call so this feature must be disabled.

a. First at all ML440 stations dial the access code to force intercom ringing (default **723** prog **11-11-16**)
b. For the new Class Of Service the ML440 extensions have been assigned, enable **20-08-11** to stop callers from changing the ringing ML440 to Voice Call.
c. For the new Class Of Service the ML440 extensions have been assigned, disable **20-09-05** and this will prevent the ML440 user from dialing the Voice Call access code (default **721**, prog **11-11-15**)

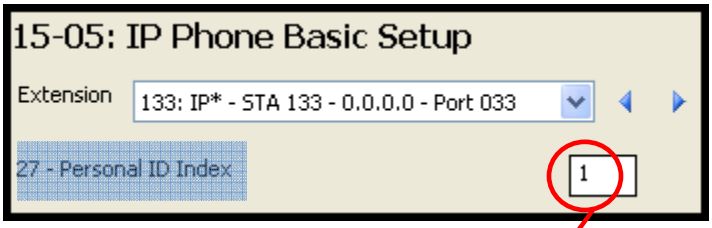
Adding a Station (Manual/Automatic)

12. Some systems may already be configured for Manual or Automatic Login. If this is the case the ML440 sets can be assigned with the following procedure.
    Within PCPro go to ***Programming***, ***Unregistered Phones***, ***IP Phone List…*** and select the ML440 extensions you intend to bring online.



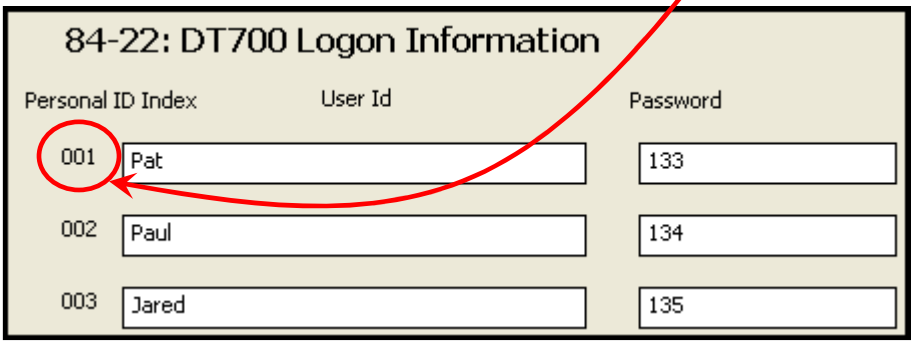
13.

Go to 15-05-27 and assign a unique Personal ID Index to each of the extension.

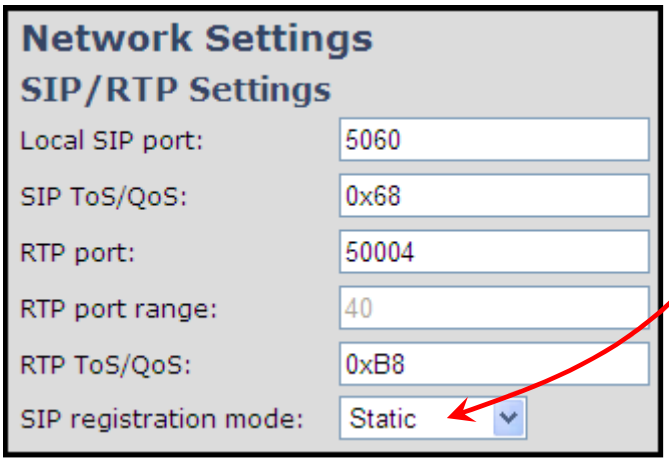


14.

In 84-22 assign a User Id and Password for each of the personal ID Index numbers assigned in step 13.



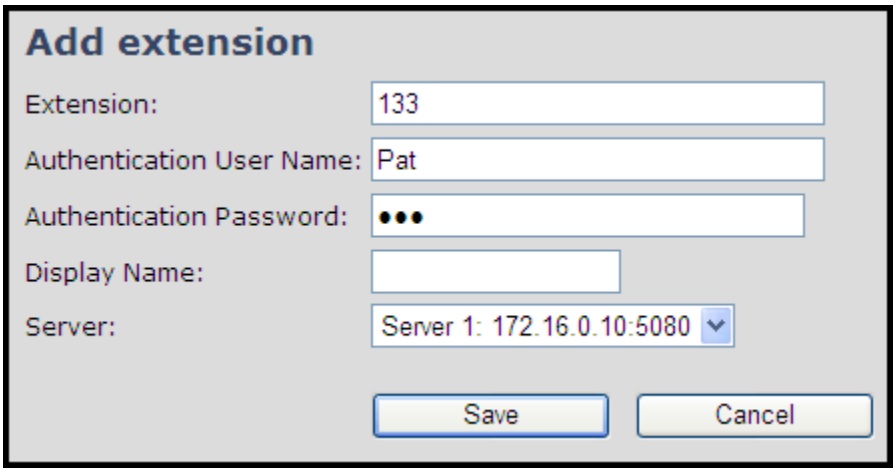
15.



Browse into the AP20 and perform steps **1~5** (pages 2 and 3 of this doc). Then select **Network** from the side menu to access the **Network Settings**.
Go to the **SIP/RTP Settings** and change **SIP registration mode:** to **Static**
Go back to the **Home/Status** page and select the **Reboot** button at the bottom left side of the screen. Allow the AP20 to reboot and come back online.

16.

After logging back into the AP20 select the **Extensions** option from the side menu and the click on **Add extension**. Enter the extension number along with the **User Name** and **Password** previously assigned in **84-22** in step 14



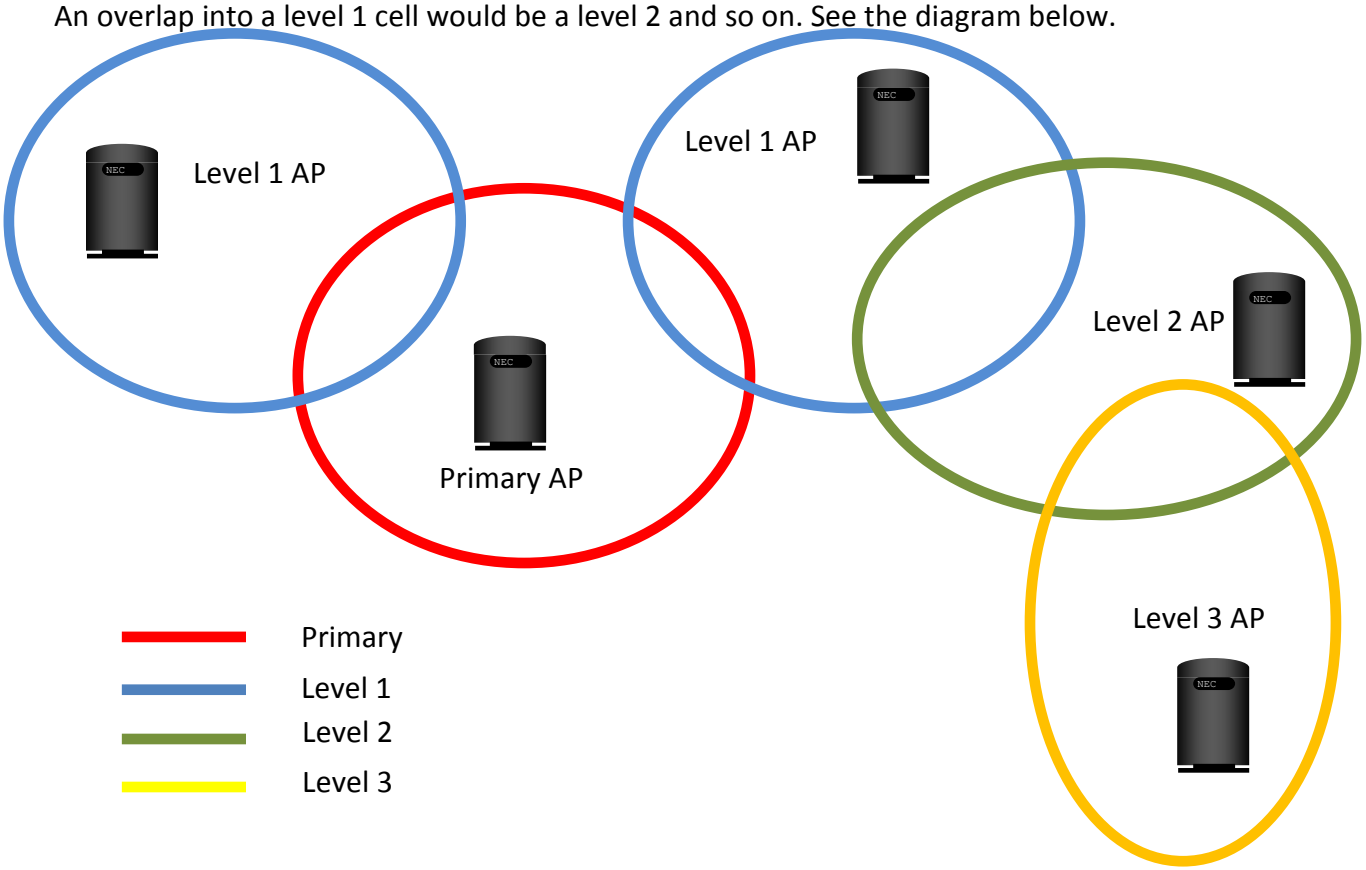
17. Finally follow steps 8 through 11 on page 4 of this doc to complete bringing the handset on line.

Additional Handset Programming

With the phone online programming of the handset is like any other deskset. The device can have key programming for up to 16 keys but only the first 4 can be accessed.

As the station is in another COS do not forget to enable the other stable options such as receiving Caller ID (***20-09-02***) and Sending caller ID (***20-08-13***).

Multi-Cell Installation

Most installations will require additional AP20's to provide the wireless coverage of the customer's working area. Each area the AP20 covers is called a "Cell". Each cell must overlap another cell so that the calls in progress can be seamlessly passed between AP20's as the handset moves between covered areas.

In a Multi-Cell layout 1 AP20 acts as the primary timing/synchronization source for the entire WL440 network. Other AP20's overlap the primary AP20 at different levels. A direct overlap with the primary would be level 1. An overlap into a level 1 cell would be a level 2 and so on. See the diagram below.