

# DuraFon SIP Quick Reference Sheet

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EnGenius technical support: email [support@engiustech.com](mailto:support@engiustech.com) or call 888-735-7888 x 815

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## TIPS

**Default IP address of the base station:** 192.168.1.156 with both user name and password = admin

**Customize the display on the handset:** It is recommended that you customize the name of each handset to match the user's name and/or extension the handset is using. Press Menu, 5 (Phone Settings), then 7 (Custom Name), then enter the desired information.

**How to transfer a call to a different PBX extension:** For most PBX systems, while on the call, press the green TALK (flash) key, then dial the extension, then press "END" to complete the transfer.

**Verify coverage (How to put a handset in RSSI test mode):** Press Menu, # # # # \*, then select "BER test". Use the arrow up/down button to scroll to "RSSI testing". A -70dBm or stronger signal is excellent. -80dBm is good. -90dBm or weaker is not ideal. Location of the base or antenna of the base should be where signal is at least -90dBm or better for all locations that need coverage. See the "RSSI instruction sheet" for more information.

**How to enable/disable headset broadcast control:** If plugging in a headset causes the phone to go into broadcast mode, you will need to turn this feature OFF (because this feature is only available with call control type headsets). To disable, press Menu, # # # # \* then using the arrow up/down button select "Headset Button". Turn it OFF and SAVE. If you have a call control type headset, enable this feature.

**Installing multiple base stations at the same location:** To avoid self-interference, separation of base antennas should be 30 feet or greater for best performance.

**How to check firmware version:** Press Menu # # # # \*, then using the arrow up/down key select "HS SW/HW Version" and/or "BS SW/HW version" to gather handset and base firmware version information.

**How to find out the IP address of the base station:** Press Menu # # # # \*, then using the arrow up/down key select "BS SW/HW version". Then scroll to see the IP address information.

**Default "PIN" for handset:** 0000. If you forgot the pin, see Ref. #4 (resetting a handset).

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## BASIC TROUBLESHOOTING

If you encounter any issues with the system, first POWER CYCLE with the base station, then if needed the handset(s). If the problem continues, try resetting the base station. Usually resetting handsets is not needed but depending on the issue, you may want to do that as well.

**NOTE:** Resetting a handset will cause you to lose registration and all stored information and resetting the base station will cause loss of all settings and stored configuration.

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## DuraFon SIP Quick Reference Sheet Page 2

**Ref #1 – Registering a handset:** First power up the base station for at least 5 seconds. Next, locate the registration button near the DC-In power jack (labeled “REG”). Press and hold the REG button until you hear a song playing. Now grab the handset you want to register and press Menu 7, 1. The display will say “Registration complete” and the handset should get a new ID. Handset ID’s start at 10 and will go up to 19 (allowing up to 10 unique ID’s and handsets to be registered to the system). Note: You can also initiate base station registration remotely via the GUI by going to “TOOLS”, then “Reset/Reboot/Reg” and click the “REGISTER” button.

**Ref #2 – Deregistering a handset:** Same procedure as Ref #1, except press Menu 7, 2 instead of menu 7, 1. Keep in mind, deregistering a handset is not required to register a handset so if you have a handset that already has a registration ID but is not communicating with the base, go ahead and register it again (it will override any previous registration information with a new registration ID). If you need to bring back a specific handset ID number (a typical issue when getting back a handset after repair – see Ref #3).

**Ref #3 – Recovering a handset ID (typical issue after having a phone repaired):** All handsets returned for repair must be registered to the EnGenius repair dept. test base station. This causes your handset lose registration to your base station. Unless you deregistered the handset from your base station prior to sending it to EnGenius, your base station thinks that handset ID still exists. For example, if you have four handsets registered as ID 10, 11, 12, and 13 and you send in handset 12 for repair, when you reregister it, you will get ID 14 because it thinks 12 is in use. To get your handset registration back to ID 12 you must erase handset 12.

From any handset press Menu, 6, then enter the PIN (default is 0000) then scroll up/down and select “Clear HS”. Now enter the two-digit handset ID you want to clear. In our example it would be handset ID12. Now ID12 is clear and available as the next registration ID. The base unit gives IDs to handsets in numerical order of free IDs. You can now go to Ref #1 (above) and go through the normal handset registration process.

**Ref #4 – Resetting a handset:** Press Menu, # # # # \*, then scroll down to “System Reset”. Press “SELECT” and then press “Clear All” or “Keep Registration”. “Keep Registration” clears all settings except registration to the Base Station and “Clear All” clears everything including previous registration information.

**Ref #5 – Resetting the base station:** First power up the base station for at least 5 seconds. Locate the reset button next to the DC-In power jack. It’s the very small button labeled “Reset”. Now use a pen or paperclip to press and hold this button down until you hear it beep. Next power cycle the base station by simply removing power and then powering it back on. The base station is now reset (registration will now start at ID10 again). Default IP address is 192.168.1.156 with user name and password “admin”. Note: You can also reset the base station remotely via the GUI by going to “TOOLS”, then “Reset/Reboot/Reg” and click “Reboot”.

**Ref #6 – Assigning a handset to a group:** Press Menu, 4 (Call Settings), then 2 (Group Setting), then choose “option” to “subscribe” to a group or groups. **NOTE:** The DuraFon-SIP system supports up to 7 definable groups and also the “all group” (which all handsets are part of). Also note, in regards to inbound/outbound calling, grouping only allow handsets to receive incoming calls from more than one account (but for outbound calls, the handset still can only use the SIP account the handset is assigned to).

**Ref #7 – Turning up or down the handset microphone sensitivity:** Press Menu, 5 (Phone Settings), then press 1 (Mic. Gain) and change accordingly.

**Ref #8 – Increasing the front speaker gain (volume out):** Press Menu, # # # # \*, then scroll up/down to “Volume adjust”. Then select “Receiver out”.

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# **DuraFon SIP Quick Reference Sheet Page 3**

## **DuraFon® SIP FAQ**

**Q1: What is the default IP address, user name, and password?**

A1: IP Address: 192.168.1.156, User Name: admin, Password: admin

**Q2: What bundles/packages are available?**

A2: System (Handset and Base), Handset only kits, and Base only.

**Q3: Can a DuraFon Pro Handset work with a DuraFon SIP Base Station?**

A3: No, it cannot and a DuraFon SIP Handset will not work on a DuraFon PRO system either.

**Q4: Is the DuraFon SIP a multi-base system?**

A4: No. Even though more than one base can be used, keep in mind, 2-Way Intercom and "Push-to-Talk" features would not work across Handsets registered to different bases. Bases will also need to be > 30 feet apart to avoid self-interference.

**Q5: Is a repeater base available as an option for DuraFon SIP?**

A5: No.

**Q6: Does the DuraFon SIP support TAP and text messaging?**

A6: No.

**Q7: Can a Handset receive a phone call during a 2-Way Intercom call conversation?**

A7: No. It is important to note; no missed call notification will occur either. For this reason, SIP-to-SIP calling from one handset to the other is the preferred method.

**Q8: Are there DuraWalkie Handsets available to go along with the DuraFon SIP System?**

A8: No.

**Q9: Is the DuraFon SIP field firmware upgradable?**

A9: Base Stations can be, but Handsets cannot.

**Q10: Is there a log file of call activity and history?**

A10: No. 2

**Q11: What is the maximum number of Handsets that can be registered to the system?**

A11: 10.

**Q12: From the Base Station GUI, can you monitor or see if calls are in progress?**

A12: No.

**Q13: What frequency does the DuraFon SIP use?**

A13: 900MHz ISM band (FHSS 902-928MHz).

**Q14: Will the DuraFon SIP work with Wi-Fi and is it a Wi-Fi phone?**

A14: No. It uses its own 900MHz frequency and only works with its own matching Base Station.

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# DuraFon SIP Quick Reference Sheet Page 4

## DuraFon SIP FAQ continued

### **Q15: What is the main advantage in using the DuraFon SIP verses a standard DuraFon system?**

A15: It does not need analog ports.

1. It can plug in anywhere there is network connectivity. There is no need to run RJ11's from the IDF/MDF.
2. It has intercom/broadcast at the Base Station (like DuraFon 1x) (PRO does not).
3. Both DuraFon PRO and DuraFon SIP support a maximum of 4-talk paths, but unlike PRO, 10 unique DN (ext. numbers) can be associated to the Base (with PRO, only 4 via 4 separate RJ11 connections).
4. The DuraFon SIP System is a network device with a unique IP address and can be remotely managed.
5. The Base Station is field firmware upgradable.
6. Its GUI supports easy access to advanced audio adjustment parameters and configuration files can be saved.

### **Q16: Will the DuraFon SIP interfere with Wi-Fi networks?**

A16: No. Wi-Fi uses 2.4GHz and 5GHz, while the DuraFon SIP uses 900MHz. However, it is always recommended to keep the DuraFon system at least 3-feet away from any other electronics.

### **Q17: How many simultaneous calls can a Handset manage?**

A17: Two.

1. To answer a second incoming SIP call from a different SIP extension (grouping): Press the "Switch" soft key.
2. To answer a second incoming call coming from the PSTN line: Press the "Switch" soft key.
3. To answer a second incoming call from a SIP extension while on a PSTN line call: Press the "Switch" soft key.
4. To answer a second incoming call from the same SIP extension, where call is coming from the PBX call waiting feature: Press the "TALK/Flash" key to answer and press the "Switch" soft key to switch between the two calls (v1.05).

### **Q18: Can one Handset have more than one SIP account associated to it?**

A18: No. Each Handset ID has its own SIP account, but you can utilize grouping to access more than one extension.

### **Q19: What VoIP codecs are supported?**

A19: G.729 (v1.05), G.711a and G.711u3

### **Q20: Does the DuraFon SIP Handset support line appearances?**

A20: No.

### **Q21: What's the maximum SIP account password character length?**

A21: 32 characters (F/W v1.05)

### **Q22: If two DuraFon SIP Handsets (associated with different DuraFon SIP Base Stations) were used behind the same PBX, can one Handset call another?**

A22: Yes. You can call via internal PBX extension-to-extension calling. You cannot however, 2-Way Intercom or Broadcast to the other Handset registered to a different DuraFon SIP Base.

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# DuraFon SIP Quick Reference Sheet Page 5

## DuraFon SIP FAQ continued

### Q23: What is the system's range?

A23: 12-floors (in-building), 250,000 sq. ft. (warehouse), 3,000 acres (open area).

### Q24: Can the DuraFon SIP Handset conference calls?

A24: Device	Caller 2	Caller 3	Capable
DuraFon SIP	DuraFon SIP	Outside line	YES
DuraFon SIP	PBX Desk-set	Outside line	YES
DuraFon SIP	Outside line	Outside line	YES
DuraFon SIP	DuraFon SIP	DuraFon SIP	YES
DuraFon SIP	DuraFon SIP	DuraFon-PSTN	YES

### Q25: What is the typical talk and standby time?

A25: Typical talk time is 4-5 hours with standby up to 50 hours.

### Q26: How do you change the settings so it automatically selects the SIP line when dialing out?

A26: Note: Use the "up/down arrow" soft key to scroll: Press "Menu," "4. Call Settings," "3. Call Manager," "Enter" Password: "0000" then press soft key "OK," "2". Outgoing," then you can set it using 3 options: 1. Auto, 2. Manual, 3. Off.

1. Auto = will automatically choose the open line, either SIP or PSTN.
2. Manual = user will choose the outbound port.
3. Off = disable all outbound calls.

### Q27: How many groups does the DuraFon SIP support?

A27: 7. Groups allow a Handset to receive/make inbound calls from different SIP extensions (share). The maximum concurrent number of calls a handset can do is two (2).

### Q28: Is the DuraFon SIP Base Station PoE (Power-over-Ethernet) capable?

A28: No.

### Q29: What is the Handset password?

A29: The default Handset password is 0000.

### Q30: How can I find out the IP address of the DuraFon SIP Base Station?

A30: From any registered handset: Press "Menu ####", scroll up/down to BS HW/SW Version and press: "select," now scroll up/ down until you get to the IP address screen.

### Q31: How do I transfer a call from an EnGenius handset to a different extension on my PBX phone system?

A 31: Most PBX transfers will require you to press the "Flash" key while on an active phone call. The green "TALK" key serves as the "Flash" key while on active phone calls.

### Q32: How far can 2-way intercom and Broadcast go (handset to handset communication)?

A32: Because these modes do not use the base station, range in 2-way intercom or broadcast mode is typically 25% to 50% less than for telephone calls. The difference can be even greater if an external antenna is used on the base station. Overall range will vary depending on environment.

### Q33: Can I register handsets to multiple DuraFon-SIP base stations?

A33: A handset can only be registered to one base station at a time.

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I need 5 cordless handsets for a client. I see what looks like a 1X. This will sit behind a PBX supporting SIP. Am I buying a single Antenna "Base"?

**The DuraFon-SIP supports up to 10 handsets, 10 SIP Client accounts, and can handle 4 calls at the same time. Yes, only one base station and antenna would be needed for 5 handset users.**

Will there be a SIP PRO version?  
**Not at this time.**

Are the conversations secure and HIPPA compliant?  
**Yes – the DuraFon-SIP meets HIPPA compliancy.**

Does the base support or will it support in the near future POE power?  
**The Base does not support PoE and there are no plans in the near future to support POE.**

I have a customer with DuraFon Pro and they now need connections in another building Can the EnGenius SIP talk to the Dura Pro thru radio or just thru PBX lines?  
**Only through PBX lines.**

Does this unit support use of MULTIPLE external antennas with RF splitters? (like we do with cell phone repeaters).  
**Yes, the DuraFon-SIP base station uses the same RF connector and antennas as the existing DuraFon product line.**

I need the specs on the new internal antenna. Building is nearly completed.  
**The indoor external antenna specs can be found here:**  
<http://www.enginustech.com/products/phone-systems/accessories/sn-ul-ak20l-ind.html>

Can dealers (like us) change the firmware ourselves?  
**YES.**

Can I handle multiple calls on one SIP handset?  
**YES, a a maximum of 2 per handset and a maximum 4 per base.**

Are there integration /application notes for tested phone systems? Will EnGenius be taking these through the manufactures interoperability labs?  
**Not at this time but soon – and this will be an ongoing effort. Please contact us if you have concerns or want to know if the system you have has been tested.**

Is it PoE compatible? Or require external PSU?  
**It is not POE compatible and comes with a PSU.**

Can you adjust HS mic-gain settings from the handset (like from the secret menu on 1X/PRO versions).  
**YES via hidden menu (Menu #####, or Menu \*\*\*\*\*)**

What would an Avaya IP Office need to work with the SIP handsets?  
**3<sup>rd</sup> party IP license(s) are required on the Avaya.**

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