EnGenius DuraFon Roam Quick Reference Sheet

Thank you for your purchase of the EnGenius DuraFon Roam.

As a supplement to the user manuals, this quick reference guide, basic set-up documents and numerous videos are available to you on the product webpage for this model, so you don't have to wait for a customer service representative for help with a simple issue.

The EnGenius network of quality resellers and installers are also available to assist you with proper installation, set-up and troubleshooting.

Basic set-up instructions: Your professional reseller or installer will usually do this for you. The best information on basic set-up can be found in the Resources section of the product pages, user's manual and set-up video.

BASIC TROUBLESHOOTING

Sometimes if you encounter any issues with the system, simply turn the equipment off for 10 seconds and then turning it back on (Power Cycle) clears he issue. You should do this for each item.

If the problem continues, try resetting the base station and/or depending on the issue, the handsets as well.

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

- No connection to SIP server - make sure DNS is populated (can use 8.8.8.8 / 8.8.4.4).
- "Dynamic Port Enable" – (Enabled by default) In the base station GUI, enabling this feature may solve issues where the network requires the transport type to change from UDP to TCP. Issues such as oneway audio or dialing outside using longer number of digits doesn't work but short numbers do, can be solved by turning on this feature.
- Download latest base station firmware: https://www.engeniustech.com

TIPS

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

How to transfer a call to a different PBX extension: Please check with your SIP provider or IP-PBX maker, but for many services, 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". Scroll to HS to BS, then press Select, scroll to the base number to be tested (Base # 1 – 8), Use the arrowup/down button to scroll to the screen display showing the RSSI readings. A -70dBm or stronger signal is excellent. -80dBm is good. -85dBm or weaker is not ideal. The location of the base or antenna of the base should be where the signal is at least -90dBm or better. 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: Bases (or their terminal antenna) should be placed with a minimum of 15 feet between each other to avoid self-interference.

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: From a registered handset, 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).

Quick Reference Sheet

Ref #1 – Registering a handset: Handset registration for the Roam is done via the Roam GUI. After logging into the Roam, go to the handset icon on the left menu and select "Register" (on top right). Now grab the handset you want to register and press Menu 6, 1. The display will read "Registration complete" and the handset will show a new ID. Handset ID's start at 10 and will go up to 99 (allowing up to 90 unique ID's and handsets to be registered to the system).

Ref #2 – Deregistering a handset: Similar procedure as Ref #1, except on the handset you'll press Menu 6, 2. Via the GUI you select the handset ID you want to deregister.

Ref #3 – Recovering a handset ID (typical after having a phone repaired): Simply deregister the handset ID via the GUI and with the returned or replacement handset register the handset ID with the above instructions.

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: Reset the base station remotely via the GUI by going to "Base Stations", on the left side menu, then find the Actions tab "Reset/Reboot/Reg" and click "Reboot". The Actions tab can be accessed by clicking the three dots on the top right of the menu headers. Default IP address is 192.168.1.156 with user name and password "admin".

Ref #6 – Handset groups: Handset can be assigned to a group via the Roam GUI within the handset icon on the left side menu. No group is assigned by default. A handset can be assigned to up to 7 groups, simply by clicking edit for the handset, selecting the appropriate group(s) and clicking apply.

Ref #7 – Handset base access: Handsets, by default, have access to all available base units. If you want to limit which base(s) a handset has access to it is done via the Roam GUI. Simple go to the handset icon on left side menu, select edit for the handset you want to remove access to select base units. Deselect the base numbers you do not want the handset to have access and click apply.

Ref #8 – Custom name handset(s): Handsets can be custom named via the Roam GUI. Go to the left side handset icon and select edit, type the custom name in the name field and click apply. Custom name can be up to 16 characters.

Ref #9 – Custom name base(s): Bases can be custom named via the Roam GUI. Go to the left side base icon and type the custom name in the name field for the base. Custom name can be up to 10 characters.

Ref #10 – Adjusting handset microphone sensitivity: Press Menu, 5 (Phone Settings), then press 1 (Mic. Gain) and change accordingly.

Ref #11 – Increasing the front speaker gain (volume out): Press Menu, # # # # *, then scroll up/down to "Volume adjust". Then select "Receiver out".

DuraFon-ROAM FAQ'S

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 Roam equipment is needed for a system set-up?

A2: A Roam system requires one DuraFon Roam-BSC (Base Station Controller), one (1) to eight (8) DuraFon Roam-BU (long-range base units) and one (1) to ninety (90) DuraFon Roam-HC (handsets).

Q3: Can the FreeStyl SIP or DuraFon SIP models work with the DuraFon ROAM model's equipment?

A3: No, these models are not compatible with the DuraFon ROAM equipment.

Q4: How many users can the DuraFon ROAM support?

A4: The DuraFon ROAM supports up to 90 handsets, with each handset having its own SIP client account. Each base can handle a maximum of 4 concurrent calls (with eight bases, the system can support up to 32 concurrent calls).

Q5: How many bases can the DuraFon Roam system support?

A5: Eight (8). You can have up to eight (8) base units and requires one Base Station Controller (BSC) as part of the DuraFon Roam system. Calls can be handed-off between base units within this system.

Q6: Can calls be handed off between base units?

A6: Yes. This allows coverage to be greatly expanded.

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 two-way radio only handsets available for the DuraFon ROAM System?

A8: Yes. DuraFon Roam-WK, nicknamed "Roam Walkie"

Q9: Is the DuraFon ROAM field firmware upgradable?

A9: Yes, the Base Station Controller (BSC), Base Units (BU) can be updated via the Roam GUI and even the Handsets (HC & WK) can be updated (handsets wirelessly).

Q10: Is there a log file available for call activity and history?

A10: Yes, via the Roam GUI

Q11: What is the maximum number of handsets that can be registered to the DuraFon ROAM system?

A11: 90, can be a mix of full-featured DuraFon Roam-HC handsets and DuraFon Roam-WK handsets.

Q12: Can call activity be monitored on the DuraFon Roam?

A12: Yes, by selecting the Dashboard left side icon within the Roam GUI you can see handset and base unit activity.

Q13: What frequency does the DuraFon ROAM use?

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

Q14: Does the DuraFon Roam use Wi-Fi?

A14: No. The Roam does not use any of your valuable Wi-Fi bandwidth.

Q15: Does the DuraFon Roam use DECT?

A15: No. The Roam does not use the DECT frequency.

Q16: Why does the DuraFon Roam use 900 MHz?

A16: One of the Roam's best attributes is its incredible range, and using a low frequency like 900 MHz helps us maximize range over much higher frequencies used by DECT (1.9 GHz) and Wi-Fi (2.4 & 5 GHz).

Q17: Where can basic set-up instructions be found?

A17: Refer to the DuraFon ROAM product webpage for a number of resources, including: user's manual, videos, guides and other important references.

Q18: Can the Roam be powered via POE?

A18: Yes, the Base Station Controller (BSC) and the Base Units (BU) can be power via POE. 802.3af/at

Q19: Will the DuraFon ROAM interfere with Wi-Fi networks?

A19: No. Wi-Fi uses 2.4GHz and 5GHz, while the DuraFon ROAM uses 900MHz. However, it is always recommended to keep the DuraFon system at least 3-feet away from any other electronics.

Q20: How many simultaneous calls can a handset manage?

A20: 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.

Q21: Can one handset have more than one SIP account associated to it?

A21: No. Each handset ID has its own SIP account, but you can utilize grouping to access more than one extension.

Q22: What VoIP codecs are supported?

A22: G.729 (v1.05), G.711a and G.711u3

Q23: Does the DuraFon ROAM handset support line appearances?

A23: No.

Q24: What's the maximum SIP account password character length?

A24: 32 characters

Q25: How can two Roam handset call each other?

A25: The handsets could call each other by dialing their SIP extension or can intercom one another by dialing the handset ID number.

Q26: What is the system's range to expect (with eight base units)?

A26: Up to 200,000 sq. ft. with about 12-floors of penetration (hotel / office-building), 1,000,000 sq. ft. (retail store), and 3,000 acres (open area, like a farm).

Q27: Can the DuraFon ROAM Handset make conference calls?

A27: Yes, DuraFon ROAM can support two handsets and an outside phone call or a DuraFon ROAM handset and two outside calls.

Q28: What is the typical talk time and standby time?

A28: Typical talk time is 4-5 hours with standby up to 50 hours.

Q29: How can I choose the type of line to use (SIP/Analog Line) for outbound calls?

A29: Use the "up/down arrow" soft key to scroll: Press "Menu," "4. Call Settings," "2. 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. 2. Manual = user will choose the outbound port. 3. Off = disable all outbound calls.

Q30: How do I transfer a call from an EnGenius handset to a different extension on my PBX phone system?

A30: For most PBX's, press the "Flash" key while on an active phone call to initiate a call transfer. The green "TALK" key serves as the "Flash" key while on active phone calls. After pressing Flash, enter the extension you want to transfer the call to, then press END to complete the transfer.

Q31: What is the Handset password?

A31: The default Handset password is 0000.

Q32: How can I find out the IP address of the DuraFon ROAM Base Station?

A32: 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.

Q33: How far can 2-way Intercom and Broadcast go (handset to handset communication)?

A33: With the Roam system, the two-way radio functions can be sent via the base units and the coverage will be similar to that of a phone call. If the two-way radio communication is direct handset-to-handset then the rule-of-thumb is 50% of the phone call coverage.

Q34: Can I register handsets to multiple DuraFon ROAM base units?

A34: Handsets are defaulted to the entire system (all bases), unless, via the Roam GUI, the handset is denied access to select bases.

Q35: What characters are allowed for SIP name, password, etc.?

A34: (1) SIP Number : a-zA-Z0-9$*()_+-= (2) Display Name: a-zA-Z0-9!@#$%^&*()_+-=,. (white space) (3) Password: a-zA-Z0-9!@#$%^*()_+-=, (white space) & (4) Auth Name: !#$%&'()*+,-./0-9:;<=>?@AZ[]^_`az{|}~

Q36: Which EnGenius voice models support SIP?

A36: Currently the DuraFon ROAM, DuraFon SIP and FreeStyl SIP. Please check the EnGenius voice products webpages for new models.

Q37: Is the DuraFon Roam TAA compliant?

A37: Yes.

Q38: Is the DuraFon Roam FCC and IC approved?

A38: Yes.

Q39: Can the DuraFon Roam support an outdoor antenna?

A39: Yes, the Roam will support both the outdoor SN-UL-AK20L antenna and the indoor SN-UL-AK20LIND antenna. It is important to note that the base antenna connection is reverse thread and should be turned clockwise to loosen. Remove and install by hand only.

Q40: Where can I find information about the optional antennas and other accessories?

A40: Accessories can be found on these webpages: (Click on the link)

https://www.engeniustech.com/phone-accessories.html

Q41: Can the Roam firmware be updated?

A41: We recommend updating the firmware for the Roam periodically (once per quarter or once peryear) just to be sure you have the latest and greatest. The update can be done via the Roam GUI for the BSC, Bases and even the Handsets.

Q42: How many concurrent calls are supported?

A42: Maximum concurrent calls on a single base is 4 (4 talk paths per base), with eight Roam bases 32 concurrent calls can be supported.

Q43: What would an Avaya IP Office need to work with the DuraFon ROAM?

A43: A 3rd party IP license(s) are required on an Avaya IP Office with one each per handset. Here is a link on YouTube on setting this up: https://www.youtube.com/watch?v=2TKNrXT7V5I

Q44: Where can I find out how to use many of the function with my 3rd party IP-PBX or Hosted SIP provider?

A44: The best place to go for these type of instructions would be the maker of the IP-PBX or the hosted SIP provider. Let them know you are using a 3rd party device behind their system. Not all functions will be accessible with 3rd party devices.

Q45: Where is the DuraFon Roam manufactured?

A45: The DuraFon Roam equipment is made in Taiwan