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User Manual

DuraFon Roam BSC

Long-Range SIP Cordless System Controller



EnGenius Customer Service http://www.engeniustech.com/

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Regulatory Information

Federal Communications Commission (FCC) EMC Statement

This device complies with Part 15 of FCC rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference.

(2) This device must accept any interference received, including interference that may cause undesired operations.

WARNING!

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference at his own expense.

IC Interference Statement

The following information applies if you use the product within Canada area. Industry Canada ICES Statement CAN ICES 003 (Issue 7)

Equipment Checklist

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DuraFon Roam BSC Illustration

In a DuraFon Roam BSC package, please find the following components:

- a. DuraFon Roam BSC x 1
- b. Screw pack x 1
- c. Quick Guide









System Architecture



System Features(including DuraFon Roam BU and DuraFon Roam HC)

SIP

- Voice codec: G.711a, G.711u, G.729A
- SIP protocol: RFC3261
- DTMF: RFC2833, SIP INFO Hold: RFC3264
- Transfer: RFC3515, RFC3891, RFC3892
- Support Outbound Proxy
- DNS SRV Support

Long-Range

- 12 Floors In-Building Penetration
- 250,000 sq. ft. of Facility Coverage
- 3,000 Acres of Property, Open Land Coverage

Durable

• Tested to withstand 6-Foot Drops, Over 50 Times onto Concrete Floors

Handset Features

- Cordless telephone
- 2-Way Radio
- User Handset Naming
- Keypad Lock
- Speakerphone
- Caller ID
- Call Waiting
- Vibrate Mode
- Line Select
- Call Logs Dialed & Received
- Redial
- Speed Dial
- Call Hold
- Call Transfer
- Wireless PBX Function Sharing
- Wireless Phone Book Sharing
- Silent Ring
- Mute
- Wired Headset
- Blue Tooth
- 900 MHz, DSS, Frequency Hopping
- Selectable Handset Grouping (7 groups)
- User Programmable PBX Functions
- Phone Book Supports 50 Entries
- Intercom (Handset-to-Handset), no group chatter
- PTT Broadcast (One-to-Many)

System

- 900MHz(902~928MHz)
- Multi-Cell Architecture
- Roaming & Handover
- Multi-Base up to 8
- 1 LAN and 1 PSTN Ports per Base Unit
- Multi-Handset up to 90
- Removable Base Antenna
- Flexible Port Dedication: Single, Group or All
- Standard SIP Protocol Connection
- Remote Configuration via EnGenius Cloud
- Any Analog Line Connection: Landline, ATA, Cellular, VoIP or Satellite
- Supports Ring Groups & Hunt Groups

- Type I/II Caller ID (FSK and DTMF)
- Visual Message Waiting Indication (VMWI) for PSTN
- Conference Calling
- Modifiable Flash and DTMF Tone Timing
- Secure, Digital Spread Spectrum w/Frequency Hopping Technology
- EnGenius Cloud Remote Access

Battery & Charger

- Li-Ion Technology
- 6-Hours of Talk Time
- 50-Hours of Stand-By Time
- Desktop Charger Supports Handset & Spare Battery Charging Slots
- 4-Hour Recharge Time
- Battery Hot-Swap While Call is On-Hold

Optional Equipment

- External Base Antenna Kits: Optional indoor or outdoor antenna with 20 meter low loss LMR-400 cable
- Lighting Protection Kit
- Antenna Splitter

DuraFon Roam Value

- No Monthly Bill (like cellular)
- No Per Minute charges (like cellular)
- No Contracts (like cellular)
- No Annual FCC License Fees (like 2-way radios)
- No Extensive Infrastructure Installation (like wireless networking, Wi-Fi phones)
- No QoS Concerns
- No Wireless Network Interference

Manufacturer's Part Numbers

- DuraFon Roam BSC (Controller)
- DuraFon Roam HC (Handset)
- DuraFon Roam BU (Base Station)

Getting Started

Install and connect DuraFon Roam BSC and BU to a PoE switch inside your company's network which is able to access to internet. Re: Connecting the line port of BU to PSTN network as a backup.



Note: In case the switch inside your company's network doesn't support 802.3af PoE (Power over Ethernet), you can power the DuraFon Roam BSC and BU via EnGenius single port Power-over-Ethernet (PoE) adapter respectively (e.g. EPA5006GP/ EPA5006GAT).

Signing up

Before you start to manage EnGenius DuraFon Roam BSC, you must first sign up for the service.

Registering EnGenius Cloud is similar to other web-based platforms and can be done either with a social media account (e.g. Google or Facebook) or by creating an account from scratch. You will need to provide your email address, company name, physical address, and phone number. Furthermore, you must determine the country in which your account will be hosted. That is, all relative device information, user configurations, and client statistics will be kept in the corresponding region of servers (Oregon for US and Frankfurt for other countries). This enables EnGenius Cloud to protect customer data and comply with requirements like GDPR for customers within the European Union.

Logging On

Once your account has been created, you can login to EnGenius Cloud in the following steps:

1. Open a web browser to https://cloud.engenius.ai/ . This will bring up the main login page.

C EnGenius	Don't have an account? (SIGN UP)
EnGenius Cloud The Al-Driven Cloud for Smart Networking Cloud Inite	Sign in to EnGenius Cloud Enter your details below Codo demo@engenius.al Password Forgot your password? Forgot your password? Forg

2. Enter your EnGenius Cloud email address and password, click the SIGN IN button.

- 3. For EnGenius Partner who has account on EnGenius Partner Portal already, you can simply click on "E Partner" button, and EnGenius Partner Portal will pop up login page for you to use Single-Sign-On capability of Partner Portal to log on to EnGenius Cloud
- 4. For Google and Facebook users, you can also click on "Google" or "Facebook" button to use your account on Google and Facebook to log on to EnGenius Cloud
- 5. EnGenius Cloud will create a new default Organization and Network for every new account based on the email address as unique user identification. (Note: If someone is invited to an Organization or Network, this account won't have default Organization and Network.) If you have multiple accounts created on EnGenius Cloud, EnGenius Cloud will merge your accounts based on the "email address" of the account. For example, if you have created a new account on EnGenius Cloud using the same email address as your google account, then you're able to login to this email account either through Google account authentication

with Google account password or through EnGenius Cloud Login with the password while you created the EnGenius Cloud account.

Registering Devices to Organization

Register a DuraFon Roam BSC to EnGenius Cloud inventory by using the serial number located on the device.

Firstly, navigate to Inventory & License, click "Register Device".

Hichard / WNG	Network 🔺 🔟 Inventory & License					00 🖗 😳		
Devices License	es							
🗌 Type 🗸	Q. Name	Model	Serial Number	11 1-3 of 3 🗌 🕤 As MAC	sign to Network E Ren	move from Network 🕄 De-regist	er Device + Register Device Registered By	
AP	ECW120	ECW120	0110C211F9X3	00:02:6F:BC:00:02	Network	2021/10/08 03:45:59	richard7350.chang@se_	
D bsc	SP-938 BSC	SP-938 BSC	1010MVC1F9P5	00:02:6F.BC:00:01	Network	2021/10/05 08:26:34	richard7350.chang@se_	
EnSky	SkyKey I	SkyKey I	1970MN211FE3	88.DC.96.7E.39.4B		2021/10/05 02:23:21	richard7350.chang@se_	
	Devices Licens	Devices Licenses	Devices Licenses Type v Name Mooel AP EOW120 ECW120 bac SP-938 BSC SP-938 BSC EnSky SkyKey1 SkyKey1	Devices Licenses Type v Name Model Serial Number AP E0W120 E0W120 0110C211F9X0 bac SP438 BSC SP-438 BSC 1010MVC1F9F9 EnSky SkyKey1 SkyKey1 1970MX211FE3	Devices Licenses II 13 of 3 @ Ar Type v Name Model Setial Number MAC AP EOW120 0110C211F9X3 000225F8CC002 bac SP438.85C SF-438.85C 1010MVC1FPF5 00025F8CC001 ExSiy SkyKey1 SkyKey1 1970MV211FE3 88.0C:957E39748	Devices Licenses Q II 1-2 of 3 @ Assign to Network. III File Type v Name Model Sensil Number MAC Network. AP ECW120 0110/211F9X3 00.02.25F.8C:00.02 Network bsc SP-938.8SC SP-938.8SC 1010/MVC1F9F5 00.02.25F.8C:00.01 Network ExGiv SkyKey1 SkyKey1 1970/MX211FE3 88.0C:96.7E:39.48	Devices Licenses II 1-3 of 3 Stasign to Network III Remove from Network III Developed from Network III Developed from Network III Developed from Network IIII Developed from Network IIII Developed from Network IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	

Registering devices with a serial number is easy. Just enter the serial numbers of your DuraFon Roam BSC, one per line, click the "Register" button.



Adding BSC from Inventory

Navigate to DuraFon Roam

G	□ = Org / ♥ Networ	rk 🔺		DuraFon	Roam		O	0 🗛	
Q		Q			n	i 0-0 of 0 │ ≣ Move to │ 畲 R	Remove from Network	+ Add from	inventory
	🗆 Name 🗸	MAC V	Model Name	LAN IP	F/W Ver.	Uptime		Actions	
				No Data Available					
G									
6	\$								
ai i									
<u>88</u>									
									(

Click "Add from Inventory"

G	Org / ♥ Netwo	rk 🔺		DuraFon	ı Roam		C	04	L 💿
Q		۹.			11	0-0 of 0 ॑ Ⅲ Move to ॑ 亩 Rei	move from Network	+ Add fro	m Inventory
٠	🗆 Name 🛩	MAC 🗸	Model Name	LAN IP	F/W Ver.	Uptime		Actions	
				No Data Available					
G									
6									
-									
ш									
-									-
									C

Select BSC then click Apply

G	Richard / TNetwork	Add f	rom Inventory					0 9 🍂 💿
Ģ			Serial Number	Туре	Model	MAC	ove from Network	+ Add from Inventory
*	Name		1010MVC1F9P5	BSC	DuraFon Roam BSC	00:02:6F:BC:00:01	LAN IP	Actions
6								
22						X Cancel 🗸 Apply		

Connect to DuraFon Roam

Navigate to DuraFon Roam

G	Richard / Vetwork			DuraFon Roam					09 🗳 💿				
P									11 1-2 of 2	≣ Move to	Remove from Network	+ Add from Inve	entory
*	Ī		Name DuraFon Roam BSC @	MAC 00:02:6F:BC:00:01	Model Name DuraFon Roam BSC	AP Online	AP Offline	Switch Online	Switch Offline	WAN IP	LAN IP	Actions Connect	
G													
6 <	\$												
												(IJ

Click "Connect" to entering GUI of BSC

G	≡	Richard / 🕆 Network 🤷				Dura Dura	aFon Roam			O	0 🦨	RC
Ţ								11 1-2 of 2	亚 Move to 🗌	Remove from Network	+ Add from	Inventory
-		Name	MAC	Model Name	AP Online	AP Offline	Switch Online	Switch Offline	WAN IP	LAN IP	Actions	
		DuraFon Roam BSC 🖉	00:02:6F:BC:00:01	DuraFon Roam BSC	o	0	0	0	1.163.220.81	[Connect	
Ģ												
6												
Course of												
.h												
28												
Ø												O

Now the DuraFon Roam is ready for networks configuration
 device management and event/log analysis.



Changing default credential

When first time enter the GUI of DuraFon Roam, you will find a triangle icon on the right top corner.



When you move the cursor to the icon, it will show you a message to remind you to change default credential. Click "Change Now" to change Login Name and Password.

Re: The default Login Name and Password is "admin".



System Settings

Before start using the DuraFon Roam, please make sure the related network settings are well setup.

IP Addressing

Navigate to System Settings > IP Addressing

G	System Settings	DuraFon Roam	08
۲	IP Addressing Time SIP Server SIP Acco	ints	🖌 Apply
	IP Assignment O Dynamic IP	O Static IP	
Ļ	LAN IP IP Address	10.0.174.23	
æ	Subnet Mask	255.255.254.0	
ıl.	Default Gatewa	y 10.0.175.254	
	DNS DNS	DHCP	
	Primary DNS	10.0.200.191	
	Secondary DNS	10.0.200.192	
۲			
&	VLAN VLAN Status	Disable 🗸	
-	VLAN ID	4093	
-	VLAN Priority	0	

By default is DHCP, the BSC is assigned an IP address dynamically by the DHCP server. If somehow it can't be assigned the IP address from the DHCP server, it will roll back to default static IP 192.168.1.156 for the base unit automatically. You can set static IP 192.168.1.x to your PC/NB, so that they would be able to access web of this BSC.

IP Address	IP assigned by DHCP server Or using 192.168.1.156
Username / Password	admin / admin

> After finishing all settings, click **Apply** to take effect.

Time

- Navigate to System Settings > Time
- Check the default of Time Setting in "Auto" and NTP server Time server with "pool.ntp.org".

Select the Time Zone you located in, e.g. California is "UTC-08:00 Pacific Time", New York is "UTC-05:00 Eastern Time".

Re-1 : If it's in daylight saving time, you should enable the "Daylight Saving". Re-2 : The Time Zone will be back to default("UTC-05:00 Eastern Time") when BSC's firmware is upgraded.

> After finishing all settings, click **Apply** to take effect.

G	System Settings	DuraFon Roam	00
	IP Addressing Time	SIP Server SIP Accounts	🗸 Apply
	Time Setting	O Manual O Auto	
		Date 2021 / 9 / 80 (Y/M/D)	
÷		Time 13 : 41 (24H:M)	
њ		Synchronize with PC	
		NTP Time Server pool.ntp.org	
	Time Zone	Time Zone UTC+08:00 China, Hong Kong, Western Australia, : 💌	
•		Enable Daylight Saving	
\$			
a			

SIP Server

Navigate to System Settings > SIP Server

G	System Settings		DuraFon Roam	e	>
٢	IP Addressing Time SI	P Server SIP Accounts		Apply	Î
	Basic Settings	VoIP Server	192.168.22.124		
		VoIP Server Port	5060 (5060-5180)		
÷		STUN	Automatic V		
ıl.			External IP		
			STUN Server stun.ekiga.n	et	
			STUN Server Port 3478		
۲		SIP Outbound Proxy			
♣		SIP Outbound Proxy Port	5060 (1-65535)		
a					J
	Advanced Settings	+			÷

You must check with SIP service provider to get the correct "VoIP Server",
 "VoIP Server Port", "Stun Server", "Stun Server Port", "SIP Outbound
 Proxy" and "SIP Outbound Proxy Port" before setting the SIP Server.

G	System Settings		DuraFon	n Roam		00
	IP Addressing Time	SIP Server SIP Accounts				✓ Apply
	Basic	VoIP Server	192.168.22.124	 Image: A start of the start of		
		VoIP Server Port	5060 (50	160-5180) 🗸		
.th		SIP Transport STUN	Automatic 👻			
da			External IP			
Ö			STUN Server	stun.ekiga.net	\checkmark	
			STUN Server Port	3478	~	
\$		DNS SRV				
&		SIP Outbound Proxy Port	5060 (1-	65535)		
۵	Advance					

Click + to set up advanced SIP settings(If necessary).

G	System Settings		🛱 DuraFon Roam	8
0	Advanced Settings -]		-
		DTMF	RFC2833 ~	
		Primary Codec	G.711 u-law 💙	
Ŀ		Secondary Codec	G.711 a-law 🗸	
*		Tertiary Codec	G.729 ¥	
ılı		QoS		- E
		Local SIP Port	5060 (1-60000) 20000 (Even number between 1024-60000)	- 1
~		RTP Ptime	20 ms 👻	
8		User-Agent Headers	SIP-UA/DuraFon	
♣		Registration Expire	360 (30-65535 seconds)	
#		Session Timer NAT Keep Alive Method	Disable V	

Re:

Basic	
SIP Transport	Default: Automatic. According to the requirement of SIP server, you can select UDP or TCP or TLS.
STUN	When the BSC is located behind a NAT, you can set STUN server to discover its public IP.

DNS SRV	The BSC is used a hosted device connected to ITSP,
	DNS SRV record type may be required in some service
	providers.
	When DNS SRV is activated, DNS is assigned to 8.8.8.8
	(google DNS)
Advance	
DTMF	Default: RFC2833
Primary Codec	G.711 u-law or G.711 a-law is suggested. If you select
Secondary Codec	G.729 Codec, the SIP call will not support 3-way
	conference.
QoS	When activate this QoS, it will add the QoS
	parameters in message(following 802.1p, priority 6)
Allow SDP NAT Rewrite	In some cases, i.e. connected with NAT or VPN, to
	enable this option to have the IP address in UDP
	message bodies rewritten and routed correctly.
RTP Ptime	RTP packetization time is required to synchronize
	when using a P2P call.
User-Agent Header	For security in some SIP servers, they may authorize
	the specific user-agent string.
Registration Expire	Expire time of SIP registration
Sossion Timor	Enable/Disable SID Session Timer
Session miller	

> After finishing all settings, click **Apply** to take effect.

SIP Accounts

Navigate to System Settings > SIP Accounts

G	Syste	em Sett	ings				Du		80			
۲	IP A	ddressing	Time	SIP Server	SIP Accounts							Apply
	٩	Search	×							O online	o offline	+ Add SIP Account
	Del	ete Edit	SIP No	Display Name	Auth Name	SIP-Reg Status	In-dedication	Out-dedication	Enable			
	۵	ď	10			•	Handset_10	Handset_10	~			
600	۵	ď	1			0	Group_1	Group_1	~			
ılı	Û	ľ	100			0	All Handsets	All Handsets	2			
-	۵	ľ	11			•	Handset_11	Handset_11	~			
	Ô	ľ	14			•	Handset_12	Handset_12	~			
	Û	ď	12			0	Handset_12	Handset_12	~			
8												
												-



Click Add SIP Account to increase new account

G	System	Setti	ings			Gran	to SID Account	, j	80					
	IP Addi	essing	Time	SIP Server	SIP Account	Clea	the SIF Account				✓ Apply	Î		
	Q Sea	ch	×			Number			O online	o offline	+ Add SIP Account			
	Delete	Edit	SIP No	Display Nam	e Auth Name	Display name								
*	0	ß	10			Auth name	admin							
	G	ľ	11			Password								
茴						In-dedication	All Handsets	~						
						Out-dedication	All Handsets	~						
						Enable								
\$								🗸 Submit						
*														
-												E		
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Re: You must check with SIP service provider to get the correct SIP "Number"、 "Auth name" and "Password" before creating the new SIP account.

➢ Click ^I to edit the SIP account

G	System Settings		8
	IP Addressing Time SIP Server SI	Edit Account	✓ Apply
	Q Search ×	Number 555	online offline + Add SIP Account
	Delete Edit SIP No Display Name	Display name	Enable
.th	D C 555	Auth name	*
11.	1 C 117	Password	* *
崗		In-dedication Handset_10 ~	
		Out-dedication Handset_10 ~	
\$		Enable	
*		▲ Reset	
_			

> After finishing all settings, click **Apply** to take effect.

Base Station

When finishing the System Settings, adding/editing Base Station will be next.

Navigate to Base Station

If your PC/NB displaying "No EnGenius Base Station discovered in same network!", It means the base station list is empty, please make sure the base is well connected to intranet, and can be discovered by BSC.

G	Base Stations	DuraFon Roam	8
	Base Station List		
	No EnGenius Base Station discovered in s	ame network!	
	Please deploy Base Station to a PoE Switch	in same subnet that BSC would discover those devices automatically and can manage centrally.	
÷	Q Discover Now		
ıh			
*			
*			
۵			

Click "Manager", the base station will be registered to BSC with "Managed" Mode.

G	Base Stati	ons			DuraFon Roam								8		
									Mana	aged online 🛛 🔍	Managed offlir	ne 😐 Disc	covered Q Discover Now		
	Mode	Name	MAC Address	IP Address	ID	Sync-Status	Bro Bas	adca e /	ist Enabled FXO	FXO Number	FW Version	Actions			
	Managed	ď	00:AA:BB:CC:88:11	192.168.22.101	1	Synced (Master)		1			v0.0.1.6	🖒 Reboot	× Unmanage		
Ŀ	Managed	đ	00:AA:BB:CC:AA:11	192.168.22.102	2	Synced		1			v0.0.1.6	() Reboot	× Unmanage		
₼	Managed	đ	00:AA:BB:CC:55:11	192.168.22.105	3	Synced		1			v0.0.1.6	() Reboot	× Unmanage		
ıl.															
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> Click ^{III} to change the Name of base stations.

Once the base station connected to intranet, click the "Discover Now" to find new base station (Or simply wait for a few seconds, GUI will update automatically).

G	Base Static	ons				Du	raFon Roam		8
							Managed online @	Managed offline 🧶 Disc	overed Q Discover Now
	Mode	Name	MAC Address	IP Address	ID	Sync-Status	Broadcast Enabled FXO Number Base / FXO	FW Version Actions	
	Discovered		00:AA:BB:CC:99:11	192.168.22.112		Non-Synced	0 / 0	v0.0.1.6	🖵 Manage
	Discovered		00:AA:88:CC:88:11	192.168.22.101		Non-Synced		v0.0.1.6	🖵 Manage
*	Discovered		00:AA:BB:CC:AA:11	192.168.22.102		Non-Synced	0 / 0	v0.0.1.6	🖵 Manage
iii i									
-									
-									

Handset

After adding/editing the Base Station, you can then add/edit Handset.

Navigate to Handset

If your PC/NB displaying "No EnGenius handset registered", it means the handset list is empty, please register handset(s) first.



Click "Add Handset" to register new handset(s)

G	Hand	set					DuraFon R	oam			8				
	Q Filt	ler	×				 Success Fail Progress Not changed Delete 								
<pre>%</pre>		Edit	ID va	Name 🐖	SIP Dedicated In / Out-bound	FXO Dedicated In / Out-bound	Current Base	Group	Base Subscribe	Serial Number	FW V				
		ď	10	DuraFon Roam HC	EI / EI	51 / 51	Not found	1234567	1 2 3 4 5 6 7 8	AB1234546789	v1.01				
		Ø	11	DuraFon Roam HC	EI / EI	51 / 52	Base 1	1 2 3 4 5 6 7	1 2 3 4 5 6 7 8	AB0123478577	v0.01				
.th		ľ	12	DuraFon Roam HC	2/2	2 / 2	Base 1	1 2 3 4 5 6 7	1 2 3 4 5 6 7 8	ABC1234567	v0.01				
ıl.															
•															
♣															
	4										, .				

Assign Handset ID and Handset Group, click "Next". At the same time, press MENU (softkey) on handset >> 6.Registration > 1.Register



Handset is registering to base



> When handset registered completely, click "Done" to finish process.

G	Hand	set			-	n n	(F		i.		88
_						Register I	New Handset	×			
	Q Sea	irch	×			Handset	Registered !		O Not cha	anged — Deregister	+ Register
		Edit	Update	ID v×	Name >>	Model	DuraEon Roam			Serial version	
_		ď	0	10	DuraFon Roam		bulurenneun		678	AB1234546789	
		Ľ	0	11		FW version	v1.00		6 7 8	ABC1234567	
-		ď	0	12		Handset ID	15		6 7 8	AB1234546789	
		Ľ	0	13		Handset Group	1 2 2 4 5 6 7		6 7 8	AB1234546789	
11.		Ľ	0	14		Thandset Group	1 2 3 4 3 0 7		678	AB1234546789	
曲		ď	0	15		-		-	678	000000000000	
						+	Register Another 🗸 Dor	ie			
-											
69											
*											

G	Hand	lset					DuraF	on Roam			A 8
	Q Fil	ter	×				O Success	🖸 Fail 🧿 Prog	ress O Not changed	🗊 Delete 🛛 🗕 Deregister	+ Register
		Edit	Update	ID va	Name 🔨	SIP Dedicated In / Out-bound	FXO Dedicated In / Out-bound	Current Base	Group	Base Subscribe	Serial Num
		ď	0	10	DuraFon Roam HC	CI / CI	2 / 2	Not found	1 2 3 4 5 6 7	1 2 3 4 5 6 7 8	AB12345467
		Ø	0	11	DuraFon Roam HC	2 / 2	2 / 2	Base 1	1 2 3 4 5 6 7	1 2 3 4 5 6 7 8	AB01234785
-		Ľ	0	12	DuraFon Roam HC	12 / 12	S / S	Base 1	1 2 3 4 5 6 7	12345678	ABC1234567
ıl.											
İ											
٠											
8											
-	- Micr	osoft Exc	el 2010 (2)								

Re: In case registration failed, please check your registration process and do it again.



Click "Deregister" to remove a handset

Select handset ID, click "De-register". At the same time, press MENU (softkey) on handset > 6.Registration > 2.Deregister



Select Handset ID, click "Deregister". At the same time, press MENU (softkey) on handset > 6.Registration > 2.Deregister

G	Hand	set					d a	- D		-			AB
=						Wa	it for Deregist	ter Response	×				
	Q Fil	er	×							anged	Delete	- Deregister	+ Register
(H		Edit	Update	ID ~~	Name ~~		r.				Base Sub	scribe	Serial Num
		Ľ	0	10	DuraFon Roam H		1 111	1111 8	5	5 6 7			AB12345467
-		ď	0	ार	DuraFon Roam H					5 6 7	12	4 5 6 7 8	AB01234785
		Ľ	0	12	DuraFon Roam H					5 6 7	12	4 5 6 7 8	ABC1234567
11													
-													
-													
8													
-													
													, .

Handset deregistered. Click "Done" to finish process. Or click "Deregister Another" to go ahead for another deregistration.

G	Hand	set			ſ	D	_			29
						Deregister Handset	×			
a	Q Sea	rch	×			Handset Deregistration Success!		Not changed	- Deregister	+ Add Handset
	Delete	Edit	Update	ID va	Name 🛩	Name Handset_12		96	Serial version	
		ď	0	10	DuraFon Roam	Handset ID 12		45678	A81234546789	_
		ď	0	11				4 5 6 7 8	ABC1234567	
at.		ľ	•	13		+ Deregister Another 🗸 Done	e	4 5 6 7 8	AB1234546789	_
60	U	ß	0	14	,	الله المراجع الألبا الأراجي الألبا الأراجي الما		4 5 6 7 8	AB1234546789	
-										
69										

Click to edit the handset, including handset's name, group and subscribed base. Click Apply to take effect.

G	Handset				📓 DuraFon Roam							
	Q Fil	ter	×				O Success	O Fail O Progr	ess O Not changed	🗊 Delete 🗕 – Deregister	+ Register	
æ		Edit	Update	ID va	Name 🐃	SIP Dedicated In / Out-bound	FXO Dedicated In / Out-bound	Current Base	Group	Base Subscribe	Serial Num	
		ß	0	10	DuraFon Roam HC	2 / 2	51 / 53	Not found	1234567	12345678	AB12345467	
		ľ	0	11	DuraFon Roam HC	2 / 2	2 / 2	Base 1	1 2 3 4 5 6 7	1 2 3 4 5 6 7 8	AB01234785	
din a		ď	0	12	DuraFon Roam HC	2 / 2	21/21	Base 1	1234567	1 2 3 4 5 6 7 8	ABC1234567	
ıl.												
>												
6												
1												

After editing "Name", "Group" and "Base subscribe", click "Apply" to take effect.

G	Hand	lset			ſ		A		i i		A	8
	0.5		Y			E	dit Handset 10	×	anged I	Delate - Daranista	+ Depister	
									angeo g	j Delete — Delegiste	+ Kegister	
÷.	<u> </u>	Edit	Update	ID va	Name ~^	Name	DuraFon Roam HC			Base Subscribe	Serial Nu	
		Ľ	0	10	DuraFon Roam He	Grave			5 6 7	1 2 3 4 5 6 7	8 AB123454	467
		Ľ	0	11	DuraFon Roam He	Gloup			5 6 7	1 2 3 4 5 6 7	8 AB01234	785
at a		ľ	0	12	DuraFon Roam He	Base subscribe	1 2 3 4 5 6 7 8		567	1 2 3 4 5 6 7	8 ABC1234	567
11.												
ä							× Cancel 🗸 App	ly				
					l.							
ŵ												
-												
&												
a												
	4											

> Delete handset

In case a handset is not working for some reason, you can't deregister it. You

can click \Box to select the handset you want to remove, and then click "Delete" to remove it from the system. The handset ID will be removed and become available for use again.

Hand	set		🚮 DuraFon Roam							A	
Q Filt	ter	×				O Success	🛈 Fail 🙁 Prog	gress O Not changed	Delete - Deregister	+ Register	
	Edit	Update	ID va	Name 🔨	SIP Dedicated In / Out-bound	FXO Dedicated In / Out-bound	Current Base	Group	Base Subscribe	Serial Num	
	ľ	0	10	DuraFon Roam HC	2 / 2	2 / 2	Not found	1 2 3 4 5 6 7	1 2 3 4 5 6 7 8	AB12345467	
	Ľ	0	11	DuraFon Roam HC	2 / 2	2 / 2	Base 1	1 2 3 4 5 6 7	1 2 3 4 5 6 7 8	AB01234785	
	ď	0	12	DuraFon Roam HC	2 / 2	2 / 2	Base 1	1234567	1 2 3 4 5 6 7 8	ABC1234567	
		Handset	Handset	Handset	Handset	Handset	Handset	Handset DuraFon Roam	Handset	Handset	

G	Hand	set			🚮 DuraFon Roam								
3	Q Filt	ter	×				O Success	🗘 Fail 🙁 Prog	ress O Not changed	Delete	- Deregister	+ Register	
ŝ	Dê	Edit	Update	ID va	Name 🛩	SIP Dedicated In / Out-bound	FXO Dedicated In / Out-bound	Current Base	Group	Base Subsci	ibe	Serial Num	
		ľ	0	10	DuraFon Roam HC	1 / 1	2 / 2	Not found	1 2 3 4 5 6 7	123	45678	AB12345467	
		ľ	0	11	DuraFon Roam HC	Z / Z	⊠/⊠	Base 1	1 2 3 4 5 6 7	123	4 5 6 7 8	AB01234785	
h													
d.													
2													
6													
•													
	4												

Select handset 12, and click "Delete". There is a warning message.



Click "Apply" to remove handset 12

Base Station Settings

FXO Settings

DuraFon Roam base station implement a FXO port for emergency backup, please setup the related parameters before using it.



FXO Number Settings

You can assign the PSTN inbound call received by dedicated handset/group handset/all handsets. Also the outbound call called via dedicated handset/group handset/all handsets.

G	Base Station Settings			Du	raFon Roam	88	
	FXO Set	ttings FXO	Number Settings	Broadcast			V Apply
	Base	Base Name	Phone Number	Description	In-Dedication	Out-Dedication	-
	1	œ	C#	··· @	All Handsets 🗸	All Handsets 💙	Í
	2	œ	ß	2	Group_1	All Handsets 👻	
m	3	ď	ď	g	Group_2 Group_3	All Handsets	
ıl.	4	C ²	ď	@	Group_4 Group_5	All Handsets 👻	
-	5	C2*	ß	···· 🕼	Group_6 Group_7	All Handsets 👻	
	6	6	1 27	Ø	Handset_10 Handset_11	All Handsets	
-		13	2	2	Handset_12 Handset_13		
					Handset_14 Handset_15		
&					Handset_16 Handset_17		
-					Handset_18 Handset_19		
					Handset_20 Handset_21 •		

Broadcast

DuraFon Roam handset is not only able to make peer to peer broadcast, but also broadcast via base station.

In order to extend the communication range, the default of broadcast in DuraFon Roam is via base station.

When enabling broadcast over base, you can assign individual base (or multiple bases) for broadcasting. After enabled, broadcasts will always utilize enabled base(s) for broadcast.

G	Base Station Settings	DuraFon Roam	^O
٢	FXO Settings FXO Line Dedication Broadcast		🗸 Apply
(ł	Enable broadcast over Base		
	Enable Base_1		
æ	Enable Base_3		
ıl.	Enable Base_5		
-	Enable Base_6		
	Enable Base_8		
	Time out to convert peer to peer broadcast	1 v seconds	
۲			
A	Enable broadcast from FXO		
. 660	Broadcast Time out 120 🗸 seco	nds	
a			

In case the base station isn't able to build connection for broadcast, after certain timing, it will automatically convert to peer to peer broadcast instead. The option for time out timing is 1 ~ 5 seconds.

G	Base Station Settings	🛱 DuraFon Roam	AO
	FXO Settings FXO Line Dedication Broadcast		🗸 Apply
<pre>%</pre>	Enable broadcast over Base		
	Enable Base_1		
#	Enable Base_3		
њ	Enable Base_5 C		
İ	Enable Base_7 Enable Base_8		
	Time out to convert peer to peer broadcast	1 v seconds	
•• •	Enable broadcast from FXO	2 3	
	Broadcast Time out 120 👻 seco	nds 5	

Broadcast via base stations can be enabled also via the FXO port of the base, allowing non-DuraFon Roam users to broadcast to DuraFon Roam handsets by calling from outside to base's FXO port.

G	Base Station Settings	🚮 DuraFon Roam	^0
۲	FXO Settings FXO Line Dedication	Broadcast	V Apply
	Enable broadcast over Base		
	Enable broadcast from FXO		
₼	Enable Base_1 Enable Base_2		
ih	Enable Base_3 Enable Base_4		
	Enable Base_5 Enable Base_6	0	
	Enable Base_7		
۰	Enable Base_8		
&	Broadcast Time out	120 v seconds	
۵			

Since broadcast will send signal to handsets, in order not to occupy the handsets, you can limit the max broadcast timing. The option for broadcast time out timing is 30/60/90/120 seconds.

G	Base Station Settings	DuraFon Roam	48
	FXO Settings FXO Line Dedication Broadcast		🗸 Apply
£	Enable broadcast over Base		
	Enable Base_1	0	
*	Enable Base_3 Enable Base_4	0 0	
ıl.	Enable Base_5	D D	
	Enable Base_7	0	
	Time out to convert peer to peer broad 30	cast <u>1 v</u> seconds	
	Enable broadcast from FXO		
	Broadcast Time out	seconds	

Dashboard

Dashboard of DuraFon Roam provides you an overall picture of whole system operating status, the details including overall usage、BSC status、Call status and RSSI status.



➢ In the nine square grids, it shows the status of SIP/PSTN of each base.





VoIP CONNECTED	means the SIP is connected and ready for calling.
VoIP N/A	means the base is off-line.
FXO IN-USED	means one PSTN call is in process.
FXO CONNECTED	means the PSTN line is connected and ready for calling.
FXO N/A	means the base is off-line.
FXO NO-LINE	means the PSTN isn't connected.
Base_7	
	means no base connected.

> In the middle of nine square grids, the GUI will be re-freshed if clicking it.

BASE STATION

Overview

Click "Overview", you can check "Call number" and "Call time" with all bases, or dedicated base.

Also you can check at three periods: Last Hour、 Last Day and Last Week.



When scrolling down, you can check the following six charts :
 1) "TOP CALL TIMES(Handset)"
 2) "TOP CALL NUMBERS(Handset)"



3) "TOP CALL TIMES(FXO)"4) "TOP CALL NUMBERS(FXO)"



- 5) "TOP Use(Base)"
- 6) "CALL DISTRIBUTION(SIP vs FXO)"



Controller

- Click "Controller", you can check the following system status:
 - Device : including Device Name、Series Number、MAC、Current Local Time、Uptime and Firmware Version.
 - 2) Memory : including Total Available, Free, Cached and Buffered.

Dashboard	DuraFon Roam	8
Overview Contr	ller Call RSSI	
Device Device Name	DuraFon Roam BSC	
Serial Number:	1990MN2IFLVC	
MAC Address:	00:02:6F:BC:00:01	
Current Local Time	Tue Oct 12 09:11:21 GMT-8 2021	
Uptime:	4 days .22 hours .39 minutes .57 seconds	
Firmware Version:	v0.0.1.4	
Memory		
Total Available:	573304 KB (55%) / 1013892 KB	
Free:	526916 KB (51%) / 1013892 KB	
Cached:	31080 KB (3%) / 1013892 KB	
Buffered:	15308 KB (1%) / 1013892 KB	

3) CPU loading

- 4) eMMC : including Used and Free Up Space.
- 5) LAN : Including IP Address、Subnet Mask、Gateway、Primary DNS and Secondary DNS.

6) Process : VoIP System、 BSC Status Monitor and Network Management System.

7) If Process indicator signals "Error", simply click Restart

ashboard	🛱 DuraFon Roam	8
Used:	2398 KB (1%) / 388462 KB	
Free Up Space:	Clear log	
LAN		
IP Address:	192.168.22.148	
Subnet Mask:	255.255.0	
Gateway:	192.168.22.1	
Primary DNS:	192.168.22.1	
Secondary DNS:		
Process @ Run	nning 🔍 Error	
Mall Custom	Restart	
voir system		
BSC Status Monito	ar 🔘 Restart	_

Call

ب

٠

Base_4

Click "Call", you can check the current call status in both base station and handset.

handset 12. And handset 12 is receiving a call from handset 11. G Dashboard DuraFon Roam A Overview Controller Call RSSI Base Ringing S Inci 😢 Outgoing 🐠 Broadcast 🗳 Conference 🦉 Handset S FYC . . K Handset_11 Handset_12 K Handset_12 👯 🖬 Handset_11 Base 2 Base 3

For example, checking below call status of base 3, handset 11 is making a call to handset 12. And handset 12 is receiving a call from handset 11.

Base_5

At the same moment, checking below call status of handset, handset 11 is making the outgoing call to handset 12, and handset 12 is receiving the incoming call from handset 11.

G	Dashboard	DuraFon Roam	8
	Base_6	Base_7	
#		-	
њ			
	Handset Q All		
\$	Trantoset & Singing & Incoming & Outgoing I Broadcas	st 🔩 Conference 🥃 Handset 💄 SIP 🖀 FXO 🦄 Not found	
♣	CuraFon Roam_10	Handset_12 DuraFon Roam_13	
_			

Dashboard	d D	uraFon Roam	^
Overview Controller Call RS	51 -		
Base_1 🗸			EM C Refresh
			🛛 Excellent 🧧 Normal 🔵 Weak
Handset va	HS Signal Status 🛹	BS Signal Status ~~	Base Station Group
DuraFon Roam HC_11	٠	•	Base_1
DuraFon Roam HC_12	•	•	Base_1

RSSI

Click "RSSI", you can check the receiving radio signal strength of handset and base. This info shows you the connection performance of handset and base. For example, the bar of deep blue means the handset receiving signal strength which received from base. And the bar of light blue means the base signal strength which received from handset.
 Two type of RSSI : Bar chart & columnar



Topology

Navigate to "Topology", you can overall view the current connection between base(s) and handset(s).



When handset(s) is moving around, the handset will automatically hand-over from one to the other base, the topology will update the connection accordingly.



Statistics

Summary

Navigate to Statistic, click "Summary", you can view the various calls during a time period, including Incoming Calls, Outgoing Calls, Intercom, Handover and Broadcast.

G	Statistics		Du	ıraFon Roam			8
	Summary Base Station Calls						ĺ
	2021/11/03 - 2021/11/10						
	Start Time End Time Inbound	Outbound	Intercom	Handover	Broadcast	Overall	
*	2021-11-03 12:17:09 2021-11-10 12:17:09 19	13	91	88	5	211	
d.	Summary						
Ö							
٠		Sutbound Intercom					
♣		iroadcast					
							-

> Select time period.

G	Sta	tis	tics	5												Du	raFon Roam			8
٢	Su	m	nary	<u>′</u>	Bas	e St	atio	n	Calls											Î
	e	þ	021/	11/0)3 - 2	021	/11/1	10												. 1
		<		N	lov 20;	21	10				C)ec 203	21	2	>	Intercom	Handover	Broadcast	Overall	-
		Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa	91	88	5	211	-
		7	8	9	10	11	12	13	5	6	7	8	9	10	11					- 1
ıl.		14	15	16	17	18	19	20	12	13	14	15	16	17	18					- 1
	2	21	22	23	24	25	26	27	19	20	21	22	23	24	25					- 1
	2	28	29	30	1	2	3	4	26	27	28	29	30	31	1					- 1
		5	0	8	8	9	10	11	- 8	3	1	5	6	2	8					- 1
								203	21/11/03	- 2021	/11/10	c	ancel	1	pply					- 1
-	-	F				×.	-			-	int	ercom		1	_					- 1
											Bri	padcas	ŧ							
600																				
								/												

Base Station

> Navigate to Statistic, click "Base Station", you can view the following info :

G	Statistics						DuraFon	Roam	8
٢	Summary	Base Sta	ation Ca	Ills					
	2021/11	1/04 - 2021/	11/11						
	ID	Air Time	Busy	Busy Time	Total Call	Handover	1588 Failed	SIP Failed	-
	1	03:48:17	58	03:32:56	116	77	1	14	
(111)	2	01:13:57	12	00:03:16	98	72	5	21	
ıl.	3	00:07:54	0	00:00:00	1	3	3	12	
e	4	00:00:52	0	00:00:00	3	0	1	12	
•••	5	00:08:36	0	00:00:00	1	4	1	12	
4									
a									

Re: "Air Time" is the accumulated time when handset link to base. "Busy" is the frequency of base full loading. "Busy Time" is the accumulated time when base full loading.

"The "1588 Failed" means the base failed in synchronization via networking. It will be recovered automatically, as long as the network works normally.

The "SIP Failed" means the bases inquire with BSC about the registration info of handsets, but somehow BSC doesn't respond. It will be recovered automatically, as long as the connection is normal between BSC BU.

Select time period.

itatis	stic	5													DuraFon	Roam	8
Sum	mary		Base	e Sta	atio		Calls										Í
ë 2	2021/	11/0)3 - 2	021/	/11/1	0											
<		1	iov 202	21					D	ec 20	21		>	dover	1588 Failed	SIP Failed	
Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa		0	14	
31	1	2	3 10	4	5	13	28	29 6	30	1	2	3 10	4		2	21	
14	15	16	17	18	19	20	12	13	14	15	16	17	18		3	12	
21	22	23	24	25	26	27	19	20	21	22	23	24	25		1	12	
28	29	30	1	2	3	4	26	27	28	29	30	31	1		1	12	
8	0	1	8	ä	10	22	6	3	2	8	9	1	6		0	12	
						2021	/11/03	2021	11/10	C	ancel	1	pply		0	12	
															0	12	
8		- 2	30:10:2	2	0		3	00:00:	00	3			10		3	12	

Calls

> Navigate to Statistics, click "Calls" to view call statistics over a time period.

9	Statistics					DuraFo	on Roam			
	Summary Ba	se Station	Calls							
X	Q Search	2021/11/03	- 2021/11/10	All Bases	All Handsets					Page 1 / 7
	Start Time	Call Type	Trunk	Caller ID	From	То	Base	Disposition	Duration(Sec) Rssi(dBm)	3.000
	2021-11-04 16:26:11	Inbound	SIP_555	111	111	555		Answered	4	î
8	2021-11-04 16:27:17	Inbound	SIP_555	111	111	555		Answered	3	
	2021-11-04 16:27:35	Inbound	SIP_555	111	111	555		Answered	5	
	2021-11-04 16:47:31	Inbound	SIP_555	111	111	555		No answer	3	
	2021-11-04 16:53:25	Inbound	SIP_555	111	111	555		No answer	5	
	2021-11-04 16:55:22	Inbound	SIP_555	111	111	555		No answer	10	
3	2021-11-04 16:55:39	Inbound	SIP_555	111	111	555		No answer	3	
	2021-11-04 17:23:36	Inbound	SIP_555	111	111	555		Answered	14	
R	2021-11-04 17:47:07	Inbound	SIP_555	111	111	555		No answer	4	
N.	2021-11-04 18:05:34	Inbound	SIP_555	111	111	555		No answer	10	
5	2021-11-04 18:05:56	Inbound	SIP_555	111	111	555		No answer	8	

> Select time period.



Log

Navigate to Log, there are "Event" and "System" for manager reviewing.

Events

G	Log			DuraFon Roam		8
	Event System					
ŝ	Q Search 2	022/05/09 1	1:35 - 2022/05/16 11:35	All Devices	单 Error 🔸 Warning 🌘 General	Page 1 / 8
	Time	Device	Event Type	Description/Detail		
	2022-05-16 08:43:56	Base_1	Daemon Status	ptp IP change restart.		*
.th	2022-05-16 08:43:56	Base_2	Daemon Status	ptp IP change restart.		
	2022-05-16 08:43:49	Base_2	Device Status	Base online from 192.168.22.112.		
	2022-05-16 08:43:49	Base_1	Device Status	Base online from 192.168.22.113.		
	2022-05-16 08:43:48	Base_2	Device Status	Base online from 192.168.22.112.		
	2022-05-16 08:43:48	Base_1	Device Status	Base online from 192.168.22.113.		
-	2022-05-16 08:41:16	Controller	Device Status	Controller boot up.		
*	2022-05-13 17:03:08	Base_1	Device Status	Base online from 192.168.22.113.		
*	2022-05-13 17:03:03	Base_2	Device Status	Base online from 192.168.22.112.		
	2022-05-13 17:03:00	Base_2	Device Status	Base online from 192.168.22.112.		
	2022-05-13 15:45:29	Base_1	Device Status	Base online from 192.168.22.113.		

• Select time period of Event log.

G	Event Log			DuraFo	n <mark>R</mark> oam			00
	Q Search	2021/09/29 1	5:56 - 2021/10/0	15:56 All Devices	•	Error 🧕 Warning	• General	Page 1 / 4
	String							
	Q Search							
Ŀ	Time							
-		:56 - 2021/1	0/06 15:56					
	Device							
1h	All Devices	v						
İ		X Cancel	🗸 Apply					
	Time	Device	Event Type	Description/Detail				
	2021-09-30 06:40:24	Controller	DUT Status	Controller boot up.				- i
*	2021-10-04 01:09:27	Controller	DUT Status	Controller boot up.				
	2021-10-04 01:40:22	Base_2	DUT Status	Base managed.				
-	2021-10-04 01:40:26	Base_2	DUT Status	Base online from 192.168.22.134.				

System

Log	📓 DuraFon Roam	Δ
Event System	n	
Online Monitor		
C ⁴ Refresh	May 16 11:40:00 EnBSC cron.info crond[1963]: USER root pid 8556 cmd /usr/sbin/ezmevent_handler May 16 11:40:00 EnBSC cron.info crond[1963]: USER root pid 8555 cmd /usr/sbin/ezmcheckin_handler -d	
	May 16 11:39:00 EnBSC cron.info crond[1963]: USER root pid 8174 cmd /usr/sbin/ezmevent_handler May 16 11:38:00 EnBSC cron.info crond[1963]: USER root pid 7536 cmd /usr/sbin/ezmevent handler	
	May 16 11:37:00 EnBSC cron.info crond[1963]: USER root pid 7121 cmd /usr/sbin/ezmevent_handler	
	May 16 11:36:00 EnBSC cron.info crond[1963]: USER root pid 6/11 cmd /usr/sbin/ezmevent_handler May 16 11:35:00 EnBSC cron.info crond[1963]: USER root pid 6249 cmd /usr/sbin/ezmevent_handler	
	May 16 11:35:00 EnBSC cron.info crond[1963]: USER root pid 6248 cmd /usr/sbin/ezmcheckin_handler -d	
	May 16 11:33:00 EnBSC cron.info crond[1963]: USER root pid 4578 cmd /usr/sbin/ezmevent_handler	
	May 16 11:32:00 EnBSC cron.info crond[1963]: USER root pid 4180 cmd /usr/sbin/ezmevent_handler	
	May 16 11:30:00 EnBSC cron.info crond(1963): USER root pid 3/34 chid /usr/sbin/ezmevent_handler	÷
Remote Log Sett	ing	
Enable		
Log Server IP	0.0.0	

Re: You can enable the "Remote Log Setting", when system log has something abnormal, you can remotely check the log.

Enable		
Log Server IP	0.0.0.0	
Log Server Port	514	

Tools

Firmware

New Firmware Available

• When new firmware is available, you will receive an email notification as following, to notify "new firmware available".

Event log				
Error Warning General				
Time	Device	Event Type	Description/Detail	
2022-06-16 15:24:55	DuraFon Roam	Notify	Controller has new firmware available	

Re : Please make sure the "Email Notification" has been set up, otherwise, you will not receive the notification.

• Also, when you access the GUI, you will see a prompt window as following. You can upgrade firmware at once or do it later.



Download new firmware

 Navigate to Tools > Firmware, you can check the current firmware version and upgrade new firmware (immediately upgrade or scheduled upgrade).

G	Tools		DuraFon Roam	4	3
	Firmware	Backup & Restore Reset & Reboot P	honebook Email Notification		
(~]					
		Controller	Base	Handset	
		CURRENT	CURRENT Base_1	CURRENT DuraFon Roam HC_10 ¥	
ıb		v1.0.0.39	v1.0.0.10	v1.01 View Last Status	
Ö		UPGRADE AVAILABLE	UPGRADE AVAILABLE	UPGRADE AVAILABLE	
٠			TARGET BASE	TARGET HANDSET All Handsets	
*		Upgrade file : Browse	Upgrade file : Browse	Upgrade file : Browse	
		Obditate Now	Upgrade Now	V Upgrade Now	

- When new firmware available, the button of Server will turn to dark blue, you can click the button to download new firmware from EnGenius server.
 - Re : If moving the cursor to the server, it will show you the detail information of new firmware.



Once the new firmware downloaded well, you will see the new firmware version, and the button of **Upgrade Now** will turn to dark blue too. It means you can upgrade new firmware at once.



Upgrade BSC

- Once the new firmware is available, you can choose to upgrade new firmware at once(click " Upgrade Now "), or set up scheduled upgrade.
- > It will take around 140 seconds to upgrade firmware.



When firmware upgrade completely, the BSC will reset and reconnect to EnGenius Cloud, you have to login Cloud again.

G	Don't have an account	SIGN UP
EnGenius Cloud To-Go Mobile App	Sign in to EnGenius Cloud	
Easy Networking with Mobile Phone	Email	
for Small Business	richard7350.chang@senao.com	
See how it works	Password Forgot Password?	
TTEL CONTRACTOR OF THE TOTAL OF TOTAL OF THE TOTAL OF THE TOTAL OF THE TOTAL OF THE TOTAL OF THE TOTAL OF THE TOTAL OF THE TOTAL OF THE TOTAL OF TOTAL OF THE TOTAL OF	G Google F Facebook E Partner	
B LIVELEDER Bandmann	Terms af Use Privacy Pollor	
1 4000346	©2022 EnGenius Technologies	

If you initially login from local GUI, after firmware upgrade completely, the BSC will reset and reconnect to local GUI, you have to login again.



Re: You can change the user ID and password by entering the "Administrator Access" as following.



Now the firmware is new version.



Upgrade Base

- Once the new firmware is available, you can choose to upgrade new firmware at once(click " Upgrade Now "), or set up scheduled upgrade.
- Before upgrade new firmware, you can check the current firmware version for base.

G	Tools	🛱 DuraFon Roam	AO
	Firmware Backup & Restore Reset &	z Reboot Phonebook Email Notification	~
(~]			
	Controller	Base	Handset
*	CURRENT	CURRENT Base_1 CURRENT	DuraFon Roam HC_10 ¥
ıl.	v1.0.0.3	v1.0.0.1 v1.01	View Last Status
	UPGRADE AVAILABLE v1.0.1.3	UPGRADE AVAILABLE UPGRADE v1.0.1.3 v1.03	AVAILABLE
٠		TARGET BASE TARGET H	IANDSET
&	Upgrade file : Browse	Server Upgrade file : Browsen Server Upgrade f	file : Browse
-	Vpgrade Now	V Upgrade Now	grade Now

Choose the Base which needs to upgrade new firmware. Re: The number 1 ~ 8 means the Base ID. The A means for all bases.

G	Tools	🔓 DuraFon Roam	Δ	8
	Firmware Backup & Restore Reset & R	eboot Phonebook Email Notification		
(H)				
	Controller	Base	Handset	
	CURRENT	CURRENT Base_1	CURRENT DuraFon Roam HC_10 V	
ıl.	v1.0.0.3	v1.0.0.1	v1.01 View Last Status	
İ	UPGRADE AVAILABLE v1.0.1.3	UPGRADE AVAILABLE v1.0.1.3	UPGRADE AVAILABLE v1.03	
۵		TARGET BASE	TARGET HANDSET	
&	Upgrade file : Browse	Server Upgrade file : Browsen	Upgrade file : Browsen	
-	Vpgrade Now	Vpgrade Now	Vpgrade Now	

- It will take around 190 seconds to upgrade firmware. When firmware upgrade completely, the base station will reset and reconnect, please check the dashboard to make sure if the base station has connected to BSC.
- After firmware upgrade, you will see the current firmware version(v1.0.1.3) showed on screen.



Upgrade Handset

- Once the new firmware is available, you can choose to upgrade new firmware at once(click " Upgrade Now "), or set up scheduled upgrade.
- Same as Base, you can check the firmware version of Handset by clicking dropdown menu.



Click "TARGET HANDSET" to select the handset(s) for firmware upgrade. There are "All Handsets", "Group_1 ~ Group_7" and individual handset as an option.

G	Tools		DuraFon Roam		A
	Firmware Backup & Restore	Reset & Reboot Phonebook	Email Notification		
[]	Co	ontroller	Base	Handset	
ш .њ	CURRENT	CURR	ENT Base_1 ~	All Handsets	Roam HC_10 🗸
ıl.	v1.0.0.3	v1.0	.1.3	Group_1 Group_2 Group_3 Group_4	w Last Status
	UPGRADE AVAIL v1.0.1.3	ABLE UPGP v1.0	ADE AVAILABLE	Group_5 Group_6 Group_7 DuraFon Roam HC_10	
۵		TARG	et base 3 4 5 6 7 8 A	DuraFon Roam HC_11 DuraFon Roam HC_12 All Handsets 💙	
&	Upgrade file : <u>B</u>	rowse Server Upgra	ade file : Browse	Upgrade file : Browse	E Server

- Re: In case the all bases installed closely (the interval between bases less than 6 feet), in order to avoid the interference between bases, please keep the Base_1 "Managed" only ("Un-manage" the rest bases) before start upgrading the firmware of handset(s).
- When firmware upgrade completely, you will see the new firmware version(v1.03) showed on screen.

G	Tools		DuraFon Roam		A
	Firmware	Backup & Restore Reset & Reboot	Phonebook Email Notification	~	İ
(f]		Controller	Base	Handset	
		CURRENT	CURRENT	CURRENT During David MC 10 M	
		v1.0.0.3	v1.0.1.3	View Last Status	
Ö		UPGRADE AVAILABLE v1.0.1.3	UPGRADE AVAILABLE v1.0.1.3	UPGRADE AVAILABLE v1.03	
٠			TARGET BASE	TARGET HANDSET	
&		Upgrade file : Browse	Upgrade file : Browse	Upgrade file : Browsen	
		Vpgrade Now	Vpgrade Now	Vpgrade Now	

PS: You can check the status of last upgrade by click "View Last Status".

G	Tools	Handrat Hograda X	8
4		CURRENT THATSEE OPUIAGE	Í
		v0.0.1.4 • offline • progress • success • fail 00	
		UPGRADE AVAILABLE	
*		v0.0.1.4	
		Upgrade file : Browse 12345678A Upgrade file : Browse 12345678A Upgrade file : Browse	
		Upgrade file : Browsen. View Last Status	
٠			
&		UPGRADE SCHEDULED	
		Time 🛱 2021/10/12 10:57 Device 🗋 Controller 📄 Base 📄 Handset 💽 🗸 Apply	

Schedule Upgrade

> In case you don't want to upgrade immediately, you can set a schedule upgrade.

G	Tools	DuraFon Roam	A
[}^ (E)	CURRENT v1.0.1.4	CURRENT Base_1 v v1.0.1.4	CURRENT DuraFon Roam HC, 10 V V1.02 View Last Status
 	upgrade available v1.0.1.4	UPGRADE AVAILABLE V1.0.1.4 TARGET BASE	UPGRADE AVAILABLE V1.02 TARGET HANDSET
₿	Upgrade file : Browsen	Server Upgrade file : Browsen	Vpgrade file : Browsen
& #	UPGRADE SCHEDULED Time 2022/06/20	13:47 Device 🗹 Controller 🗹 Base 🗹 Har	ndset 🗸 Apply

 Enable the "upgrade scheduled", setup a proper time by setting "Time", and click the device(Controller, Base or Handset).
 After setting up, click "Apply" to take effect.

G	Tools						DuraFon Roam		48
٢	CURRENT						CURRENT Base_1 ~	CURRENT DuraFon Roam HC_10 V	
4	v1.0.1.4						v1.0.1.4	v1.02 View Last Status	
	UPGRADE AV	AILABLE					UPGRADE AVAILABLE	UPGRADE AVAILABLE	
#	v1.0.1.4	< Jun		♥ 2022	2 -	>	(1.0.1.4	v1.02	
d.		Su Mo 29 30	Tu N 31	We Th 1 2	Fr 3	5a 4	ARGET BASE	TARGET HANDSET	
İ	Upgrade file :	5 6 12 13 19 20	7 14 21	8 9 15 16 22 23	10 17 24	11 18 25	Jpgrade file : Browse	All Handsets Upgrade file : Browsen	
٠	Vpgrade	26 27 3 4	28 5 13 🗸	29 30 6 7 · : 47	1 8 •	2	Vpgrade Now	🖌 Upgrade Now	
&	UPGRADE SCI			Cancel	A	pply			
	Time	₿ 2022/0	06/20	13:47]	D	evice 🗹 Controller 🗹 Base 🗹 Ha	ndset 🗸 Apply	

Backup & Restore

Navigate to Tools > Backup & Restore.

You can back-up the Configuration & Log of BSC to NB/PC or Micro-SD card. Also can restore the Configuration & Log of BSC from NB/PC or Micro-SD card.

G	Tools		DuraFo	on Roam	80
٢	Firmware	Backup & Restore	Reset & Reboot Phonebook Email No	tification	
			Configuration	Log	
æ			Backup Restore	Backup Restore	
ıl.					
Ē			Backup	Backup Restore	
٠					
&					

Reset & Reboot

Navigate to Tools > Reset & Reboot.

When system running abnormally, you can reset the system, or reboot it.



Click "Reset", followed by clicking "Apply" to reset BSC

G	Tools	8
9	Firmware Backup & Restore Reset & Reboot Ph Caution: All settings will be cleared.	
	Please unmanage base before reset Reset C boot Controller	
	✓ Apply	
4		
\$		
\$		
		

Click "Reboot", BSC will take 90 seconds to restart.

G	Tools	D	F D	8
	Firmware Backup & Restore Re	set & Reboot Ph	oot	
		Reset Controller	Reboot Controller	
		2	ڻ ا	
		Reset	Reboot time : 87	
~				
-				
*				

Phonebook

- > Navigate to Tools > Phonebook, you can do the following:
 - 1) Create a phonebook list
 - 2) Edit a phonebook list
 - 3) Delete a phonebook list
 - 4) Push phonebook list to all handsets.
 - 5) Export phonebook list to PC/NB.
 - 6) Import phonebook list from PC/NB.

Create a phonebook list by clicking

u	+	Add	I Co	ntact	,,

Tool	s				DuraFon R	oam				4
Firmv	/are	Backup & Restore	Reset & Reboot	Phonebook	Email Notificat	ion				
Q	Filter	×				🗊 Delete	at Push	Import	Export	+ Add Contact
	*	Name	Phone Number							^
	1	Phbook_01 🖄	11111101 🕑							í
	2	Phbook_02	111111102 🕑							
	3	Phbook_03 🕼	11111103 🖃							
	4	Phbook_04	11111104 💷							
	5	Phbook_05	111111105 📝							
	6	Phbook_06	111111106 📝							
	7	Phbook_07 @	111111107 🕑							
	8	Phbook_08 🕑	11111108 🖉							
	9	Phbook_09 🖾	111111109 🖽							
	10	Phbook_10	11111110							

> Enter Name and Phone Number, click "Apply" to take effect.

G	Tools				d				A
9	Firmware	Backup & Restore	Reset & R		Add Contact	×			Â
्रि	Q Filter	×		Name:			h 📑 Import	Export	+ Add Contact
	. *	Name	Phone	Phone Number:					
	1	Phbook_01	111111			_			<u>.</u>
÷	🗌 2	Phbook_02 😰	111111			🗸 Apply			
ıl.	3	Phbook_03 🗹	111111103 🗹						
÷	4	Phbook_04 😰	111111104 🗹						
	5	Phbook_05 😰	111111105 🗹						
	6	Phbook_06 😰	111111106 🗹						
	7	Phbook_07 😰	111111107 🖉						
2	8	Phbook_08 😰	111111108 🖉						
	9	Phbook_09 😰	111111109 🖙						
	10	Phbook_10 🗹	111111110 🗹						

Edit a phonebook list by clicking " \geq

G	Tools				DuraFon Roam				A 8
	Firmware	Backup & Restore	Reset & Reboot	Phonebook	Email Notification				Í
۲. ۲	Q Filter	×			Delete	🚅 Push	Import	Export	+ Add Contact
	- *	Name	Phone Number						
L.	1	Phbook_01	111111101						î
*	□ 2	Phbook_02	111111102 🖉						
ıl.	□ 3	Phbook_03 📝	11111103 🖙						
	4	Phbook_04	11111104 🖽						
	5	Phbook_05	11111105 😰						
	6	Phbook_06	11111106 📝						
•	7	Phbook_07 @	111111107 🕑						
æ	8	Phbook_08	11111108 🖉						
	9	Phbook_09 🖾	11111109 🖙						
	10	Phbook_10 🗹	11111110 🗹						

Delete a phonebook list, select the entry you want to delete, and then click \triangleright the "Delete ".

G	Tool	s				🗟 DuraFon Roam 🔥 🔼
	Firmw	/are	Backup & Restore	Reset & Reboot	Phonebook	Email Notification
a A	QI	Filter	×			Delete Z Push Import E Export + Add Contact
		#	Name	Phone Number		· · · · · · · · · · · · · · · · · · ·
-		1	Phbook_01	11111101 [2]		Î
.th		2	Phbook_02 🕼	11111102 🖉		
d.		3	Phbook_03 🖉	11111103 @*		
		4	Phbook_04 II	11111104 🖃		
		5	Phbook_05 🖾	111111105 🕑		
		6	Phbook_06 🖃	11111106 😰		
		7	Phbook_07 😰	111111107 😰		
A		8	Phbook_08 🖉	111111108 🕑		
		9	Phbook_09	111111109 🖃		
		10	Phbook_10	11111110 🖃		

- You can choose to transfer selected phonebook or all phonebook
- You can choose to transfer phonebook to individual/group/all handsets.
- Click "Start Pushing Phonebook" to send selected phonebook to desired handsets.

G	Tools			da ra		٦	AB
-	C	De dune 9: De stans	Decet & D	Phonebook Update	×		
	Firmware	Backup & Restore	Reset of R				
(H)	Q Filter	×	[]»»»	>> offline o progress o success	🔘 fail	sh 📑 Import 📑 Exp	ort 🕂 Add Contact
	#	Name	Phone	$\frown \frown$			
	1	Phbook_01	111111 10				Î
-	2	Phbook_02	111111				
1.	3	Phbook_03 🕑	111111			J	
-	4	Phbook_04	11111104 🗹				
	5	Phbook_05 🕼	11111105 🕼				
	6	Phbook_06 🖾	11111106 🗹				
-	7	Phbook_07 🖻	11111107 🗹				
æ	8	Phbook_08 🗳	11111108 @				
	9	Phbook_09	11111109 📝				
	10	Phbook_10 🗹	11111110 🗳				

Tool	s				DuraFon Roam	4
Firmv	/are	Backup & Restore	Reset & Reboot	Phonebook	Email Notification	
Q	Filter	×			🗊 Delete 🚅 Purch 📑 Import. 💽 Export	+ Add Contact
	*	Name	Phone Number		+	
	1	Phbook_01 [2]	111111101 😅			
	2	Phbook_02 @	111111102 @			
	3	Phbook_03 @	11111103 😅			
	4	Phbook_04	11111104 💷			
	5	Phbook_05 🔡	111111105 @			
	6	Phbook_06	11111106 🖃			
	7	Phbook_07 @	111111107 @			
	8	Phbook_08 @	11111108 @			
	9	Phbook_09	11111109 😅			

G	Tool	s				DuraFon Roa	am				AO
	Firmw	are	Backup & Restore	Reset & Reboot	Phonebook	Email Notificatio	n				
E)	Q F	ilter	×				🗊 Delete	≓ Push	Import	E+ Export	+ Add Contact
		#	Name	Phone Number							
		1	Phbook_01 🖾	11111101 @*							<u></u>
		2	Phbook_02	111111102 🖻							
1		3	Phbook_03 🕼	111111103 🖃							
		4	Phbook_04	11111104 🕑							
		5	Phbook_05	111111105 🕑							
		6	Phbook_06	111111106 🖃							
		7	Phbook_07	111111107 😰							
A		8	Phbook_08	111111108 🖻							
		9	Phbook_09 @	111111109 💷							
		10	Phbook_10	11111110 🖻							

Re: the default file name is "phonebook.csv".

> Retrieve and open phonebook file from NB/PC by clicking " **b** Import ".

G	Tools					🛱 DuraFon Roam	A 8
	Firmwar	e	Backup & Restore	Reset & Reboot	Phonebook	Email Notification	
Æ	Q Filt	er	×			🗊 Delete 🔁 Push 🚺 Import	Export + Add Contact
		۲	Name	Phone Number		1	
		1	Phbook_01 😰	111111101 🖃			<u>^</u>
.th		2	Phbook_02	11111102 🖉			
1		3	Phbook_03 🗹	11111103 🖃			
		4	Phbook_04	11111104 🗹			
		5	Phbook_05 @	11111105 🖃			
		5	Phbook_06 🖃	11111106 🖙			
		7	Phbook_07 🖉	111111107 🔡			
a		3	Phbook_08 📝	11111108 🖉			
			Phbook_09 @	11111109 💷			
-		10	Phbook_10 🕑	11111110 🖻			

Email Notification

- Navigate to Tools > Email Notification, you can setup the email notification for below information :
 - Weekly report with the Event & Call Log list.
 - Instant alert with base station offline.
 - New firmware available.

Tools				🛱 DuraFon Roam	A
Firmware	Backup & Restore	Reset & Reboot	Phonebook	Email Notification	
Mail N	Notification State				
	SMTP Server				
	SMTP Port				
	SSL/TLS				
	User Name				
	Password				
	From Mail Address				
	To Mail Address				
1	Test Apply				

Below is an example of "Weekly report with the Event & Call Log list".

Task tracked last	week (2021-09-29	11:36:58 - 2	021-10-06 11:36:58)					
eMMC									
Used:4%									
Calls									
Start Time	Call Type	Trunk	Caller ID	From	То	Base	Disposition	Duration	Rssi
2021-10-04 01:56:53	in	sip_00	222	222	Grp00	5	ANSWERED	10	-52
2021-10-04 02:45:19	in	sip_00	222	222	Grp00	2	ANSWERED	352	
2021-10-04 06:16:14	in	sip_00	222	222	Grp00	6	ANSWERED	4	-106
2021-10-04 07:23:13	in	sip_00	222	222	Grp00	4	ANSWERED	10	-52
2021-10-05 10:43:08	intercom		10	Hs10	Hs11	3	ANSWERED	5	-64,-101
Event log									
Error Warning	General								
Time	Device	E	ent Type	Descripti	on/Detail				
2021-09-30 06:40:24	Controller	DU	Л Status	Controller I	boot up.				
2021-10-04 01:09:27	Controller	DU	Л Status	Controller I	boot up.				
2021-10-04 01:40:22	Base_2	DU	Л Status	Base mana	aged.				
2021-10-04 01:40:26	Base_2	DU	Л Status	Base online	e from 192.168.	22.134.			
2021-10-04 01:40:53	Base_2	DU	Л Status	Base unma	inaged.				

> Below is an example of "Instant alert with base station offline".

<u>Event log</u>				
Error 🚦 Warning 🚦 General				
Time	Device	Event Type	Description/Detail	
2022-06-16 16:23:36	Base_8	Device Status	Base offline.	

Below is an example of "New firmware available".

Event log				
Error Warning Gener	al			
Time	Device	Event Type	Description/Detail	
2022-06-16 15:24:55	DuraFon Roam	Notify	Controller has new firmware available	

Technical Specifications

Hardware Specification CPU: Model: Qualcomm IPQ4019 Architecture: 32-bit Clock Rate: ARM A7 Quad Core 717MHz Hardware Encryption Acceleration: Yes Memory: System Memory: 1GB DDR3 Storage: eMMC: 4GB (MLC) Interfaces and LEDs 2 x 10/100/1000 Mbps RJ45 ports (1 x PoE) 1 x Micro SD Slot 1 x DC-Input Jack 1 x Reset Button 1 x Power LED (Orange) 2 x LAN LED (Green)

Mechanical & Environment

Dimension 100mm(L) x 60mm(W) x 23.4mm(H) Weight (Without accessories) 103g Operating: Temperature: 0°C~40°C (32°F~104°F) Humidity: 0% ~ 90% typical Storage: Temperature: -40°C~80°C (-40°F~176°F)

Humidity: 0% ~ 90% typical

Compliance Regulatory

FCC Subpart15 B

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