arbnco

ARC STARTER KIT -WiFi CONFIGURATION GUIDE

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TABLE OF CONTENTS

1.	How to Read This Document	3
2.	Before Starting	3
3.	Network Requirements and App	3
4.	Resetting the WiFi chip	3
5.	Configuration Steps Single Wi-Fi enabled AQ+ device	4
6.	Configuration Steps Multiple Wi-Fi enabled AQ+ device	6
7.	Troubleshooting	8



HOW TO READ THIS DOCUMENT

This document is intended for owners of standard arbn well installations and Arc starter kits. It describes how to connect your arbn well kit to a WiFi network. The guidelines described here should be followed as closely as practical. While arbnco maintains these documents with care and regularly updates them with the newest information, errors and misunderstandings can occur. If you are unclear about anything described in this document or need any other help with your arbn well system, please email well-support@arbnco.com. The guidelines in this document are not intended to be part of a professional code of practice, codes, standards, or statutory requirements. Happy sensing!

BEFORE STARTING

NETWORK REQUIREMENTS AND APP

To configure your Arc starter kit for your Wi-Fi, you will need the following:

- An Apple or Android smart phone.
- The Wi-Fi configuration application *Esptouch* from Google Play or Apple's App Store.



• A 2.4G Wi-Fi network

RESETTING THE WI-FI CHIP

Before configuration, reset the Wi-Fi chip on each of your AQ+ devices as follows:

- Connect the device to a power source using a micro USB cable.
- Press the button on the device four times (short presses). The device's front LED will flash red and green.
- Press two more times (short presses). The device's front LEDs will flash green several times, eventually stopping on their own.



CONFIGURATION STEPS (SINGLE DEVICE)

You can either configure multiple devices together (see below) or you can configure each device separately using the following steps:

- Connect your phone to a 2.4G Wi-Fi network.
- Connect the AQ+ device to a power source using a micro USB cable.
- Open the Esptouch app and enter the password of the same 2.4G Wi-Fi network to which your phone is connected.

	EspTouch	
SSID: SKY16FE0	0	
BSSID: 90:21:6:	99:c3:39	
Password:		
Device count:	1	
Broadcast Mu	Iticast	
	connected al	
Please make	sure the netw	ork is 2.4G
Please make		ork is 2.4G
Please make	sure the netw	ork is 2.4G

- Make certain your 'Device count' is set to 1 and that 'Broadcast' is selected.
- Press 'Confirm' on the Esptouch app and verify the light on your AQ+ device is flashing green, indicating it has entered acceptance mode.
- Keep the Esptouch app open for a few minutes while it is broadcasting to ensure your AQ+ device has connected to the Wi-Fi. You will receive the following messages when the configuration has finished:

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nl vodafone UK 🗢 16:48	24% vodafone UK	< ÷	21:13	֎ 43% ■
EspTouch			EspTouch	
SSID: ARBNCO WAP 2.4ghz	SSID: SKY	(16FEC)	
BSSID: 0:1d:aa:1d:8a:60	BSSID: 90):21:6:	99:c3:39	
Password: Lovingit1314	Password:		SFX.	
Device count: 1	Device cou	unt:	1	
Execute Result 84f3ebdb8ce4 is connected to the wifi	Bro	Suc: YE 84f3eb	xecute Result S,isCancelled: NO,t db9bca,inetAddres 192.168.0.45]	
l know			I know	-
The device is connected after sta Please make sure the network is The device only supports 2.40	AG Please	make	connected after sure the network only supports	rk is 2.4G
			Confirm	
APP-v1.3.2 / SDK-v0.3.7.0	APP-v1.3.2	2 / SDK	-v0.3.7.0	



Page 4 of 8

CONFIGURATION STEPS (SINGLE (CONT.))

- The AQ+ device has now been configured to the Wi-Fi and you should start seeing it reporting to the arbn well platform within 60 minutes.
- You can now repeat this process with your other AQ+ devices.
- If you have purchased other arbn well devices with your Arc starter kit, these should also start reporting once at least one AQ+ device is connected. Make sure they are in the vicinity of the device, and not in sleep/shipping mode. To check whether a non-WiFi device (which are battery-powered) is in sleep mode, press the button once (short press). The LED on the front of the device should flash green.
- Once each device has reported at least once, you may begin deploying them.

CONFIGURATION STEPS (MULTIPLE DEVICES)

To configure several AQ+ devices simultaneously, use the steps below. Occasionally, this process is less reliable than configuring each device individually.

- Connect your phone to a 2.4G Wi-Fi network.
- Connect all your AQ+ devices to a power source using micro USB cables.
- Open the Esptouch app and enter the 2.4G Wi-Fi network password.

🖬 vodafone UK 🗢	08:10	100%
	EspTouch	
SSID: SKY16FE	0	
BSSID: 90:21:6	99:c3:39	
Password:		
Device count:	1	
Broadcast M	ulticast	
	s connected a	
	ce only suppo	
	Confirm	

- Make certain your 'Device count' is set to the number of AQ+ devices that you want to connect and that 'Multicast' is selected.
- Press 'Confirm' on the Esptouch app and verify the lights on your AQ+ devices are flashing green, indicating they have entered acceptance mode.
- Keep the Esptouch app open for a few minutes while it is multicasting to ensure your AQ+ devices have connected to the Wi-Fi. You will receive the following messages when the configurations have finished:

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CONFIGURATION STEPS (MULTIPLE (CONT.))

•••Il vodafone UK 🗢 18:49 @ 83% 🔳	🖬 🛙 vodafone UK 🗢 18:49 🛞 83% 🔳	💵 🖬 vodafone UK 🗢 18:49 🕑 83% 🖿
EspTouch	EspTouch	EspTouch
SSID: SKY16FE0	SSID: SKY16FE0	SSID: SKY16FE0
BSSID: 90:21:6:99:c3:39	BSSID: 90:21:6:99:c3:39	BSSID: 90:21:6:99:c3:39
Password: EXVYSSEX	Password: EXVYSSEX	Password: EXVYSSEX
Device count: 2	Device count: 2	Device count: 2
Broadcast Multicast 84f3ebdb8d05 is connected to the wifi	Bro Execute Result [isSuc: YES,isCancelled: NO,bssid: 84f3ebdb8cf6 is connected to the wifi	Bro Execute Result [isSuc: YES,isCancelled: NO,bssid: 84f3ebd8d05,inetAddress: 192.168.0.46] [isSuc: YES,isCancelled: NO,bssid: 84f3ebd8cf6,inetAddress: 192.168.0.47]
	1 know	l know
The device is connected after startup Please make sure the network is 2.4G The device only supports 2.4G	The device is connected after startup Please make sure the network is 2.4G The device only supports 2.4G	The device is connected after startup Please make sure the network is 2.4G The device only supports 2.4G
Cancel	Confirm	Confirm
APP-v1.3.2 / SDK-v0.3.7.0	APP-v1.3.2 / SDK-v0.3.7.0	APP-v1.3.2 / SDK-v0.3.7.0

- Your AQ+ devices have now been configured to the Wi-Fi and you should start seeing all of them reporting to the arbn well platform within 60 minutes.
- If you have purchased other arbn well devices with your Arc starter kit, these should also start reporting once at least one AQ+ device is connected. Make sure they are in the vicinity of the device, and not in sleep/shipping mode. To check whether a non-WiFi device (which are battery-powered) is in sleep mode, press the button once (short press). The LED on the front of the device should flash green.

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• Once each device has reported at least once, you may begin deploying them.

TROUBLESHOOTING

If the Wi-Fi configuration fails, you will receive the following error:



In this case, please follow the General troubleshooting Steps outlined below.

If you have encountered this error while trying to configure multiple AQ+ devices simultaneously, please disconnect all but one of your Wi-Fi enabled AQ+ devices and follow the **General troubleshooting Steps** for each device individually

GENERAL TROUBLESHOOTING STEPS

- Ensure that the AQ+ device has not already connected to a Wi-Fi network by checking if your sensor device(s) are reporting to the arbn well platform. Make sure the AQ+ devices have been plugged in to power and connected for 10-30 minutes to allow the readings to propagate through the cloud. If no readings show up on the platform, carry out the following steps.
- Disconnect your AQ+ device from the power source.
- Close the Esptouch app. and disconnect your phone from the 2.4G Wi-Fi.
- Ensure that the Wi-Fi network with which you are connecting is truly 2.4G and reconnect your phone if it is (if it is not, select a different Wi-Fi that you know is 2.4G).
- Reconnect your AQ+ device to power.
- Open the Esptouch app. and follow the **Configuration Steps (Single)**.
- Repeat this process for all your AQ+ devices.
 Page 8 of 8

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