

## Technical Note No. 061

## Choosing a Network Operator for the AQLite or AQSync RUT-241 Router

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Author: Austin Bailly

This procedure will work to mitigate poor cell reception or cellular towers that constantly kick your instrument off their network.

Note: Currently, 2B Technologies does not have the ability to connect to Verizon towers. If a Verizon operator is chosen, the RUT-241 will not be able to connect to cell.

#### Summary:

This is the process for choosing a network operator in your local area for the RUT-241 router in your AQLite or AQSync.

## Required Hardware:

- A computer that connect to ethernet/ WiFi
- If using an AQLite: #2 Philips Screwdriver

## Initial Steps: Obtaining the Router Information

#### If using an AQLite

- Disconnect all power to the AQLite.
- Disconnect all power to the RUT (small yellow and orange cable).





• Using a #2 Philips Head Screwdriver, unscrew the two screws holding the RUT in place on the door.



- Turn over the AQLite and take a picture. The important information on the back of the RUT is the WIFI SSID, WIFIPASSWORD, USERNAME and PASSWORD.
- Follow the disassembly instructions backwards, re-connect the RUT to the back door plate and connect the power cable for the RUT.



# If using an AQSync:

• Contact <u>techsupport@2btech.io</u> to get the Wi-Fi information and admin password for your RUT-241 router. Please provide the serial number of your AQSync in your message to us.



#### Procedure:

- 1. Turn on the AQLite or AQSync, and look for the WiFi SSID obtained from the Initial Steps to appear on your computer.
- **2.** Once it appears, enter the WiFi PASSWORD obtained from the Initial Steps, and connect to the RUT.



**3.** Once connected, open a browser and type into the URL bar at the top 192.168.1.1. An example of the screen that should appear is below.





**4.** Type in the USERNAME and PASSWORD obtained from the Initial Steps and click Login. After successfully logging in, a screen example of what should appear is below.

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**5.** Click on the option Mode to switch the interface to the ADVANCED mode.

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6. On the left side navigation bar, choose the Network option.

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7. On the left Navigation Bar, Choose Networks Operators under Mobile.

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<<	NETWORK	CTELTONIKA   Networks	MODE USER FW VERSION Advanced Admin Rut2m_R_00.07.04.3 Logout ⊡>
	Mobile ~	NETWORK OPERATORS	OPERATOR LISTS
Status	General Network Operators	OPERATOR SCAN SETTINGS     Current operator T-Mobile Hologram	
Network	Interfaces > Wireless	Connection mode Auto	<u>^</u> )
Services	Firewall >		SAVE & APPLY
System	Routing >		

**8.** Change the connection mode to Manual-Auto, which will make the SCAN FOR OPERATORS option appear. Click on it.

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()) Network	Operators	Current operator T-I Connection mode	/lobile Hologram Manual-Auto		
<b>Ç</b> Services	Wireless Failover Firewall →	Operator code	VA SCAN FOR OPERATORS		
5ystem	VLAN > Routing >	~ AVAILABLE OPERATORS			
	DNS	Status Operator Name	Short Name Nume	eric Name Net	work Type

 A prompt will pop up while the router searches for available operators in your area. Wait until the prompt leaves. Note this could take while (should be done within 5 minutes).

	Manual-Auto
SCANNING FOR OPERATORS	IT MIGHT TAKE UP TO 180 SECONDS



10. From the list of operators, choose one that may work in your area (Note 2B Technologies does not have a contract with Verizon at this time. If Verizon is chosen, the router will not connect to cell).

	NETWORK OPERATORS			OPERATOR LISTS
OPERATOR SCA	IN SETTINGS			
	Current operator T	-Mobile Hologram		
	Connection mode	Manual-Auto	^	
	Operator code	313100 (FirstNet)	~	
		- Custom -		
		313100 (FirstNet)		
		310260 (T-Mobile)		
		311480 (Verizon)		
AVAILABLE OPE	RATORS	310410 (AT&T)		
Status	Operator Name	Short Name	Numeric Name	Network Type
Forbidden	FirstNet	FirstNet	313100	4G
Available	T-Mobile	T-Mobile	310260	4G
Available	Verizon	Verizon	311480	4G
Available	AT&T	AT&T	310410	4G

**11.** After choosing the desired operator, click SAVE & APPLY and wait 1 minute. After this minute, the router will restart on its own. If the operator chosen is a valid one, the router will connect to cell, and your instrument will be able to send data via the router.

NETWORK OPERATORS			OPERATOR LISTS
✓ OPERATOR SCAN SETTINGS			
Current operator	T-Mobile Hologram		
Connection mode	Manual-Auto	^	
Operator code	313100 (FirstNet)	~	
	Custom 313100 (FirstNet) 310260 (T-Mobile) 311480 (Verizon)		
✓ AVAILABLE UPERATURS	310410 (4181)		
Status Operator Name	Short Name	Numeric Name	Network Type
Forbidden FirstNet	FirstNet	313100	4G
Available T-Mobile	T-Mobile	310260	4G
Available Verizon	Verizon	311480	4G
Available AT&T	AT&T	310410	4G SAVE & APPLY



12. Note this does not mean your instrument will upload immediately. Wait the normal amount of time for the instrument to upload. If it does not, that means the operator chosen is not working. Go through the steps again and choose a different operator. If no individual operator works, reset the connection mode back to Auto, and contact techsupport@2btech.io.

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	Firewall	>		SAVE & APPLY
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