

USA Modem Upgrading

As a result of the 3G network shutdowns scheduled in 2022, incoming and outgoing calls will be affected, therefore requiring new firmware (FW) updates to keep your system active.

If your system is out of warranty, a replacement PCB assembly will need to be purchased. We offer individual PCBs and full upgrade kits for your convenience.

Please speak to our Sales team for more details - **+1 321 900 4599**

If your system is still within warranty it will depend on what equipment version you currently have that will dictate the correct solution for you.

Image	Items	Action Required
	Yellow Base PCB & Black Modem PCB	<ol style="list-style-type: none"> 1. Manually Update Base PCB FW 2. Replace Modem PCB under Warranty (Call Technical)
	Black Base PCB & Yellow Modem PCB	<ol style="list-style-type: none"> 1. Manually Update Base PCB FW 2. Update Modem PCB via SMS
	Yellow Base PCB & Yellow Modem PCB	<ol style="list-style-type: none"> 1. Manually Update Base PCB FW 2. Update Modem PCB via SMS

Manually Update Via Laptop and USB-B Cable

****ATTENTION****

CURRENT PROGRAMMING MAY GET DELETED IN THIS PROCESS AND REQUIRE PROGRAMMING AGAIN



- **USB-B type Cable**
(not included)
- **Windows Laptop/PC** (not included)
(Windows 10 or later, other OS not supported).
- **Firmware Burner PC Program**
- **New Firmware '.bin' File**
Available online. Link below



YouTube How-To Video:

<https://www.youtube.com/watch?v=15gYnPPJY1I>

***Ensure you are using the correct firmware file as per the table overleaf.**

Step 1: Connect

- Connect USB B-type cable to Windows PC/laptop (Windows 10 or later).
- Connect USB cable to port on PCB assembly as shown below.

****The intercom will need to be powered on before upgrading can begin****



Step 2: Download

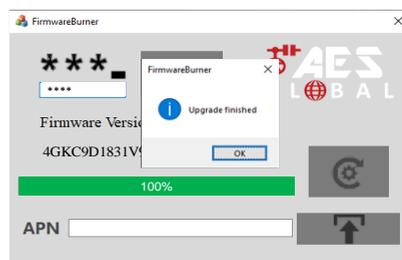
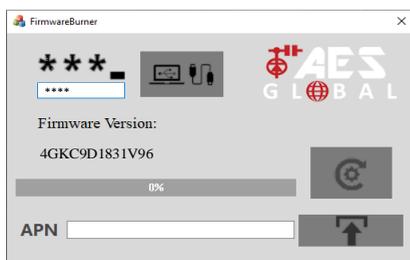
- (a) Download the 4G FirmwareBurner tool and corresponding '.bin' file from the AES Global website.

Available from the resources page on our website: aesglobalus.com

Device	FW
Cellcom-Prime	2.2.4
Keycell	1.1.4
Snapcom-Prime	2.1.5
Multicom-Lite	2.0.7
Multicom-Classic	3.0.7

Step 3: Upgrade

- (a) 4G FirmwareBurner Tool will load as shown below.
- (b) Enter the 4-digit Programming Passcode and click 'Connect'.
Default Programming Passcode/ Engineers Code is 9999
- (c) Check the latest firmware version on the board.
Available to view on most recent firmware only
- (d) Click 'Flash', locate the firmware file (bin file format), and wait for the upgrade to complete (PCB will auto reboot after upgrade).
- (e) Close the 4G FirmwareBurner Tool and remove the USB lead from the board.



*Tip: After PCB reconnects to network, reopen Upgrade Tool, Connect, and check new firmware version was successfully installed and apply the APN***

Check / Apply the APN

Step 1: Check APN Setting

To ensure the unit can connect correctly ensure the correct APN is set. The device is designed to obtain the APN dynamically i.e. automatically apply it. If you do not get a GREEN LED on the PCB after a maximum 180 seconds then you may need to apply the APN via the firmware tool. Instructions are available on our website or in the video above.

- (a) If you have a GREEN LED to check what APN is applied, send the text command ***20#**
- (b) Ensure the APN* information is correct for the SIM card in use.
(If the SIM is provided by AES the APN should be 'RESELLER'.)
**You can obtain the correct APN to be used by contacting the SIM card supplier.*
- (c) If the APN is correct you can proceed to test the unit for call out and in. If the APN is incorrect, you can reset this by sending the below SMS string.

9999#97X#

(replace X with the APN provided by the SIM supplier. E.g. 9999#97RESELLER#)

(9999 is the default programming passcode/ engineers code, if this has been changed you will need to use the correct code)

Update Quectel Modem Via FOTA

(Yellow Quectel version only & not required if you received a replacement modem from AES)

Step 1: Ensure you are on the correct base firmware version

- (a) Send the text command ***20#**
- (b) Confirm firmware matches the versions listed at step 2 on the previous page, depending on the type of device you have.

Step 2: Upgrade the Modem firmware

- (a) Upgrade the Quectel Modem by sending the below message.
(ensure the message is typed exactly as shown)

9999#60X# (Cellcom Prime, Keycell, Snapcom Prime)

9999#60#X# (Multicom Classic, Multicom Lite)

Tip: When using this format some cell phones may try to send the message as a link. This will not work, contact tech support for assistance.

X = http://23.105.204.41:2346/EC25/EC25AFXGAR07A03M1G_01.002.01.002-R07A03_30.001.30.001.zip

- (b) A text will be received as below to confirm the start of the process. It will take approximately five minutes to complete.
- (c) Receive FOTA upgrade complete message. (If an unsuccessful message is received, repeat from step (a).

PROCESS COMPLETE