COMMODORE 64 WIFI NETWORK ADAPTER SETUP GUIDE

Congratulations on your purchase of the Wifi adapter for Commodore 64 computer. With a little luck, you will shortly be reliving the golden age of BBS and PETSCII. ☺

To set up the wifi adapter you will need the following:

- **Wifi adapter (duh!)**
- **Commodore 64 Computer (double duh!!)**
- **C64 Terms program of your choice (Strike Term, Z term, Novaterm etc)**
- **Wifi network access**
- **An interest in 8 bit goodness (well, it helps)**

Before you start.

The wifi adapter comes with a fully functioning firmware allowing you to connect to your password protected wifi network. However the firmware itself has a few quirks that need to be understood in order to setup the wifi adapter.

In its current form, the wifi firmware will only connect to networks which have the SSID in UPPERCASE lettering. This may be rectified in future updates, but until then this means you must change your wifi network SSID to be all uppercase. For instance “MYNETWORK” is fine, however “MyNetwork” will not work. Please ensure you SSID is changed to all upper case with no special symbols. There is another quirk regarding the SSID that will be explained in the setting up section, sufficed to say that as long as your network SSID is all in uppercase you will be fine.

The wifi adapter works with WPA password protected networks. Ensure you have network password at hand before setting up. For ease of use I recommend using a password of all numerical digits such as “1857365937” as the quirk surrounding the SSID (read above) may affect the wifi adapter password handling also.

Getting started.

The wifi adapter is a USER PORT card and so plugs into the USER PORT of the Commodore 64. Plug the wifi adapter into the USER PORT with the components (chips, LED etc) facing up. **NEVER PLUG OR UNPLUG DEVICES WHILST YOUR SYSTEM IS POWERED UP!**

Switch on the C64 and load up your Terms package.

After loading, your terms package should show the current BAUD RATE. This should be 2400 baud. This is the maximum speed the USER PORT can communicate at. You can select speeds lower than 2400 baud, which will mean slower network access, however you cannot select speeds above 2400 baud.

Select the option to go to a TERMINAL.

You should now be able to type in the terminal window. Type “at” and press return and the system should respond with “ok”. This means the terms software is communicating with the wifi adapter successfully.

If when you press keys in the terminal window nothing happens (no characters appear on screen) then it probably means the wifi adapter is set to a different BAUD RATE to your terms software. If the two are set to different baud rates they cannot communicate. You must set both the terms software and the wifi adapter to the same baud rate to rectify this. The easiest way to do this is as follows:

- Press RESET on the wifi adapter and hold for 5 seconds. This will cause the wifi adapter to reset and set its baud rate back to the lowest setting of 300 baud. In your terms program, set the baud rate to 300 baud then go to the terminal window. It should now recognise key presses. You can now use modem commands to set the wifi adapter back to 2400 baud rate and then set the terms software to 2400 baud rate.

Assuming you are successfully able to type commands in the terminal window, you now need to setup the SSID and password of your wifi network into the wifi adapter. Remember how you had to have your network SSID in all UPPERCASE letters? Well, the other quirk with the current wifi firmware is that you need to give this SSID in LOWERCASE! The command to set the SSID is at$ssid= so if your wifi network SSID is “MYNETWORK” then to set this SSID in the wifi adapter you would issue the command at$ssid=mynetwork.

Once you have set your SSID you need to set the password. Again, the quirk that affects the upper/lowercase naming of the SSID may affect the password, so I recommend using a totally numerical password for ease. Ie “3856651945” for example. You set your wifi netowkr password with the command at$pass= so for the above example you would issue the command at$pass=3856651945.

Once this is done you can attempt to connect to your wifi network by issuing the command atc1.

If everything is correct you should see a message showing you a successful connection to your wifi network.

Now would be a good time to save the settings to the wifi adapter. If you do not save the settings then they will be lost when you power off the system. To save the current settings issue the command at&w. Congratulations! The hard work is over!!!

Now you start connecting to BBS systems etc. To do so you issue the command atdt this is followed by the telnet address of the BBS and the port. This information is always given with the BBS address. So, for example, Reflections BBS address is reflections.servebbs.com and the port is 23 so to connect to this BBS you would issue the command atdtreflections.servebbs.com:23 note the colon between the end of the bbs address and the port number. You should now be looking at the login page of Reflections BBS.

That’s it. Now all you need is that 80’s mix tape, some mirrored sunglasses and a lime green bean bag and you can start reliving the golden age of 8 bit networking. ;)

Some useful modem commands.

- Change baud rate: at$sb=N (N=300,1200,2400,4800,9600,19200,38400,57600,115200)
- Set WiFi SSID: at$ssid=yournetwork (always lowercase!)
- Set WiFi Password: at$pass=yourpassword
- Connect to WiFi: atc1
- Save current settigns to NVRAM: at&w
- Connect by TCP: atdtsome.bbs.com:23
- Disable telnet command handling: atnet0
- Get my IP: atip
- Make a HTTP GET request: atgethttp://host:80/path
- Answer a RING: ata
- Disconnect: +++ (following a delay of a second)
- Speed Dial: atdsN (N=0-9)
- Set Speed Dial: at&zN=HOST:PORT (N=0-9)
- Complete commands can be found with at? or athelp

Final tip.

The wifi adapter firmware allows you to set up and store 10 speed dial addresses. These are very quick and easy to set up so it is a good idea to store your favourite BBS's so you can dial into them by simply issuing the command atdsN – N being 0-9 of your stored addresses. For instance, if we wanted to store Reflections BBS as speed dial number 6 we would issue the command at&z6=atdtreflections.servebbs.com:23. Then to dial it in future we need only issue the command atds6.

REMEMBER – always save your settings with at&w or any changes will be lost when powering down.