FCA uConnect Modification

For Harmon 8.4" and 6.5" Units

Background:

There are many different models of the FCA uConnect, made by many different companies these include Harmon, Continental, Panasonic and Alpine.

The modifications here are for the Harmon manufactured units found in Jeep, Dodge, Fiat and Alfa, in the 8.4" and 6.5" size.

The 3.4", 5" and 7" units are made by different manufacture's run different software or have different sized screens, and are outside of the scope of these instructions.

Disclaimer:

I can not be held responsible for any damages to the uConnect, Car or your hair falling out from running any of the modifications outlined here.

That being said, if you do have a problem please contact me and I will see if I can help you fix it.

I can be contacted through XDA in the uConnect 6.5 (Alfa / Fiat) Root Access topic, or directly through: isquithy@gmail.com

Model Clarification:

Though visually identical there are at least 7 different versions of the 6.5 uConnect identified so far. These are categorised by Region (EU, NA and ROW) and Model (333, 944 and 524).

The Regions are easy to identify as it is listed on the System Info as part of the map database. Eg: CMCVP4EU; or FCAVP4ROW; and are quite self-explanatory.

Eg:

This is a NA uConncet

And this one is a EU uConnect

The Model can be more difficult however, so far there have been 3 main models identified, loosely based on the cars they are in:

944 = Alfa EU, NA and ROW (Giulietta being model 940)

333 = Fiat ROW and NA (Fiat 500 being model 330)

524 = Jeep EU and NA (Renegade being model 520)

However just to confuse matters further most EU Fiats also use the 524 update file.

This means that there are currently 4 different swdl.iso versions (magic.zip files) covering the updatable uConnects recognised so far:

"8.4 pre UPD – VP4 14.05.03 NA" --This is for the USA 8.4" uConnect. This file can be used on any firmware version up to v16.10.xx – After that the UPD update system has been used, and cannot currently be updated

"Alfa pre UPD – 944 17.07.55 EU" --This will run on any EU Alfa running 17.07.55 or older, again 17.35.41 and newer uses the UPD update system, and cannot be updated currently

"Alfa ROW – 944 15.18.00 ROW" --This is the only update known about for the Alfa ROW units

"Fiat pre UPD – 333 15.43.00 NA" --This is the only update known about for the early NA Fiats

"Jeep pre UPD – 524 17.07.46 EU" --This will run on Jeeps or Fiats running 17.07.46 or older, any update after 17.07.46 uses the UPD update system and can not by update using these files.

For Clarification

If you have a 8.4" uConnect running firmware >16.10.xx OR a 6.5" uConnect running firmware >17.07.55, currently NON of the modifications will work on your system. This is due to the new update system being used by FCA that uses .upd files and not the modified .iso's listed.

Where possible it is recommended to update the uConnect to the latest version of the modifiable firmware before running any of the modifications on it, as all the modifications that have all been developed on / with the v17 firmware and using older firmware may cause problems.

USB Media:

The uConnect can only read a FAT32 Formatted USB memory stick. During the modification process it is recommended to make a backup of the system first. The best practice for this would be to have 2 USB sticks, one containing the created backup for safe keeping and the second one for the modifications.

If using this method, then 2 x 16GB USB memory sticks should be more than sufficient.

The other method would be to have 1 large USB Stick at least 32GB in size used for both backup and modification.

When selecting the USB Stick, it is VERY useful to select one that has an activity LED on it such as the SanDisk Ultra Fit USB3.0, this is useful to have as some of the file transfers can take time to complete and the uConnect will not appear to be doing anything and my not give any indication of the completed process. By having the LED indicator, it is possible to visually see when the file transfer activity has completed.

I personally use a 64GB SanDisk UltraFit USB3.1 as my main testing / development USB stick and have a 32GB SanDisk Ultra Fit USB3.0 as my now old development stick / backup.

*** the SanDisk UltraFit USB3.1 does not have a LED on it.

File Location:

All the files required are currently hosted on a MEGA share, the URL:

https://mega.nz/#F!kURhTCbJ!uJhKPMyGiESbvQSDb33CvQ

BACKING UP uConnect:

After the correct identification of the uConnect make / model / version, download the corresponding files from the above URL:

"1 Magic -XXX.zip"

"2 Backup.zip"

1. Expand "1 Magic -XXX.zip" and "2 Backup.zip"

2. Copy the content onto the root of the USB drive

Name

📁 backup
📄 script
💿 swdl
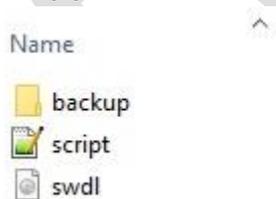
3. Start the car and let uConnect boot up (wait approx 5min for full boot up). The last part of the unit booting up is the hands-free system

4. Plug in and WAIT, the uConnect will not appear to be doing anything but if you are using a USB with a light you should be able to see it flashing with file activity

5. After some time, in my case it took 45min to complete this stage, it should popup a window about there is an update to the software that you MUST

answer NO to – Answering yes will cause much pain and problems, so just say NO.
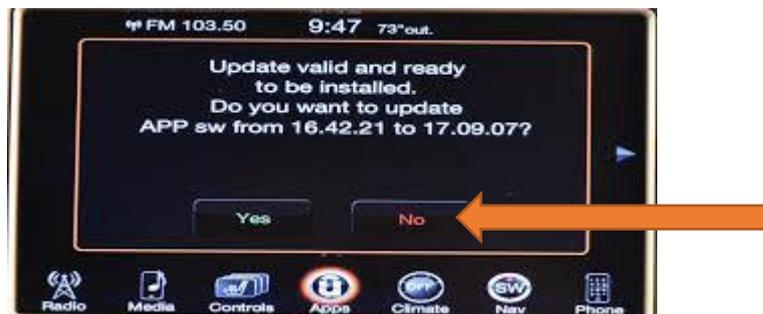
6. After answering NO to the update, Pull USB, and power cycle the uConnect*

The backup of the map and app files will be in the Backup folder on the USB Stick.

If you are using the 2 USB stick method, DELETE THE "SCRIPT.LUA" file from the USB stick at this point and KEEP THIS USB SAFE, it is your recovery system.

If you're like me and use a >32GB USB stick, KEEP THE BACKUP FOLDER SAFE – mark it as read only.

There are now uploaded copies of the official EU Map Packs (A) from 2013 Alfa, 2015 VP4 (Any) and 2017 VP4 (Any) and NA Map Packs (B) 2013 VP4 (Any), that will function as backups or official upgrades for anybody needing them, or wanting to restore the uConnect back to stock system software.

If you have a different set of Original Map files, such as ROW, NA or Brand specific files please contact me, and I can add them to the Mega Share for all to benefit from

Modifying the uConnect:

After the correct identification of the uConnect make / model / version, download the corresponding files from the above URL:

"1 Magic -XXX.zip" if not already got from the backup stage

The modification eg: "D FEU Custom 2019v1.zip", "Z TMC Update.zip", "Z Status Check.zip" etc.

1. Expand "1 Magic.zip" and the modification (in this case "D FEU Custom 2019v1.zip")

2. Copy the content onto the root of the USB drive

3. Start car and let uConnect boot up (wait approx. 5min for full boot up). The last part of the unit booting up is the hands-free system

4. Plug in and WAIT, the uConnect will not appear to be doing anything but if you are using a USB with a light you should be able to see it flashing with file activity

5. After some time, in my case it took 1min to update the TCM, 10min to complete a UK only map update and approx. 50min to update the FullEU. It should popup a window about there is an update to the software that you MUST answer NO.
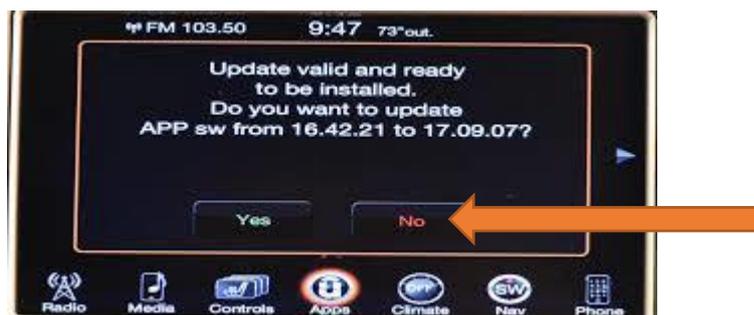
6. Pull USB, and power cycle the uConnect*

Status Checking:

There have been a few methods built into the system to check the status of a modification.

If updating a Map: The status of the update can be confirmed by looking at the System Information on the uConnect. If it has been updated the Map Database should start with "TAA;" and will reflect the update you applied

If changing the splash screen: It would be very obvious from the first power on if it had been successful or not.

If having more complex problems there is the "Z Status Checker.zip" that will produce some files in the "fs" folder that can be assessed to review any problems.