Before you begin:

You must have Python installed on your computer. Python is usually installed by default on Linux (including Raspberry Pi) but not on Windows. To see if it is installed open a Command Prompt (Windows) or a terminal (Linux) and simply type ***python*** (all lower case). If you see a prompt of three arrows (>>>) then it is installed. Type ***quit()*** to return. If you don't see the prompt please try typing ***python2*** and ***python3***. (Depending on your installation it may be called one of these two names).

If Python is not installed please visit https://www.python.org/downloads/, the Python Foundation download page. There are other download sources, including Microsoft. You may find that there are two Pythons, 3.11 and 2.7 (sometimes referred to as Python3 and Python2). These instructions are for Python3. (Python2 will soon become obsolete).

Setup instructions:

1. Store *UDPRepeater2Multi.py* in a convenient directory on your computer.
2. The WSJT-X Monitor app has told you the IP address of your Android phone. Open *UDPRepeater2Multi.py* with any editor (such as Windows Notepad). On line 50 substitute the your phone's IP address for the 192.168.1.57 that is written there. On line 17 if your multicast IP is not 224.0.0.1 then change it to the IP you are using.
3. Open WSJT-X. Go to *Settings/ Reporting tab*. Set UDP Server to your multicast IP and port to 2237 (the default). Under Outgoing Interfaces choose both options. Leave Multicast TTL at 1 (default).
4. Open a Command Prompt window (Windows 10) or a terminal (Linux), change to the directory in which you stored *UDPRepeater2Multi.py* and type "***UDPRepeater2Multi.py***" (Windows) or "***./UDPRepeater2Multi.py***" (Linux). Data should now flow to both your Android device and your desktop app(s).
5. To terminate *UDPRepeater2Multi* simply close the Command Prompt or terminal window.

For your understanding:

What we're doing is telling WSJT-X to send data to the *UDPRepeater2Multi* script. Since Android does not support multicast *UDPRepeater2Multi* will then "repeat" it to your Android devices by sending a unicast packet.

This setup only has to be done once. After that, start this Python script every time you start WSJT-X. In other words, repeat step 4 above.

Within the script, lines 50-54 have this format:

txAddress1 = ('**192.168.1.57**', **2237**)

The first set of numbers (192.168.1.57 in this example) is the IP address. The second number (2237) is the port. With this in mind, lines 50-54 are the IP address and port where the data is *sent* (the Android device) . Feel free to change these as needed and add more devices (anything after a '#' is a comment so lines 52-54 are not used).

Even more details:

- The *UDPRepeater2Multi* script can be easily modify it to send data to more Android devices, such as a third phone or a tablet. For assistance see to the comments in *UDPRepeater2Multi* (lines beginning with a '#'). Or contact us.
- You can use *UDPRepeater2Multi* to send data to other computers, not just Android devices. This may be useful if your router does not support multicast by default.
- The IP address 127.0.0.1 always means "this computer". If you want to send unicast messages to 127.0.0.1 using this script please contact us. A small addition is required.