

Start the AirDefense server:

1. Connect the power cord.
2. Flip the switch next to the cord connection to I.
3. Press and hold the button on the front with the Green check.
4. After a few seconds the unit will power up.

Start the controller Laptop (sent with package):

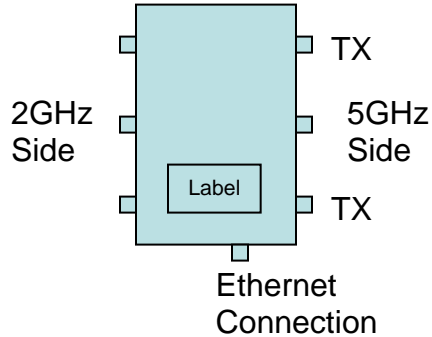
1. Boot the laptop
2. Connect to the switch if not already done.
3. Double click the AirDefense Icon on the desktop
4. Enter the username: Motorola
5. And the password: Motorola\$1
6. The control window should come up.
7. Ensure the reference AP is booted up and connected to the switch.
8. Also ensure the metal sensor AP (DUT) is connected as well
9. NOTE: the reference AP and the sensor AP (DUT) will require POE and antennas.

Connect the MU:

1. Boot up your selected MU (not included in the package).
2. Set your IP address to the subnet: 192.168.3.n
3. A good selection would be 192.168.3.201
4. Search the SSID list for something different
5. I don't remember what we set the SSID to, SRK thinks it was set to Motorola, but it may be dfs_test or something else. You should recognize it as an SSID not usually in your environment. The sensor AP does not beacon, so there should only be one new SSID visible and that is the one.
6. Connect to this SSID and start a ping session.
7. Note the SSID.

On the AirDefense Server control screen:

1. On the controller laptop, select the Reference AP in the "Default Group"->"ap650-112233".
2. This will be selectable on the left lower panel. Click "Default Group" to expand that and "ap650-112233" should be the sensor that has the green mark. You may need to give it some time after you get everything connected for it to settle out.
3. Now you should see the SSID of the reference AP in the list of SSID below the "ap650-112233" entry.
4. Select this, but don't do anything yet.



Connections:

1. You will only need antennas on the 5GHz side.
2. But you will need one of the outer TX connections going to a Spectrum Analyzer to monitor the output of the DUT.

Preparing for the test:

1. The Reference AP is not set up in DFS Test mode, so it will jump once you inject Radar signals.
2. Check the channel that the reference AP is set to on your MU. It should be set to 108+112.
3. Set your Radar simulator to that channel for the first test.

Running the first test:

1. Now go back to the controller Laptop and right click on the SSID entry of the reference AP
2. Right click on the SSID of the Reference AP.
3. Select "Air Terminate Disconnect"
4. Click Ok in the dialog (don't change any of the defaults).
5. Quickly verify that the Sensor AP is now transmitting packets to the Reference AP on the Spectrum Analyzer (Set your sweep time to 1 or 2 seconds for this).
6. Now you must inject radar before the sensor AP successfully shuts down the Reference AP (roughly within 5 seconds of hitting the OK button on the dialog in step 4)

The timing is critical. The Sensor only transmits when the AirDefense server tells it to shut down an AP in its environment. And after it is successful, the reference AP will no longer be able to notify the sensor that it has detected Radar. Under normal operation, there will be multiple APs connected to the Sensor that will all be detecting the radar signals, so this limited scenario will not happen.

But for our purposes, you just want to inject the radar before the sensor is successful in removing the Reference AP from the environment, and verify that it successfully tells the Sensor AP to get off of the channel.

It may take several tries to get the timing correct for the test, and become comfortable with the visual clues on the Spectrum Analyzer that determine if the test is working or not.

To Test Again:

1. Ensure there is no more radar being injected.
2. Reboot (repower is the easiest) the Reference AP.
3. On the dialog showing on the control laptop hit "Clear All"
4. And dismiss the dialog.
5. Once the Reference AP is rebooted and is again beaconing (ping session is reestablished), the test is reset and you can again perform the test.

Once you get to the point where you are comfortable with the test, I will send instruction on how to set up the AirDefense server for other channels (if you need to test multiple channels).

You will also need to run the test on the internal antenna version of the sensor AP. If you have your own method of monitoring the output of the internal antenna sensor, that is good. You could if you need, open it up and connect one of the TX antennas directly to your Spectrum Analyzer.