

## TECHNICAL BULLETIN # 2

August 07, 2015

To: All EMxpert End-Users

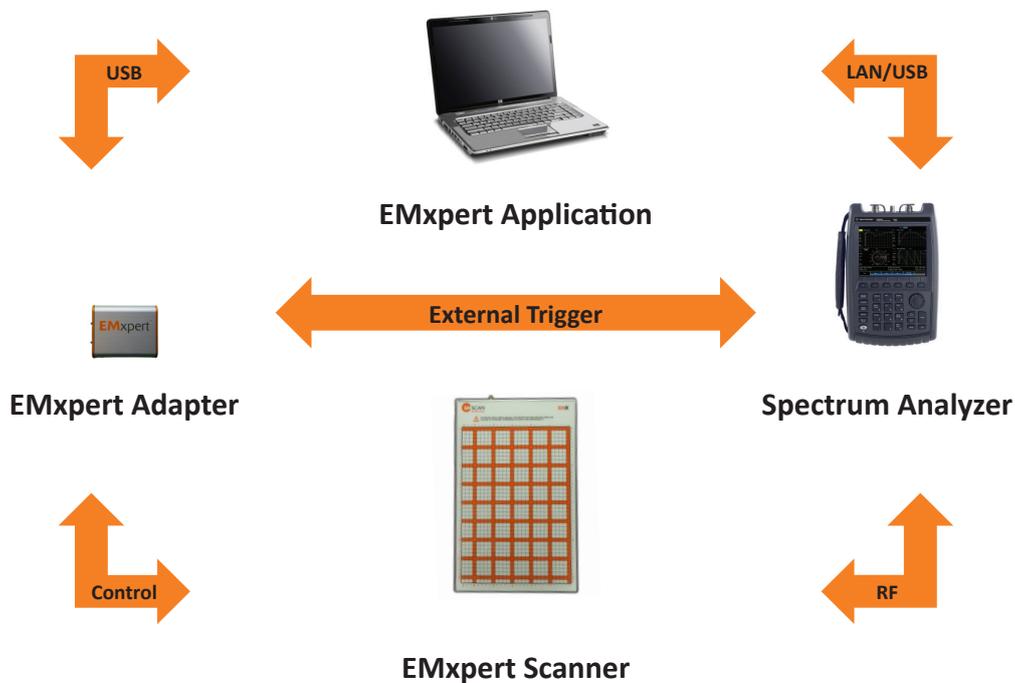
Re: EMxpert v5x Quick Installation and Checklist

1. Install latest version of Keysight IO

Click [here](#) to download the latest version.

2. Install the EMxpert software application by double clicking on Setup application icon. The application must always be installed on the C: drive.
3. Connect PC, scanner, adapter and spectrum analyzer as per the diagram below. If you are using Ethernet between the PC and the spectrum analyzer, use a crossover Ethernet cable.

If the spectrum analyzer has multiple trigger ports, always connect to Trigger 1 IN.



4. If you are using an USB cable to connect the PC to the spectrum analyzer, do so and then go to Step 5.

If you are using an Ethernet crossover cable first set up your IP address as follows:

Set your spectrum analyzer to the static IP address 172.16.1.148/255.255.0.0; you will probably have to restart your analyzer.

Set your PC with static IP address 172.16.1.99/255.255.0.0

Best is to set it up in *Alternate Configuration* in the *Local Area Connection Properties / Internet Protocol Version 4 (TCP/IPv4) / Properties* path [in Windows 7 or equivalent path for other Windows OS]

If you want to use another pair of IP addresses (PC + Spectrum Analyzer) you need to discontinue the heartbeat function that is today only able to ping 172.16.1.148. Please make the following change to 'EMxpert.ini' in the directory where EMxpert.exe is: C:\Program Files (x86)\EMSCAN Corporation\EMxpert 5.

Open this file by using notepad; there is the following section at the end:

```
[EMxpert Info]
Spectrum Analyzer Detecting = 1
Scanner Detecting = 1
```

Just change into:

```
[EMxpert Info]
Spectrum Analyzer Detecting = 0
Scanner Detecting = 1
```

#### 5. Install the EMxpert USB driver

Go to *Control Panel / Hardware and Sound / Devices and Printers / Device Manager* [in Windows 7 or equivalent path for other Windows OS]

Expand "USB Custom Driver" and look for EMxpert USB Driver 2014

If it says 2010 or if there is a yellow triangle, right click and select Update driver and then browse to the "EMSCAN EMxpert USB Driver" folder in the install folder on the CD, hard disk or key.

Click on the "EMSCAN EMxpert USB Driver" folder and press OK. Proceed with the installation steps.

Note that you may have to repeat this procedure if you connect the USB cable between the adapter and the PC to another USB port at another occasion.

Note as well that not all USB ports are equal; some are less than others and may not work with the EMxpert adapter. Try various ports until you find one working properly.

The EMxpert driver is a third-party Microsoft approved driver. If the installation fails you must disable the third-party driver enforcement of Windows 8 and 8.1 as follows:

#### **Windows 8.0**

On the side START bar, click on "Settings"

Click on "Change PC settings"

In PC Settings, click on "General"

Scroll down to "Advanced startup"

Click on "Restart now"

In "Choose an option", click on "Troubleshoot"

In “Troubleshoot”, click on “Advanced options”

In “Advanced options”, click on “Startup Settings”

In “Startup settings”, click on “Restart”

In “Startup settings”, press number 7 on your keyboard to select “Disable driver signature enforcement”

### **Windows 8.1**

On the side START bar, click on "Settings"

Click on "Change PC settings"

In PC settings, click on "Update and recovery"

In "Update and recovery" select "Recovery"

In "Recovery" go to "Advanced startup"

Click on “Restart now”

In “Choose an option”, click on “Troubleshoot”

In “Troubleshoot”, click on “Advanced options”

In “Advanced options”, click on “Startup Settings”

In “Startup settings”, click on “Restart”

In “Startup settings”, press number 7 on your keyboard to select “Disable driver signature enforcement”

### 6. Open Keysight IO

Look at the bottom right of the Keysight IO window and see if it says PRIMARY VISA

If it does not, go to *Control Panel / Programs / Select Keysight IO / Change / Modify / Select PRIMARY* [in Windows 7 or equivalent path for other Windows OS]

When using a FSH 4 or FHS 8 connected via USB to the PC, go to the install folder on the CD, hard disk or key, open the folder USBDriverFSH8 and run the FSH4\_V2\_11.exe in order for the Keysight IO library to recognize the FSH.

Keysight IO is good at auto-discovering and configuring. If it is connected properly you will see in the bottom section Messages the following two lines:

Instruments are already discovered and configured

User interface session started

If there is a connection issue, mostly with LAN, select Manual Configuration and then LAN Instrument

In Set LAN Address / Hostname or IP Address

Enter the IP address 172.16.1.148

In Verify Connection

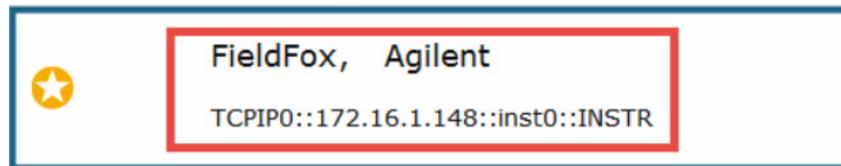
Click on Test this VISA Address

Then click on Accept

If there is still no connection, disable your PC firewall or set it up to allow traffic to/from 172.16.1.148 and repeat the steps above.

If you are using a Keysight X series spectrum analyzer, please refer to Technical Bulletin #9 for additional help in connecting the analyzer.

Once connected, set the analyzer as a favorite. Click on the grey star and it will turn yellow.



7. Close Keysight IO

If you are using an Keysight X series spectrum analyzer, please refer to Technical Bulletin #9 for specific settings before closing Keysight IO.

8. Double click on the EMxpert5 icon

Look at the bottom of the EMxpert application and wait until it shows "Connected to the Scanner and Spectrum Analyzer".

Get ready to scan!

If you have any issue, verify that you are using a compatible spectrum analyzer with the right hardware, firmware and software version:

[http://www.emscan.com/emxpert/EMx\\_supportedSA.cfm](http://www.emscan.com/emxpert/EMx_supportedSA.cfm)

If your EMxpert still does not work, contact us by email at [support@emscan.com](mailto:support@emscan.com) or call +1-403-291-0313 ext. 2