# Procedure for Connection Setup and Process of Scope test cases

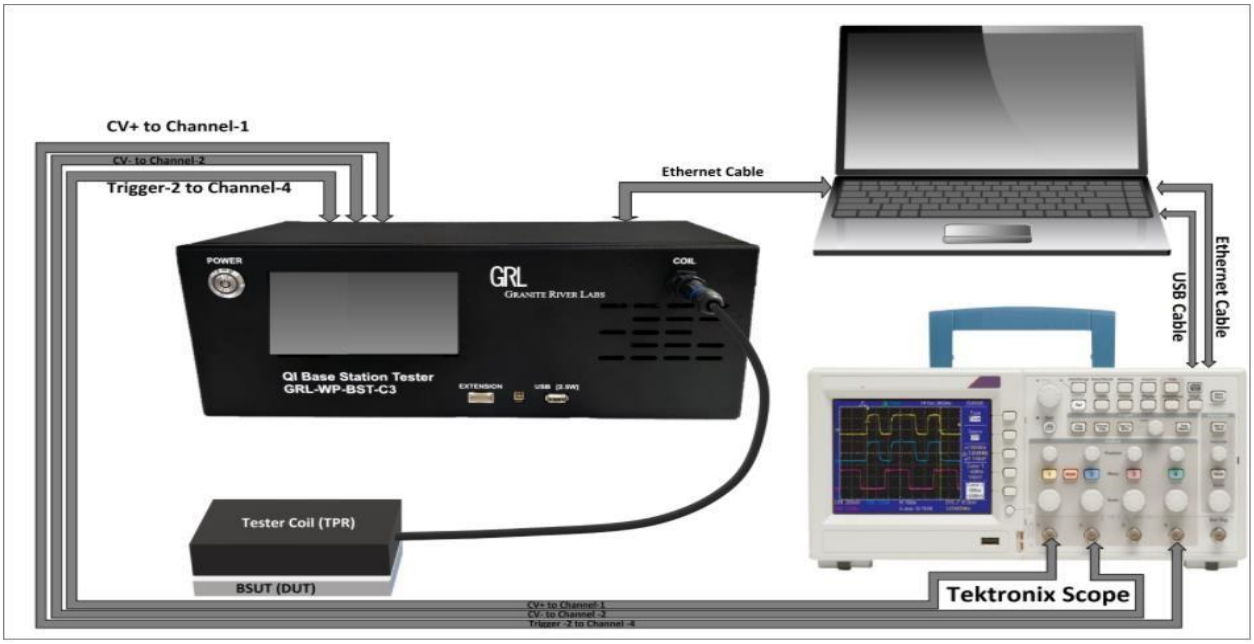
*Tools Required:*

1. *Oscilloscope*
2. *Two Ethernet Cables*
3. *Type-A to Micro-B USB Cable*
4. *Scope Probes*
5. *C3 Controller*
6. *Laptop/ PC*
7. *TPR Coils*
8. *If PC/Laptop has 1 Ethernet port then USB to ethernet adaptor is needed*

Ethernet to USB adaptor

## Scope connection with GRL-WP-BST-C3:

1. Connect CV+ of C3 box to Scope Channel-1.
2. Connect CV- of C3 Box to Scope Channel-2.
3. Connect Trigger -2 to Scope Channel -4.
4. Connect Ethernet cable from Scope to PC USB using Ethernet adaptor.
5. Connect Type-A to Type-B cable from scope to PC.
    a. Connect Type-B plug to backside of Scope and Type-A to PC
6. Connect C3 Ethernet cable to PC



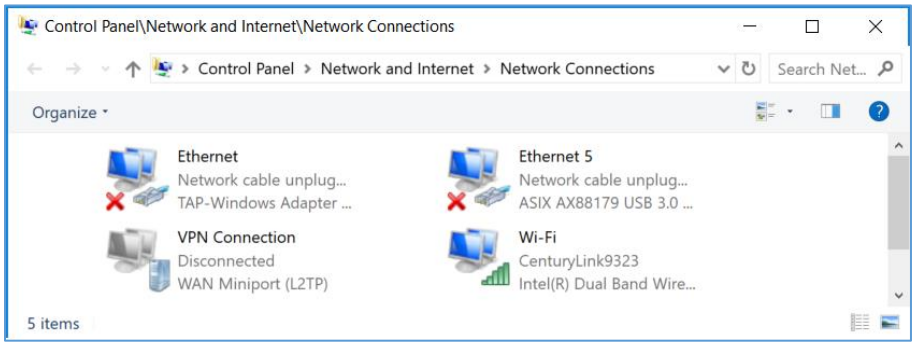

## Steps follows running test cases in scope:

1. GRL-C3 Tester /Scope Ethernet IP address settings.
2. Installation of Tek Visa in Testing PC.
3. Sharing folder in scope without password protect C3.
4. Scope connection setup with C3 Box.

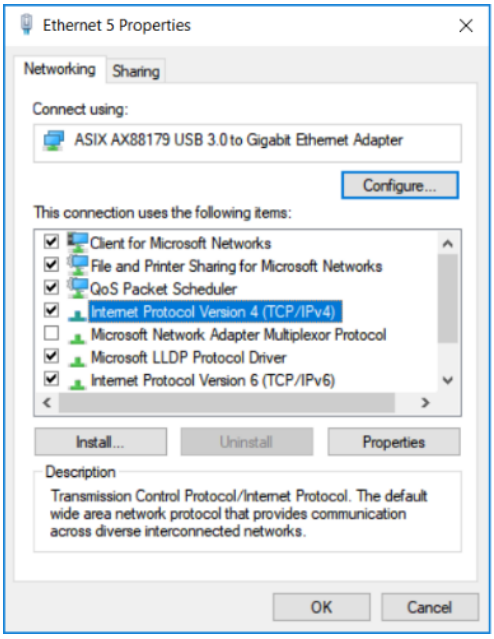
## GRL-C3 Tester /Scope Ethernet IP address settings:

The Ethernet port on the control computer needs to be configured correctly for the GRL-C3 tester to recognize the control computer and vice versa.

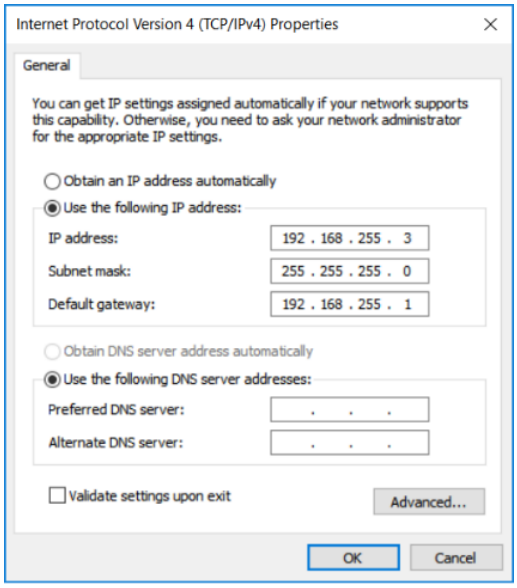
To make sure the network connection is set up correctly, open the Network Connections panel from the Control Panel.




Open the Ethernet panel for the Ethernet port that will connect to the GRL-C3 tester, select “Internet Protocol Version 4 (TCP/IPv4)” and click on the “Properties” button below and to the right.

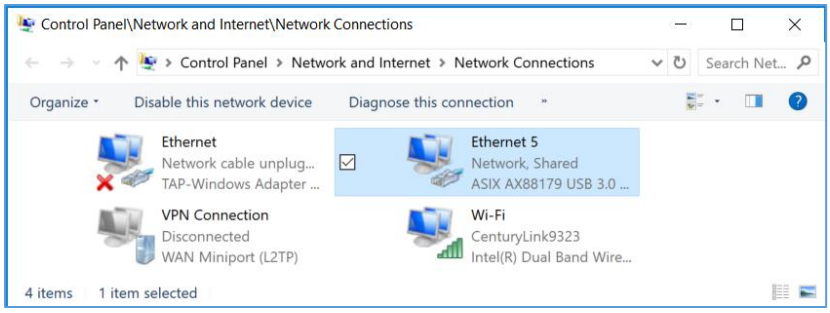



Set up the TCP/IPv4 properties as shown below.




Select a static IP address ("Use the following IP address:") which should be 192.168.255.*n* where *n* is any number between 2 and 255. The subnet mask should be 255.255.255.0 and the default gateway should be 192.168.255.1. The rest of the items should remain unchanged.

Click on the "OK" button on the Internet Protocol Properties and close the Ethernet Properties. Make sure the GRL-C3 tester is powered on and completely booted up (front panel display shows firmware version number) and then connect the Ethernet cable from the GRL-C3 tester to the computer's Ethernet port that was just set up. The network connections panel should now look as pictured in **Error! Reference source not found.** below:



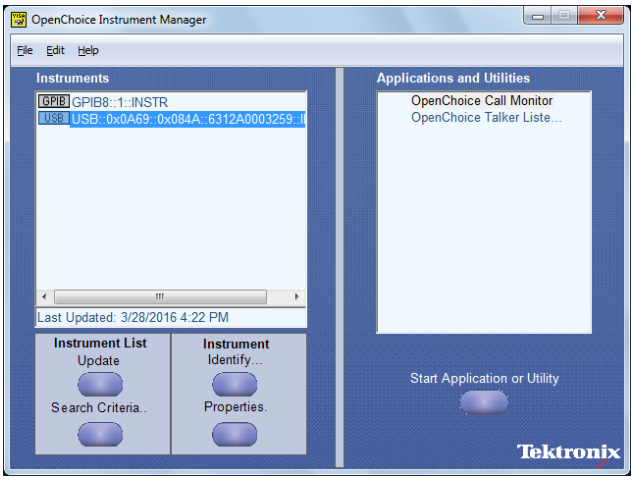

The GRL-C3 tester is now set up and ready for use.

Before running any tests, it is recommended that you verify that the control computer and the GRL-C3 are communicating by going to the "Connection Setup" screen on the GRL-C3 Browser App and clicking on the "Connect" button. The tester status should display "Connected". Refer to Section **Error! Reference source not found.** below.

Note: Please follow same steps for scope ethernet settings. Make sure keep different Ip address Eg: 192.168.255.10

## Tek Visa Installation in PC/Laptop:

1. Click on the below is link to download Tek visa Software. https://graniteriverlabs1-my.sharepoint.com/:u:/g/personal/india-drive_graniteriverlabs_com/EUhQgX9imI1EqPZEYQOokIQBU6enEDCrfdqfQONNU7b4NA?e=aKiQW4
2. Connect USB Cable from Tek scope to PC/Laptop.
3. Click on download folder and double click on "OpenChoiceTekVisa_Deployment_Package_066093812" file.
4. Install Tek visa software in laptop.
5. After installation Software recommends to reset the PC, please restart it.
6. Open Tekvisa application which installed latest.
7. Makes sure Tekscope instrument was displayed in instruments panel.




## Steps for Connection Setup:

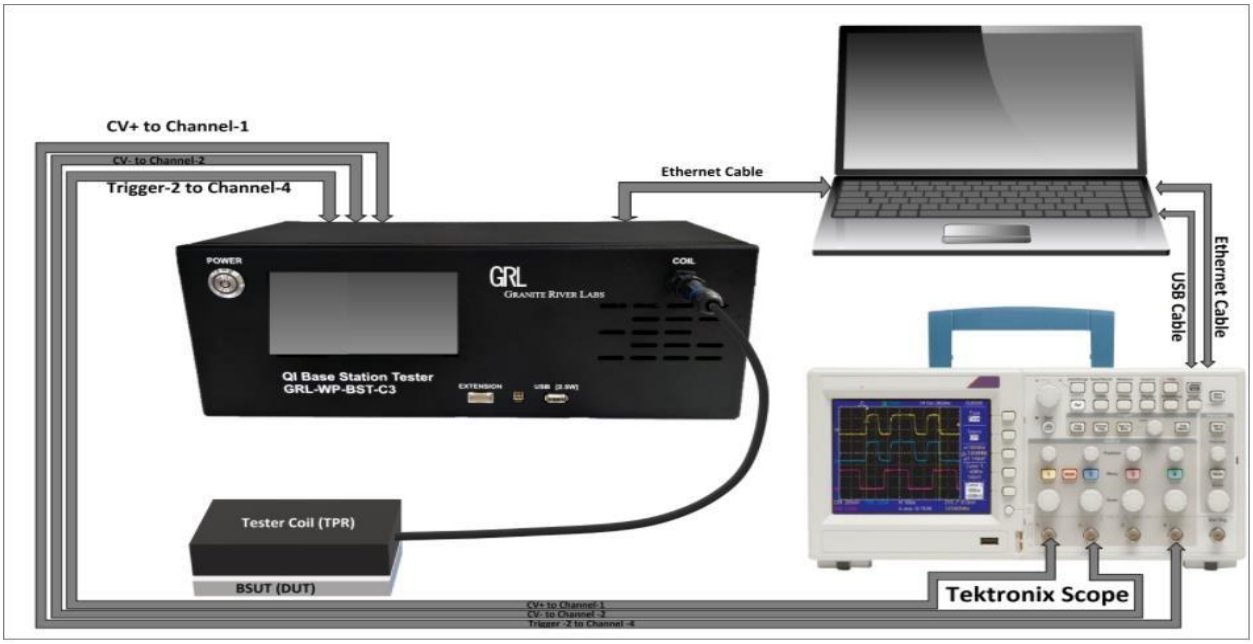



*Image.1*

Step1: Connect C3 controller to PC/Laptop using Ethernet cable.

Step2: Ensure latest C3 Browser Application and Tekvisa Software is installed in PC.

Step3: After Successful Installation of Software's (Which mentioned in Step 2) establish connection with C3 setup.

Step4: Connect Oscilloscope to PC/Laptop using LAN connection.

Step5: Make sure all the Ethernet IPV4 settings has been configured with Unique IP address.

Step6: Connect CV+ to Channel-1, CV- to Channel-2 and Trigger-2 to Channel-4 from C3 to scope as shown in the image (*Image.1*).

Step7: Connect Type-A to Micro-B Cable from scope to PC in-order to read scope waveforms.

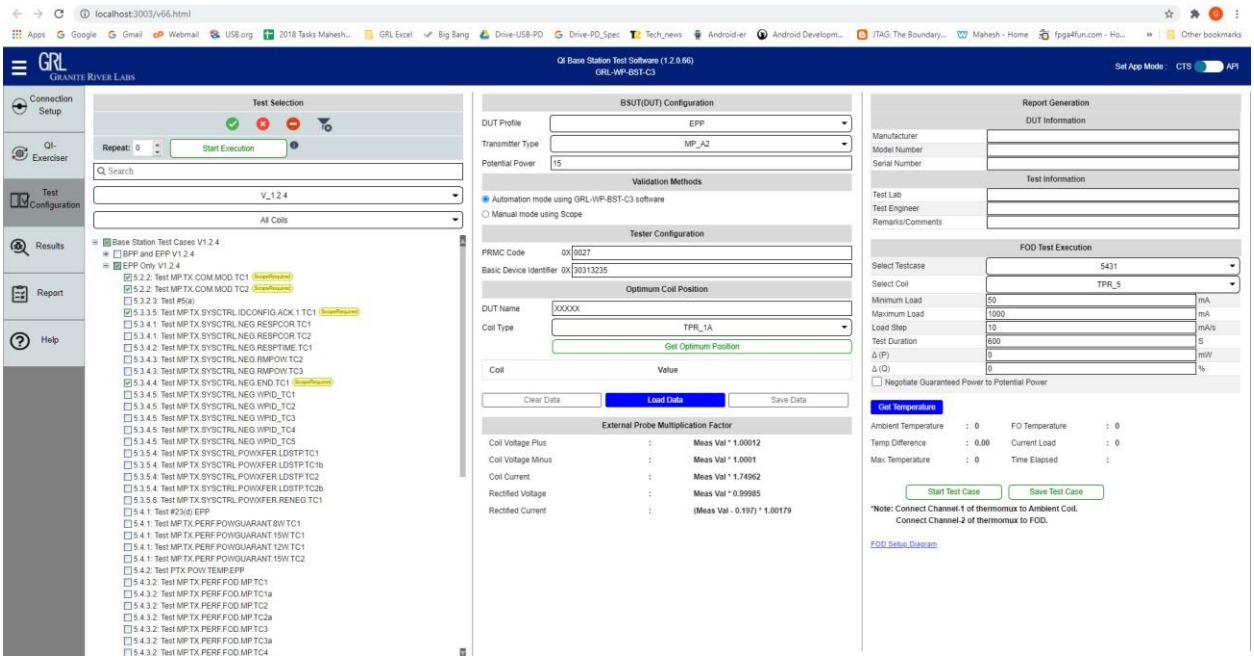
Step8: Once the above (Step7) connection is done, make sure Tekvisa Application detected Pop-up is shown in Toolbars.

Step9: Connect the BSUT to C3 using TPR Coil as shown in the image (*Image.1*).

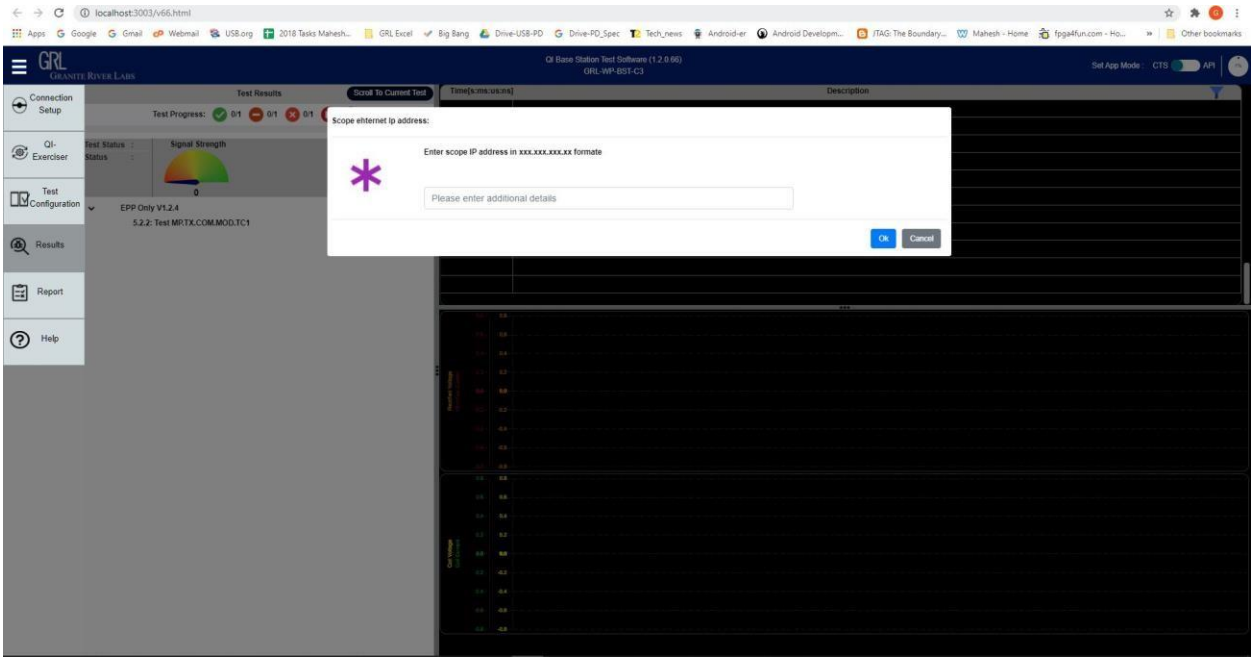
## Steps for Test Execution:

Step1: Select Appropriate Transmitter Type, DUT Profile and Potential Power of connected BSUT from Test configuration panel in C3 application.

Step2: Select Scope required test cases and click on Start Execution Button.



Step3: Once test case execution started observe IP address pop-up as shown in below image.

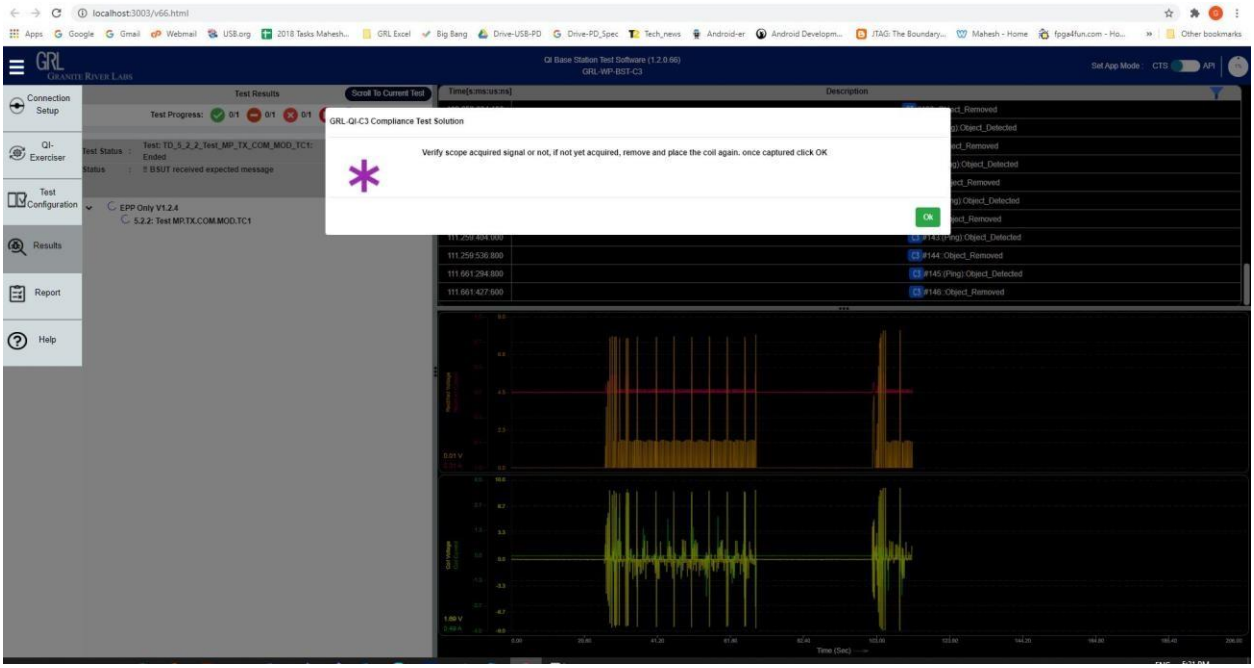


Step4: Enter scope IP address in given format and click on OK button.

Step5: Once the IP address has given observe Remove/ place coil from Base station Pop-ups. Follow those pop-ups and click on Ok button.

Step6: Make sure the TPR Coil has been placed in optimum position.

Step7: Once the expected test sequence is executed verify scope acquired signal or not. If acquired click on Ok button as per observed pop-up which is shown below. If scope signal is not acquired remove and place the coil again.




Step8: Once the test execution is done check whether the test report is generated along with scope capture in C:\GRL\GRL-C3_Browser_App\Report path.