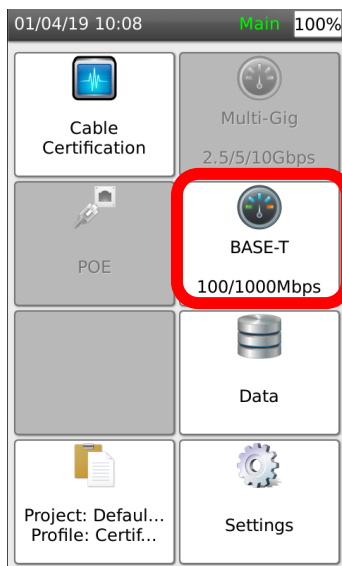# Testing Cabling for Ethernet Performance

This article describes how to test a link for its Ethernet performance. Every TestPro comes with the capability of testing a link for 10Mbps, 100Mbps and 1Gbps Ethernet. If you have the Gigabit option and AD-NETCABLE adapter, you can go further and test to 2.5, 5 and 10Gbps.

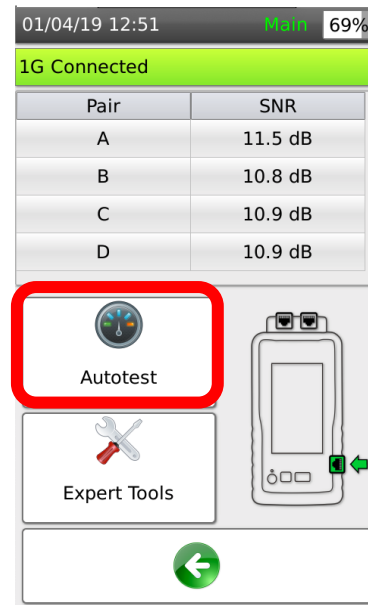## Part 1: Basic testing to 1Gbps

1. Select BASE-T

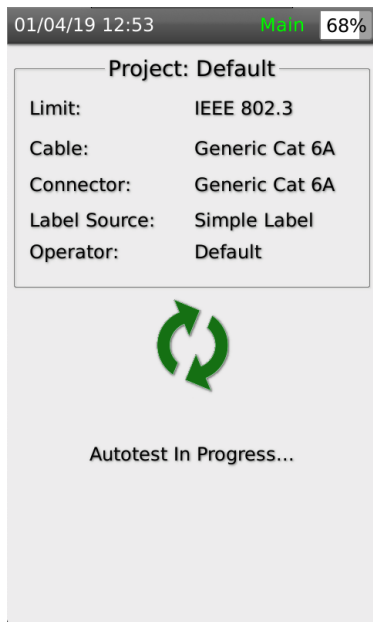Power ON TestPro. From the Home Screen, press the BASE-T icon

Remember to use the side port on the unit for this test.

2. From the BASE-T screen, select Autotest. Note that if a valid device is detected at the far end, it will connect automatically
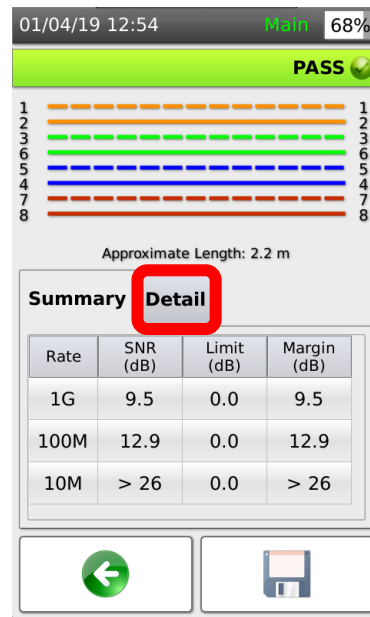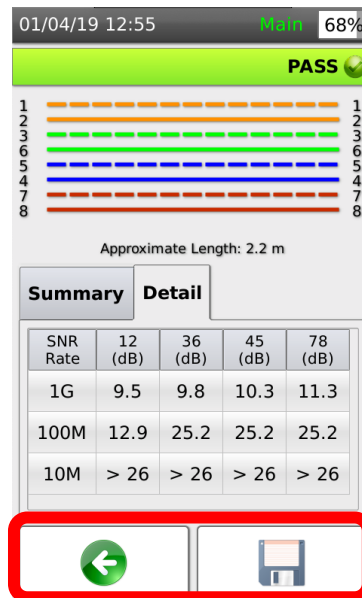
3. Test in progress screen

4. Test Result Screen

Note the signal to noise ratio is given for each speed. The greater the SNR the better. To see per pair detail, press Detail

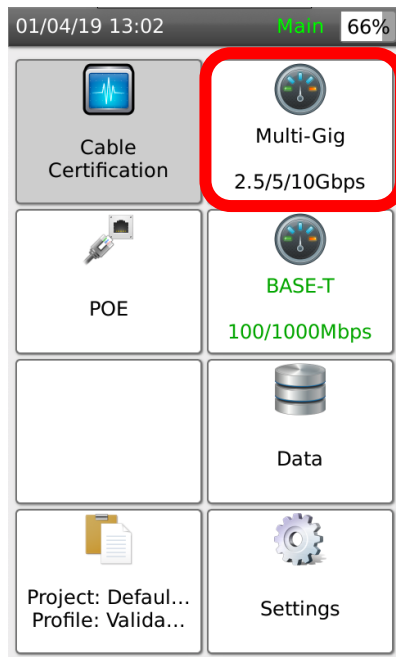## 5. Note that wiremap and length results are also provided.
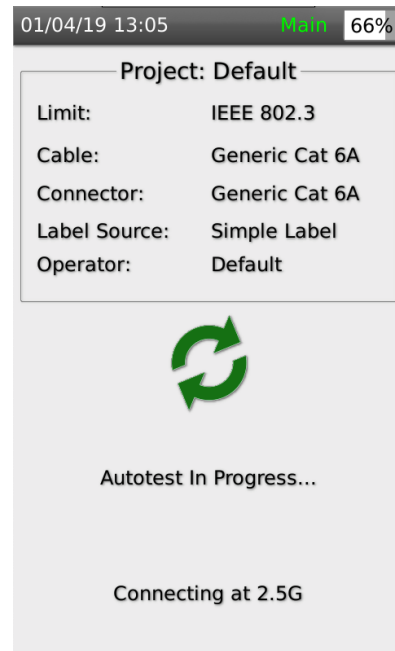
Save results or press the back arrow to exit

Part 2: High speed testing to 10Gbps

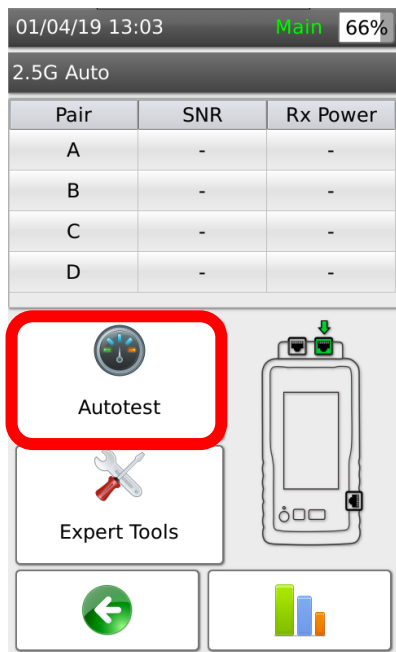This test requires the AD-NETCABLE adapter
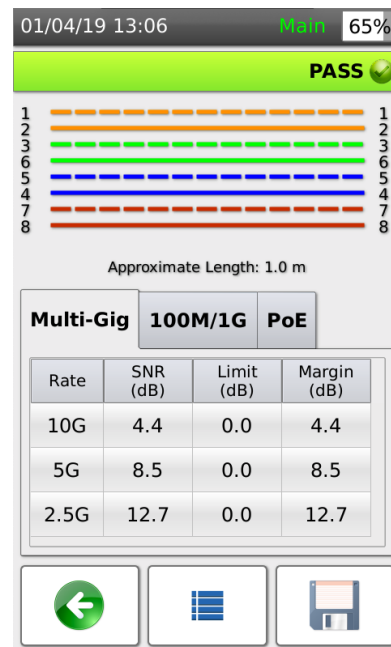
1. Press the Multi-Gig icon

01/04/19 13:02   Main   66%

Cable Certification	Multi-Gig 2.5/5/10Gbps
POE	BASE-T 100/1000Mbps
	Data
Project: Defaul... Profile: Valida...	Settings

2. Press the Autotest icon

01/04/19 13:03   Main   66%

2.5G Auto

Pair	SNR	Rx Power
A	-	-
B	-	-
C	-	-
D	-	-

Autotest

Expert Tools

3. Note test in progress will cycle through 1, 2.5, 5, and 10Gbps tests

01/04/19 13:05   Main   66%

Project: Default

Limit:	IEEE 802.3
Cable:	Generic Cat 6A
Connector:	Generic Cat 6A
Label Source:	Simple Label
Operator:	Default

Autotest In Progress...

Connecting at 2.5G

4. The result screen

01/04/19 13:06   Main   65%

PASS

Approximate Length: 1.0 m

Multi-Gig   100M/1G   PoE

Rate	SNR (dB)	Limit (dB)	Margin (dB)
10G	4.4	0.0	4.4
5G	8.5	0.0	8.5
2.5G	12.7	0.0	12.7

Notes:

1. From the results screen you can get pair level details.
2. Note that a small (< 5 dB) margin may not guarantee good performance. This is because the cabling at rest is 'best case'   If the attached devices are transmitting traffic and sourcing PoE, the SNR will decrease on an active circuit.