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- ✓ safety products
- ✓ hand tools
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Frequently Asked Questions

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Frequently Asked Questions

System

Screen capture of pop-ups and tray menu?

Hold down tray menu for 5 seconds.

Battery charge time?

Less than 3.5 hours @ 30°C from a complete discharge.

A minimum recommended charge time is at least 2 hours to achieve 60% or more battery charge.

How to differentiate between OneExpert and HST power supply?

The OneExpert power supply shows “ 12V 5AMP” on the label.

Car adapter?

Same Car Charger for OneExpert DSL, SmartClass TPS, HST-3000.

Remote Operation through Web Browser?

OneExpert DSL uses noVNC to connect from the web to the instrument.

<http://novnc.com>. You can log into your unit, using your IP address and the port number 5900.

FTP URL entry?

Fill in valid path, “ ftp://” will be added automatically.

File Manager?

The Ethernet TE configuration files show up under /userconfigs/base/eth_te_app/... The “ Report” folder is used for results. The userresults is used for fiberscope Still Image. The Reports folder is for PDF/HTML/XML generated from clicks of the “ Report” button in the tray. StrataSync syncs the Reports folder.





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Frequently Asked Questions

System (cont...)

What are .oxh configuration files?

Files that save an icon of the configuration to the home screen.

Factory defaults/restore?

Restore instrument settings. Customer configurations are not changed.

Closing an application?

When returning to the Home Screen, an application like Opens is still running in the background. To stop the application, press the “Back” key one more time.

Bluetooth pairing for mobile device?

OneExpert pairing instructions:

The OneExpert must be on the Settings->Bluetooth screen in order to see the dialog to accept the pairing request!

1. Be sure OneExpert not paired with any other device (See Settings->Bluetooth)
2. Ensure iOS device not paired with any OneExpert device (See Settings->Bluetooth)
3. Navigate OneExpert to Settings->Bluetooth and be sure Bluetooth enabled
4. Navigate iOS Device to Settings->Bluetooth and select OneExpert device (identifying it by the ID). Some devices support use of “Select Device” in upper left of OneExpert app (Controller tab).
5. Wait for dialog to appear on OneExpert screen. Press OK to confirm Bluetooth pairing request.
6. Navigate to the OneExpert DSL application. It should appear as connected.

Troubleshooting:

1. If connection fails for some reason it may be necessary to disable then re-enable Bluetooth on the OneExpert device.
2. If OneExpert device fails to automatically reconnect it may be necessary to follow each step of the above instructions





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Frequently Asked Questions

Copper

Why isn't there a Gain slider in In-Home TDR?

For high resolution the OneExpert DSL only uses a very narrow pulse width (about 7ns), so there is no need to change it.

TDR dead zone?

SmartGain and In-Home TDR doesn't have a dead zone.

TDR trace offset?

The trace for the In-Home actually starts at about half the length of the cords so we can clearly see the open or short. The other modes start at the box 2mm connectors.

How to do RFL testing?

- Cord compensation done?
- Selftest with cords shorted done?
- General conditions of the pair under test - Battery cross? High fault size >3meg? Distance to strap?

General RFL guidelines

- Keep DTS as short as possible
- Load coils add distance that is not accounted for
- Use a good low ohm strap
- If the "known good" wire for Single pair has leakage on it, the result will be wrong
- Test from both ends
- For more than one gauge of wire on the pair, use Multi Gauge or results will be wrong
- Good low ohm connections must be made with the pair under test
- If there is more than one fault on the pair, the result will be wrong
- Test more than once.





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Frequently Asked Questions

Copper (cont...)

Ground reference check for Longitudinal Balance results?

If the delta between the previously run result and the Reference check result is at least 20%, then it is a Pass, meaning the previous Longitudinal Balance test used a good Ground connection.

K-Test conditions?

One fault has to be 2 times greater than the other; a ratio of 2:1.

- The faults must occur at the same physical point on the pair to the same place or reference. For example both wires are faulted to the shield at the same location.
- The Fault ratio is 2:1. The fault size on one wire vs. the fault on the other is twice as large. For example one wire has a 10K ohm fault and the other has a 20K fault.
- The larger fault value should be at least 100 times greater than the loop ohms of the pair under test. For example if the loop ohms is 100 then the larger fault value should be > 10K ohms.
- The K test is a two step measurement that starts with the far end open and does a series of resistance measurements to determine the faults present and if it is possible to solve the resistance to fault. Then with the far end shorted, the measurement finishes and calculates the results. It can be run manually or use the UFED to automatically provide the correct conditions for the test.

K Test specs:

- It works on loops up to 7,000 ohms.
- It works for faults up to 20 Meg ohms.





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Frequently Asked Questions

DSL

Test method for Estimated Loop Length?

- VDSL: Looks up the loop length based on the line attenuation in DS1.
- ADSL: Looks up the loop length based on a combination of the upstream and downstream line attenuations.
- All the loop lengths are based on 26AWG cable.

LOS and LOF counters

The counters displayed are anytime the tester detects a discontinuation in the downstream signal (LOS) and a LOF is the transceiver's inability to detect the start of frame. The counters are increments in seconds in which the defects have occurred. G.997.1 defines the second counter for LOS but not for LOF.

Broadcom 6368 DSL Modem retrain

The DSL retrain decision is made based on the continuous presence of defects or failures – LOS, LOF, SES -- as they are defined in G992.[135], G993.2 and G997.1. The modem will retrain if:

- LOS is present for 8 seconds continuously
- LOF is present for 4(VDSL) or 12(ADSL) seconds continuously
- DS Noise Margin is negative for 12 seconds continuously
- SES is present for 30 seconds continuously
- DS Noise Margin is below MinMargin required by the DSLAM for 60 seconds continuously

1MHz attenuation

The k10 representing the electrical length of the loop is not taken directly from Hlog at 1Mhz. The value is the minimum of the k10 values calculated from tones 256 to 512 (1.1 to 2.2 MHz) as per G993.2 spec section 7.2.1.3.2. So the k10 value will normally differ from the Hlog at 1 MHz value.





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Frequently Asked Questions

DSL (cont...)

Vector Friendly mode

Vaivi supports G.993.2 Annex-Y. No Interferences for FEXT influence on nearby transmission lines with vectoring. And Downstream interferences for FEXT influences on own transmission line.

DSL RTX: REIN and SHINE

REIN (Repetitive Electrical Impulse Noise): This noise is defined as a continuous and periodic stream of short (<1mS) impulses. In DSL the DSLAM will configure how many consecutive symbols of REIN should be completely correctable no matter how many errors occur within the consecutive symbols.

SHINE (Single High Impulse Noise Event) This noise is defined as a stream of periodic stream of impulses that arrive at random intervals with random durations and levels. These are typically large impulses (>10mS) in duration. As with REIN, the DSLAM will configure the number of consecutive DSL symbols corrupted by this type of noise, that should be corrected on a connection.

Quickly changing between RJ-45 and T/R (A/B) interface for DSL testing?

Touching the RJ-45 socket or T/R (A/B) symbol in the screen header bar changes to the other setting.

DSL Advanced Setting?

Aggregate Attenuation calculations are performed for both LATN and SATN. Per band attenuation information for the unused bands is available for LATN, so the Unused Bands configuration applies here. Tones Per Band selection affects both LATN and SATN calculations.

DSL Router mode Forward Multicast?

Forward Multicast needs to be enabled for IGMP Video traffic behind OneExpert.





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Frequently Asked Questions

DSL (cont...)

DSL Rate specification?

OneExpert reports the NDR and ANDR specified in G.9701. $ANDR = NDR$ (Downstream) + NDR (Upstream). $NDR = DPR - 1000\text{kbit/s}$. DPR is DTU payload rate defined as $DPR = DPR (D) + DPR (Dr)$.

OneCheck

OneCheck launch icon save location?

Saving a OneCheck Copper configuration to Home Screen will place the icon into the Category from which the OneCheck Copper test was launched. If launched from “OneCheck” Category, the icon will be placed there. If launched from “Copper” Category, the icon will be placed there.

Ethernet

Can't connect both Ethernet ports to the same Router?

The OneExpert detects network loops and disables the ports accordingly. Otherwise broadcast packets would get looped continuously back and forth from the two devices (since they are both switches).

IPv6 Support?

IP Ping, FTP/HTTP Throughput test, VoIP, Video

VoIP 100Rel?

It is reliable provisional responses. Basically in the original standard there is no confirmation that the endpoint received messages such as “ringing” due to the way the signaling works. This enhancement ensures that these indications are sent reliably.





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Frequently Asked Questions

Video

How to get the Video channel list?

The file is in the ONX-580 File Manager under “documents” and named “ChannelListTemplate.xls”. It allows defining a video channel list.

TrueSpeed

Is TrueSpeed Test on the ONX time or data volume based?

Time based.

TrueSpeed

Wifi AP mode?

Allows bridging between Ethernet and Wifi.

Wifi Scan level thresholds?

dBm \geq -60 Green
dBm \geq -87 Yellow
dBm $<$ -87 Gray

Services

Recommended calibration interval?

3-years, though the instrument will hold specifications $>$ 10 years.

