Cable Pro Frequently asked questions

What is a cable Pro?

The Cable Pro is a compact continuity tester for multi pin electrical cables

Why is the Cable Pro better than a buzz box or volt meter?

A buzz box or DVM with an audio continuity function may be appropriate when you have only one wire, but you have to identify each pin probed. In many cases these are installed in equipment and the numbers are tiny, poorly lighted and poorly aligned. The Cable Pro Tests all of 75 pins in less than .1 second. Not only does it test one pin to its mate. it tests each pin against every other pin. In this way it can check for proper connections, missing connections, and miswired connections. It also checks for the proper orientation of diodes in the cable.

How do you determine which end is the transmitter and which is the receiver?

Each pin on the tester is both a transmitter and a receiver. Each pin is driven to a logic high, then all pins are tested to determine which has continuity to the pin driven high. When all pins have been tested for a corresponding logic high, the process is repeated on pins 2 – 75. When one unit is employed, there are 5625 possible connections. The Cable Pro tests all of those possibilities in less than a second.

A GDU37x has 50 pins by itself. Is 75 pins enough on the Cable Pro?

If you need more than 75 pins, you can add another module for a total of 150 pins. In addition most harnesses have spare and unused pins, so only a fraction of the 150 pins is used.

How do we connect the Cable Pro to our harness?

An adapter cable is user fabricated by the user to transition from the DB25F plugs on the Cable Pro to your harness. DB25 connectors were chosen to reflect wide availability and quality to suite the individual needs.

I have a 68 pin connector on my harness, how do I hook it up to multiple 25 pin connectors?

As far as the Cable Pro is concerned, there are 75 pins total. It does not matter which Cable Pro connector it is located on. For instance you could have one end of a connection on Cable Pro P1 pin 1 and the other end on Cable Pro P1 pin2 or Cable Pro P3 pin 25. It is extremely flexible in set up.

Do I need a separate adapter for every harness I test?

If a particular harness requires the same connector as another unit, you may only need a configuration file change as long as the needed pins are pinned out. Particularly for plugs with few pins, you can have multiple connectors attached to it. Take for instance our Panel Pro Cable guide harness. We have 2 AMP cpc 9 pin plugs, a 3 pin male AMP val-u-lok connector, a 3 pin female val-u-lok connector and a 2 conductor power plug. Using one configuration file that describes the connections to the Cable guide, simply changing to another configuration file sets it up to check only one of the 3 pin connectors on a limit switch.

What are the set up steps to test a cable?

Make an adapter cable that mates to one or more of the Cable Pro plugs. The other end of the adapter must have the connector(s) that mate to your cable. If you are capable of making cables, it is a snap to make the adapter. Edit the pin numbers and connections in the configuration file. You are now ready to test. There is a learn mode where a known good cable is tested and written to the configuration file.

How long does a test take?

It varies a bit with the number of connections, but with one 75 pin unit, each pin of the 25 pin plugs connected to the corresponding pins of the other plugs, it takes about 1 tenth of a second. That is 5625 possible connections in about a tenth of a second. Try that with an ohm meter. With 2 units there is a lot of communications so 22500 tests run in a few seconds.

How do I test Equipment in an aircraft whose connections vary from installation to installation?

Set up an adapter with just one piece of equipment such as a PMA5000 with one connector on it with its pins connected to the Cable Pro. Use the Cable Pro Probe mode to check individual pins on various connectors. The Cable Pro annunciates visually and audibly the equipment pin number. Using the audio function frees the technician from looking at 2 different plugs.

What powers the Cable Pro?

The Cable Pro is powered from the USB cable attached to lap top or PC computer.

There are 3 DB25 connectors on the Cable Pro. Can I only check cables with DB25 connectors?

The user will fabricate an adapter to mate up with the cable being tested. The pins may span one or more of the Cable Pro connectors. DB25 connectors were chosen for availability, flexibility and cost. The user is free to select the price and quality level desired.

Do you supply cables or mating connectors?

No. The connector that mates with the Cable Pro is a common DB25M. It is available almost anywhere connectors are sold and is available in many grades to suite your requirements. We are planning to supply an extender handle for db style connectors that would replace.

If I have many plug /unplug cycles, won't the connectors on the Cable Pro wear out?

The connectors on the Cable Pro are mounted on economical ribbon cables with header connectors. They are easily and economically replaced. If you wish, you can attach a gender changer on the Cable Pro plugs. When the connections become unreliable, simply replace the gender changer.

What is included with the Cable Pro?

The Cable Pro unit, a 6 foot USB cable, sample pin probe, Cable View software.

What is Cable View?

Cable View is the PC computer software that operates the Cable Pro hardware. It includes functions to make and edit configuration files that tell cable view what the connections should be. It operates the Cable Pro in several test modes including end to end testing of a cable or single end testing where a manual probe applies a logic high on an unknown wire and Cable view reports visually and Audibly what pin it is connected to. It can produce written documentation on the test status

What is the Cable View software subscription cost?

Updates and software maintenance releases are free of charge to Cable Pro owners. New releases with significant feature upgrades may incur a cost, but we will never charge you to make your software work the way it was intended. The current version status can be checked online on our website and downloaded at your leisure.

What kind of support do you provide?

We will respond promptly to email questions. The help file in Cable View will answer most questions.

What kinds of reports are generated?

When a cable is tested, the status of that test is immediately displayed on the screen. The report includes description of the cable, the date and time of test, serial number if desired, and the name of the operator. It displays a pass/fail rating. When a cable does not pass, the connections that are faulty are displayed and written to the report to assist in rework. The reports cannot be edited, but a new test can overwrite an old test with new date and time.

Do you have a drawing library of cables and connections?

Not at this time. Functions such as that may be available in a future release.

Is the Cable Pro for Aviation use only?

The Cable Pro applies to any multi pin electrical cable testing.

What is the Warranty of the Cable Pro?

The Cable Pro is warranted for 1 year not including normal wear and tear.

Will Cable View work with Windows 8?

Yes.

What is the size and weight?

The unit weight is 10 oz. size 6.625 x 4.437 x 1.8. shipping weight is about 1 pound.

What are the flanges on the bottom of the Cable Pro?

They are used to fasten the unit to a fixed surface on a work bench or similar surface.

How do you handle Switches and relays

Switches are defined in Cable View. During testing, Cable view will prompt the user to switch to the different positions. Multiple poles and throws are accommodated. Relays must be switched manually with external circuitry that cannot apply any voltages to Cable Pro test pins.