



Cleverscope Ltd
Phone +64 9 524 7456
Fax +64 9 524 7457
Email info@cleverscope.com
28 Ranfurly Rd, Epsom
P.O. Box 26-527
Auckland 1023
New Zealand

Installing Cleverscope 4720 beta

Summary

The Cleverscope 4720 beta is not yet released for general use. However it is reliable, and the faults with it are known. After the faults, and implementation of triggered charting, are completed, the product will be released. File formats are now fixed. Following completion of the release, the Linux version will be released.

Cleverscope 4700 beta has been built using Labview 2011. This is the latest release of Labview. Labview 2011 has the ability to generate both 32 and 64 bit versions of the executable, and includes conditional compilation allowing one source for all varieties of operating environment – Windows, Linux and MacOS. Labview 2011 properly supports code signing, and interoperability with .Net. For this reason we have taken the large step of moving to it, despite the downside of a very large and different runtime.

Cleverscope 4720 includes all the facilities of 46xx, and adds real time charting (streaming to disk). Maximum stream rate is currently 1.5 MSPS. A high performance disk system is required as the actually data rate is about 12 Mbytes/sec continuous. Streamed data is peak captured, allowing even 10ns pulses to be seen in long duration recordings. Pan and zoom is fast with sample sets up to about 100 Gsamples. Samples maybe captured until the disks is full, or a pre-determined file size or capture duration is met.

Cleverscope 4720 also includes automatic full buffer capture on every trigger, and supports automatic saving and loading of full buffer files.

As the full installation system is not yet complete, installation is a two step process:

1. Installing either the existing Cleverscope 46xx product, and verifying operation, or using the Cleverscope Update to install just the USB driver and Visa support system.
2. Installing the Cleverscope 4700 and supporting run time environment.

In future, once the run time has been installed, much smaller updates will be available, as at present.

Installation Steps

Install the existing USB interface and VISA support system

Do not plug in the Cleverscope yet.

You can either install the existing full application, or on a virgin machine, just the Cleverscope 465x updater.

If you already have Cleverscope installed and working, do **not** carry out this step.

You can get the update from here :

<http://www.cleverscope.com/resources/Cscope%20Update%204670.zip>

Extract the contents to a directory, and run setup.exe in the update directory. Ignore the warning of a missing component (it is the Labview 7.1 runtime, which is not needed).

You should see a screen similar to this one:



Check the 'Install CS328A Driver' and 'Install NI-VISA Driver' options, and click install.

Install Cleverscope 4.7 and runtime

Download the 150 Mbyte Cleverscope 4.7 beta installation from here:
[http://www.cleverscope.info/builds/Cscope Installation Disk 4720.zip](http://www.cleverscope.info/builds/Cscope%20Installation%20Disk%204720.zip)

Extract the contents to a hard disk. Open the folder and run setup.exe. Accept all defaults. This will install the Cleverscope 4.7 application and the run time for it.

Getting it running

Start the Cleverscope application in the Windows Start menu. Plug in a Cleverscope acquisition unit. Windows should find it. Click on 'Auto' on the Cleverscope Control panel to capture something. You should see the trigger light flashing and a line on the screen.

New features

Full Buffer

To capture with full buffer transfers, check the Auto Get option before capture.



The size of the frame captured is set by the drop down list above the Auto Get check box. After checking the box, all captures will be transferred full frame. Any saves, or Auto Saves will be saved full buffer.

Charting

While another acquisition is not in progress, click the Chart button.



The system will now capture streaming to disk. Click the chart button to stop capture. Use File/File Options, and then click 'Charting File Options' to set up the chart base name and directory, and the sample rate. Maximum sample rate is 1.5M. Zoom out in time to see more signal, or click Fit. You'll need to experiment! Recently captured charts are available in the File/recently used file list.