University of Birmingham

Equipment

Equipment on this list can be borrowed form the Vision Laboratory. Please fill in the loan book when borrowing and returning.

Name	Description	Requirements	Contact for help
Minolta LS110. Luminance meter	'**point and shoot (#point)** ' luminance meter. Measures luminance of light emitters and light reflected from surfaces.	Can be used alone in manual mode but automatic mode requires bespoke software and an RS232 interface (COM port). Some monitor measuring software is available.	Both Andrew Schofield and Matthew Dexter have automated software.
CRS ColourCAL. Luminance and colour meter	'**limpet (#limpet)** ' luminance and colour meter. Can only measure light emitters.	Requires Lightscan software running on a PC for basic use and a DLL for automation via bespoke software. USB interface. **See notes below (#notes)** .	Andrew Schofield
CRS SpectroCAL. Spetroradiometer	'**point and shoot (#point)** ' Spectroradiometer. Measures spectrum of light emitters and light reflected from surfaces.	Requires JETI software running on a PC for basic use. CRS ToolBox for MatLab should allow automation when available. Needs either a 2 screen system or a separate PC. USB interface.	Harriet Allen
Black Box. Experiment timer	Kit for measuring accurate stimulus and response times so as to benchmark experiments.	Requires a PC with parallel port and software. Kit must be connected to a different PC from the one that is running the experiment.	Mark Cox probably knows the most about this kit at the moment.
Pico Virtual Oscilloscope	Interface to turn as PC into a two channel digital oscilloscope.	Requires a PC with parallel port and software.	Andrew Schofield
Function generator	Generates analogue (1D) sine waves and square waves etc.	Stand alone, but might need an amplifier to drive any significant load.	Andrew Schofield
Digital multi-meter	Measures volts, amps or ohms.	Standalone.	Andrew Schofield
Tool kit	Plus stopwatch, tape measure and ultrasonic range finder.		
Anti-static mat and strap	Avoids embarrassment in technical services.	You need to find an earth point to connect to.	

Vision tests held in laboratory

These clinical vision tests can be borrowed form the Vision Laboratory. Please fill in the loan book when borrowing and returning.

Name	Description	Notes
Optician's test set	Lenses, prisms and optician style lens holders.	Not available for long term loan. Please try hard not to lose individual lenses.
Peli-Robson Contrast sensitivity chart	A clinical measure of operational contrast sensitivity. A bit like a standard eye test chart but measures the minimum visible contrast of letters.	Keep the chart clean and protected from sunlight.
Visual acuity chart	A clinical measure of visual acuity. As seen at an opticians.	
TNO Stereo acuity test	A clinical test of stereoscopic acuity.	Keep plates clean and protected from sunlight.

Vision tests held in School Test Library

Name	Description	Notes	Contact for help
Ishihara colour vision test	Standard clinical test for colour vision.	Keep plates clean and protected from sunlight.	This test is held in the School's test library. Contact Angela Counchman.

Key

'point and shoot' means that it works a bit like a camera. There is no contact with the object to be measured.

'limpet' means that the device sticks onto the object being measured.

Notes

The CRS ColourCAL sticks onto your monitor with a suction pad. I recomend that you cover this pad with some velvet with a hole in it. The soft side of the velvet should touch the monitor. Use gaffer tape to hold the meter onto the monitor but also apply some presure to the meter during the readings. Make sure that you don't let the tape (or your fingers) touch the display area of the monitor. While I have done this to several of my monitors with no ill effects I make no warrantee as to the appropriateness of this procedure. If you are worried about sticking anything to your monitor use the Minolta LS110 or SpectroCAL instead. Marks left on monitors CAN be cleaned off with optical lens cleaning solution but the monitor will never be quite the same again. DO NOT UNDER ANY CIRCUMSTANCES CLEAN A MONITOR WITH WATER. Some suitable solution is available. Spray it onto the monitor and wipe it off very carefully using a soft lint free cloth with a circular motion working from the centre of the screen out.

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