Overview:

The Eye-Scope allows remote control and monitoring via a USB connection.

USB Interface:

In order for Windows to recognize the Eye-Scope USB port the USB driver must first be installed, after which the Eye-Scope appears as an additional COM port on the computer. Currently Windows XP, Vista, 7, and 8 are supported. Windows 7 requires the extra step listed below; Windows 8 requires additional steps which can be found in the following application note:
http://www.spectronixinc.com/Downloads/Installing%20Under%20Windows%208.pdf

1. Copy the file "cdc_NTXPV764.inf" from the supplied CD to the hard drive.

2. Plug the Eye-Scope into a free USB port. When the hardware installation wizard asks for the driver location, browse to the "cdc_NTXPVista.inf" file on the hard drive.

3. After the driver has been installed right click "my computer" and select "properties". In the properties window select the "hardware" tab. Click on "device manager" and expand the "Ports (COM & LPT)" item. Locate the "Spectronix, Inc." entry and note the assigned COM number, (ie "COM4"). This is the COM port that the software will use to communicate with the Eye-Scope.

Note, on some operating systems such as Window 7, manual USB driver installation may be necessary. If the hardware installation wizard fails, go to "My Computer" > "Properties" > "Hardware" > "Device Manager", and find the "Spectronix" or "SERIAL DEMO" entry under "Other Devices" and select "Update Driver". At this point you will be able to browse to the location of the driver.

Commands:

The Eye-Scope uses ASCII data to communicate with a host computer; the tables below list the individual commands, parameters, and responses from the Eye-Scope.

Notes:

1. All communication is initiated by the host.

2. Commands are not case sensitive.

3. Exactly one space or equal sign should be inserted between the command and any parameters.

4. All commands should be terminated with a <CR> <LF>.

Get Unit Information	
Command:	Parameters:
`"?"`	`(none)`
Response:	Parameters:
Command Echo	?

Unit name	`100380A`
Firmware Rev	`V1.0`
Termination (one byte)	`0x00`
Notes:	

Get Measurements (comma separated)	
Command:	Parameters:
"Read"	**(none)**
Response:	Parameters:
Command Echo	**"read"**
Signal Status	**"0,"= no signal, "1,"= signal**
Lock Status	**"0,"= not locked, "1,"= locked**
Signal Quality	**"##,"** *(figure of merit in % - height*width)*
Signal Amplitude	**"###,"** *(mV ~400mV max)*
Open Eye Height	**"##,"** *(open eye height as a % of the total eye height – 1UI)*
Open Eye Width	**"##,"** *(open eye width as a % of the total eye width – 1UI)*
Bit Rate	**"####.#,"** *(measured bit rate in Mbps)*
Termination (one byte)	`0x00`
Notes:	**"read 0, 0, 0, 4, 0, 0, 622.0"0x00**

Start a Scan, returns a bitmap	
Command:	Parameters:
"Scan"	*none*
Response:	Parameters:
(Bitmap)	*Binary data*
Notes:	*Starts a standard scan, returning a bitmap. Note, the bitmap data is valid only with a sampling setting of 1:1.*