## ESrvWin Software Operating Manual Version 1.1

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# Santa Barbara Instrument Group

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## Introduction

Thank you for buying SBIG's **ESrvWin** Software (Ethernet **Serv**er for **Win**dows). This package allows you to talk to your Parallel Port or USB based SBIG Camera (ST-7, ST-8, etc.) on a remote Ethernet Equipped PC through an Ethernet network as though it were connected directly to your PC. This makes it easy to talk to a camera/server in your backyard observatory from the comfort of your house. While the Parallel and USB Ports of most computers can be extended to 50 feet and possibly further, Ethernet cables on networks can be hundreds of feet in length.

#### What's Required

SBIG's **ESrvWin** software is a 32-Bit Console program that runs under 32 bit Windows, including Windows 95/98, Windows Me, Windows NT, Windows 2000 and Windows XP. A typical installation is shown in the figure below:



You'll need a computer in the remote site with 32 Bit Windows, an Ethernet card and a Parallel or USB port, depending on the type of camera you have. That's where you run the **ESrvWin** software. On the Local side, you'll need 32 Bit Windows and an Ethernet connection. That's where you run the CCDOPS software. That's all there is to it!

# Setup

You need to install the **CCDOPS Version 5** and **ESrvWin** software from the floppy disks or CD-ROMS they came on. Install these programs on both the Remote Server and the Local PC. That way you can run CCDOPS from the Server while you're setting up the Telescope and focusing the camera and then exit CCDOPS and run the **ESrvWin** software for remote use. Installing **CCDOPS** and **ESrvWin** varies depending on the version of Windows you are running:

- Windows NT/ Windows 2000/Windows XP
  - Log in as the Administrator
  - Run the CCDOps Installer
  - Make sure you Update your drivers in the SBIG Driver Checker program by clicking the Update button.

- Windows 95/98/Me
  - Run the CCDOps Installer
  - Make sure you Update your drivers in the SBIG Driver Checker program by clicking the Update button.

#### ESrvWin

As mentioned above, the **ESrvWin** program is a 32-Bit Console program. You can run it by double clicking on the icon or you can run it from the DOS prompt. The program has default settings (serving LPT1) that are invoked by double-clicking the icon. From the DOS prompt you can configure the program with the following command line:

#### C:\>ESRVWIN [LPTPORT] [u]

where *[LPTPORT]* is an optional 1, 2 or 3 indicating the LPT Port you want served and *[u]* is an optional switch indicating that you want to server the USB port. Again, if you don't provide one or the other optional parameters EsrvWin it defaults to serving LPT1.

In the section below, CCDOPS will need to know the IP address of the remote server. When you run **ESrvWin** it shows you this information as shown below:

```
C:\ >Program Files\SBIG\CCDOPS5\ESRVWIN

ESRVWIN.EXE Parallel/USB Server Ver 1.1...

Usage:ESrvWin [lptPort] [u] (lptPort=1,2 or 3, u=USB)

Determining LPT1 address...(Addr=0x0378 - OK)

Opening SBIGUDrv driver for LPT1...(OK)

Server Name :matts866p3

Server Address:192.168.0.24

Waiting for client to link (hit Ctrl-Break to abort)...
```

#### CCDOPS

Run CCDOPS and use the **Graphics/Comm Setup** item in the **Misc** menu. Select *Ethernet* for the Interface and enter the IP Address as reported by **ESrvWin** then hit the OK button:

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aphics/Con	nm Setup		
Interface:	Ethernet	- [	ŌK
Parallel			Cancel
LPT Port:	LPT1	2	
Priority:	Low	-	
Serial	2		
COM Port:	COM1	3	
Baud Rate:	Auto	-	
Ethernet Address:	192 . 16	8 0	24
Add(688.	1 102 . 10	9 & 9 & 8	57
Annunciator:	Off	•	6

At this point you should be able to use the **Establish Link** command in the **Camera** Menu to establish a link to the camera as reported in the lower-right corner of the CCDOPS window:

Link:[PixCel237A]ENET Res:Auto Temp:21.66°C (0%) Filter:Clear

At this point you can use **CCDOPS** just like the camera were attached to your local LPT or USB port.

Note that you can run **ESrvWin** and **CCDOPS** on the remote server machine to get this working. Then exit from **CCDOPS** on the remote server and run it on the local machine. If you are not able to establish a link try the following trouble-shooting guide:

- Make sure you are using CCDOPS Version 5 or later (with the Gold Icon, not the Black Icon) or that your third party software has been updated to support SBIG's Universal Driver with Ethernet connectivity.
- Make sure your drivers are up to date by downloading the SBIG Driver Checker software from our web site <u>www.sbig.com</u> and Updating your drivers.
- Make sure that both machines (remote and local) are plugged into the Ethernet network and have different IP addresses. Use the Ping utility to verify that the two machines can talk to one another.
- Make sure the camera is connected to the remote server and is powered up. Try talking to the camera from CCDOPS on the remote machine without ESrvWin running, configuring CCDOPS to use the LPT or USB port directly rather that the Ethernet port.
- Check the settings you have used for the IP address on the local machine and that **ESrvWin is running** and that **CCDOPS is not running** on the remote machine.