MAGPOWR Spyder™ Firmware Update
Instruction Manual

COPYRIGHT

Periodically there will be updates to this manual. The latest version is available at *www.maxcessintl.com* or by calling your regional office. See back page for phone numbers.

TABLE OF CONTENTS

1. INTRODUCTION

The MAGPOWR Model Spyder may have the firmware upgraded by connecting the Spyder to a local FTP server running on a laptop or other local computer.

2. HARDWARE CONNECTIONS

Connect the Spyder to a computer or local network using a CAT5 Ethernet cable.

3. PROGRAMMING THE SPYDER FROM A LOCAL COMPUTER

3.1. INSTALLATION OF THE FTP SERVER SOFTWARE

Insert the CD containing the FTP Server software. The setup program should automatically start. If the setup program does not start or you received the setup program in an e-mail, execute the file FtpServerSetup.exe.

The setup program will ask for a Program Group and if you want a desktop shortcut. Leave these at the defaults or make a choice and press Next.

The setup program will ask if you want to install the program in the default directory or a directory of your choice. Leave this at the default or make a choice and press Next.

Confirm your settings and press Next.

Press Finish.

The FTP Server should now be running. There should be a green box in the lower left corner of the FTP server program showing the server is running, see figure 1, and there should be a flashing "FTP" icon in the system tray of your computer screen (lower right hand corner). **FTP**
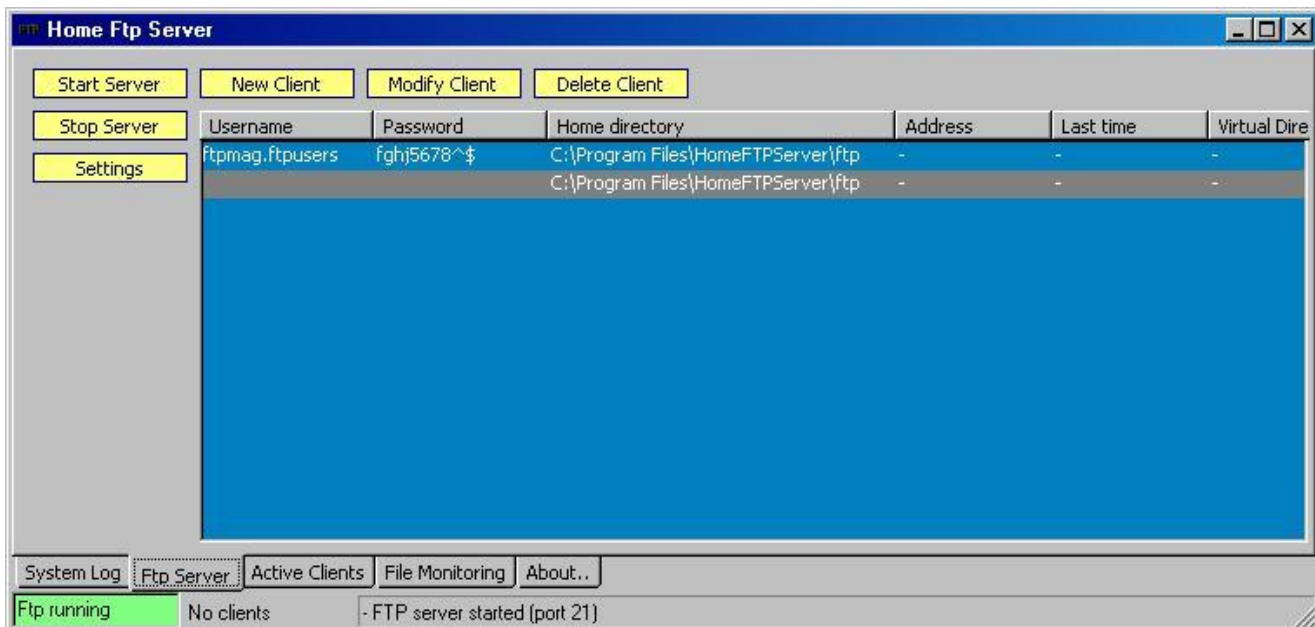
Figure 1. FTP Server Screen Shot

The FTP Server Software and the latest Spyder program have been installed on the computer. The Spyder software is contained in the \ftp\ProductSoftware\ sub-directory of the FTP Server install directory. For a default installation the Spyder program is in C:\Spyder\FTP\ftp\ProductSoftware\. The Spyder software is program 920A91.xx.bin, where xx is a two digit number specifying the current revision level.

Use Windows Explorer or My Computer to go to the C:\Spyder\FTP\ftp\ProductSoftware\ directory. Make a note of

the 920A91.xx.bin file in this directory. You will need this file name to tell the Spyder which software to download in section 3.4.

Important: If your CD or e-mail contains a 920Axx.xx.bin file, please copy the file from the CD or e-mail to the C:\Spyder\FTP\ftp\ProductSoftware\ directory. This will assure you are getting the latest version. Use this file name in section 3.4.

Skip to section 3.3 if the FTP Server is running.

WARNING: There is a hardware change in the Spyder between versions 920A91.07 and 920A91.08. If your Spyder unit has any version 920A91.07 or below you cannot upgrade to version 920A91.08 or higher.

3.2. RUNNING THE FTP SERVER SOFTWARE

Double click the FTP Server shortcut on your desktop or use the Start menu, Programs, Home FTP Server to start the FTP Server. Verify the server is running by clicking the "Ftp Server" tab and the lower left corner should show a green box showing the server is running. If the server is not running press the "Start Server" button. See Figure 1.

3.3. CONFIGURING THE NETWORK CONNECTIONS

The computer and the Spyder must be on the same network subnet and each must have a unique IP Address. The Spyder defaults to the subnet 192.168.1.xx and has an IP Address of 192.168.1.100. On your computer open the Network Connections. Double click on the LAN icon and then click on Properties. You should see a window similar to figure 2. Highlight the Internet Protocol(TCP/IP) and click on Properties and a window similar to figure 3 should show. There are slight differences in these two windows depending on which Windows operating system you are using.
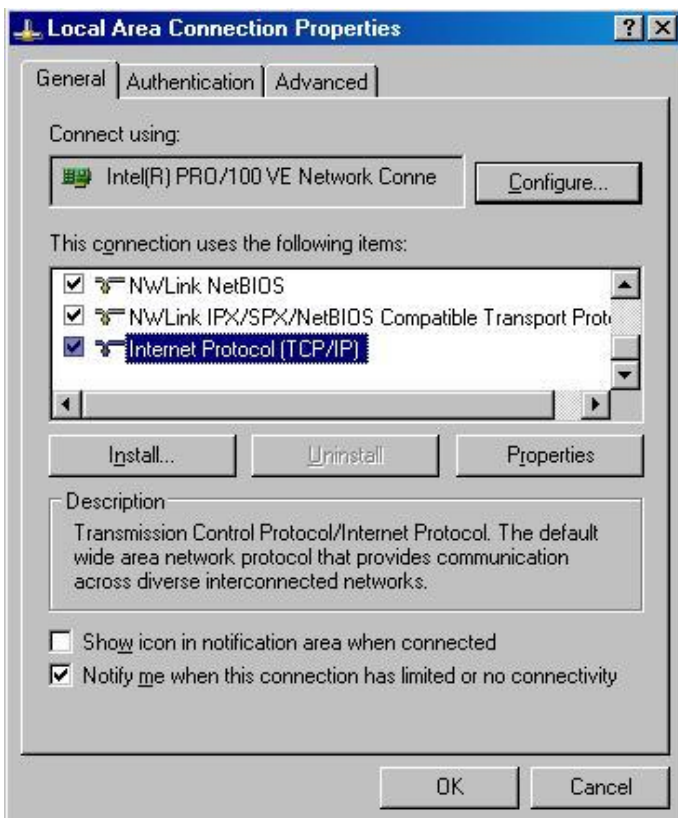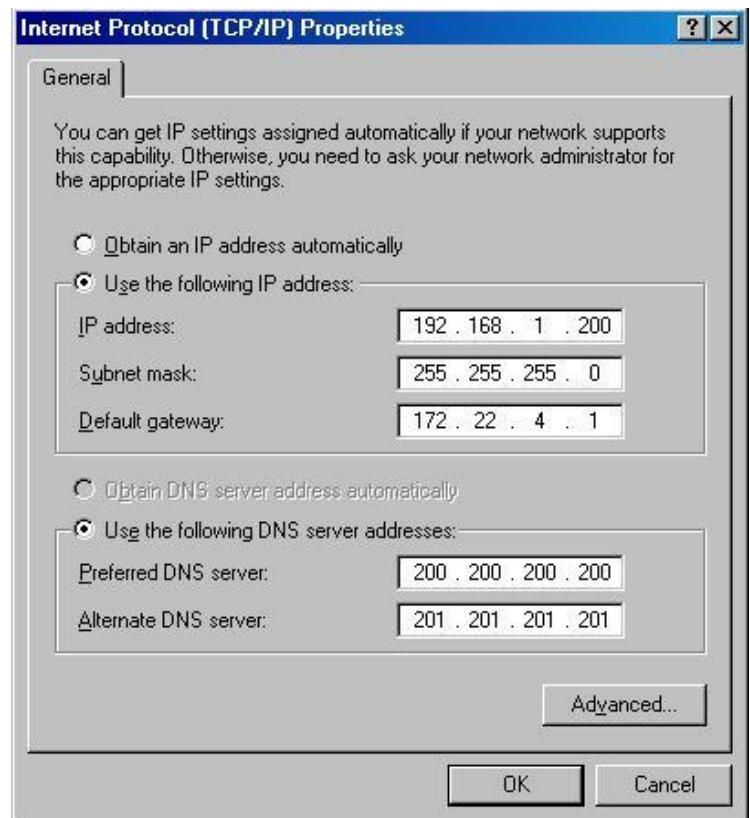
Figure 2. Local Area Connections   **Figure 3. TCP/IP Properties**

Use the steps in either 3.3.1 or 3.3.2 depending on your computers present configuration.

3.3.1 If your computer has "Obtain an IP Address Automatically" selected.
Remember to return to the present configuration when you are finished programming the Spyder, otherwise you may not be able to access your company's network.
   - Select "Use the following IP Address".
   - Type in the IP Address and Subnet Mask as shown in figure 3.
   - Click "OK" on both the figure 3 and figure 2 windows
   - Set the Spyder's FTP Address to be the same as the computers IP Address.
   - Verify the Spyder's IP Address is 192.168.1.100 and the Subnet Mask is 255.255.255.0.
   - Go to section 3.4.

3.3.2 If your computer has "Use the following IP Address" selected.
   - Set the Spyder's IP Address to a number with the same first three numbers as your computer and make the fourth number different. If your computer has an IP Address of 172.16.1.180 then make the Spyder's IP address 172.16.1.xx, where xx is a number between 1 and 254.
   - Set the Spyder to the same Subnet Mask as your computer.
   - Set the Spyder's FTP Address to be the same as the computers IP Address.
   - Go to section 3.4.

3.4. PROGRAMMING THE SPYDER

WARNING: There is a hardware change in the Spyder between versions 920A91.07 and 920A91.08. If your Spyder unit has any version 920A91.07 or below you cannot upgrade to version 920A91.08 or higher.

Turn power off to the Spyder. Press the "Up" and "Down" arrow while turning the power on to the Spyder until the program number is displayed. The display should show:

```
U p d a t e   S o f t w a r e ↓
←                              →
```

 Press the "Down" arrow key.

```
D o w n l o a d
      9 2 0 A 9 1 . 0 1      ↓
```

If the program number showing is not the same as the program number from section 3.1, press the "Enter" key to edit the program number.

Press the "Down" arrow key to start programming.

```
C o n t a c t i n g . .
```

When programming is finished the screen will show:

```
U p d a t e
S u c c e s s f u l           ↓
```

If an error message is displayed then programming has not completed.

The Spyder now has the latest software. Turn power off and then on to the Spyder to complete the installation. The Spyder will now show the new 920Axx.xx number for a few seconds during power up

4.   PROBLEMS

| Problem	Possible Cause	Solution or Diagnostic
Screen blank or all dark.	Contrast grossly misadjusted.	Remove power. While holding down ↓ and ← buttons reapply power. The Spyder will be sweep through the contrast settings. When the contrast is at or near the desired level press ↵.
FTP Login Failed	Computer or Spyder network parameters not set properly. Spyder FTP directory, FTP username, or FTP password not set properly. Ethernet cable not connected. FTP server not running on computer.	Check Computer and Spyder network parameters IP Address, Subnet Mask, FTP Address. Reset Spyder to factory defaults. Remove power. While holding down the ↑ and → buttons reapply power. Check Ethernet connection. Verify the FTP server is running. See section 3.2.
Get Program Failed	Invalid program number.	Make sure the Spyder program number is correct.
Program CRC Invalid	Data transfer corrupted. Corrupt program file.	Try programming Spyder again. Go to MAGOWR.com and get the latest program.
Displays "Booting…"	Loaded version 920A91.08 or higher on Spyder which previously had 920A91.07 or below	Program Spyder with 920A91.07 version.

5. SPYDER RESET FUNCTIONS

The Spyder has functions which are activated by holding down keys while turning on power.
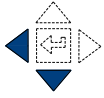
5.1. Automatic Contrast Adjust

The automatic contrast adjustment is activated by holding down the "Left" and "Down" arrow keys while turning on the power. Hold the keys for at least 6 seconds after power is on. The display will repeatedly sweep through the full contrast range until the "Enter" key is pressed. When the display is readable, press the "Enter" key to exit contrast adjustment.
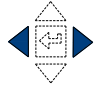
5.2. Reset All Parameters Except Calibrations to Defaults

All parameters except calibrations will be reset to defaults by holding down the "Left" and "Right" arrow keys while turning on the power. Hold the keys until the screen shows "Resetting Parameters".
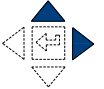
5.3. Reset All Parameters to Defaults (Including Calibrations)

All parameters will be reset to defaults by holding down the "Right" and "Up" arrow keys while turning on the power. Hold the keys for at least 6 seconds after power is on.
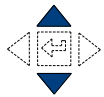
5.4. Download Software

To download new software hold down the "Up" and "Down" arrow keys while turning on power and hold the keys until the display shows "Update Software".

MAXCESS®

MAGPOWR FIFE TIDLAND