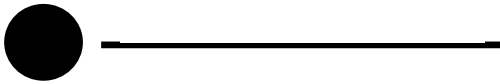


SpotLine 110

User Guide



SpotLine 110 User Guide

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FCC Statement

This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. This equipment had been tested and found to comply with the limits for a class B digital device pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy, and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult an experienced radio/TV technician.

Caution to the user: The Federal Communications Commission warns the users that changes or modifications of the unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

SpotLine 110 User Guide

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1.0 Introduction

The SpotLine 110 is part of a new generation of asynchronous terminals designed for all multi-user environments, from micro computers to minis to mainframes.

And why is this concept new?

It is new and original because the SpotLine 110 demonstrates six key characteristics: Color, Performance, Expandability, Intelligence, Standardization and Integration.

Color: The color can be controlled completely by the host computer, with the application program setting whatever it wants.

Performance: Thanks to the high communication speed (up to 115Kbaud) with the host server, the response time for your application is greatly improved.

Expandability: The expandability of the SpotLine 110 terminal is based on two factors:

- Any base unit can be upgraded from monochrome to color simply by changing the monitor you use.
- All the logic and control hardware reside in a separate small unit, which can then be upgraded for future generations more quickly than building the old style of all-in-one terminal.

Intelligence: The built-in functionality of the SpotLine 110 relieves the host computer of many communications tasks, and allows for many different configurations.

In addition, the SpotLine's multiple ports, windowing and multisession capability allows the simultaneous connection to more than one host machine, even if they are running different operating systems.

Standardization: The SpotLine 110 is designed to work with industry standard keyboards, monitors and printers, enabling simple replacement and maintenance of any component.

Integration: The SpotLine 110 has been designed for fast, friendly and simple setup, allowing for immediate and easy integration with your host computer. The resulting system will then use homogenous peripherals, monitors and keyboards.

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2.0 Specifications

The principal characteristics of the SpotLine 110 are as follows:

EMULATION: The SpotLine 110 has a number of built-in emulation modes designed to fully support the demands of the principal multi-user operating systems available in the marketplace.

SPEED: The SpotLine 110 terminal connects to any RS232C serial port and can communicate asynchronously with host computers at any speed from 1200baud to 115K baud.

MONITORS: You may connect any monochrome or color VGA/SuperVGA monitor to the SpotLine 110. If you use monochrome, it will automatically be detected and color values will be automatically translated to various brightness levels.

KEYBOARDS: The SpotLine 110 has a PC/AT compatible keyboard port, and can be used with both international scan code keyboards and ASCII keyboards.

PARALLEL PRINTER: The parallel printer port functions as a local printer to the terminal. Buffer memory of approximately 16 pages allow for the rapid transmission of data from the host computer to the printer.

SERIAL PRINTER: A serial printer may be connected to either the Serial 1 or Serial 2 port on the SpotLine 110.

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3.0 INSTALLATION

Follow these steps to install your SpotLine 110:

- Connect a monochrome or color VGA monitor to the monitor port.

- Connect your chosen keyboard

- Connect a suitable cable to either the SERIAL 1 or SERIAL 2 RS-232 connectors, and the primary server for the terminal. See Chapter 6 for the necessary cabling diagrams.

- Connect a suitable cable to the other serial port and a second server if so desired.

- Attach a parallel printer to the parallel port if needed.

- Connect a serial printer to the unused serial port if needed.

- Connect the supplied power cable to a 110V source. Similarly power on your monitor and printer.

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4.0 Usage

4.1 Configuration Setup

All the parameters of the terminal are accessible from on-screen menus, once you have powered up the unit.

To access the menu and configuration parameters, press the following keys simultaneously.

Scroll Lock + Esc

(Please note: If the system key has been changed to **ALT**; then you must use **ALT + ESC** to access the setup menu)

The main menu will appear as follows:

```
SPOTLINE V 4.3b Copyright (c) ARGOS Systèmes 1994, 1997
USA-9711-009999

----- Main Menu -----
User Environment
Port Configuration
Sessions
Factory Configuration
Save And Exit
Exit Without Saving
-----

Enter: Select Arrows: Next Item F4: Toggle Color
```

□ You can navigate around the menus with the up and down arrow keys, then press **ENTER** to make a selection.

While the menus are all different, the following keys always work the same:

□ Press the **TAB** and **UP/DOWN** keys to navigate to any menu item. The current selection will be shown in reverse video.

□ Press the **ENTER** key to accept any valid choice

□ Press **ESC** to return to the preceding menu

□ Press the **LEFT** or **RIGHT** arrow keys to select alternative values for any parameters.

□ Press the **F1** function key to see a full list of the possible choices.

□ Use the **Space Bar** to cycle through the choices

The Help window is a permanent part of the base unit and will appear as needed.

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4.1.1 User Environment

SPOTLINE V 4.3b Copyright (c) ARGOS Systèmes 1994, 1997
USA-9711-009999

```
----- User Environment -----  
Language       : [English  ]  
Keyboard       : [American ]  
Colored Setup  : [Yes     ]  
Default Session : [0       ]  
System Key     : [Scroll Lock]  
Beeper        : [High    ]  
Status Line    : [Bottom  ]  
  
Screen Saver  
  
Activate      : [Yes      ]  
Timeout       : [1       ]  
Message       : [SPOTLINE 110]
```

Enter: Save SpaceBar: Cycle Arrows/Tab: Next Field F1: List Esc: Cancel

Pressing the **F1** function key displays:

Language
French
English

Language: Specify the language set you will use

Keyboard
French
German
Italian
Spanish
Swiss German
Portuguese
American
Belgium
Swiss French

Keyboard : Specify the keyboard nationality

Color Setup
No
Yes

Color Setup: Select Color or Monochrome

Default Sessions
1
2

Default Sessions: Specifies the default number of sessions that may be active

System Key
Scroll Lock
Alt

System Key: Allows for the use of the **Alt** key instead of **Scroll Lock** key to active the local terminal functions

Beeper
High
Medium
Low
Off

Beeper : Allows you to set the volume of beeper

Status Line
Bottom
Top
None

Status Line : Allows you to set the position of the status line

Screen Saver: Allows you to activate or de-activate the screen power saver, and set the time in (in minutes) of no activity after which it should be activated. Note: (Screen Saver message is limited to 16 characters.)

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4.1.2 Port Configuration

This menu is used to set all the parameters relative to the two serial ports:

```
SPOTLINE V 4.3b Copyright (c) ARGOS Systèmes 1994, 1997
USA-9711-009999

----- Port Configuration -----

Serial Port Parameters

                Serial 1                Serial 2
Type           : [Terminal ]           [Not Used ]
Speed          : [38400  ]           [38400  ]
Data           : [8 bits  ]           [8 bits  ]
Parity         : [None   ]           [None   ]
Stop           : [1 stop  ]           [1 stop  ]
Flow           : [XON/XOFF]           [None   ]
Line           : [Direct  ]           [Direct  ]

Enter: Save SpaceBar: Cycle Arrows/Tab: Next Field F1: List Esc: Cancel
```

Type
Not Used
Terminal
Printer

Type: Specifies the usage type

Speed
115200
57600
38400
19200
9600
4800
2400
1200
600
300
150
110
50

Speed: Specify the baud rate for the port

Data
8 Bits
7 Bits

Data: Specify the number of data bits

Parity
None
Odd
Even

Parity: Parity type

Stop
1 Stop
2 Stop

Stop: Required number of stop bits

Flow
None
DTR
XON/XOFF
XPC

Flow: Specifies the transmission protocol

Line
Direct

Line: Specify the nature of the connection to the server (always direct)

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4.1.3 Sessions

This menu specifies the different parameters relative to the different simultaneous sessions:

```
SPOTLINE V 4.3b Copyright (c) ARGOS Systèmes 1994, 1997
USA-9711-009999

----- Sessions -----
Sn Emulation   Keyb.  Monitor  Media   Printer  Host    Auto.  Term
1 [Ansi/SCO ] [ASC ] [Colo. ] [Serial 1] [Parallel] [None ] [No ](Default)
2 [Ansi/SCO ] [ASC ] [Colo. ] [None   ] [None   ] [None ] [No ](Default)

Enter: Save SpaceBar: Cycle Arrows/Tab: Next Field F1: List F2: Copy
F3: Paste Esc: Cancel
```

Sn: Session Number 1 or 2

Press **F1** function key displays

```
Emulation
Spot
Pcterm
Ansi/SCO
Ansi/SCO V4
AT386/IX
Z29
RISC 6000
HP 9000
Bull DPX 20
3151 (8859)
3151 (850)
3151 (Bloc)
VT 52
VT 100
VT 220 24 lines
VT 220 25 lines
VT 320 24 lines
VT 320 25 lines
```

Emulation: Specify session emulation mode

```
Keyboard
Scn (Scan Code)
Ascii
```

Keyboard: Specifies the codes to use for the keyboard

Monitor
Monochrome
Color

Monitor: Specifies color or monochrome

Media
None
Ser. 1
Ser. 2

Media: Specifies which port to use for the session

Printer
None
Parallel
Serial 1
Serial 2

Printer: Specifies the printer port for this session

Host, Auto. and Term are not used

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4.1.4 Factory Configuration

Do not use, for Factory use only.

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4.1.5 Save and Exit

You will be asked to confirm that you want to save the new parameters before this function executes:

```
SPOTLINE V 4.3b Copyright (c) ARGOS Systèmes 1994, 1997
USA-9711-009999

Exit and Save, Proceed ?
  Yes      No

Enter: Select Arrows: Next Item F4: Toggle Color
```

After a short delay while it saves the values.

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4.1.6 Exit without Saving

This option allows you to abandon any changes made:

```
SPOTLINE V 4.3b Copyright (c) ARGOS Systèmes 1994, 1997
USA-9711-009999

Exit whithout Save, Proceed ?
  Yes      No

Enter: Select Arrows: Next Item F4: Toggle Color
```

All parameters remain as they were when the menu was first invoked.

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4.2 Reversal of the LED's for Num. Lock and Caps Lock

Depending upon which keyboard protocol you select, you may want to reverse when the LEDs light up for Num. Lock and Caps Lock.

The key combinations:

Scroll Lock + Num Lock

and

Scroll Lock + Caps Lock

allow you to make these changes.

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4.3 Purge the printer buffer

When you are using the local printer port (serial or parallel), a situation may arise where you wish to purge whatever is in the print buffer (for example, if you had a paper jam or error).

In such a case, you can manually purge the contents of the print buffer by pressing the following keys simultaneously:

Scroll Lock + Backspace

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4.4 Print Screen

At any time when the terminal is connected to a server, it is possible to print the contents of the screen by pressing:

System Key + P

(Note: for firmware version 3.5 to 4.1 use **Scroll + Alt + Print Screen**)

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4.5 Function Key

Under some of the terminals emulation modes (ANSI/SCO and AT386/IX), it is possible for user programs to program the function keys with special escape sequences.

4.5.1 Function Key Reset

The key combination:

Scroll Lock + Space

will reset all the function keys to their default program values.

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4.5.2 Programming function keys (F1- F24)

You can program the function keys to perform specific tasks, provided that the SpotLine 110 is set to Ansi SCO or Ansi SCOv4 terminal emulation mode.

Note: Function Key F13 is Shift F1, F14 is Shift F2, etc.

To program any function key to generate a specific string command to your application, send the following escape sequences to the terminal:

Esc Q x “string_to_program”

or

Esc Q x ‘string_to_program’

where x denotes the required Function key as follows:

Key	x	hexadecimal
F 1	0	30h
F 2	1	31h
F 3	2	32h
F 4	3	33h
F 5	4	34h
F 6	5	35h
F 7	6	36h
F 8	7	37h
F 9	8	38h
F 10	9	39h
F 11	:	3ah
F 12	;	3bh
F 13	<	3ch

F 14	=	3dh
F 15	>	3eh
F 16	?	3fh
F 17	@	40h
F 18	A	41h
F 19	B	42h
F 20	C	43h
F 21	D	44h
F 22	E	45h
F 23	F	46h
F 24	G	47h

The maximum string length is 19 characters.

To use control characters within the string, precede the character with the carat (^) symbol.

Examples:

EscQ0"Hello" programs F1 to issue *Hello* when pressed

EscQ?'date^M' programs F16 to issue *date<cr>*

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4.6 Multi-screen Session switching

All Spotline terminals support multiple simultaneous sessions. To switch between the different sessions (virtual terminals), use the:

Scroll Lock + Fn

Or

Alt + Fn

keys, depending on which System Key was chosen where Fn is the function key corresponding to the desired session.

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4.6.1 How to declare SCO mscreen for Spotline Terminals

The Multi-Sessions provided by SCO thru mscreen may be used with Spotline Terminals.

1. Create a temporary directory on the Unix Server:
cd /tmp (enter)
mkdir spotline (enter)
cd spotline (enter)
2. Load the Unix disk provided with the Spotline Terminal:
tar xrf /dev/fd0 (enter)
3. Edit the mscreen declaration file:
vi /etc/mscreencap (enter)
Go to the end of file - line G
Create a new line - Line O
Exit from the insert mode - Esc
Include the Spotline file:
r/tmp/spotline/spot.msc (enter)
Save and End Editing:
:x (enter)
4. Activate mscreen from Spotline Terminal
mscreen (enter)
Switching Sessions are now available
Alt F1.....session 1
Alt F2.....session 2
Alt F3.....session 3
Alt F4.....session 4
Alt F5.....session 5
Alt F6.....session 6
Alt F7.....session 7
Alt F8.....session 8

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5.0 Software Configuration

This chapter describes how to configure the host computer to tell it about your SpotLine terminal.

5.1 SCO Xenix/Unix

Under SCO Unix or Xenix, your SpotLine 110 should be configured as an **ANSI** terminal, just like the terminal sessions on the SCO system console.

The terminal type **ANSI** should be declared in the */etc./initial* file as well as */etc/ttytype*.

If you use the SCO multiscreen functionality, include the file *spot.msc* in the Unix file */etc/mscreencap*. The file *spot.msc* is on your diskette labeled *UNIX*. See section **4.6.1**

Also could be found on our web site, (www.spotline.com)

Configuration of the SpotLine 110 for SCO UNIX:

Under Port communication parameters:

Set the speed, baud rate, etc.

Under Session Parameters:

Select the Option **ANSI/SCO** under emulation, or **ANSI/SCOv4** if you have SCO Open Desktop or SCO Open Server 5.

Select **ASCII** for the keyboard mode.

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5.2 Interactive Unix

If you are using Interactive Unix, then the SpotLine terminal should be declared in the */etc/inittab* as AT386. In effect, the SpotLine terminal is then compatible with the main system console. Verify that the variable TERM is set to the value AT386. This may also be set in the */etc/ttytype* file.

Any application variables you are setting should be configured to treat the SpotLine 110 as a system console.

Configuration of the SpotLine 110 for Interactive:

For Communication Port Parameters:

Set the Speed, stop start bits, etc.

Under the Session Parameters:

Select the option “AT386/IX emulation”

Select the ASCII keyboard option and the correct country code.

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5.3 Other Unix Versions

The SpotLine family of terminals will also work equally well with other versions of UNIX, such as AIX from IBM and HP-UX for Hewlett Packard systems.

It is recommended that you use the “Ansi/SCO” emulation mode for the terminal. You can integrate the required *termcap* and *terminfo* parameters from the files *scoansi.tc* and *scoansi.ti* on your *UNIX* diskette.

The file *scoansi.ti* file needs to be compiled with your UNIX *tic* program (Terminfo compiler) to create the necessary *terminfo* entries. This compilation must take place under root level administration.

For example:

```
tic scoansi.ti
```

To use your SpotLine terminal with the standard UNIX utilities, it is necessary to declare it as an *Ansi* device in your environment variables, or termcap and terminfo files.

Configuration of the SpotLine 110:

Communications port parameters:

Set the baud rate, stop/start bits, etc.

Session parameters:

Choose the *Ansi/SCO* emulation option

Select *ASCII* keyboard and the appropriate country code.

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5.4 Use with other Operating Systems

The SpotLine 110 terminal may be used as a terminal off any other host system that supports asynchronous terminals.

Complete emulation details of the SpotLine 110 are contained in Chapter 7 of this manual. You will notice that the control codes are very similar to other industry standard terminals.

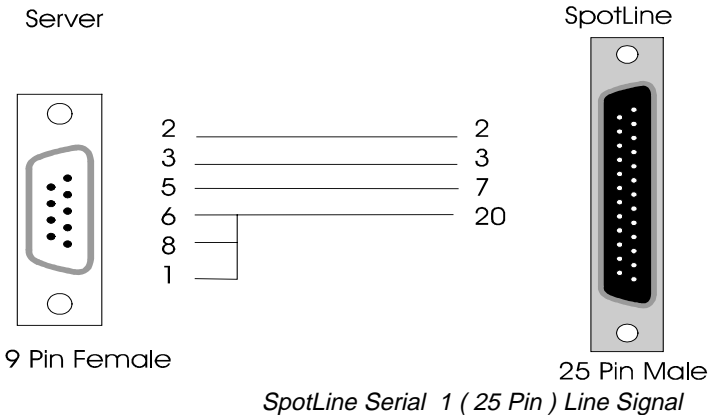
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6.0 Cabling

The SpotLine 110 terminal uses industry standard 4-wire or 6-wire RS232C cabling. It is strongly recommended that use cabling appropriate for your environment to minimize noise, errors and other interference. In particular, properly shielded and grounded cable should be used wherever possible, and that all outdoor cables (even for short runs), be properly enclosed in grounded, metallic conduit.

In addition, care should be taken to not run cables adjacent to transformers, air conditioners, refrigerators or other devices that generate a lot of electromagnetic interference.

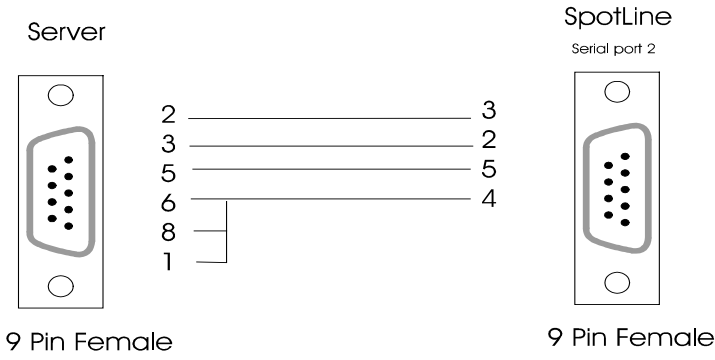
6.1 Terminal to Host cabling



Pin 2	TD	Transmit Data
Pin 3	RD	Receive Data
Pin 7	GND	Ground
Pin 20	DTR	Data Terminal Ready

9 Pin Serial Server (Female) to 25 Pin Serial Port 1

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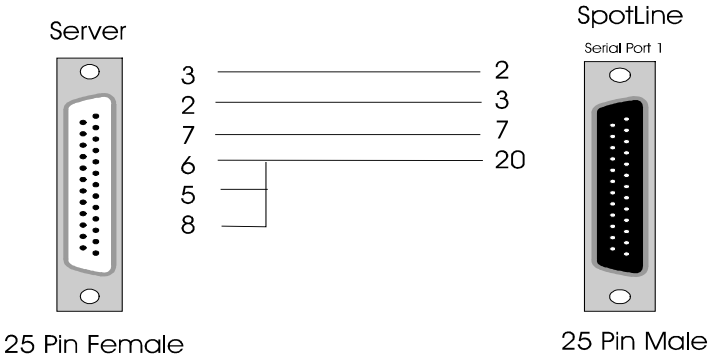


SpotLine Serial 2 (9 Pin) Line Signal

Pin 3	TD	Transmit Data
Pin 2	RD	Receive Data
Pin 5	GND	Ground
Pin 4	DTR	Data Terminal Ready

9 Pin Serial Server (Female) to 9 Pin Serial Port 2

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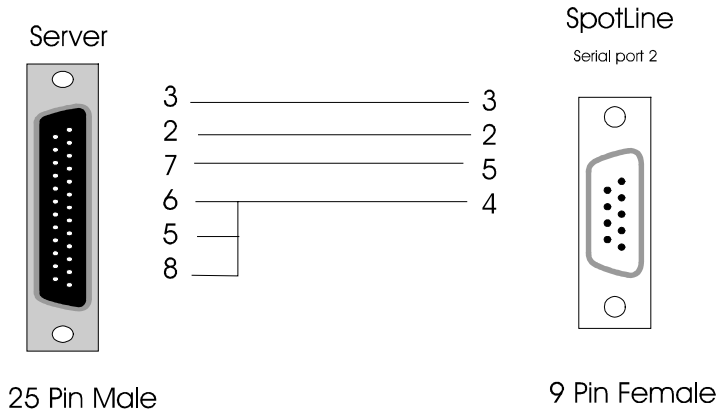


SpotLine Serial 1 (25 Pin) Line Signal

Pin 2	TD	Transmit Data
Pin 3	RD	Receive Data
Pin 7	GND	Ground
Pin 20	DTR	Data Terminal Ready

25 Pin Serial Server (Female) to 25 Pin Serial Port 1

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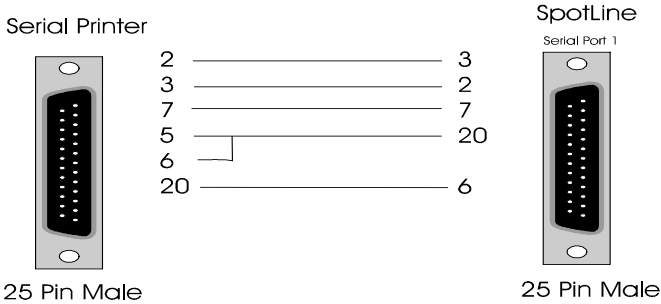
SpotLine Serial 2 (9 Pin) Line Signal

Pin 3	TD	Transmit Data
Pin 2	RD	Receive Data
Pin 5	GND	Ground
Pin 4	DTR	Data Terminal Ready

25 Pin Serial Server (Male) to 9 Pin Serial Port 2

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6.2 Serial Printer Cabling

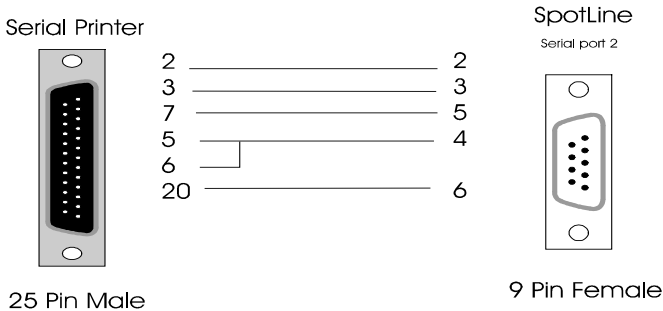


SpotLine Serial 1 (25 Pin) Line Signal

Pin 3	RD	Receive Data
Pin 2	TD	Transmit Data
Pin 7	GND	Ground
Pin 20	DTR	Data Terminal Ready
Pin 6	DSR	Data Set Ready

25 Pin Serial Printer (Male) on 25 Pin Serial Port 1

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SpotLine Serial 2 (9 Pin) Line Signal

Pin 2	RD	Receive Data
Pin 3	TD	Transmit Data
Pin 5	GND	Ground
Pin 4	DTR	Data Terminal Ready
Pin 6	DSR	Data Set Ready

25 Pin Serial Printer (Male) on 9 Pin Serial Port 2

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7.0 Emulation

This section is provided only for those users who wish to know the details of the emulation modes and protocols of the SpotLine 110 emulation mode. This chapter describes the “SPOT” emulation which is different from the standard terminal product. Unless your operating system or application programs are unique, it is advised that you ignore this chapter.

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7.1 General:

The SpotLine 110 always emulates 25 lines and 80 columns.

This emulation works in *Wrap Off* mode if a carriage return is not entered before the end of the line.

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7.2 Keyboard Control Characters:

In ASCII mode, the following scan codes will be sent to the host computer: (All values in Hexadecimal)

Key	Scan Code
Enter	0D
Backspace	08
Tab	09
Esc	1B
Delete	7F
Left Arrow	1F 08
Right Arrow	1F 06
Up Arrow	1F 0B

Down Arrow	1F 05
Insert	1F 0F
Home	1F 1C
End	1F 02
Page Up	1F 12
Page Down	1F 03
F1	1F 80
F2	1F 81
F3	1F 82
F4	1F 83
F5	1F 84
F6	1F 85
F7	1F 86
F8	1F 87
F9	1F 88
F10	1F 89
F11	1F A8
F12	1F A9
Shift F1	1F 8A
Shift F2	1F 8B
Shift F3	1F 8C
Shift F4	1F 8D
Shift F5	1F 8E
Shift F6	1F 8F
Shift F7	1F 90
Shift F8	1F 91
Shift F9	1F 92
Shift F10	1F 93
Shift F11	1F 94
Shift F12	1F 95

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7.3 Screen Control Parameters

(All values in Hexadecimal)

Cursor to Top Line	0D	(^M)
Next Line	0A	(^J)
Cursor Left	08	(^H)
Cursor Right	06	(^F)
Cursor Up	0B	(^K)
Cursor Down	05	(^E)
Tab	09	(^I)
Cursor Home	1C	(^\)
Beep	07	(^G)
Position Cursor	1B 66	X Y

where

$$X = \text{Column Number} + 20(\text{hex})$$

$$Y = \text{Row Number} + 20(\text{hex})$$

Cursor Off	1B 77	(Esc w)
Cursor On	1B 76	(Esc v)
Clear screen	0C	(^L)
(The cursor does not move)		
Clear to end of screen	1B 4A	(Esc J)
Clear to end of line	1B 4B	(Esc K)
Insert Line	1B 4C	(Esc L)

Delete Line	1B 4D (Esc M)
Insert Character	1B 40 (Esc @)
Reverse Video	1B 62 (Esc b)
Flashing Video	1B 63 (Esc c)
Underline	1B 64 (Esc d)
Video Dim	1B 65 (Esc e)
Video Bright	1B 68 (Esc h)
Reset Attributes	1B 61 (Esc a)
Set Color Text	1B 72 T (Esc r Color T)

where T has the value:

<u>Hex</u>	<u>Color</u>	<u>ASCII</u>
30	Black	0
31	Red	1
32	Green	2
33	Brown	3
34	Blue	4
35	Magenta	5
36	Cyan	6
37	Light Grey	7
38	Dark Grey	8
39	Light Red	9
41	Light Green	A
42	Yellow	B
43	Light Blue	C
44	Light Magenta	D
45	Light Cyan	E
46	White	F

Set Color background 1B 73 (Esc s Color B)

where B has the value:

<u>Hex</u>	<u>Color</u>	<u>ASCII</u>
30	Black	0
31	Rouge	1
32	Green	2
33	Brown	3
34	Blue	4
35	Magenta	5
36	Cyan	6
37	Light Grey	7

Transparent Mode On 1B 2A (Esc *)

Transparent Mode Off 1B 2b (Esc +)

Hard Copy Alphanumeric 1B 4F (Esc O)

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7.4 Local Printer Control Codes - ANSI and AT386 Emulation

When using the ANSI or AT386 emulation modes of the SpotLine 110, the following codes can be used to control the local printer:

Transparent Printing ON 1B 5B 35 69 (Esc [5 i)

Transparent Printing Off 1B 5B 34 69 (Esc [4 i)

Clear local Print Buffer 1B 5B 33 69 (Esc [3 i)

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7.5 Additional ESC Commands

The SpotLine 110 is designed to support up to 16 sessions; eight on the serial 1 connection and eight on the serial 2 connection. Use the following escape command to switch sessions:

(Session are numbered 0 - 7)

For session 0	1B 5B 30 7A	(Esc [0z)
For session 1	1B 5B 31 7A	(Esc [1z)
For session 2	1B 5B 32 7A	(Esc [2z)
For session 3	1B 5B 33 7A	(Esc [3z)
For session 4	1B 5B 34 7A	(Esc [4z)
For session 5	1B 5B 35 7A	(Esc [5z)
For session 6	1B 5B 36 7A	(Esc [6z)
For session 7	1B 5B 37 7A	(Esc [7z)

Parallel Port ON	1B 5B 35	(Esc [5 i)
Parallel Port OFF	1B 5B 34 69	(Esc [4 i)
Serial Port 1 ON	1B 5B 39 69	(Esc [9 i)
Serial Port 1 OFF	1B 5B 38 69	(Esc [8 i)
Serial Port 2 ON	1B 5B 37 69	(Esc [7 i)
Serial Port 2 OFF	1B 5B 36 69	(Esc [6 i)
Purge all Port Buffers	1B 5B 33 69	(Esc [3 i)

Lock Keyboard	1B 5B 32 68	(Esc [2 h)
Unlock Keyboard	1B 5B 32 6C	(Esc [2 i)

80 to 132 columns	1B 5B 3F 33 68	(Esc [?3h)
132 to 80 columns	1B 5B 3F 33 6C	(Esc [?3i)

Clear Foreground	1B 5B 36 6A	(Esc [6j)
Normal intensity	1B 5B 6D	(Esc [m)
High intensity	1B 5B 31 6D	(Esc [1m)
Clear Screen	1B 5B 32 6A	(Esc [2j)

Auto-Wrap on	1B 5B 3F 37 68	(Esc [?7h)
Auto-Wrap off	1B 5B 3F 37 6C	(Esc [?7i)

Reverse Direction of Serial Port

When the serial port is selected as “Printer” in the **Type** field of Port Configuration in the Setup Menu, you may reverse the direction of the port in order to receive data to be sent to the host as if it were keyboard data. (Note: the keyboard will not be locked)

Serial Port 2 Inbound ON	1B 5B 31 31 69	(Esc [11 i)
Serial Port 2 Inbound OFF	1B 5B 31 30 69	(Esc [10 i)
Serial Port 1 Inbound ON	1B 5B 31 33 69	(Esc [13 i)
Serial Port 1 Inbound OFF	1B 5B 31 32 69	(Esc [12 i)

This command is for SCO ANSI (v4) emulation only.

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8.0 Warranty

Spotline Inc. warrants the SpotLine 110 terminal, excluding such items as software, diskettes and related documentation, will be free from defects in materials and/or workmanship for a period of 1 year from the date of delivery. During the warranty period, Spotline will correct any defects in material or workmanship, or any failure of the hardware system to conform to specification, at no charge for in-house labor and materials. Shipping costs must be prepaid. Any replacement parts/products shall be new or serviceably used, and are warranted for the remainder of the original warranty.

Spotline liability for failure to repair the hardware system to conform to the warranty after a reasonable number of attempts will be limited to replacement of the terminal, or, at Spotline's option, to a refund not too exceed the purchase price of the hardware system. These remedies are the Purchaser's exclusive remedies for breach of warranty.

The warranty stated above is the only warranty applicable to this product. All other warranties, express or implied (including all implied warranties of merchantability or fitness for a particular purpose), are hereby disclaimed. No oral or written information (including but not limited to a 30 day money back guarantee) or advice given by Spotline, its agents or employees shall create a warranty or in any way increase the scope of this warranty.

This warranty is governed by the laws of the state of California.

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