

JFW Industries, Inc.



75SA-050 MANUAL

(This manual corresponds with firmware revision 0)

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Additional Documentation Provided with Operating Manual:

1. Outline Drawing
2. Specification Sheet

1. Introduction

The JFW model 75SA-050 test system consists of four 1PT2 self-terminating electromechanical switches that cover the frequency band DC-2150MHz. The unit is controlled remotely via Ethernet or RS-232. The unit may be manually controlled on the front panel using the keypad and LCD display. There is a slide switch on the back panel that allows the user to select between either Ethernet or RS-232 mode. The switches are failsafe and are all set to Port 1 while the unit is off and on startup.

In addition to this manual a CD is also provided. The CD contains the following:

- 1) 75SA-050 Manual.PDF.....(This Manual)
- 2) 75SA-050.PDF.....(Specification Sheet)
- 3) 092-6481.PDF.....(Outline Drawing)
- 4) 75SA-050.EXE.....(JFW Test Software)

Mechanical Specifications

The 75SA-050 is designed in a benchtop style enclosure. The outline drawing details all necessary package dimensions and connector layouts. The unit is AC powered via a 3-prong receptacle on the rear panel. A standard power cord is supplied with the unit. The power supply itself is a universal AC power supply that can handle input AC voltages 100-240 VAC (47-63 Hz).

The 75SA-050 is also AC current protected by use of a 2 Amp "Slo-Blo" AC fuse. The fuse is field replaceable in the event of any failure to the fuse. The fuse itself is a 5x20 mm "Slo-Blo" type fuse and can be ordered through JFW or directly from Littelfuse. The Littelfuse part number is #215-002. The JFW part number is #025-021.

Front Panel Display

If the slide switch on the back panel is set to Ethernet mode when the unit is powered on, then "Ethernet Mode" will be displayed on the LCD. When a valid Ethernet connection to the unit has been made (using the correct IP address and port number), the number of Ethernet Connections listed on the LCD will increase. When the connection is closed, the number of Ethernet Connections listed on the LCD will decrease.

If the slide switch on the back panel is set to RS-232 mode when the unit is powered on, then "RS-232 Mode" will be displayed on the LCD. Also, the current baud rate setting will be displayed (9600, 19200, or 38400). When the unit receives the Change Baud Rate remote command, the new baud will be immediately displayed.

2. Manual Mode



Manual control is achieved with the keypad and LCD on the front panel of the unit. To change from remote mode to manual mode, press the “Manual/Remote” button on the left of the keypad.

From the Remote Mode, press the Manual/Remote key to enter Manual mode.

IMPORTANT NOTE: If the unit is connected remotely to any users in Ethernet mode and you switch to manual mode, the unit will close all Ethernet connections before starting manual mode. While in manual mode, no remote Ethernet connections are allowed.

Manual control is based on the location of the “>” cursor on the left. The cursor indicates which line you are currently on. You may switch through the different lines with the Up and Down arrows left of the screen.

While on a particular line, the numbers can be changed by either typing in the new port setting or switch number on the keypad or use the “+” and “-” keys to scroll through the values. The program will only allow changes within the range of acceptable values for that line. Switch addresses can be (1-4) and port values can be (1-2).

To change a setting of a switch in the test system, you must first set the address of the switch, and then set the port number. Changing a switch number, will automatically display its current setting in the Value row. To change this setting, simply scroll down with the arrow keys on the left to activate the Port Value State, and enter the desired setting.

Pressing the JFW button in the top left hand corner of the keypad will display the JFW model number and the current firmware revision it is running for a brief period of time before returning to the navigation menu.

If the unit is in RS-232 mode and you switch to manual mode, the unit will stop executing RS-232 commands that it receives. When you switch back from manual mode to RS-232 mode, all RS-232 commands that were received while in manual mode are deleted from the buffer.

3. Remote Command Set

The following command set is used for both Ethernet mode and RS-232 mode. The command set consists of the following commands:

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If you send a remote commands to the unit that is not properly formatted, then you will receive one of the following error messages.

- Error1** **Command is formatted incorrectly.**
This error occurs if a command does not follow it's proper command syntax.
- Error2** **Switch address out of range.**
This error occurs if the switch address is not 1-4.
There are 4 total switches in this test system.
- Error3** **Port value out of range.**
This error occurs when the port value is not 1-2dB.
The switches in this test system are all 1P2T switches.
- Error4** **Interval time out of range.**
This error occurs when the interval time of the pause command is not 1-9999.
- Error5** **Interval time not properly formatted.**
This error occurs when a "M" or "S" does not follow the interval time for the pause command. The "M" formats the interval time to milliseconds. The "S" formats the interval time to seconds.

1) Identification Command

Syntax: IDN <CR>
<CR> = carriage return

Description: This command returns the identification information for this system and is followed by a carriage return and a line feed. It will list JFW Industries Inc, followed by the JFW model number and the firmware revision level.

Examples: *In RS-232 mode:*
IDN <CR>
"JFW Industries Inc., Model 75SA-050, Firmware Rev 0 <CR> <LF>"

In Ethernet mode:
IDN <CR>
"JFW Industries Inc., Model 75SA-050, Firmware Rev 0 <CR> <LF>"
"Current Ethernet Connections = 4 <CR> <LF>"
*

Notes: *The IDN command will also return a Message in Ethernet mode if a Message has been stored using the Message command.
To erase the message, any user can send the Clear command from Ethernet mode.
Command is not case sensitive, but must be terminated by a carriage return.

2) Change Baud Rate Command – RS-232 Only

Syntax: CBx <CR>
x = new baud rate
<CR> = carriage return

Description: This command changes the baud rate of the unit. The current baud rate is displayed on the LCD while in remote mode.

Examples: CB9600 <CR> Changes the baud rate to 9600 baud
CB19200 <CR> Changes the baud rate to 19200 baud
CB38400 <CR> Changes the baud rate to 38400 baud

Notes: "x" must be either 9600, 19200, or 38400.
Command is not case sensitive, but must be terminated by a carriage return

3) Disconnect Command

Syntax: DIS <CR>
<CR> = carriage return

Description: This command causes the test system to close the existing Ethernet connection. This command is only used while in Ethernet mode.

Examples: DIS <CR>
Returns: "Connection Closing<CR><LF>" and closes the Ethernet connection.

Notes: There must NOT be a space between the "D", "I", and "S".
Command is not case sensitive, but must be terminated by a carriage return.

4) Set Switch Command

Syntax: SSx y <CR>
 x = switch number to control
 y = port value to set the switch to
 <CR> = carriage return

Description: This command sets switch “x” to port “y”.

Examples: SS1 1 <CR> Sets switch 1 to Port 1.
 SS4 2 <CR> Sets switch 4 to Port 2.

Notes: “x” must be 1-4 (there are 4 total switches in this test system).
 “y” must be 1-2 (port range is 1-2).
 There must be a space between “x” and “y”.
 Command is not case sensitive, but must be terminated by a carriage return.

5) Set Switch with Response Command

Syntax: SSRx y <CR>
 x = switch number to control
 y = port value to set the switch to
 <CR> = carriage return

Description: This command sets switch “x” to port “y”.

Examples: SSR1 1 <CR> Sets switch 1 to Port 1. Returns: “Switch#1 = Port 1<CR><LF>”
 SSR4 2 <CR> Sets switch 4 to Port 2. Returns: “Switch#4 = Port 2<CR><LF>”

Notes: “x” must be 1-4 (there are 4 total switches in this test system).
 “y” must be 1-2 (port range is 1-2).
 There must be a space between “x” and “y”.
 Command is not case sensitive, but must be terminated by a carriage return.

6) Read Switch Command

Syntax: RSx <CR>
 x = switch number to query
 <CR> = carriage return
 <LF> = line feed

Description: This command returns the port setting for switch “x”.

Examples: SS1 2 <CR> Sets switch 1 to Port 2.
 RS1 <CR> Returns: “Switch#1 = Port 2<CR><LF>”.

Notes: “x” must be 1-4 (there are 4 total switches in this test system).
 Command is not case sensitive, but must be terminated by a carriage return.

7) Set All Switch Command

Syntax: SAS x <CR>
x = port value to set the switches to
<CR> = carriage return

Description: This command sets all switches to Port “x”.

Examples: SAS 1 <CR> Sets all switches to Port 1.
Returns: “Switches 1-4 = Port 1<CR><LF>”
SAS 2 <CR> Sets all switches to Port 2.
Returns: “Switches 1-4 = Port 2<CR><LF>”

Notes: “x” must be 1-2 (port range is 1-2).
Command is not case sensitive, but must be terminated by a carriage return.

8) Set Multiple Switch Command

Syntax: SMS x1 y1,x2 y2<CR>
x = switch number
y = port value to set the switch to
<CR> = carriage return
<LF> = line feed

Description: This command can set multiple switches to multiple port values in one command.
It sets switch “x1” to Port “y1”, switch “x2” to Port “y2”, etc.
Sends back “n Switches Set” where “n” is the number of switches that were set.

Examples: SMS 1 1,2 2<CR> Sets switch 1 to Port 1 and switch 2 to Port 2.
Returns: “2 switches Set<CR><LF>”

Notes: “x” must be 1-4 (there are 4 total switches in this test system).
“y” must be 1-2 (port range is 1-2).
There must be a space between “SMS” and “x1”.
There must be a space between all “x”s and “y”s.
You only have to set the switches you want to change.
Ex. “SMA 1 1, 4 2<CR>” sets switch 1 to Port 1 and switch 4 to Port 2.
Command is not case sensitive, but must be terminated by a carriage return.

10) Close Command – Ethernet Only

Syntax: **CLOSE<CR>**
 <CR> = carriage return

Description: This command causes the test system to close all other user's Ethernet connections to the test system, but leaves your Ethernet connection open. This command is only used while in Ethernet mode.

Example: Four users are connected to the test system. Send an IDN to verify.

IDN<CR>

“JFW Industries Inc., Model 75SA-050, Firmware Rev 0<CR><LF>”

“Current Ethernet Connections = 4<CR><LF>”

CLOSE<CR>

“75SA-050 – 3 Connections Closing<CR><LF>”

Sending the close command will disconnect the other 3 users and leave you as the only Ethernet connection. Send an IDN to verify.

IDN<CR>

“JFW Industries Inc., Model , Firmware Rev 0<CR><LF>”

“Current Ethernet Connections = 1<CR><LF>”

The one connection that is left open is your connection.

Notes: This command is used mainly if you are running an important test and need sole access to the switches by closing any other Ethernet connections to the 75SA-050.

This command is also helpful to use if you have an intermittent Ethernet connection to your network, possibly through wireless or connecting via VPN. If you lost your connection, you would then have to reconnect to the 75SA-050 and it would open a new socket. Sending the Close command would then close the original socket and correct the current number of connections.

Command is not case sensitive, but must be terminated by a carriage return.

11) Pause Command

Milliseconds Interval Syntax: **PAUSExM<CR>**

Seconds Interval Syntax: **PAUSExS<CR>**

x = duration of time to pause

M = interval time format set to milliseconds

S = interval time format set to seconds

<CR> = carriage return

Description: This command pauses the test system for “x” duration of time. The time duration can be set from 1-9999. The time duration can be formatted to be in milliseconds or in seconds depending on if there is a “M” for milliseconds or “S” for seconds. The pause command is useful when sending scripts to the test system and you want a timed pause between other remote commands.

Examples: **PAUSE100M<CR>** Returns: “Pause Starting<CR><LF>”
Test system pauses for 100 milliseconds.
Returns: “Pause Finished<CR><LF>”

PAUSE15S<CR> Returns: “Pause Starting<CR><LF>”
Test system pauses for 15 seconds.
Returns: “Pause Finished<CR><LF>”

Notes: Command is not case sensitive, but must be terminated by a carriage return.

Feedback: At the beginning and ending of each PAUSE command, the test system will send all connected users a message to provide feedback of the test system status. At the beginning, the message “Pause Started” is sent. When the command has finished executing, the message “Pause Finished” is sent.

12) Message Command – Ethernet Only

Syntax: MESSAGE x<CR>
<CR> = carriage return

Description: This command will allow you to send a custom message to any new user that connects to the 75SA-050.

Examples: MESSAGE I will be using switches 1 and 2 on the 75SA-050 today (9/2) -CLK<CR>
Returns: "Message Stored<CR><LF>"
Then if a new user connects to the 75SA-050, they would see:
"Connection Open 75SA-050<CR><LF>"
"I WILL BE USING SWITCHES 1 AND 2 ON THE 75SA-050 TODAY (9/2) -CLK<CR><LF>"

-or if an IDN command is sent-

IDN<CR> Returns:
"JFW Industries Inc., Model 75SA-050, Firmware Rev 0 <CR> <LF>"
"Current Ethernet Connections = 2 <CR> <LF>"
"I WILL BE USING SWITCHES 1 AND 2 ON THE 75SA-050 TODAY (9/2) -CLK<CR><LF>"

Notes: "x" can be any ASCII string up to 100 characters long.
There must be a space between MESSAGE and "x".
This command is helpful for letting colleagues know you are using the test system for an important test and the port settings must not be disturbed.
The Message can be cleared by sending the Clear command from any user connected in Ethernet mode.
Command is not case sensitive, but must be terminated by a carriage return.

13) Clear Command – Ethernet Only

Syntax: CLEAR<CR>
<CR> = carriage return

Description: This command clears the custom Message stored by the Message command.

Examples: MESSAGE I will be using switches 1 and 2 on the 75SA-050 today (9/2) -CLK<CR>
IDN<CR> Returns:
"JFW Industries Inc., Model 75SA-050, Firmware Rev 0 <CR> <LF>"
"Current Ethernet Connections = 2 <CR> <LF>"
"I WILL BE USING SWITCHES 1 AND 2 ON THE 75SA-050 TODAY (9/2) -CLK<CR><LF>"

CLEAR<CR> Returns: "Message Cleared<CR><LF>"
IDN<CR> Returns:
"JFW Industries Inc., Model 75SA-050, Firmware Rev 0 <CR> <LF>"
"Current Ethernet Connections = 2 <CR> <LF>"

Notes: Command is not case sensitive, but must be terminated by a carriage return.

14) Store Command

Syntax: STORE<CR>
<CR> = carriage return

Description: This command will write the current switch settings to the onboard flash memory to be Recalled at a later time, even after power cycling the 75SA-050.

Examples: SMS 1 1,2 2,3 1,4 2 <CR> Sets switch 1 to Port 1, switch 2 to Port 2, switch 3 to Port 1, and switch 4 to Port 2.

RAS<CR>

Returns:

“Checksum = DC45”

“Switch 1 1”

“Switch 2 2”

“Switch 3 1”

“Switch 4 2”

STORE<CR>

Returns: “4 Switch Settings Stored In Memory<CR><LF>”

Notes: Please allow approximately 1 second to write the data to memory.
Command is not case sensitive, but must be terminated by a carriage return.

15) Recall Command

Syntax: RECALL<CR>
<CR> = carriage return

Description: This command reads the data stored on the onboard flash memory from the last Store command, and resets all of the switches to those settings.

Example: (Continuing From the STORE Command Example Above)

SAS 1<CR>

Returns: “Switches 1-4 = Port 1<CR><LF>”

RAS<CR>

Returns: “Checksum = DC45”

“Switch 1 1”

“Switch 2 2”

“Switch 3 1”

“Switch 4 2”

RECALL<CR>

Returns: “4 Switch Settings Loaded From Memory<CR><LF>”

RAS<CR>

Returns: “Checksum = DC45”

“Switch 1 1”

“Switch 2 2”

“Switch 3 1”

“Switch 4 2”

Notes: Command is not case sensitive, but must be terminated by a carriage return.

4. Ethernet Mode

Overview

The 75SA-050 is Ethernet (TCP) controlled via a standard RJ-45 Ethernet connector on the rear of the unit. The controlling computer must establish a TCP connection to the test system. The remote command format and examples can be found in the “Remote Command Set” section of this manual. The command formats are the same for either Ethernet or RS-232 control. If commands are sent incorrectly to the unit, you will receive an error message.

The slide switch on the back panel allows the user to select between either Ethernet or RS-232 control. The unit must be turned off and then back on, when changing between Ethernet and RS-232 control for the change to take affect.

Multiple Ethernet Connections

The 75SA-050 allows the ability for multiple Ethernet connections at once. There can be up to 4 users connected to the test system simultaneously. All four users will connect to the test system using the same IP address and port number. The IP address can be configured to whatever the user requires. See the next section for details on configuring the IP settings. The port number is hard coded at 3001 and can not be changed.

The remote commands *Set Switch* and *Read Switch* are received and processed in less than 3 milliseconds. A user can stream *Set Switch* commands to the test system and there will only be a delay of a few milliseconds caused by the commands from other users.

Ethernet Configuration Information

This unit comes programmed to the following Ethernet settings:

I.P. Address **192.168.1.250**
Gateway **192.168.1.1**
Netmask **255.255.255.0**
Port **3001** (hard-coded into the unit and can not be changed)

An additional document “Sample Ethernet Configuration Session.PDF” comes with this manual and is located on the CD in PDF format. This sample session shows step by step example of how the Ethernet port is configured.

Open up a terminal session through your computer’s COM port using a program like HyperTerminal. You must use a Null Modem cable (JFW part #012-174) to make the physical connection from your COM port to the “Ethernet Config. Port” on the rear of the 75SA-050. The terminal session should use the following COM port settings:

Baud Rate: 9600
Data Bits: 8
Parity: None
Stop Bits: 1
Flow Control: None

You can verify a successful connection by typing “show” in the terminal window. You should receive an echo back from the 75SA-050. The commands listed below can then be used to change the network properties.

SHOW	Displays the Gateway setting
SHOW ETH0	Displays IP address and Netmask settings
SET IP xxx.xxx.xxx.xxx	Changes the I.P address
SET NETMASK xxx.xxx.xxx.xxx	Changes the Netmask
SET GATEWAY xxx.xxx.xxx.xxx	Changes the Gateway
SET NAMESERVER xxx.xxx.xxx.xxx	Changes the Nameserver

5. RS-232 Mode

This unit is RS-232 controlled via a standard 9-Pin D connector on the rear of the unit. The remote command format and examples can be found in the "Remote Command Set" section of this manual. The command formats are the same for either RS-232 or Ethernet control. If commands are sent incorrectly to the unit, you will receive an error message.

The baud rate can be set at 9600, 19200, or 38400. The current baud rate is displayed on the front panel by the LCD. To change to a different baud rate, the remote command "change baud rate" must be sent. This remote command is fully described in the "Remote Command Set" section of this manual.

The slide switch on the back panel allows the user to select between either RS-232 or Ethernet control. The unit must be turned off and then back on, when changing between Ethernet and RS-232 control for the change to take affect.

RS-232 Cable

Included with the system should be one "Null Modem" cable (JFW part #012-174). This cable is used to interface with the RS-232 Port. This cable is DE-9P to DE-9S and is the "Null Modem" type. The female connector will plug into the serial port on most PC's, and the male connector will connect to 75SA-050. This cable can also be bought from L-Com (L-Com #CSNULL9MF-10).

RS-232 Port Settings

When sending commands to the 75SA-050, your computer's RS-232 port settings must be configured as follows. The baud rate must be set at 9600, 19200, or 38400. The parity must be set to "none". The data length must be set to "8" data bits. The stop bit must be set to "1". If your RS-232 port is not configured with these settings, the 75SA-050 will not receive and execute the commands sent. It will not send back an error either, because communication was never established.

BAUD RATE	9600
PARITY	none
DATA LENGTH	8 bits
STOP BITS	1
FLOW CONTROL	none

6. JFW Test Program

IMPORTANT NOTE: No installation program needs to be run in order to use the JFW test program. Just copy the executable file and library directory located on the CD that is provided with this manual onto any location on your computer.

While using the program, you will see the commands you send displayed in the “Data Sent” window and any response from the test system in the “Data Received” window. In addition to the 75SA-050's remote command set, JFW has provided the following functionality to the GUI:

GUI Typed Command

Allows you to send any ASCII message you want to the test system. Just type your message in the text box and click on the Send Message button. Your Message is displayed in the “Data Sent” window.

JFW Industries, Inc.

75SA-050 Test Program (Rev 0)

RS-232 Setup

Close RS-232 Port

Com Port: COM3

Baud Rate: 9600

Ethernet Setup

Connect Ethernet

I.P. Address: 192.168.1.250

Port Number: 3001

Remote Commands

Set Switch Switch #: 1

with Response Port #: 1

Set All Switches Port #: 1

Read Switch Switch #: 1

Read All Switches

Change Baud Rate

GUI Typed Commands

Send Message

IDN

Clear Text Clear Drop Down Box

Data Sent

Clear Text

Data Received

Clear Text

7. FAQ's

If you are reading this page because you are having problems with a JFW test system, please contact JFW at **317-887-1340** or **sales@jfwindustries.com**. One of our engineers would be more than happy to help you troubleshoot the unit and get you back on track.

How do I find out the revision level of my firmware?

Right after the unit is powered on, the firmware revision level is displayed on the LCD. The firmware revision level is also included with the information sent back from an “identification” remote command.

I just switched from Ethernet mode to RS-232 mode using the switch on the back panel, but I am still in Ethernet mode. Why did the mode not change?

You must turn the unit off and then back on for the change to take affect.

Why won't the unit respond to my Ethernet commands?

Verify the following settings: IP address, Gateway, Netmask, and Port Number. Remember that the Port Number is hard-coded to 3001 and can not be changed. Check you command format in the “Remote Command Set” section of this manual.

Why is the unit not responding to my Ethernet port configuration commands?

The Ethernet is configured using the “Ethernet Config. Port” on the back panel. It is a RS-232 port. You must use a Null Modem type RS-232 cable. You must use the following RS-232 port settings with this port: baud rate (9600), data bits (8), parity (none), stop bits (1), flow control (none).

Why won't the unit respond to my RS-232 commands?

Verify the following RS-232 settings: baud rate, parity (none), data bits (8), and stop bits (1). The current baud rate is displayed on the front panel by the LCD. Check you command format in the “Remote Command Set” section of this manual.

Why don't I get a response from the unit when I send the remote command “RA1”?

All remote commands must be terminated with carriage returns. Attach a carriage return to your command string right after the “9”.

I sent a remote command and received back “Error1”. What does “Error1” mean?

This error occurs if characters other than IDN, CB, SA, or RA appear in the buffer. A complete list of error codes is listed in the “Remote Command Set” section of this manual.



Appendix A

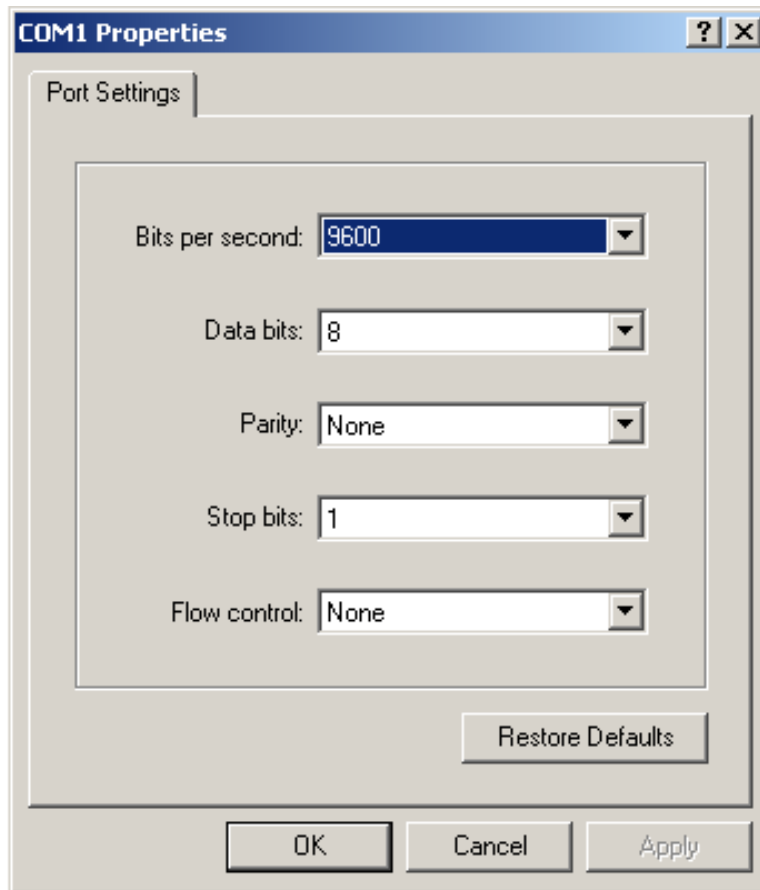
Sample Ethernet Configuration Session

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Introduction

Before using the JFW system, the Ethernet Port of the JFW system must be configured for use on your network. You must assign a unique IP address, Gateway address, and Netmask address. Connect the null modem serial cable (Ethernet Configuration Cable listed in manual) supplied with the unit from the “Ethernet Configuration Port” (back panel of system) to the serial port (RS-232 port) of your computer.

Power system unit on, and run a terminal program on your computer (such as Hyperterminal for Windows). The serial settings of Hyperterminal should be 9600 baud, 8 data bits, parity set to NONE, 1 stop bit, and flow control set to NONE as seen in picture below.



Sample Ethernet Configuration Session

The current settings are:

IP address	192.168.1.222
Gateway	192.168.1.2
Netmask	255.255.255.2
Port	3001 (hard-coded in system and can't be changed)

The new settings will be:

IP address	192.168.1.250
Gateway	192.168.1.1
Netmask	255.255.255.0
Port	3001 (hard-coded in system and can't be changed)

Step 1: Turn off the power to the test system.

Step 2: Position the Ethernet mode/RS-232 mode slide switch on the back panel to Ethernet mode.
(For Ethernet only test systems, just skip to step 3.)

Step 3: Turn on the power to the test system. The test system is now in Ethernet mode.

Step 4: Connect the Null modem cable from you computer's serial port to the port on the test system labeled "Ethernet Config. Port".

Step 5: Open a terminal program (such as Hyperterminal for Windows) and configure the serial settings to 9600 Baud, 8 data bits, no parity, 1 stop bit, no flow control.

Step 6: You are now ready to send commands to configure the Ethernet port.

Note: All following text that is colored blue and bold is text that you type.
All following text that is colored red and bold is a keystroke that you make.
(The PDF file of this document located on the CD for this system is in color)

help <enter>

TCP/IP User Block Console Version 1.1

Available commands: (type "help <command>" for more info)

echo - Turn on or off echoing of characters.
set - Configure various options.
add nameserver - Add a nameserver to the current l
mail - Send an e-mail.
show - Show current configuration.
help - This help screen.
OK

show <enter>

Current Configuration:
I/O Parameter: 9600
Gateway: 192.168.1.2
Name Servers:
Mail Server:
Mail From: user@somewhere.com

Interfaces: ETH0

OK

show eth0 <enter>

Current ETH0 Configuration:

Status: up
IP Address: 192.168.1.222
Netmask: 255.255.255.2
MTU: 600
Ping Config: off
Ping Config Done: no

OK

set ip 192.168.1.250 <enter>

IP address set to: 192.168.1.250

OK

set netmask 255.255.255.0 <enter>

Netmask set to: 255.255.255.0

OK

show eth0 <enter>

Current ETH0 Configuration:

Status: up
IP Address: 192.168.1.250
Netmask: 255.255.255.0
MTU: 600
Ping Config: off
Ping Config Done: no

OK

show <enter>

Current Configuration:

I/O Parameter: 9600
Gateway: 192.168.1.2
Name Servers:
Mail Server:
Mail From: user@somewhere.com
Interfaces: ETH0

OK

set gateway 192.168.1.1 <enter>

Gateway set to: 192.168.1.1

OK

show <enter>

Current Configuration:

I/O Parameter: 9600
Gateway: 192.168.1.1
Name Servers:
Mail Server:
Mail From: user@somewhere.com
Interfaces: ETH0

OK



Appendix B

Startup Information For Ethernet/RS-232 Test Systems

JFW Industries, Inc.
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Below is some basic information that you will need to know in order to operate your JFW test system. Refer to the test system manual for more detailed information. If you have any problems getting the test system up and running, please contact JFW (317-887-1340, sales@jfwindustries.com) and one of our engineers will assist you.

Changing from RS-232 mode to Ethernet mode

1. Turn off power to the test system.
2. Change the position of the slide switch (on back panel) from RS-232 mode to Ethernet mode.
3. Turn on power to the test system. The display on the front panel will display “Ethernet Mode”.

Ethernet Config. Port

1. The “Ethernet Config. Port” is only used while the test system is in Ethernet mode.
2. This port will only process the Ethernet configuration commands (i.e. set ip, set gateway, set netmask).
3. This port will NOT process the JFW command set (i.e. set switch, read switch, identification).
4. For a step by step guide to configuring the Ethernet port, refer to the document “Sample Ethernet Configuration Session”. Also, the test system manual has a section that covers Ethernet configuration.

Ethernet Port

1. The “Ethernet Port” is only used while the test system is in Ethernet mode.
2. This port will only process the JFW command set (i.e. set switch, read switch, identification).
3. This port will NOT process the Ethernet configuration commands (i.e. set ip, set gateway, set netmask).
4. The test system manual has a complete list of the JFW command set.

RS-232 Port

1. The “RS-232” is only used while the test system is in RS-232 mode.
2. This port will only process the JFW command set (i.e. set switch, read switch, identification).
3. This port will NOT process the Ethernet configuration commands (i.e. set ip, set gateway, set netmask).
4. The test system manual has a complete list of the JFW command set.