

FSN Series Multi-Format Switcher



FSN-150 Controller Protocol

- Revision: A
- August, 2010

RECORD OF CHANGES

| REV # | DATE | DESCRIPTION | ENTERED BY |
|--------------|-------------|--------------------|-------------------|
| A | 8/11/10 | - Initial Release | R. PELLICANO |
| | | | |

Command Syntax Specification

Ethernet Parameters

The following information describes how to connect to the Controller via Ethernet.

Communication Protocol Supported: TELNET

Default IP Address:

FSN-150 Ethernet 1: 192.168.0.5

FSN-150 Ethernet 2: Assigned by DHCP Server

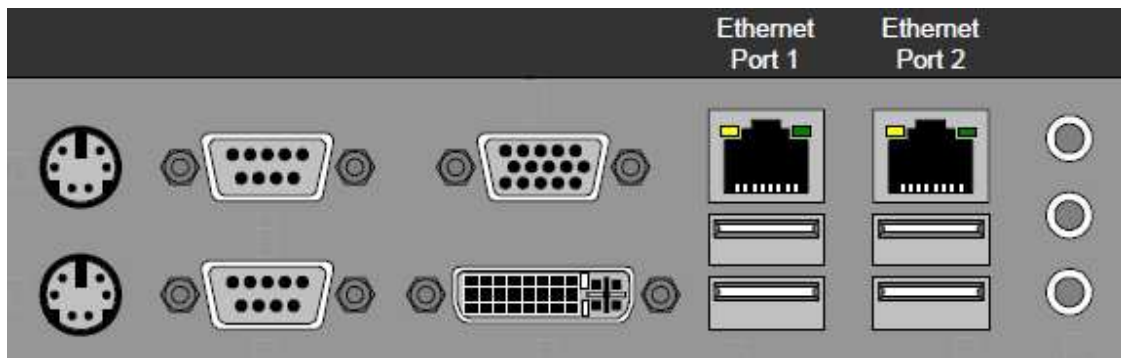
(See "COM SETUP" menu under the "SYSTEM" menu for the current address)

Communication Port: 3000

FSN-150 Example: telnet 192.168.0.5 3000

Notes:

1. A maximum of 10 telnet connections are supported at any one time.
2. The FSN-150 is configured to receive an address from a DHCP Server on the Ethernet 2 connector.



FSN-150 Rear Panel

Protocol Specification

The following description is the DEFAULT Protocol Specification. Changes to this specification are outlined in the PROTOCOL command below.

The Controller will respond with a 'KC>' prompt when the command processor is ready for a command.

The command syntax is shown below
cmd arg1 arg2 ... argn<CR>

| | |
|------|--|
| cmd | cmd is any valid Controller command, typically 2 to 6 alphabetic (non numeric) characters. |
| arg | arg1, arg2, ..., argn are required or optional parameters depending on the command used. |
| <CR> | Carriage return (ASCII 13) terminates the command |

A space (ASCII 32) must be inserted between the command and any arguments that follow. A space must also be inserted between all arguments except for the last argument in the chain.

A required argument is one that is enclosed in square ([]) brackets. An optional argument is one that is enclosed in less-than-greater-than sign (< >) brackets. As an example, we will consider the following command:

CMDNAME [num] [mode] <threshold>

With the notations used, we can easily tell that num and mode are required parameters while the threshold is optional.

All commands **must** be terminated with a carriage return (ASCII 13). The carriage return will tell the command processor to begin execution of the command. From hereafter, when we refer to a command, we will assume that a <CR> is always present at the end of the command line even though it's not explicitly written out.

If the command is not recognized as a valid command, a "!ERR_0<CR><LF>" is returned. A new line will be generated and the prompt will indicate the system is ready for a new command.

If the command is recognized and all of the command parameters are correct, the system will execute the command and return the prompt once the command has completed execution.

For an on-line list of available commands and its brief description, type **HELP** or **?** at the prompt.

If a command is recognized as valid but the parameter list is somehow incorrect, an “!ERR_#<CR><LF>” is returned to indicate an error. The # will have a numeric value that specifies the type of error. After this line is sent out the prompt will be returned to indicate the system is ready for a new command.

Error Codes

- 0 - Command Not Recognized
- 1 - Insufficient number of arguments supplied.
- 2 - At least one of the arguments is invalid (out-of-range value).
- 3 -
- 4 -
- 5 -
- 6 -
- 7 -
- 8 -
- 9 - Preset Recall Resource Conflict
- 10 - Requested Information Doesn't Exist
(Ex. Recalling a Preset that hasn't been learned yet.)
- 11 - Incomplete Binary Data Received
- 12 - Invalid binary data received
(Ex. Checksum incorrect, Data is not what is expected)
- 13 - Data Save Error (with regards for Flash Memory Writes)

Remote Commands

| Commands | Description |
|----------------------------------|---|
| ATRN | Performs an auto transition to all M/E's and AUX Mixers using the currently defined Transition times. |
| HELP or ? | Returns list of supported commands. |
| PRESET [op] [user preset file #] | Recall Memory Registers. |

Controller Command List/Description

Auto Transition

ATRN

Description:

Performs an Auto Transition on all M/E's and AUX Mixer destinations. The currently selected Effect type, rate, and edge parameters will be used to transition preview to program.

Parameters:

None

Example:

ATRN Transition Preview to Program using the transition time set in the controller.

Help

HELP or ?

Description:

Returns the list of available commands with descriptions.

Parameters:

None

Example:

```
KC>help
-----
Available Commands      Description
-----
ATRN                    Auto Trans all active destinations.
PRESET [R] [Preset Number]  Recalls the numbered preset.
HELP or ?              Returns list of available commands with descriptions
```

Preset Operation

PRESET [op] [user preset file #]

Description:

Executes the specified preset mode for the specified memory register.

Parameters:

[op] – R for Recall Preset
[user preset file #] – 1 to 1000

Example:

PRESET R 8 -- Recalls memory register 8.