XH-FSW-32X32-Q

32×32 Rack Optical Switch

USER MANUAL

Introduction:

XH-FSW-32×32 rack-mounted optical switch is a kind of functional device,with the ability of controlling and switching optical route. It can be manually selected from front panel or controlled via RS232 port, Ethernet port and auto-scanned on certain frequency. In optical fiber transmission system, it is used for multi-channel fiber monitoring, multi light source/ detector selection, and optical fiber path protection etc. Besides, it is also used in optical fiber test system for optical fiber and its component test, outdoor cable test and multi-spot optical sensors monitoring system.

Features:

Low insertion loss, Fast switching

SerialNet, High Reliability, High Stability

LED display panel. Visual display, Convenient operation.

Transparent transmission signal. High stability and reliability.

Channel and time interval of automatic scanning can be set up.

RS232 Control and Ethernet Remote Management

Applications:

FITL

Automatic Measurement

Optical Network Remote Monitoring

Cable Monitoring and Maintaining system

Specifications:

Parameters	Unit	Indicators
Channel No.		32 x32
Wavelength Range	nm	1260~1650
Test Wavelength	nm	1310/1550
Insertion Loss	dB	≤2.5 dB
Repeatability	dB	≤ 0.04
Return Loss	dB	≥ 50
Crosstalk	dB	≥ 55
WDL	dB	≤ 0.50
PDL	dB	≤ 0.1
Optic Power	mW	≤ 500
Fiber Type		SM（9/125um）
Connector		FC/APC
Monitoring Port		RJ45、RS-232
Working Power Supply（Plug-type）	V	AC:100～ 240（50/60Hz）
Power Consumption	W	＜ 50
Operating Temperature		-10 ～ 60
Size	mm	9U:483 x 500 x 400.5

Panel to Explain：

Front Panel

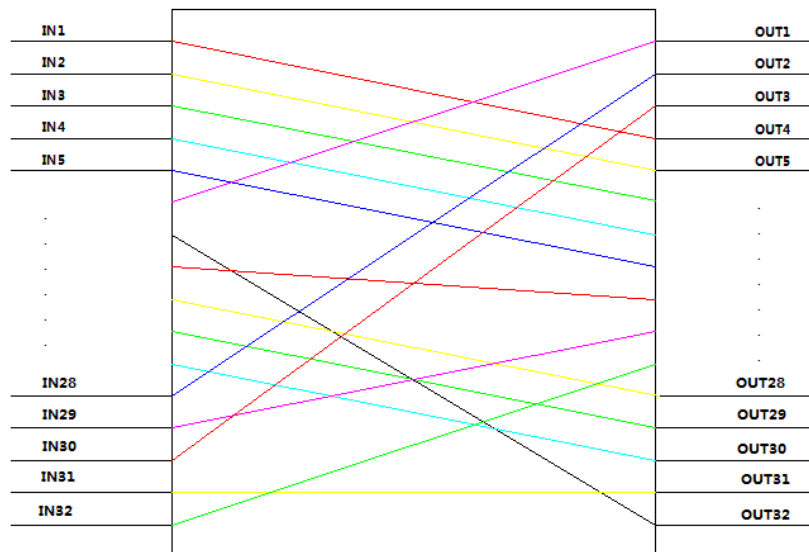POWER   WORKING   LINK   ERROR
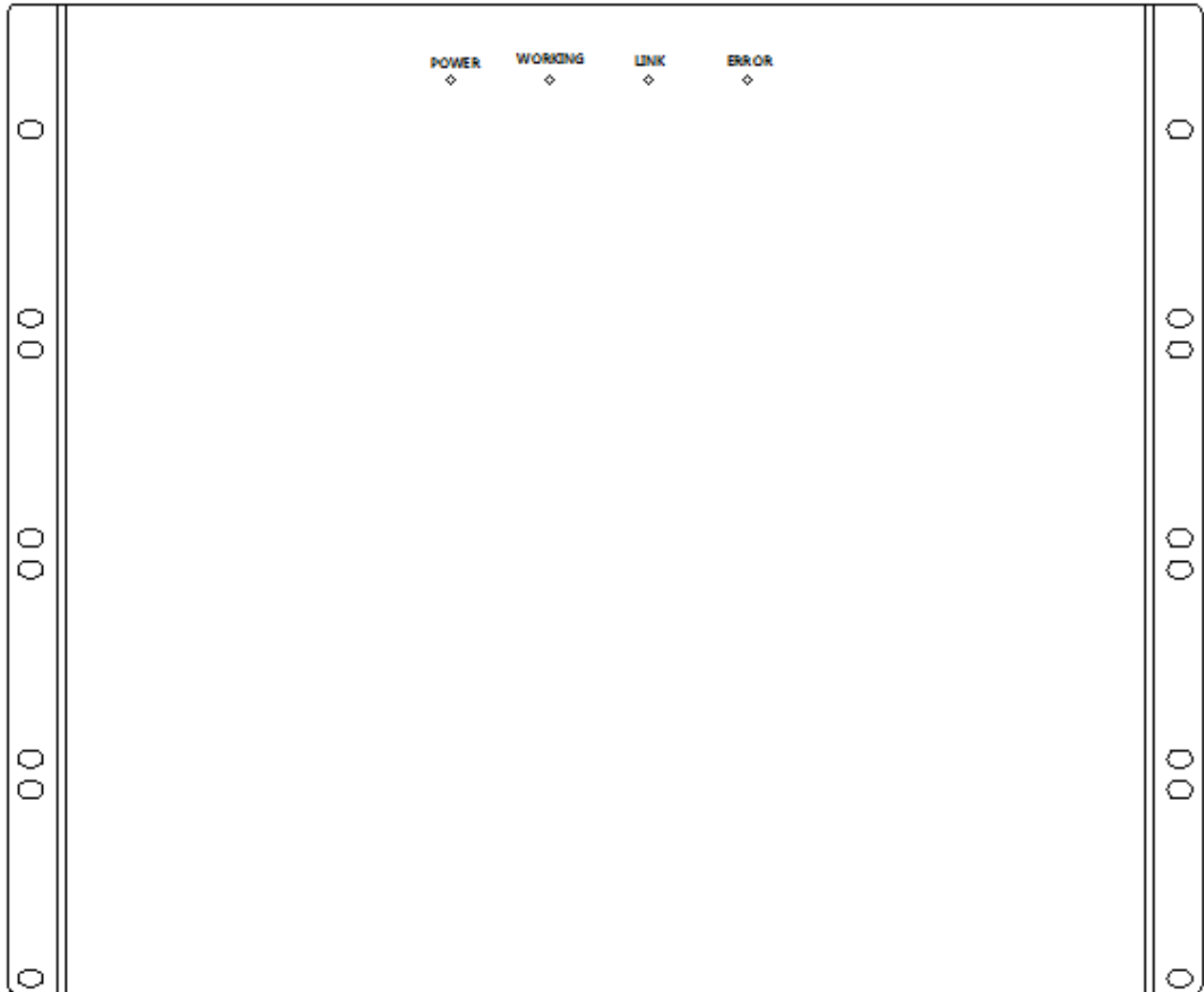
Back Panel
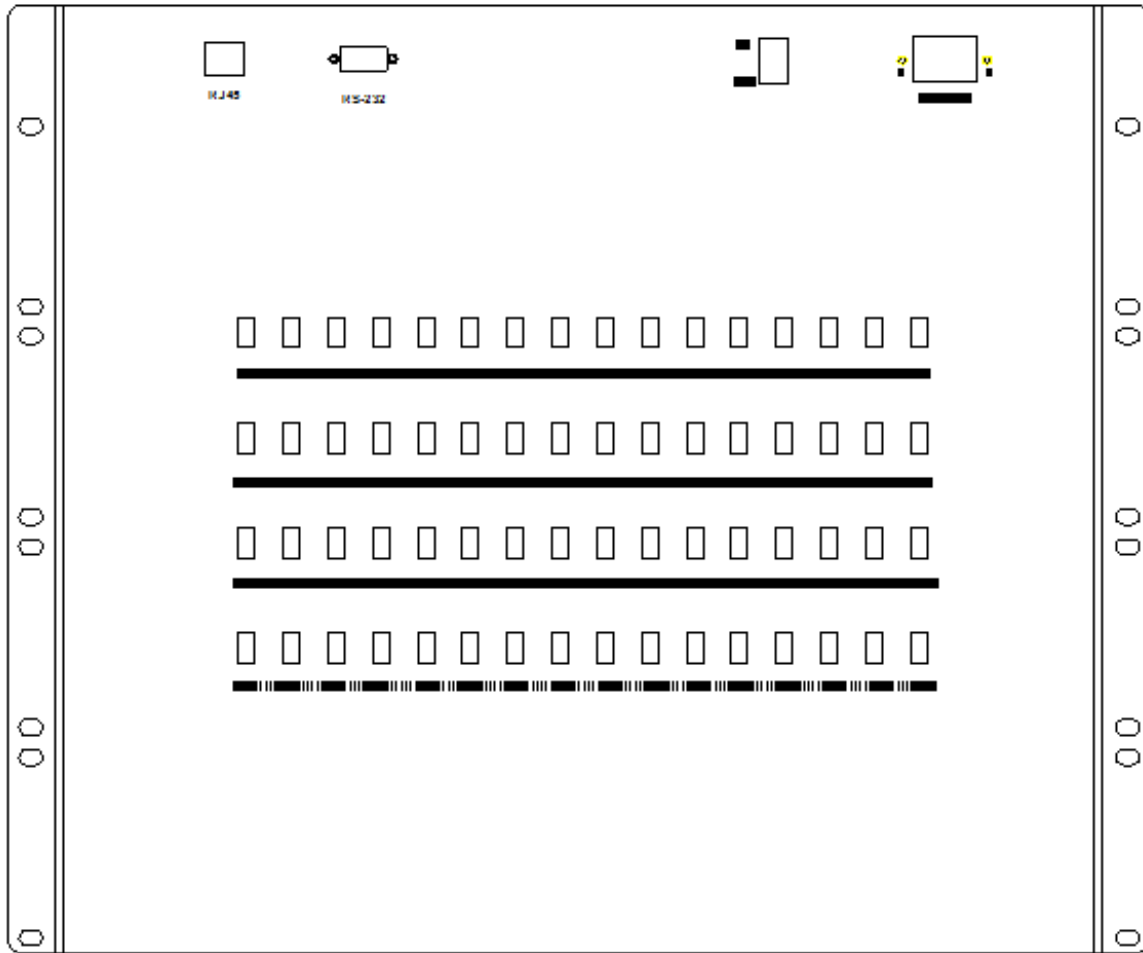
Sketch Map:

Communication Protocol:

"_":A underline;

Communication protocol all in uppercase characters;

The device executes an instruction each time;

"<" As the start instruction; ">" As an end instruction;

Instruction set

Name	Instructions	Describe
Set Optical Switch Channel	Send:<OSW_OUT_01_02_03_04_05_06_07_08_09_10_11_12_13_14_15_16_17_18_19_20_21_22_23_24_25_26_27_28_29_30_31_32>	Setup the optical switch channel to IN1-OUT1,IN2-OUT2,.......IN31-OUT31,IN32-OUT32 ,returned successfully;
	Return1:<OSW_OUT_OK>or Return2:<OSW_OUT_E1> (go beyond)or Return3:<OSW_OUT_E2>(fault)	
Query Optical Switch Channel	Send:<OSW_OUT_?>	Query the optical switch channel,returned successfully; IN1-OUT1; IN2-OUT2; IN3-OUT3; IN31-OUT32 IN32-OUT31
	Return:<OSW_OUT_01_02_03_04_05_06_07_08_09_10_11_12_13_14_15_16_17_18_19_20_21_22_23_24_25_26_27_28_29_30_32_31>	

Set the IP Addresse	Send:<OSW_IP_192.168.1.100>	Setup the IP addresse to 192.168.1.100,returned successfully
	Return:<OSW_IP_OK>	
Query IP Address	Send:<OSW_IP_?>	Query the IP address, returned successfully 192.168.1.100:IP address to 192.168.1.100
	Return:<OSW_IP_192.168.1.100>	
Set the Port Number	Send:<OSW_PORT_5000>	Setup the port number to 5000,returned succe
	Return:<OSW_PORT_OK>	
Query Port Number	Send:<OSW_PORT_?>	Query the port number ,returned successfully 5000:port number to 5000
	Return:<OSW_PORT_5000>	
Set the Subnet Mask	Send:<OSW_SM_255.255.255.0>	Setup the subnet mask to 255.255.255.0,returned successfully
	Return:<OSW_SM_OK>	
Query Subnet Mask	Send:<OSW_SM_?>	Query the subnet mask ,returned successfully 255.255.255.0:subnet mask to 255.255.255.0
	Return:<OSW_SM_255.255.255.0>	
Set the Default Gateway	Send:<OSW_GW_192.168.1.1>	Setup the default gateway to 192.168.1.1,returned successfully
	Return:<OSW_GW_OK>	

	Send:<OSW_GW_?>	Query the default gateway, returned successfully 192.168.1.1:default gateway to 192.168.1.1
Query Default Gateway	Return:<OSW_GW_192.168.1.1>	
Set the Baud Rate	Send:<OSW_BAUD_9600>	Set the baud rate to 9600,returned successfully
	Return:<OSW_BAUD_OK>	
Query Baud Rate	Send:<OSW_BAUD_?>	Query the baud rate ,returned successfully 9600:baud rate to 9600
	Return:<OSW_BAUD_9600>	
Device Restarts	Send:<OSW_RESET>	Setup the device restarts , returned successfully
	Return:<OSW_RESET_OK>	
Query Device Information	Send:<OSW_TYPE_?>	Query the device information ,returned successfully; Model：XH-FSW-32X32-Q wavelength:1260~1650nm Fiber Type：SM(9/125um) Connector：FC/APC
	Return:<OSW_TYPE_XH-FSW-32X32-Q_1260~1650_9/125_FA>	
Query Version	Send:<OSW_VERSION_?>	Query the version, returned successfully Hardware version： V1.0.1 SOFTWARE： V1.0.1
	Return:<OSW_VERSION_HARDWARE:V1.0.1SOFTWARE:V1.0.1>	

Matters need attention

Return "<OSW_ER>" is command syntax error occurred.

Return "<OSW_E2>" is not operating properly.

Return "<OSW_E1>",The channel of setting up are outside the scope of this article

"OSW01", Indicate that the device address is 01

Send arbitrary the Instructions in automatic mode, Stop to Automatic mode

In RS-232 serial port communication, the system require that the baud rate of dispatcher and sink should keep consistent