# SOFTEL

## Return Path Receiver(8 ways)

User's Manual

SR808R Series

#### I . Products Descriptions

SR808R series return path receiver is the first choice for bi-directional optical transmission system (CMTS), including eight high-performance optical detectors, which are used to receive eight optical signals and convert them into RF signals respectively, and then carry out RF pre amplification respectively, so as to realize 5-200MHz return path. Each output can be used independently, featured in excellent performance, flexible configuration and automatic control of optical power AGC. Its built-in microprocessor monitors the operating status of the optical receiving module.

#### **Features**

- 1.Independent return optical receiving channel, up to 8 channels for users to choose, output level can be adjusted independently in optical AGC state, which provides users with great selectivity.
- 2.It adopts high performance photo-detector, operating wavelength 1200 ~ 1620nm.
- 3.Low noise design, the input range is -25dBm~0dBm.
- 4. Built in dual power supply, automatically switched and hot plug in/out supported.
- 5.The operating parameters of the whole machine are controlled by microprocessor, and the LCD status display on the front panel has many functions such as laser status monitoring, parameter display, fault alarm, network management, etc.; once the operating parameters of the laser deviate from the allowed range set by the software, the system will alarm promptly.
- 6.Standard RJ45 interface is provided, supporting SNMP and web remote network management.

#### II. Installation

#### 2.1 Preparation before installation

2.1.1 Please examine the machine to see if there is distinct

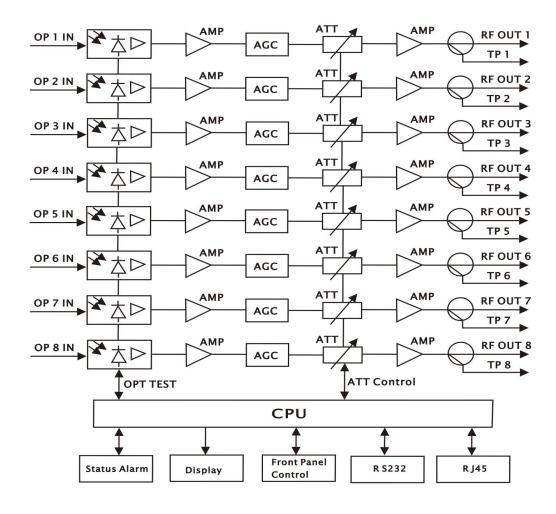
2.1.2 Please examine if the accessories is complete and the quality cards is here. If not, please contact sales or dealer

#### 2.2 Installation

- 2.2.1 Please keep a space about 4.5cm between machines for ventilation.
- 2.2.2 Please make sure: the socket works very well and well grounded; The impedance  $\leq 4\Omega$ ; 220V power with three cables, the middle one should connected to the ground. Incorrect grounding may hurt the device or influence the quality of signal.
- 2.2.3 Please make sure the power supply button in the rear panel turn to OFF before the power supply cable connected.
- 2.2.4 Please keep the interface of the fiber clean before connecting the fiber.

#### III. Operation

#### 3.1 Diagram



#### 3. 2 Main Technical Index

Category	Items	Unit	Index		Index	Remarks
			Min.	Тур.	Max.	
	Operating Wavelength	nm	1200		1620	
	Optical Input Range	dBm	-25		0	
<b>.</b>	Optical AGC Range	dBm	-20		0	
Optical Index	No. of Optical Receiver			8		
	Optical Return Loss	dB	45			
	Fiber Connector		SC/APC		C	FC/APC、LC/APC
	Operating Bandwidth	MHz	5		200	
	Output Level	dΒμV			104	
	Operating Model		AGC/MGC switching supported		•	
	AGC Range	dB	0		20	
RF Index	MGC Range	dB	0		31	
	Flatness	dB	-0.75		+0.75	
	Value Difference					
	Between Output Port	dΒμV	-21	-20	-19	
	and Test Port					
	Return Loss	dB	16			

	Input Impedance	Ω		75		
	RF connector		F	Metric/Imperial		Specified by user
	Network Management SNMP,WEB Sup Interface		Supported			
	Power Supply	V	90		265	AC
		V	-72		-36	DC
	Power Consumption	W			22	Dual PS, 1+1 standby
General Index	Operating Temp	$^{\circ}$	-5		+65	
	Storage Temp	$^{\circ}$	-40		+85	
	Operating Relative Humidity	%	5		95	
	Dimension	mm	351×483×44		3×44	D、W、H
	Weight	Kg	4.3			

#### 3.3 Front Panel Instructions



S/N	Identification	Name	Remarks
1	LCD	LCD screen	To display the parameters of the device
2	IN1	Optical input port 1	
3	IN2	Optical input port 2	
4	IN3	Optical input port 3	
5	IN4	Optical input port 4	
6	IN5	Optical input port 5	
7	IN6	Optical input port 6	
8	IN7	Optical input port 7	
9	IN8	Optical input port 8	
			Value Difference of output level between
10	TP1	Test port 1	Output Port and Test Port1 is -20dBµV
			( For Reference)
11	OUT1	RF output port 1	
12	TP2	Test port 2	Value Difference of output level between

			Output Port and Test Port2 is -20dBµV
			(For Reference)
13	OUT2	RF output port 2	(1 of Neierenee)
13	0012	Tri Output port 2	Value Difference of output level between
144 TD0		Toot part 2	Value Difference of output level between
14	TP3	Test port 3	Output Port and Test Port3 is -20dBµV
15	OUT3	DE output port 2	( For Reference)
15	0013	RF output port 3	Value Difference of autout level between
10	TD4	Took word 4	Value Difference of output level between
16	TP4	Test port 4	Output Port and Test Port4 is -20dBµV
4-	0.174		( For Reference)
17	OUT4	RF output port 4	
			Value Difference of output level between
18	TP5	Test port 5	Output Port and Test Port5 is -20dBµV
			( For Reference)
19	OUT5	RF output port 5	
20 TP6			Value Difference of output level between
		Test port 6	Output Port and Test Port6 is -20dBµV
			(For Reference)
21	OUT6	RF output port 6	
			Value Difference of output level between
22	TP7	Test port 7	Output Port and Test Port7 is -20dBµV
			( For Reference)
23	OUT7	RF output port 7	
			Value Difference of output level between
24	TP8	Test port 8	Output Port and Test Port 8 is -20dBµV
			( For Reference)
25	OUT8	RF output port 8	
6.0		Optical output power	LED GREEN, Optical input power normal
26	IN 1 (Indicator)	indicate of IN1	LED RED , Optical Input power abnormal
_	IN 2 (Indicator)	Optical output power	LED GREEN, Optical input power normal
27		indicate of IN 2	LED RED , Optical Input power abnormal
	IN 3 (Indicator)	Optical output power	LED GREEN, Optical input power normal
28		indicate of IN 3	LED RED , Optical Input power abnormal
29			LED GREEN, Optical input power normal
	,	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	, -1   1

		indicate of IN 4	LED RED , Optical Input power abnormal
20	INITE (Indiana)	Optical output power	LED GREEN, Optical input power normal
30	IN 5 (Indicator)	indicate of IN 5	LED RED , Optical Input power abnormal
0.4		Optical output power	LED GREEN, Optical input power normal
31	IN 6 (Indicator)	indicate of OUT 6	LED RED , Optical Input power abnormal
00		Optical output power	LED GREEN, Optical input power normal
32	IN 7 (Indicator)	indicate of OUT 7	LED RED , Optical Input power abnormal
20	IN O (lasticates)	Optical output power	LED GREEN, Optical input power normal
33	IN 8 (Indicator)	indicate of OUT 8	LED RED , Optical Input power abnormal
			LED GREEN, power 1 working normal
34	PWR1	Power 1 indicate	LED RED,power 1 working abnormal or
			single power working
			LED GREEN, power 2 working normal
35	PWR2	Power 2 indicate	LED RED, power 2 working abnormal or
			single power working
36	◀	Buttons	Back buttons
37	<b>&gt;</b>	Buttons	Enter buttons
38		Buttons	Start menu page turning and set the
30	<b>A V</b>	DUITOTIS	device
39	RS232	RS232 port	Local programming
40	RJ45	RJ45 port	SNMP or WEB

## 3.4 Rear panel Instructions

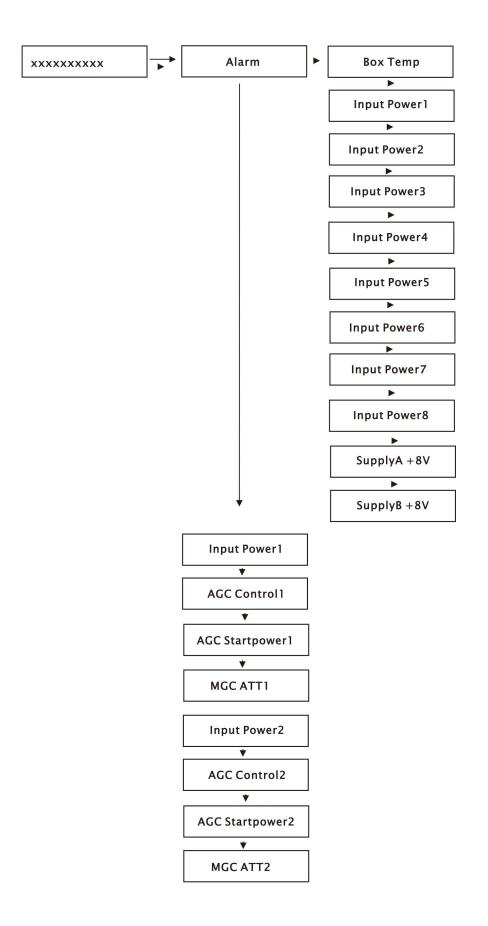


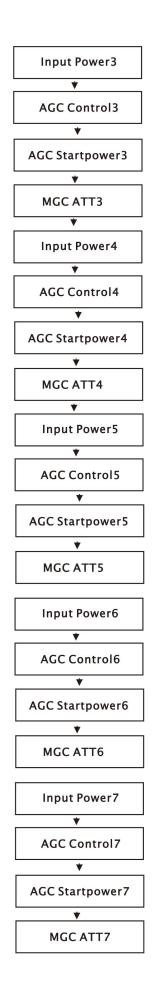
S/N	Identification	Name	Remarks
1		Grounding port	For grounding
2	Fan	Fan	For cooling the device
3	Power1	Power Socket1	Hot plug in/out supported

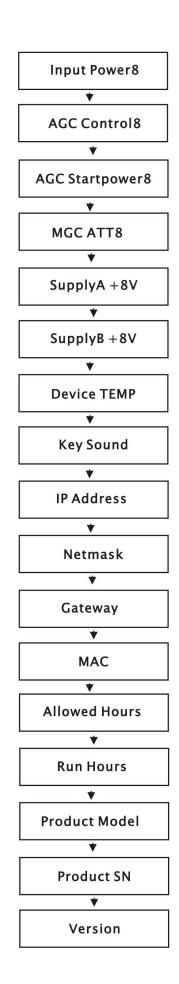
4	D0		
4	Power2	Power Socket 2	Hot plug in/out supported

### 3.5 Front Panel Operation

Press the  $\, lacktriangledown$  to display the following menus in turn, and press the  $\, lacktriangledown$  to reverse the cycle







#### IV. Notes

- 4.1 Static-sensitive pin diode is applied in the receiver, please note that electrostatic protection should be applied in the storage of the receiver and it should not be stored with corrosive material, and the storage temperature should be between  $40 \, ^{\circ}$ C and +  $85 \, ^{\circ}$ C.
- 4.2 Please don't block the cooling holes of the device and keep it in good ventilation
- 4.3 Please use anhydrous industrial alcohol instead of medical alcohol to wash the fiber connector if necessary

#### V. Warranty Terms

The receivers are covered by LIMITED WARRANTY AS NEGOTIATED, which starts from the initial date of your purchase. We provide its customer whole-life technical supports. If warranty is expired, repair service only charges parts (if required). In the event that a unit must be returned for service, before returning the unit, please be advised t

- 7.1 Warranty mark pasted on the housing of unit must be in good conditions.
- 7.2 A clear and readable material describes model number, serial number and troubles should be offered.
- 7.3 Please pack the unit in its original container. If the original container is no longer available, please pack the unit in at least 3 inches of shock absorbing material.
- 7.4 Returned unit(s) must be prepaid and insured. COD and freight collect can not be acceptable.

**NOTE:** we **do not** assume responsibility for damage caused by improper packing of returned unit(s).

The following situation is not covered by warranty:

- 1. The unit fails to perform because of operators' faults.
- 2. Warranty mark is modified, damaged and/or removed.
- 3. Damage caused by Force Majeure.
- 4. The unit has been unauthorized alteration and/or repaired.
- 5. Other troubles caused by operators' faults.