

WR8602JL Optical Receiver

WR8602JL is our new high-class 2-way output CATV optical receiver. The pre-amplifier adopts GaAs MMIC meanwhile post-amplifier adopts GaAs module, the optimization circuit design and with 10 years design experience that match to high performance index. The microprocessor control working status meanwhile LED digital display parameter that makes more convenience operation and becoming main products in CATV network.

I. Performance Characteristics

- With PIN Photoelectric Converter and High Response.
- Optimization circuit design, SMT process production, optimization signal path, fluency photoelectric signal transmission.
- With specialized RF attenuate IC, Good linear of RF attenuation and equality and high accuracy.
- GaAs amplify, power double output, high gain and low distortion.
- Microprocessor control working status, LED shows all parameters, convenience operation and high stability.
- Optimization AGC performance, when the input power range is $-9 \sim +2$ dBm, the output lever, CTB and CSO keep constantly.
- Backup data communications interface, it is convenient to connect with network management responder, connecting with network management system.

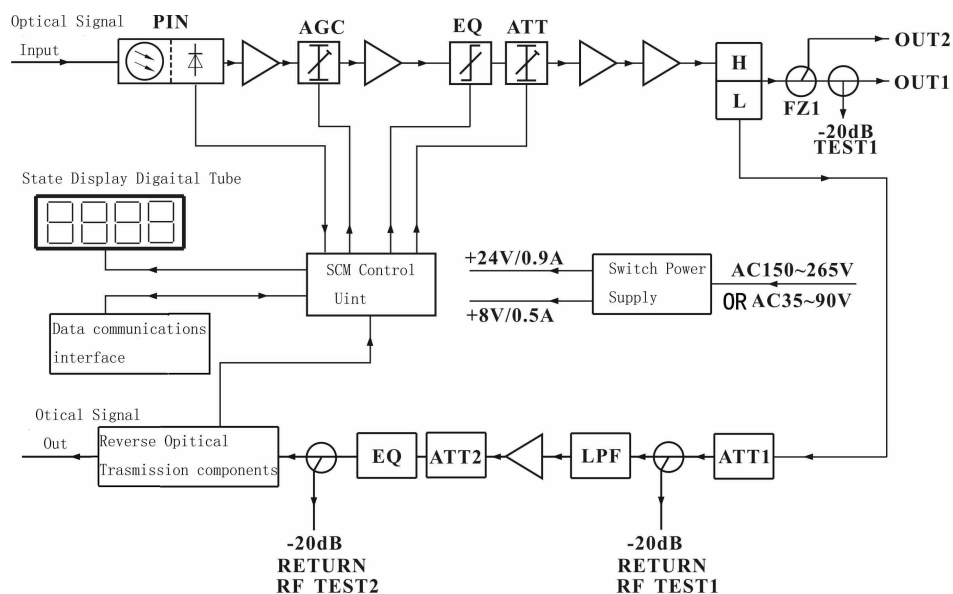
II. Technical Parameter

Item	Unit	Technical Parameter	
Optical Parameter			
Receive Optical Power	dBm	-9 ~ +2	
Return Loss	dB	>45	
Optical Wavelength	nm	1100 ~ 1600	
Connector Type		FC/APC or SC/APC	
Fiber Type		Single Mode	
Circuit Performance			
C/N	dB	≥ 51 (-2dBm Input)	
C/CTB	dB	≥ 65	Output Level 108 dBμV Balanced 6dB
C/CSO	dB	≥ 60	
RF Performance			
Frequency Range	MHz	45 ~862	
Flatness in Band	dB	±0.75	
Rated Output Level	dBμV	≥ 108	

Max Output Level	dBμV	≥ 114
Output Return Loss	dB	≥14
Output Impedance	Ω	75
Electronic Control EQ Range	dB	0 ~ 10
Electronic Control ATT Range	dBμV	0 ~ 20
Return Transmit Performance Parameter		
Optical Parameter		
Optical Transmit Wavelength	nm	1310±10
Output Optical Power	dBm	1 ~ 5
Connector Type		FC/APC or SC/APC
RF Parameter		
Frequency Range	MHz	5 ~ 65 or according to the requirement of user
Flatness in Band	dB	±1
Input Level	dBμV	85 ~ 90
Output Impedance	Ω	75
General Parameter		
Supply Voltage	V	A : AC (150~265) V ; B : AC (35~90) V
Operating Temperature	□	-40~60
Storage Temperature	□	-40~65
Relative Humidity	%	Max 95% No Condensation
Consumption	VA	≤ 30
Dimension	mm	240 (L) □ 240 (W) □ 150 (H)

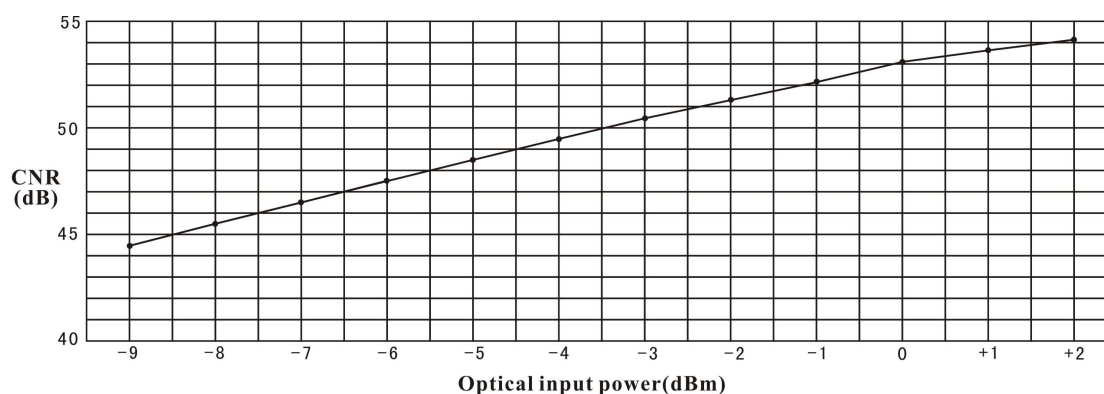
Note: The parameter of forward RF is tested under the condition of using GaAs 25 dB double power module in the last stage, if you use other module, the parameter will be slightly different.

III. Block Diagram



IV.

Relation Table of Input Optical Power and CNR

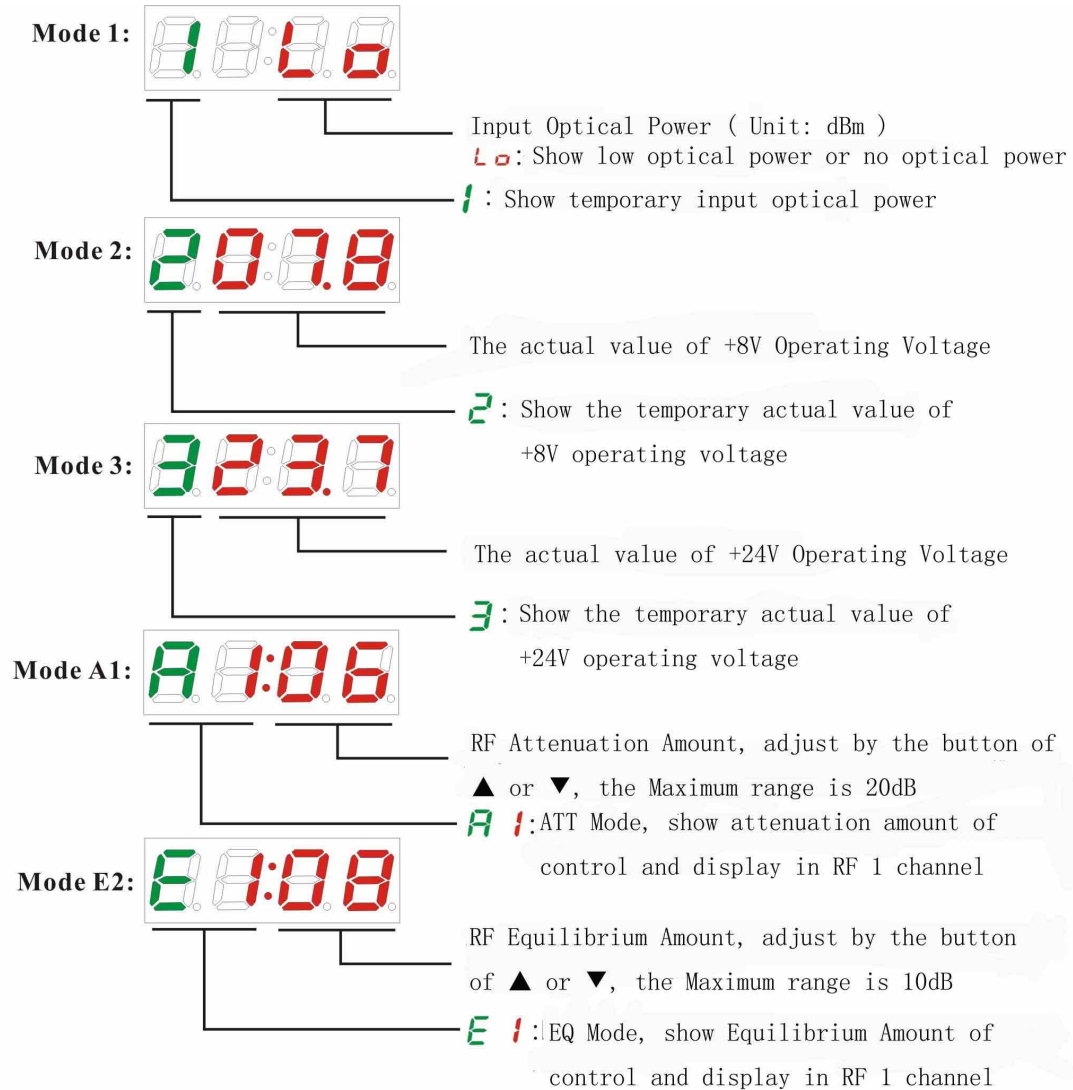


V. Function Display and Instructions

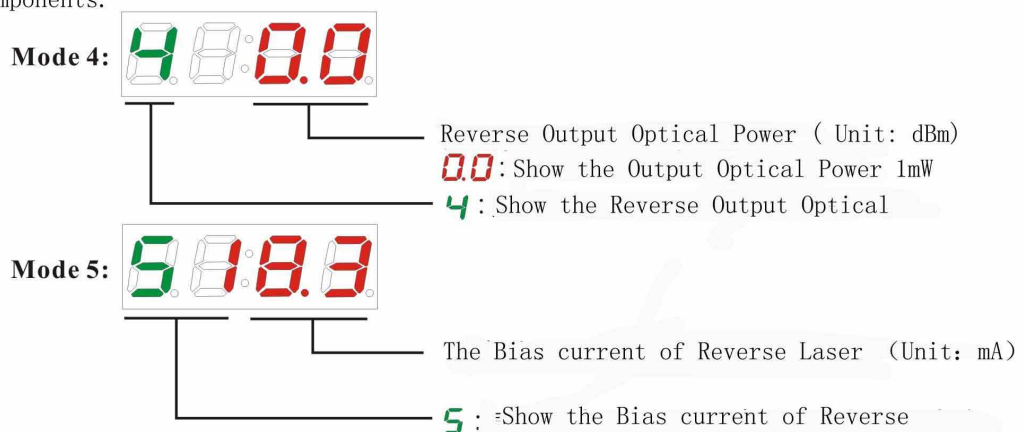
Mode: selection button of control mode, there are seven types of work mode.

- ▲ : up button , in the ATT or EQ mode increase ATT or EQ value.
- ▼ : down button , in the ATT or EQ mode decrease ATT or EQ value.

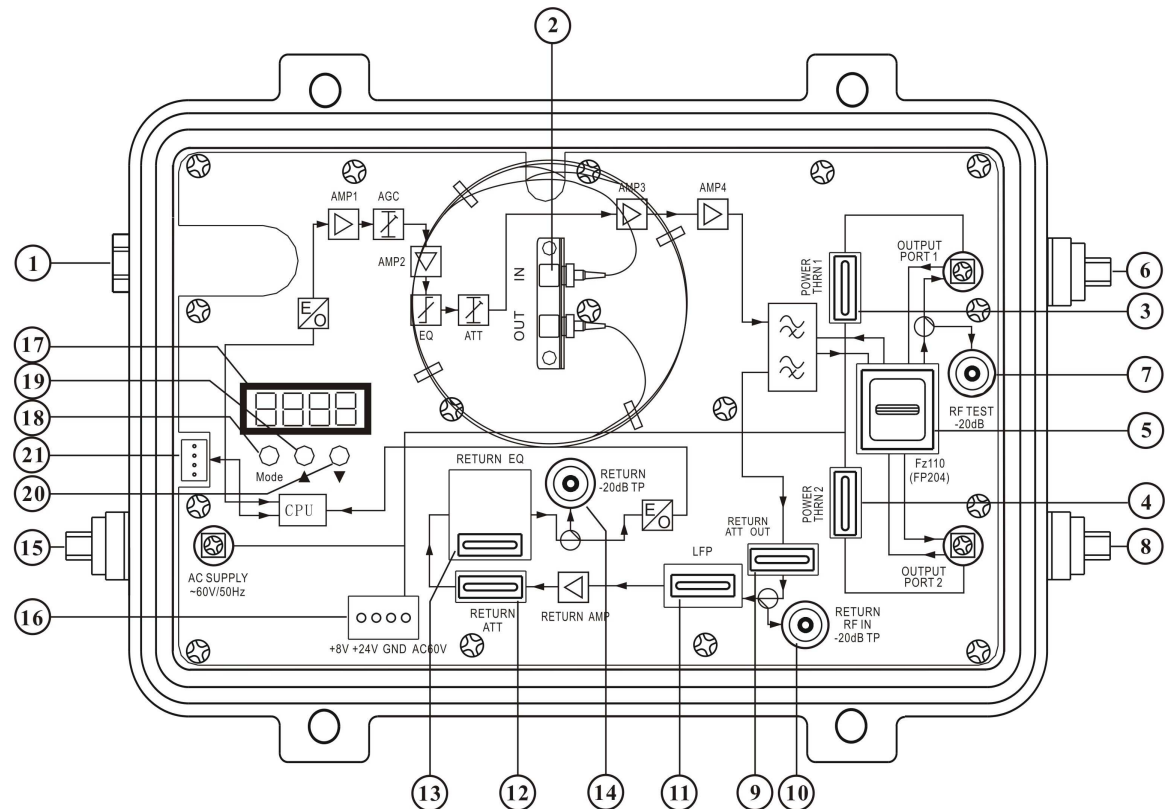
Explain by following pictures.



The following two menus is the state display of optical transmission components, if the the two menus will be displayed automatically after inserting optical transmission components.



VI. Structure Scheme



1. Optical Fiber Input
2. Optical Fiber Adapter
3. Power Overcurrent Inserter 1
4. Power Overcurrent Inserter 2
5. Output Tap or Splitter 1
6. RF Output 1
7. -20dB Output RF TEST
8. RF Output 2
9. Reverse RF Attenuation 1
10. -20dB Reverse RF TEST
11. Reverse Low-pass Filter
12. Reverse RF Attenuation 2
13. Reverse RF Equalizer
14. -20dB Reverse RF TEST
15. AC60V Input
16. Main Power Interface
17. State Display Digital Tube
18. Mode Selection Button
19. Parameter Adjusting Button UP
20. Parameter Adjusting Button DOWN
21. Data Communication Interface