

WA-1200-RP Preamplifier

1. Summary

WA-1200-RP is the preamplifier which specifically designed for the large and medium-sized head-end machine room. Adopt CATV dedicated electronically controlled RF attenuation chip with ultra-low distortion, excellent linearity to constitute the attenuation and equalization circuit, replaced the traditional manual adjustment. Microprocessor controls parameters, LCD displays working status. High adjustment accuracy, more convenient and intuitive operation. The output adopts NEC GaAs power doubler module to ensure excellent system performance index. It's the best choice for the transform of large and medium-sized head-end machine room.

2. Performance Characteristic

- Microprocessor controls the attenuation circuit.
- LCD status display, convenient and intuitive.
- Reserved Ethernet network management transponder (optional).
- Reserved dual power supply hot backup to improve network reliability (optional).
- Adopt NEC GaAs power doubler module to ensure excellent system performance index.
- 19"1U standard rack, easy to install and effectively improve the reliability of the system.

3. Technique Parameter

Item	Unit	Technique Parameter			
Frequency Range	MHz	45-862/1003			
Rated Gain (@FZ110)	dB	20	22	27	30
Gain Adjustable Range	dB	0~20 (1dB stepping)			
Slope Adjustable Range	dB	0-15			
Rated Input Level	dBμV	80	78	73	70
Rated Output Level	dBμV	100			
Flatness In Band	dB	±0.5			
Noise Figure	dB	≤7.5			
Return Loss	dB	≥16			
C/CTB	dB	≥75			
C/CSO	dB	≥75			
Carrier Combinations Cross Modulation Ratio	dB	≥72			
Carrier to Hum ratio	dB	≥68			
Supply voltage (50Hz)	V	AC220V			
Dimension	mm	483*256*44			

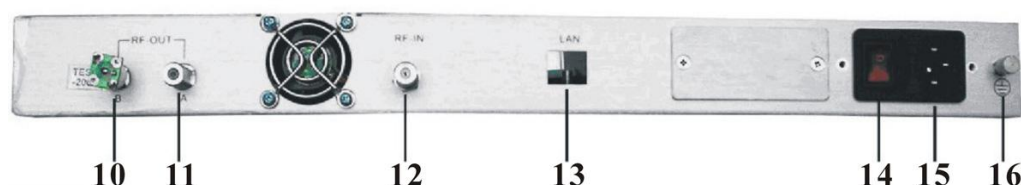
Note: The RF indexes above are tested when adopt NEC module. Use other module, the indexes will be a little different.

4. Structure Description

Front

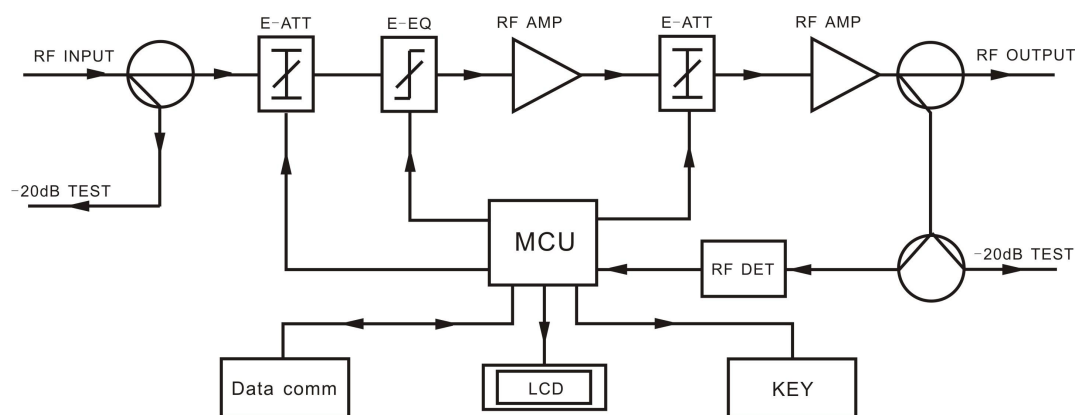


Rear



1. Power indicator	2. Running indicator	3. LCD Display screen	4. UP button
5. CANCEL button	6. DOWN button	7. Enter button	8. RF Input Test (-20dB)
9. RF Output Test (-20dB)	10. RF Output B	11. RF Output A	12. RF Input
13. RJ45 Interface	14. Power Switch	15. AC Power Input	16. GND Terminal

5. Block Diagram



6. Operating instructions

Startup screen as follows:



```

→1.Parameter View
 2.IP Configure
  
```

1. Parameter View: Display all operating parameters; **2. IP Configure:** Display and set network parameters as local IP address. Press UP button(▲)or DOWN button(▼) to select item 1 or 2. When the “→”symbol on the left points to 1, press Enter button (►) into the parameter display interface

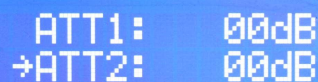


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A.DC+24V:  23.8 V
B.DC+24V:  0.0 V
  
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A.DC+24V: Operating voltage of power supply A; **B.DC+24V:** Operating voltage of power supply B (Note: Select one power supply or two power supplies is up to users)

Press Enter button (►) into

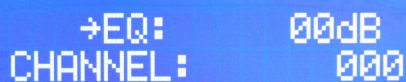


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ATT1:  00dB
→ATT2: 00dB
  
```

ATT1/ATT2: Two-stage RF attenuation, the total attenuation is ATT1+ATT2.

ATT1: Press UP button (▲) to increase attenuation, press DOWN button (▼) to reduce attenuation. Press Enter button(►)to confirm and start adjust **ATT2**. Press UP button(▲)to increase attenuation, press DOWN button (▼) to reduce attenuation. Press Enter button (►) to confirm and into



```

→EQ:  00dB
CHANNEL: 000
  
```

EQ: The adjustment of amplifier equilibrium, the arrow “→” points to EQ, press UP button (▲) to increase equilibrium, press DOWN button (▼) to reduce equilibrium.

CHANNEL: Enter the total channel number (current RF system modulating) to display the input and output RF level more accurately. Press UP button (▲) to increase channel number, press DOWN button (▼) to reduce channel number. Press Enter button (►) to confirm and into



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RFOUT:  000dBuV
  
```

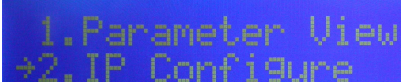
RFOUT: display the current RF output level of the amplifier



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FAN SWITCH:  OFF
  
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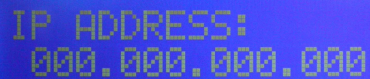
FAN SWITCH: Set the fan switch. If ambient temperature is too high, set it ON. Press UP button (▲) or DOWN button(▼) to select ON or OFF. Press Enter button(►)to confirm and return to the parent menu, as follows:



```

1.Parameter View
→2.IP Configure
  
```

The arrow “→” on the left points to 2, press Enter button (▶) into



IP ADDRESS:
000.000.000.000

IP ADDRESS: IP address. Press Enter button (▶) into the set state. Press UP button (▲) or DOWN button (▼) to change the figure, press Cancel button (◀) and Enter button (▶) to change the position. The last figure set done, press Enter button (▶) to confirm. Press UP button (▲) to return to the parent menu, press DOWN button (▼) into



GETWAY ADDRESS:
000.000.000.000

GETWAY ADDRESS: Gateway address. Press Enter button (▶) into the set state. Press UP button (▲) or DOWN button (▼) to change the figure, press Cancel button (◀) and Enter button (▶) to change the position. The last figure set done, press Enter button (▶) to confirm. Press UP button (▲) to return to the parent menu, press DOWN button (▼) into



SUBNET:
000.000.000.000

SUBNET: Subnet mask. Press Enter button (▶) into the set state. Press UP button (▲) or DOWN button (▼) to change the figure, press Cancel button (◀) and Enter button (▶) to change the position. The last figure set done, press Enter button (▶) to confirm. Press UP button (▲) to return to the parent menu, press DOWN button (▼) into



Return Last Menu
Select→


7. After-sales service description

1. The specific warranty term based on the supply and marketing contract. We are responsible for lifetime maintenance. If the equipment fault is resulted from the users' improperly operation or unavoidable environment reasons, we will be responsible for maintenance but ask for suitable material cost.
2. If the equipment breaks down, please contact with the local distributor .
3. The site maintenance of the fault equipment must be operated by professional technicians to avoid worse damage.

Special notice: If the equipment has been maintained by users, we will not responsible free maintenance. We will ask suitable maintenance cost and material cost.

Hangzhou Prevail Communication Technology Co., Ltd

Hangzhou Prevail Optoelectronic Equipment Co., Ltd

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