H-RF-SWITCH


THOR Fiber
RF-SWITCH
RF
RFA
RFB
POWER
THOR FIBER
H-RF-SWITCH
RF-TEST
RF INPUT
B
A
RF OUT
LAN

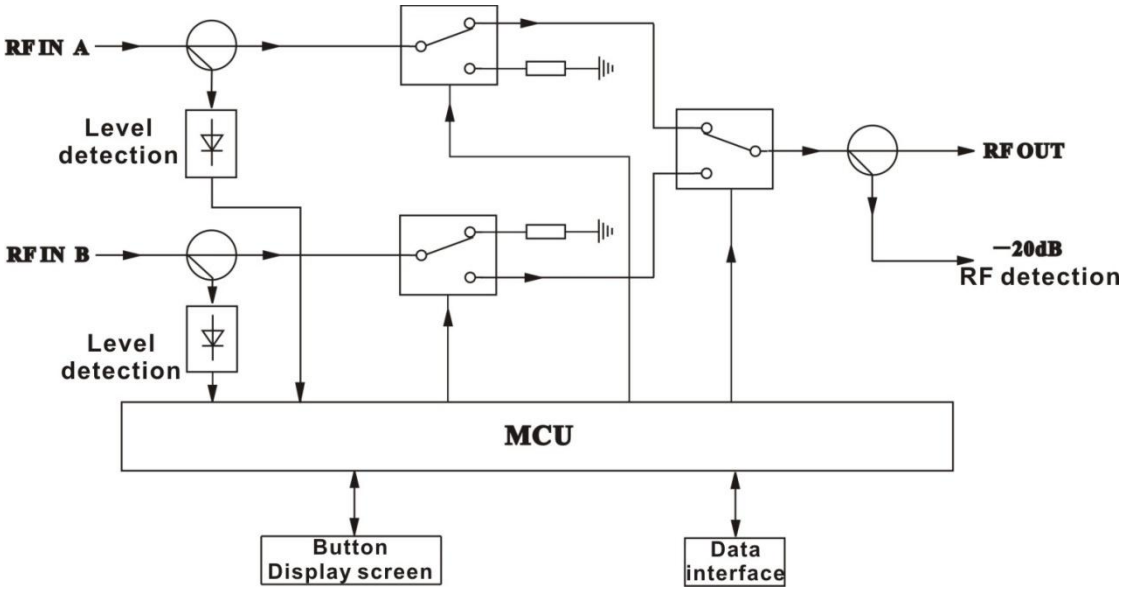
1. Product Summary

An RF switch is used for signal distribution redundancy or for remote RF switching. Our RF Switch has two inputs and a single output. One of the inputs acts as the primary channel while the second is used for failover protection. When the switch detects that the incoming RF to the primary channel has dropped below a set reference level the unit will immediately switch to the backup channel. The unit can also be switched manually by either its front control panel or remotely via Ethernet SNMP. Our unit features full remote management for setting system parameters an system monitoring.

2. Features, Performance Characteristics

- Low insertion loss, fast switching, high isolation in the entire pass band.
- Support automatic and manual switch modes.
- 19″1U standard rack, hot backup dual power supply modules optional.
- High resolution of RF monitor
- Standard RJ45 Ethernet interface
- Integrate SNMP network management function.
- The switch mode is automatic or manual.
- Switch reference level can be set through the front panel or the Internet.
- Main application:
- CATV RF switching, redundancy backups.
- RF control system.
- Laboratory.

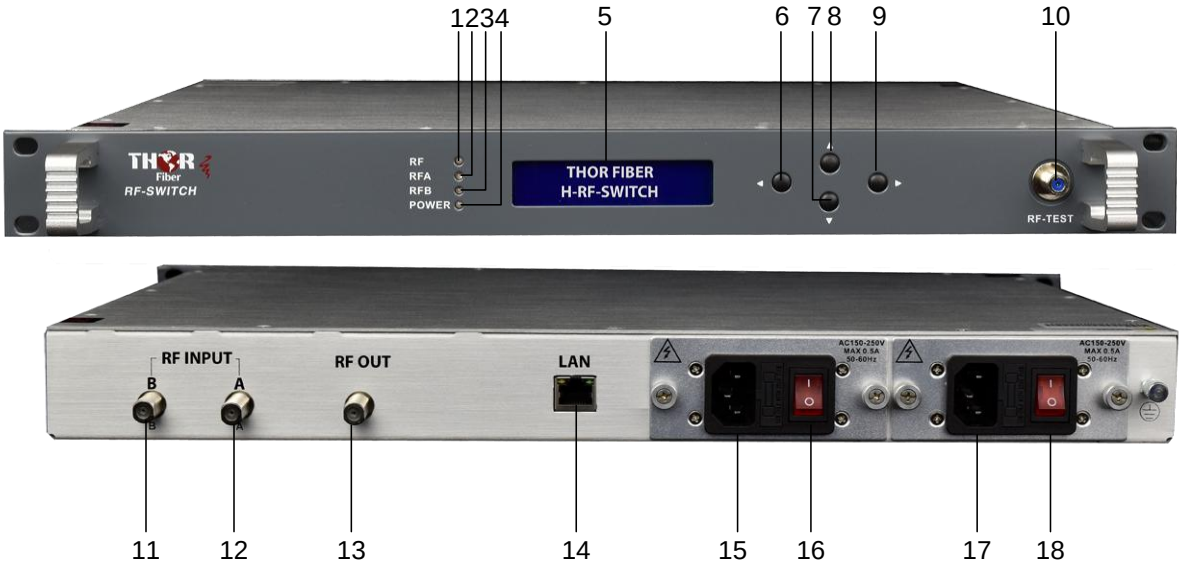
3. Block Diagram



4. Technique Parameter

Electrical Characteristics		
Item	**Unit**	**Technique parameter**
Operating frequency band	MHz	5～1003
Insertion loss	dB	≤2
Flatness in band	dB	±0.75
Isolation	dB	70
Input impedance	Ω	75
Output impedance	Ω	75
RF connector		F type (Female/male is specified by the user)
Input return loss	dB	≥16
Output return loss	dB	≥16
Longest switch time	ms	15
General Characteristics		
Operating temperature	℃	-20～＋50
Relative humidity	%	0～85
Power supply voltage	V	AC220V (dual power supply feed Optional)

5. Structure Description

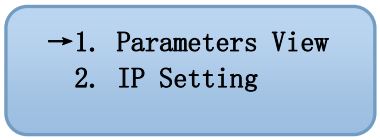


1	Working indicator of A channel	2	RF output status indicator (green: normal; red: no output)
3	Working indicator of B channel	4	Power indicator
5	LCD status display	6	CANCEL key (ESC key)
7	DOWN key (down)	8	UP key (up)
9	Enter key (right key)	10	－20dB output RF detection
11	RF input of B channel	12	RF input of A channel
13	RF output	14	Standard Ethernet interface (transponder)
15	AC power input #1	16	Power switch #1
17	AC power input #2	18	Power switch #2

***Press two buttons (6 and 9) at the same time, after several seconds, the mode is forced to set manual mode and switch to the other channel.**

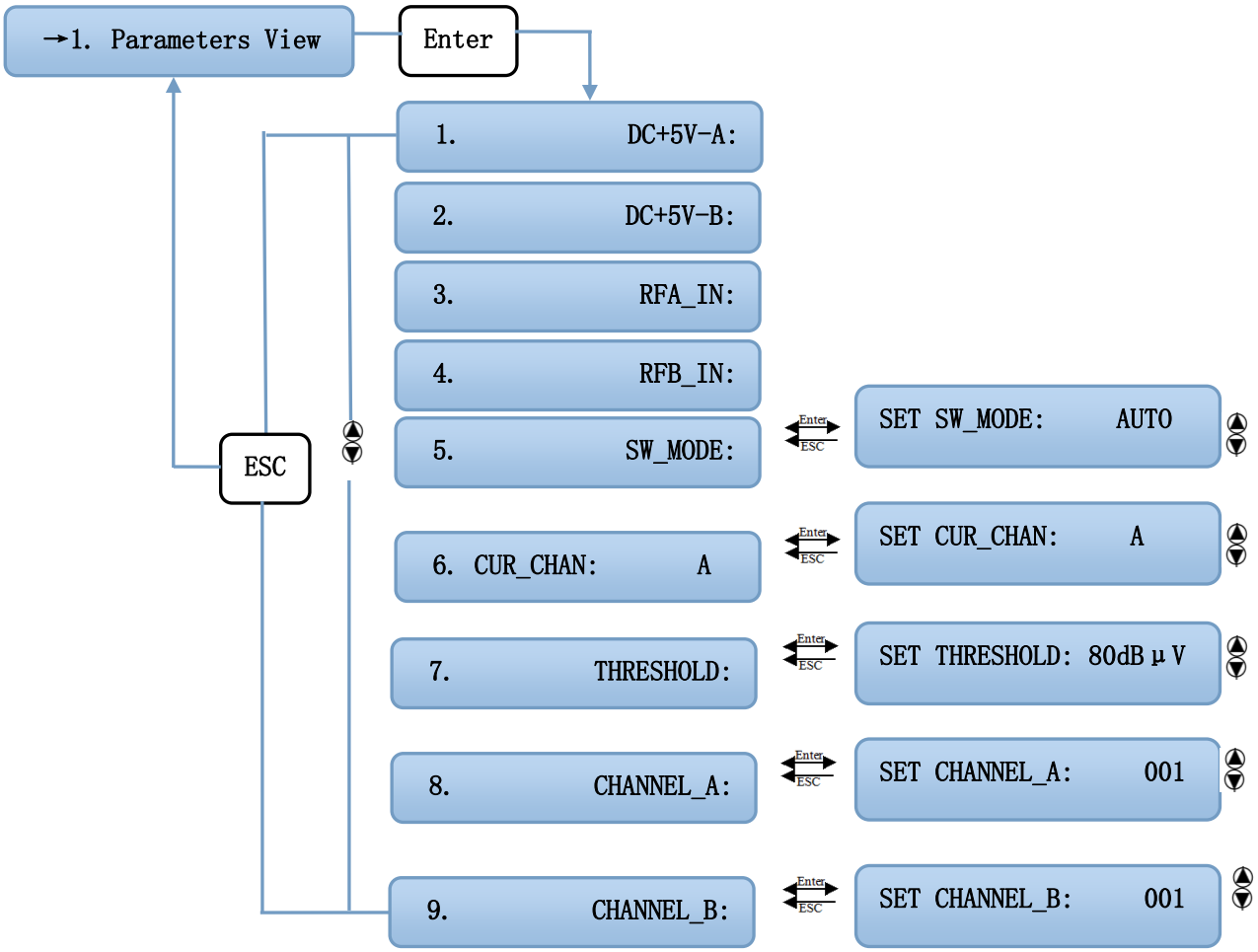
6. Displayed Menus and Operating Instruction

6.1 Boot Display Menu



Content	Description
→	Selection arrow
1. Parameters View	Parameter display and setting menus
2. IP Setting	IP display and setting menus

6.2 Parameter Display and Setting Menus

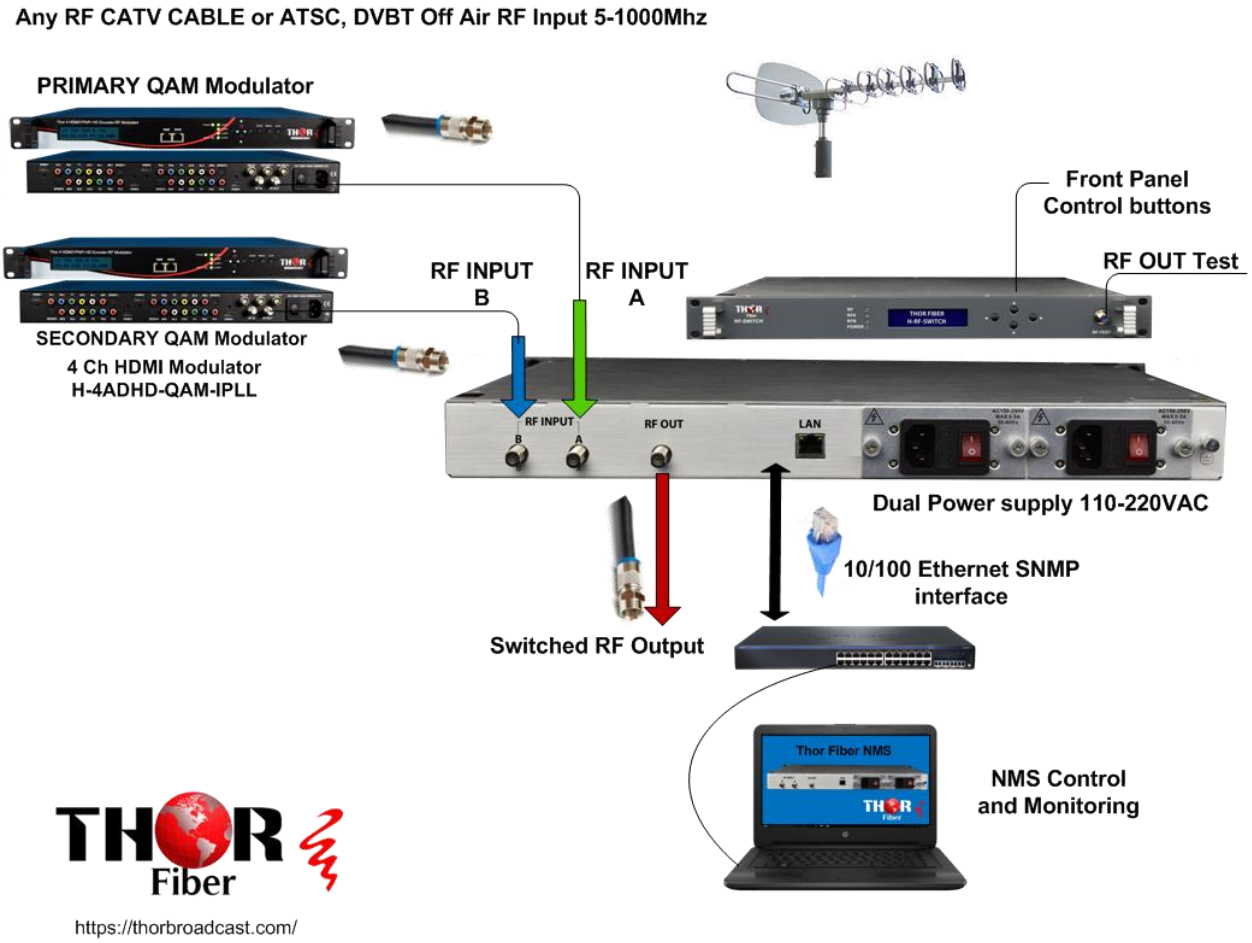


Content	Description
1.DC+5V-A	+5V monitoring voltage of A power supply
2.DC+5V-B	+5V monitoring voltage of B power supply
3.RFA_IN	RF input level of A path
4.RFB_IN	RF input level of B path
5.SW_MODE:	Switching mode selection; AUTO: auto-switch MANU: manual-switch
6. CUR_CHAN	Current working channel; Manual-switch the working channel only under the manual-switch mode
7. THRESHOLD	Switch difference value under the auto-switch mode *
8. CHANNEL_A	Channel number of A path, setting range (001~200)
9. CHANNEL_B	Channel number of B path, setting range (001~200)

***Note:** Under auto switch mode, if the level value of working channel is lower than the setting threshold and the level value of backup channel exceeds the setting threshold, it will switch to the backup channel. The threshold value is adjustable between 70 to 100 dBμV.

6.3 IP Display and Setting Menus

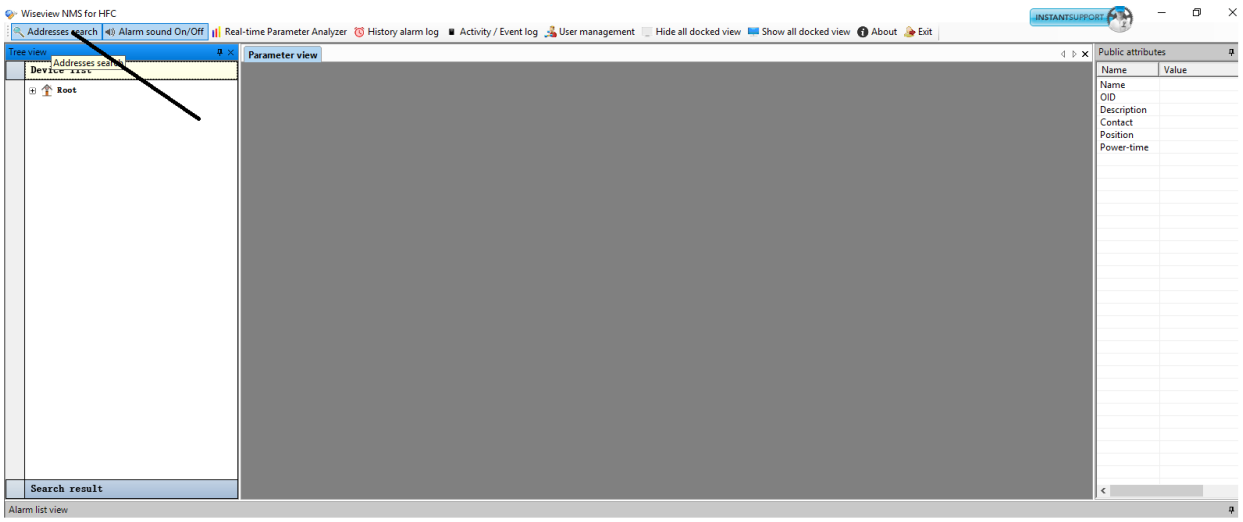
6.4 Application Drawing:

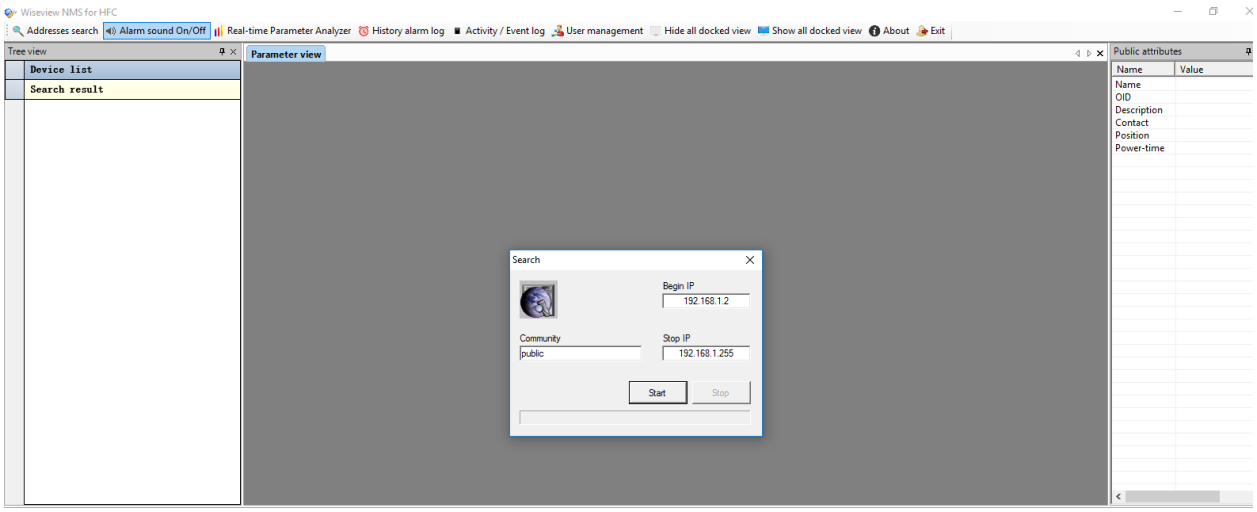


6.5 NMS Software instructions

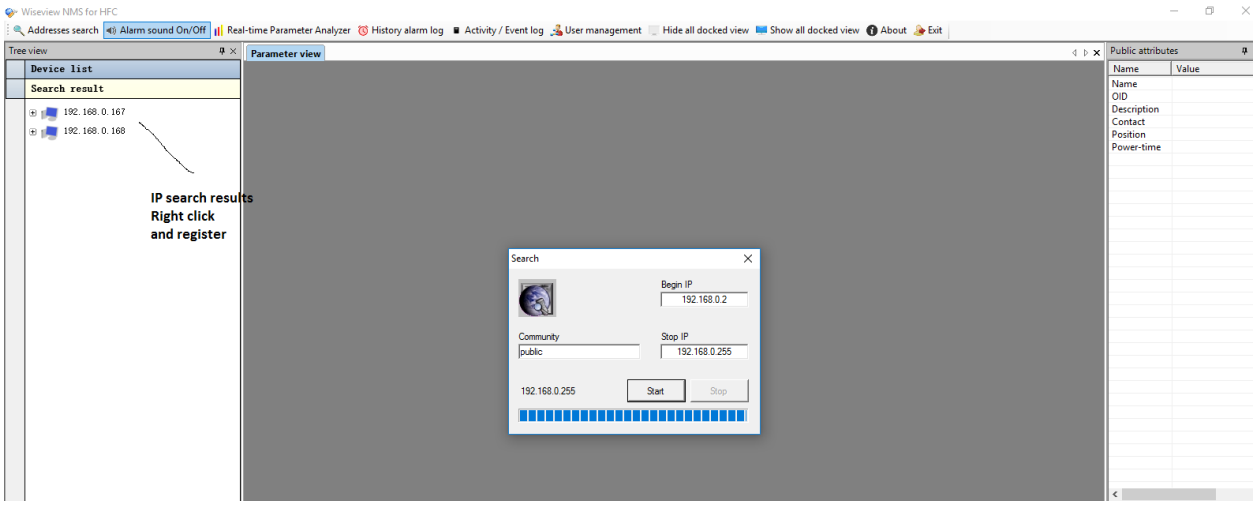
1) Please copy "Wiseview NMS for HFC" folder to the desktop
2) Install "vjredist32.exe or vjredist64 " depends of your operating system
3) Install "Wiseview NMS for HFC.exe"

4) Click “Addresses search Units have to be on the same IP Subnet as the computer

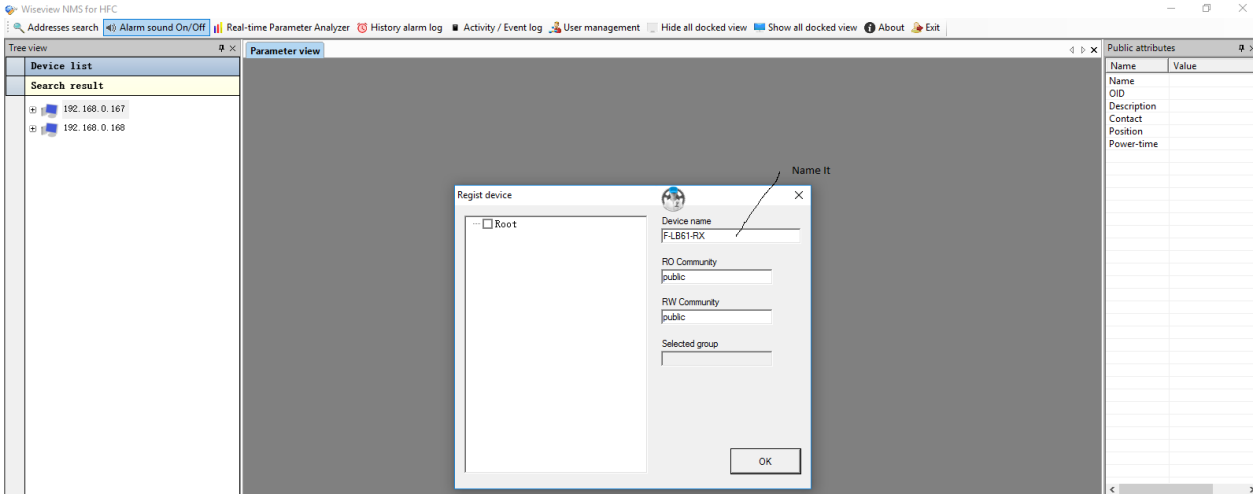




5) Right click and register IP search results



6) Name the device and click OK



7) Click each device on the left hand column to see the all parameters