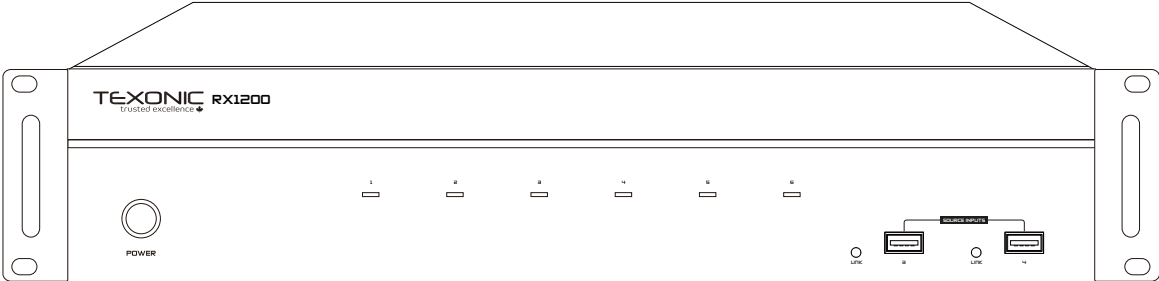


RX 1200

6 SOURCE/6 ZONE
Audio Distribution Amplifier
(2 x Streamer Inside)



DEAR CUSTOMER

Thank you for purchasing this product. For optimum performance and safety, please read these instructions carefully before connecting, operating or adjusting this product. Please keep this manual for future reference.

WARNING

1. Do not expose this unit to water, moisture, or excessive humidity.
 2. Do not install or place this unit in a built-in cabinet, or other confined space without adequate ventilation.
 3. To prevent risk of electrical shock or fire hazard, due to overheating do not obstruct unit's ventilation openings.
 4. Do not install near any source of heat, including other units that may produce heat.
 5. Do not place unit near flames.
 6. Only clean unit with a dry cloth.
 7. Unplug unit during lightening storms or when not used for an extended period of time. A surge protector is strongly recommended.
 8. Protect the power cord from being walked on or pinched, particularly at the plugs.
 9. Use unit only with accessories specified by the manufacturer.
 10. Refer all servicing to qualified personnel.
-

CAUTION

CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



INTRODUCTION

The RX 1200 home audio system brings you the advanced Generation D technology, it is a functional, easy-to-install, highly compatible, expandable and used-friendly audio distribution system. With few simple steps to install, it provides up to 50Wx2 power by class D amplifier and distribute at most to 18 zones which all can be controlled by packaged keypads, IR remote controller or APP.

Simply connecting the RX 1200 to the local Ethernet network, it let you access a wide variety of music from the Built-in streaming services or stored on the Smartphones. Two USB ports on the front panel for playing music files from USB storage devices. An Optical digital input to manage the sound of a flat screen or a CD player to have high resolution of sound quality in each zone. The overall distribution system including package device is easy-to-install, so every audiophile in every zone can use IR controller or keypads to enjoy the powerful audio. High functionality and performance bring you musical enjoyment just the way you want it.

FEATURE

- *Each zone provides 50Wx2 (@ 4 Ohm) output power.
- *High efficiency more than 85% Class D amplification.
- *6 Line input sources, including 2 Audio Streamers (Input 3, 4).
- *USB ports for playing music files from USB Flash Drive (Input 3, 4).
- *Each zone Stereo/Mono output selectable.
- *Enable control over Ethernet.
- *Support Control APP.
- *PRE-AMP output on Zone1~6.
- *Built-in IR receiver & IR remote controller for Source select/Volume/Treble/Bass.
- *12V DC trigger output to external device when the system is power on.
- *12V DC mute trigger input from the external devices.
- *RJ45 Ethernet port for the wired connection to the local network.
- *Another RJ45 Ethernet expansion port for connecting with smart TV or other device.
- *RS-232 port allows 2-way communication with the Home Automation system.
- *Expandable up to 18 Zones by additional 2 units.
- *6 LEDs for 6 zones Power On, Standby and Mute.
- *Built in IR emitter.
- *AC 115V / 230V input power switchable.

1. Power ON/OFF/ STANDBY

Depress the power button to turn on the system. Press it again to release the latch and power the unit off. Note that even the Master Controller is powered on, each zone will remain in Standby mode until the zone keypad is activated.

2. Standby/Zone ON LED

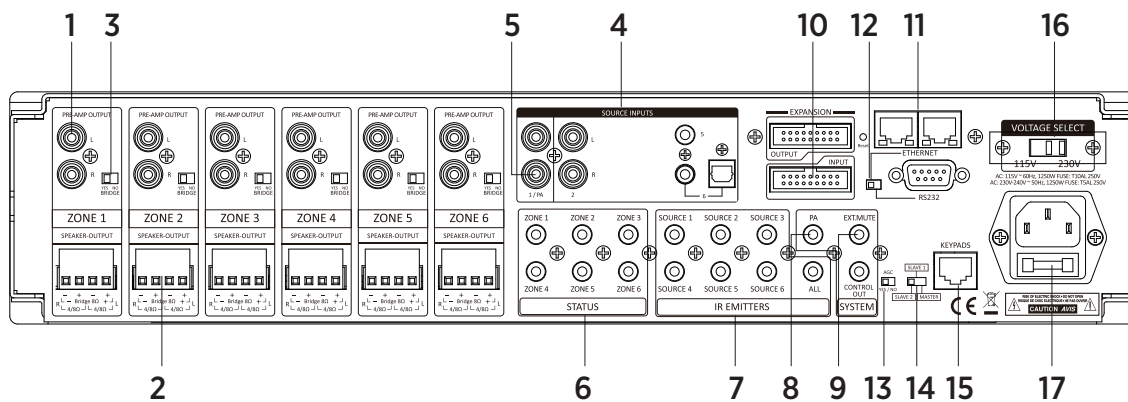
These six LEDs illuminate to indicate the status of each zone.

Blue: In Standby mode. White: In Activate mode. Blue/White: In Mute mode.

3. USB Port 3/4

Two USB ports correspond to the built-in Wi-Fi Streamers, as source input 3 and 4. Playing audio source from USB Flash Drives.

REAR PANEL



1. PRE-AMP OUTPUT

Stereo Line level output on each zone.
Connect to additional amplifier with higher output, or powered Sub-woofers.

2. SPEAKER OUTPUTS

6 x Removable terminal block connectors on each zone.
Each zone provides 2x50W @ 4 Ohm or 100W @ 8 Ohm in bridge mode.

3. STEREO/BRIDGE SWITCH

4. SOURCE INPUTS

6 Stereo Analog/Digital inputs.
Two Wi-Fi Streamers are input 3 and 4.

5. Input 1/PA

Paging capability for Input 1 to broadcast to all zones when 12VDC is applied to the PA - IN jack.

6. STATUS

When the zone is activated, the corresponding jack will output 12VDC to trigger other device.

7. IR EMITTERS

IR Outputs 6 routed & 1 common

8. PA-IN

12VDC paging trigger input

9. EXT. MUTE/CONTROL OUT

Mute the entire system with the 12VDC MUTE IN.
Use the 12VDC CONTROL OUT to trigger other equipment

10. EXPANSION IN/OUT PORT

Expandable to 18 zones with 3 x Multi-zone Controller systems.

11. ETHERNET PORTS

Dual LAN ports, one connects to the LAN port of local router. Another connects to network TV or other device which requires Ethernet.

12.ETHERNET/RS232 SWITCH

ETHERNET: When the amplifier connects to Ethernet.

RS232: When the amplifier control by PC or Control Device via RS-232.

13.AGC

Automatic Gain Control, brings low level up to a present-level.

14.MASTER/SLAVE SWITCH

Set the unit ID when connecting multi Controller systems

15.KEYPAD

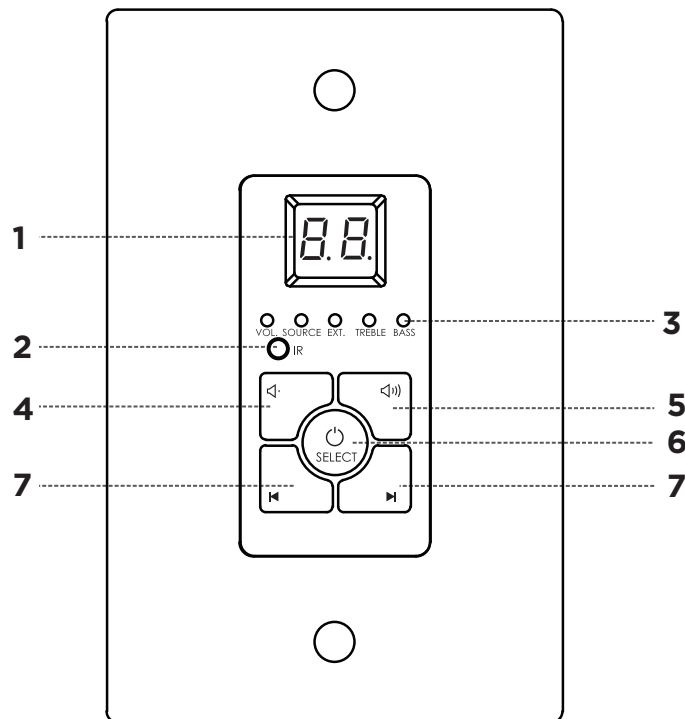
RJ-45 jack Connects to the keypad hub for 6 keypads.

16.VOLTAGE SELECT

Please set to correctly input voltage before turn on the amplifier.

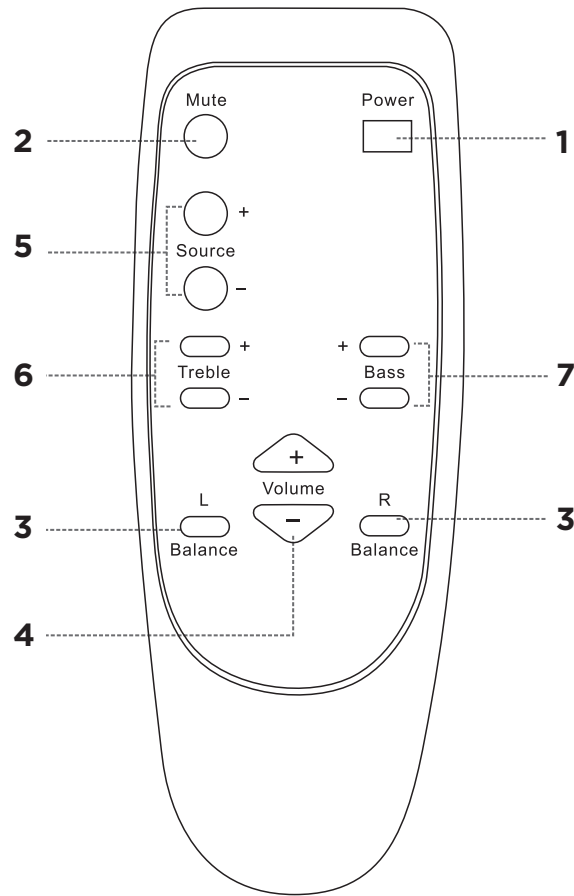
17.AC INPUT

KEYPAD



1. Numeric LED Display
2. IR Receiver Target
3. Selection and Status LED's
4. Power/Status. Press and Hold to Turn Zone ON/OFF. When ON, Press to toggle through settings
5. Increase Volume, Treble or Bass
6. Decrease Volume, Treble or Bass
7. Source Select

REMOTE CONTROL



1. Power: switches power (On/Off) for the certain zone.
2. Mute: allows you to mute a certain zone.
3. BAL: These L & R buttons can adjust the balance of L/R channel in stereo mode.
4. VOL: Volume adjustment
5. Source: Used to select signal input.
6. Treble: This allows you to enhance or reduce Treble of signal in individual zone.
7. Bass: This allows you to adjust the Bass for the individual zone

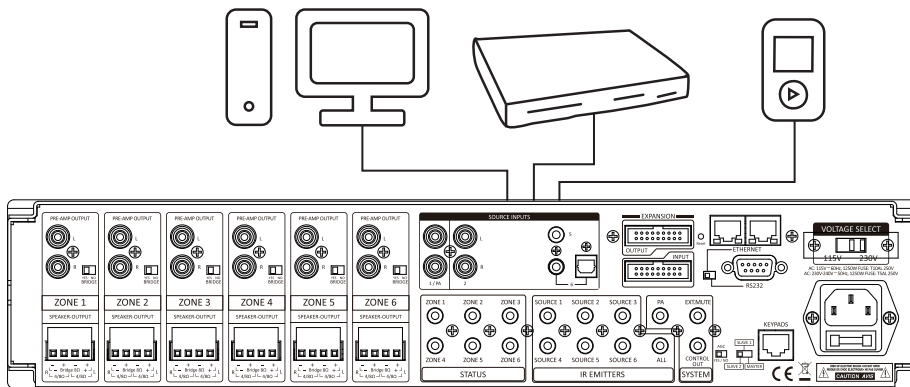
CONNECT AND OPERATE

Before you begin to install the RX 1200 , it is important to implement good installation practices:

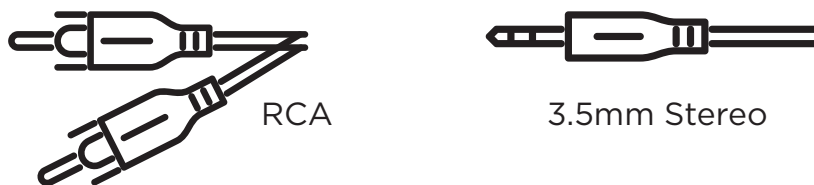
1. Make sure that AC power is disconnected before making ANY connections to the main unit and attached devices.
2. Install in a well-ventilated environment
3. Ensure any vents are not blocked to allow for proper circulation
4. Do not install above or below sources of heat
5. Use good quality cabling
6. The unit can be installed within a rack using the provided mounting rack ears

CONNECTING THE SOURCES

Up to 6 sources can be connected to a single RX 1200 . Using RCA cables connect each source into one of the available Source Inputs.



Some sources such as MP3 players and Cell Phones may require a 3.5mm Stereo to RCA Cables in order to connect to the AMP

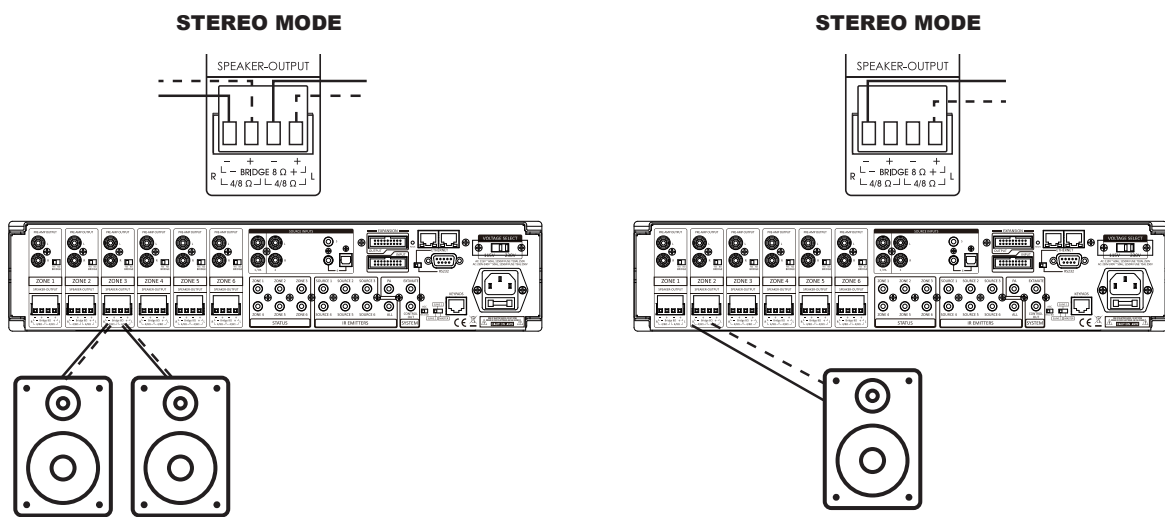


NOTE: Input 1 can be used as a global input for all zones when a source is connected to Input 1 and the 12VDC is applied to the PA-IN jack (tip is positive) then source 1 will broadcast to all zones. If no 12VDC is applied, then the first input will be operating under normal conditions.

CONNECTING THE SPEAKERS

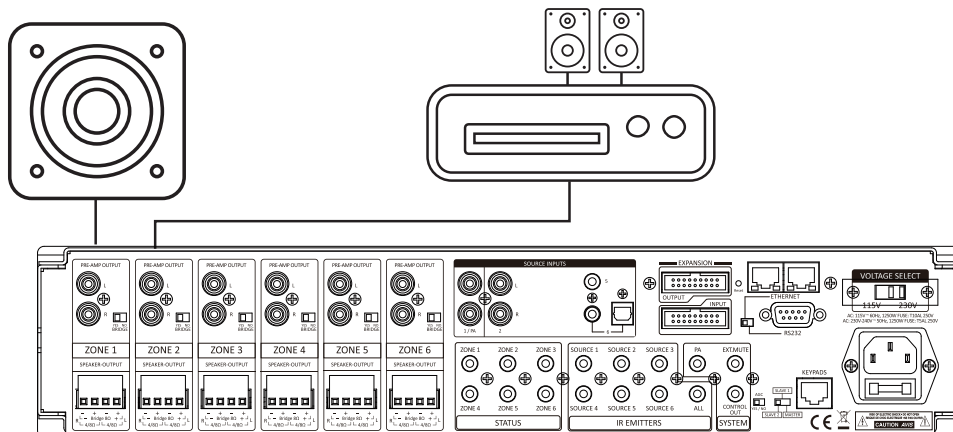
The RX 1200 can work with speakers that are 4-8 Ohm. There are 9 two modes that can be set for different setups: Stereo or Bridge. An 8 Ohm speaker can only be used when in Bridge mode. To choose between modes, use the mode switch to determine modes for each zone (Number 2 Panel Descriptions, page 5)

Once you have properly identified the desired mode, strip about ¼” of insulation and twist the copper strands. Connect the speaker wire to there screw down terminal as indicated on the amp. To loosen the terminal turn counterclockwise and to tighten the terminal turn clockwise. For better quality, we recommend used 12-14 AWG stranded copper speaker wire.



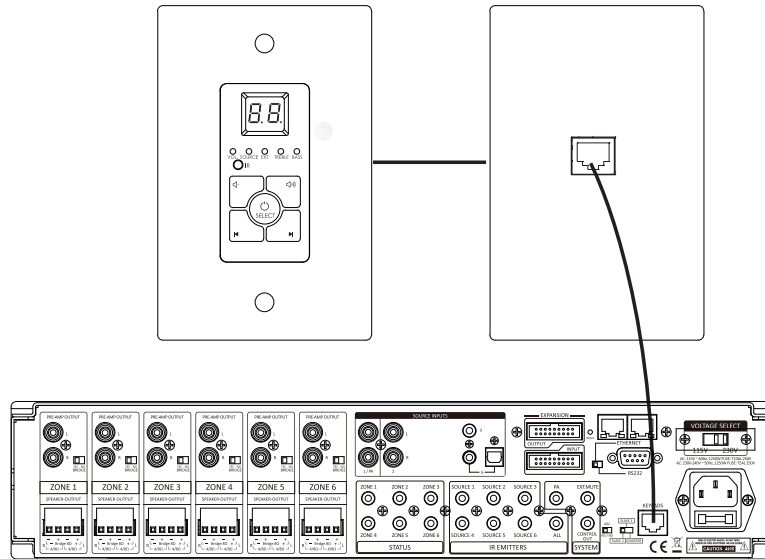
USING THE PRE-AMP OUTPUTS

There are 3 unbalanced, line level Pre-Amp outputs that correspond to the first 3 Outputs. These can be used to connect an additional amplifier, expand zones, or to connect a powered subwoofer. The Pre-amp output levels are not fixed and are able to be controlled via IR, RS232, keypads and network.

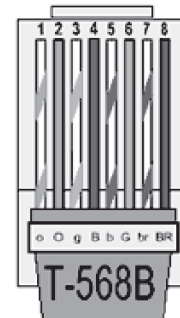


CONNECTING THE KEYPADS

The MAP-1200US comes with 6 POE enabled keypads. This allows for source control from each specific zone as well as IR routing to the appropriate source devices once selected. The MAP-1200US also comes with a hub that allows for all 6-keypads to be connected to the amp via Cat5e/6.



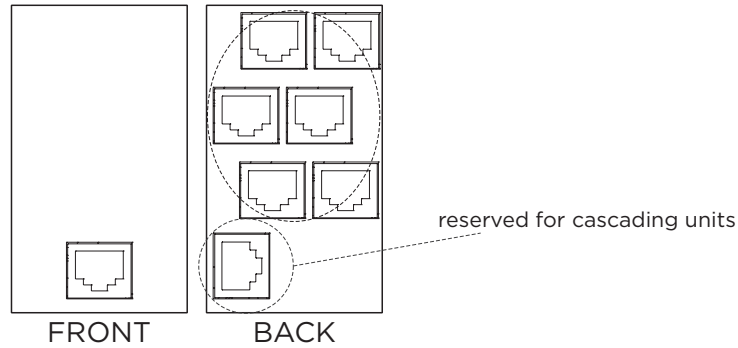
Without power being connected, connect a Cat5e/6 cable to the RJ45 port labeled KEYPADS on the back of the AMP We recommend terminating the Cat5e/6 using the 568B standard.



At this point it is also important to address your keypads. Refer to the chart below which is also found on the PCB board of the back of the keypad to set the dip switches according to the zone you would like it to control.

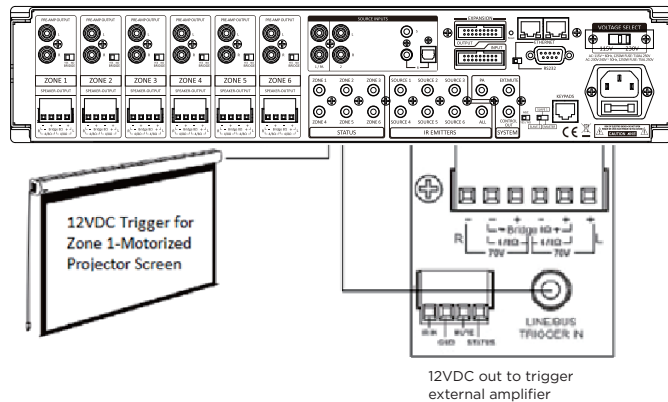
ZONE-1			ZONE-2			ZONE-3		
ON	ON	OFF	ON	OFF	ON	ON	OFF	OFF
1	2	3	1	2	3	1	2	3
ZONE-4			ZONE-5			ZONE-6		
OFF	ON	ON	OFF	ON	OFF	OFF	OFF	ON
1	2	3	1	2	3	1	2	3

Connect the other end of the Cat5e/6 to the lone RJ45 port found on the front side of the Keypad Hub. The front is what fits into the provide decora plate. Note that the Cat5e/6 between the unit and the hub should only be between 7-10ft. The RJ45 ports on the back of the Keypad Hub are not assigned but the single RJ45 port isolated on the bottom of the hub is reserved for cascading units.



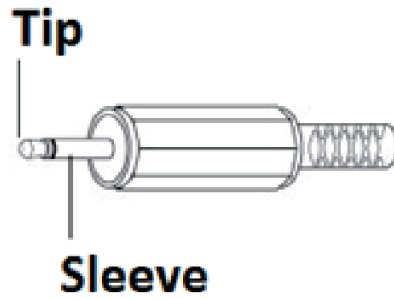
Connect the other end of the terminated Cat5e/6 to the RJ 45 port on the back of the assigned keypad and installation is complete. Complete zone and source control as well as IR and power are provided through the single Cat5e/6.

CONNECTING AND USING THE ZONE STATUS PORTS



There are six 12Vdc trigger outputs which correspond to the six output zones. When a zone is powered ON by the RX 1200 keypad, the corresponding zone sends 12Vdc to the trigger output jack. The triggers can be used to automatically switch peripheral equipment ON or OFF.

WIRING: 3.5mm Mono



Plug: Tip is Positive (+)

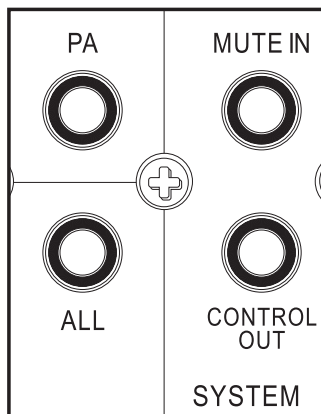
Trigger Outputs for Zones 1 - 6: Zone ON; 12Vdc applied to the TRIGGER OUTPUT, Zone OFF; 12Vdc removed from the TRIGGER OUTPUT.

CONTROL: When any zone is on, 12Vdc applied to the CONTROL OUT. When All zones are OFF, 12Vdc removed from the CONTROL OUT

Trigger Inputs:

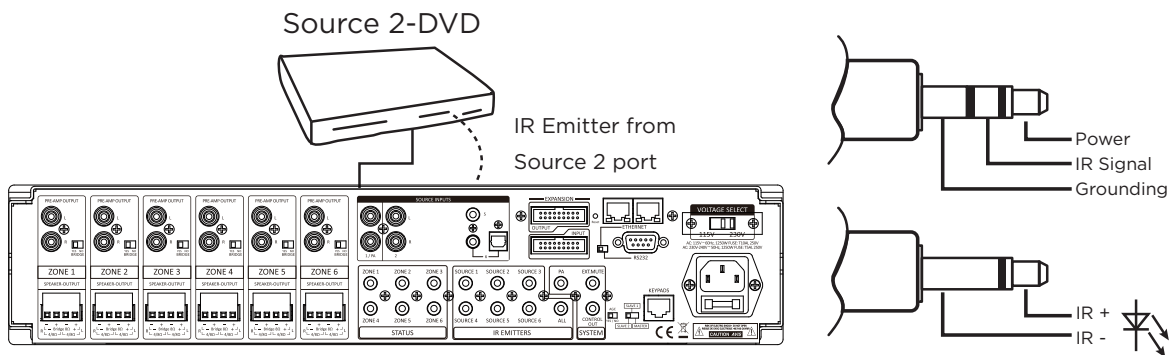
PA- IN: Apply 12Vdc for input #1 override on all six zones.

MUTE - IN: Apply 12Vdc to mute all zones.



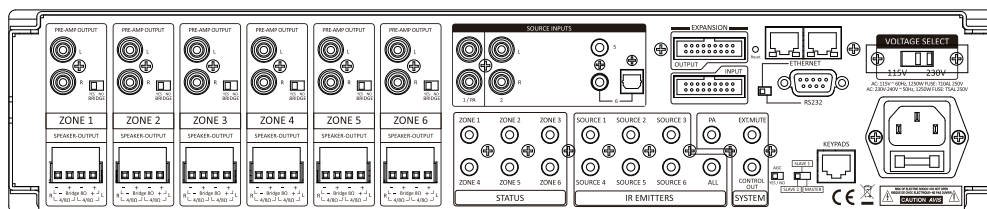
IR EMITTERS

When being used with keypads, the RX 1200 can receive IR signals from each zone, and routed back through the Cat5e/6 and Keypad up to the Amplifier to control the selected source. For example, if Source 2-DVD is selected in Zone 1, the user will be able to control the DVD player to power the device on/off, change settings ect. Since the amplifier has discreet routing, ONLY the Source that is selected on each zone can be controlled. This prevents other sources from accidentally be controlled when selected on other zones.



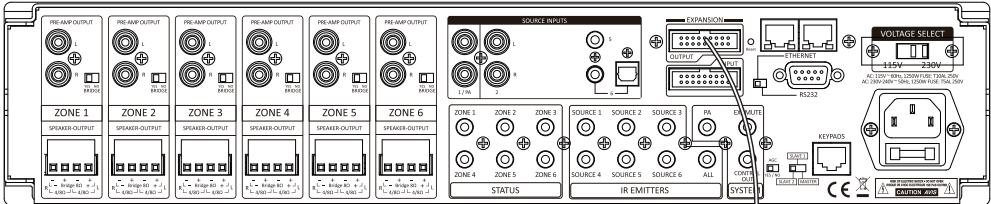
CASCADING SOURCES INTO ADDITIONAL ZONES

The RX 1200 can allow 6 sources to be distributed to up to 18 zones on 3 different units using the provided ribbon cable to connect between units. To do this first each unit needs to be addressed according using the MASTER/SLAVE switch. There are 3 positions for this, Master, Slave 1, and Slave 2 which help identify each unit.

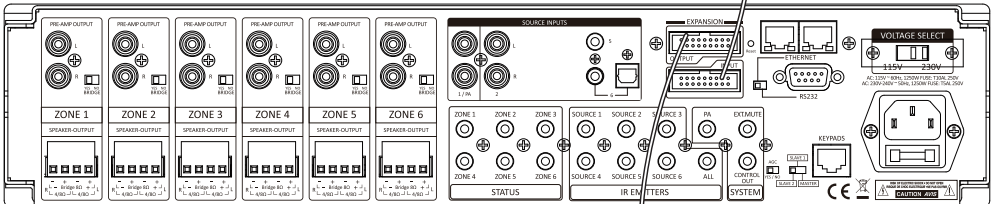


Once each unit is correctly addressed, use the provided ribbon cables to connect the OUTPUT of the original MASTER unit into the INPUT of Slave 1. To cascade the sources into a third unit, using the provided expansion ribbon cable, go out of the OUTPUT port from the device addressed as SLAVE 1 into the INPUT port of the device addressed as SLAVE 2.

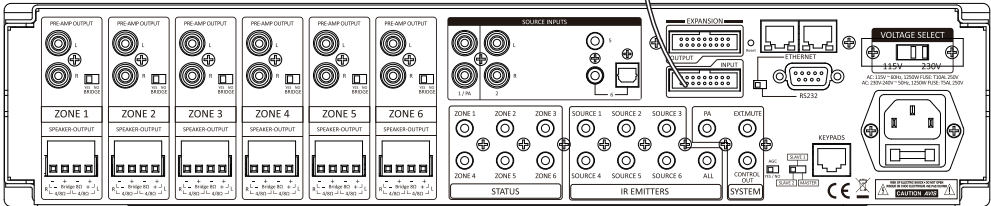
Master



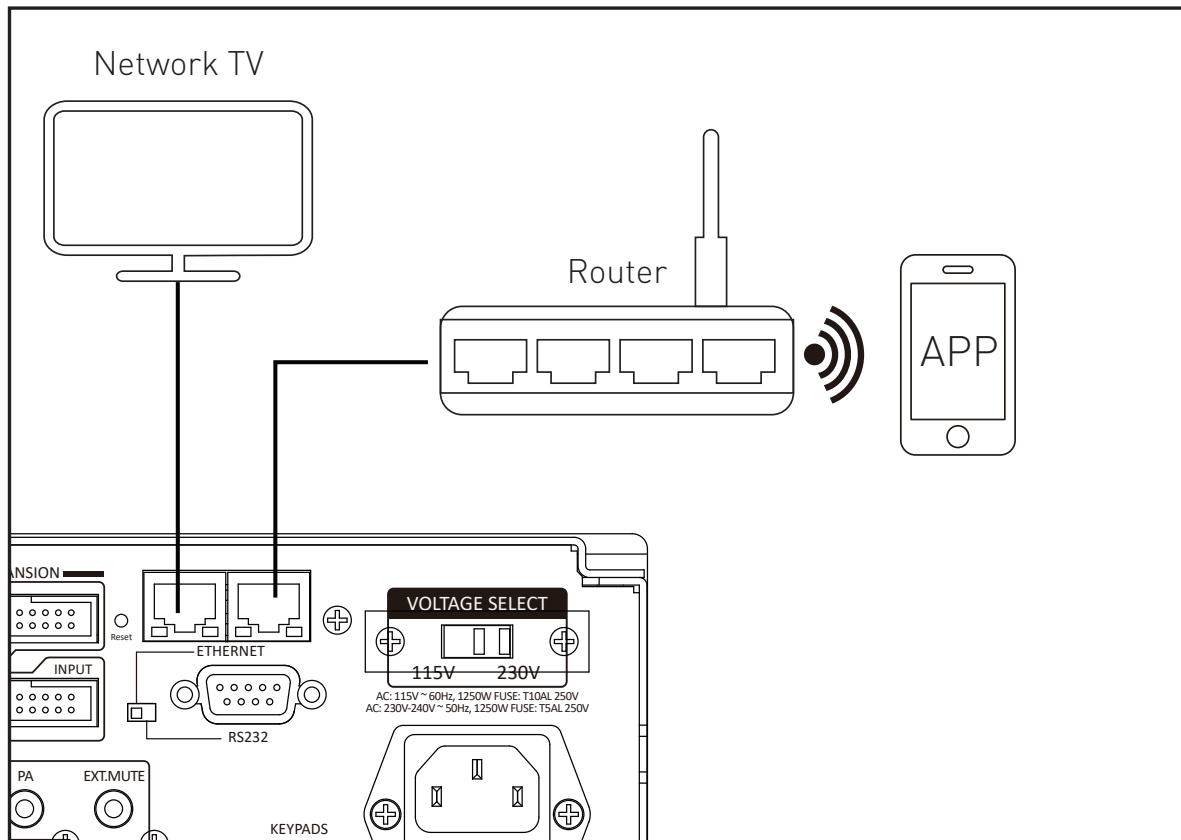
SLAVE 1



SLAVE 2



ETHERNET CONNECTION



There are two RJ-45 jacks on the rear panel of this amplifier for the connection to Ethernet.

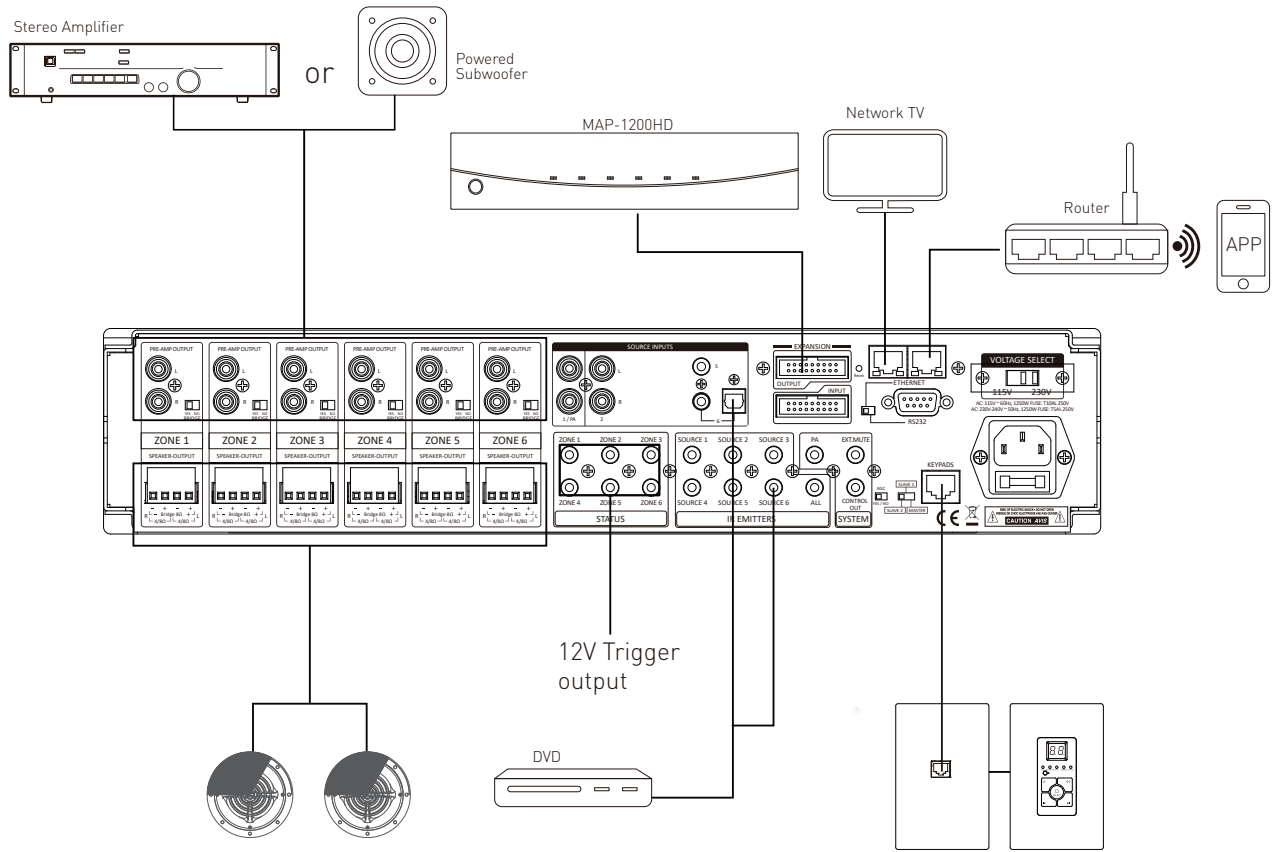
Please use a good quality Cat5e/5 cable, and follow the connecting diagram below.

1. Connect the LAN1 port on the rear panel of controller to the local Wi-Fi Router. The Ethernet connection mainly for Wi-Fi control via APP or other control devices.
2. Connect the LAN2 port on the rear panel of control to the smart TV or other Network devices.

The port simply works as SWITCH function as long as the LAN1 port enabled to Ethernet.

Note: When controlling via ETHERNET, please make sure the ETHERNET/RS232 switch is set at ETHERNET position.

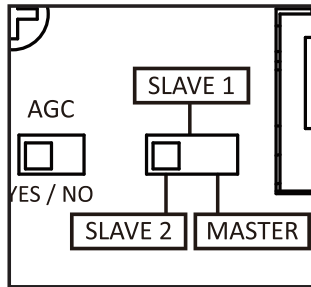
CONNECTION DIAGRAM



INTEGRATED NETWORK

The controller and APP are easy to install and connect to the local network, simply connect the RJ-45 IN port to the router via Cat5 cable, and also make sure your smart devices connect to the same local network. After connecting the controller to the router by Cat5 cable, the controller will connect with the local network automatically.

In case, having the problem for connecting to the network, please check the position of switches on the rear panel.



Please switch to MASTER and ETHERNET.

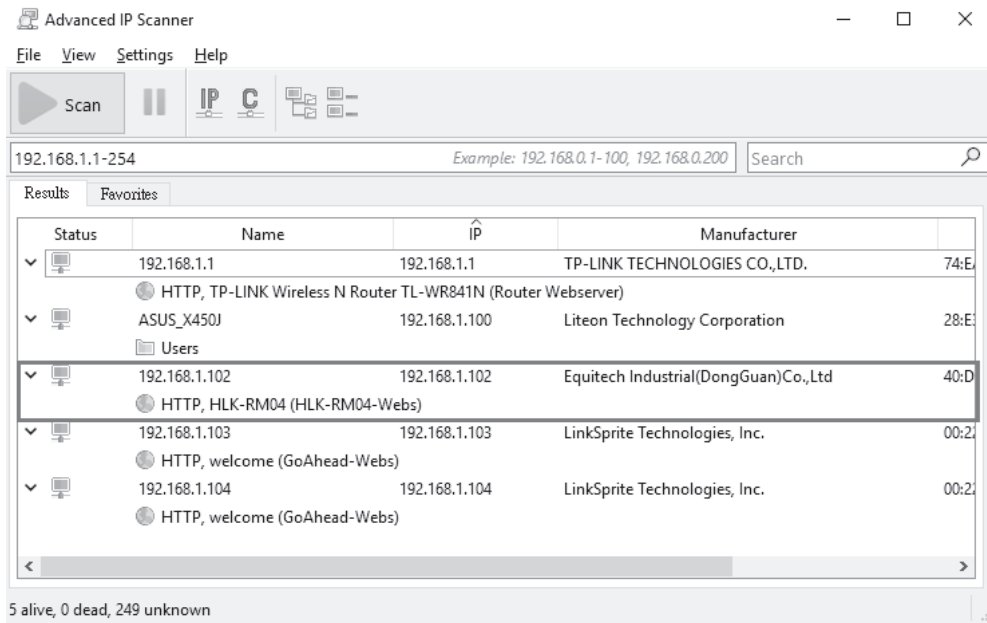
Note. Please do not press “Reset” button.

Note. Please do not connect the Ethernet port of RX 1200 to the computer directly.

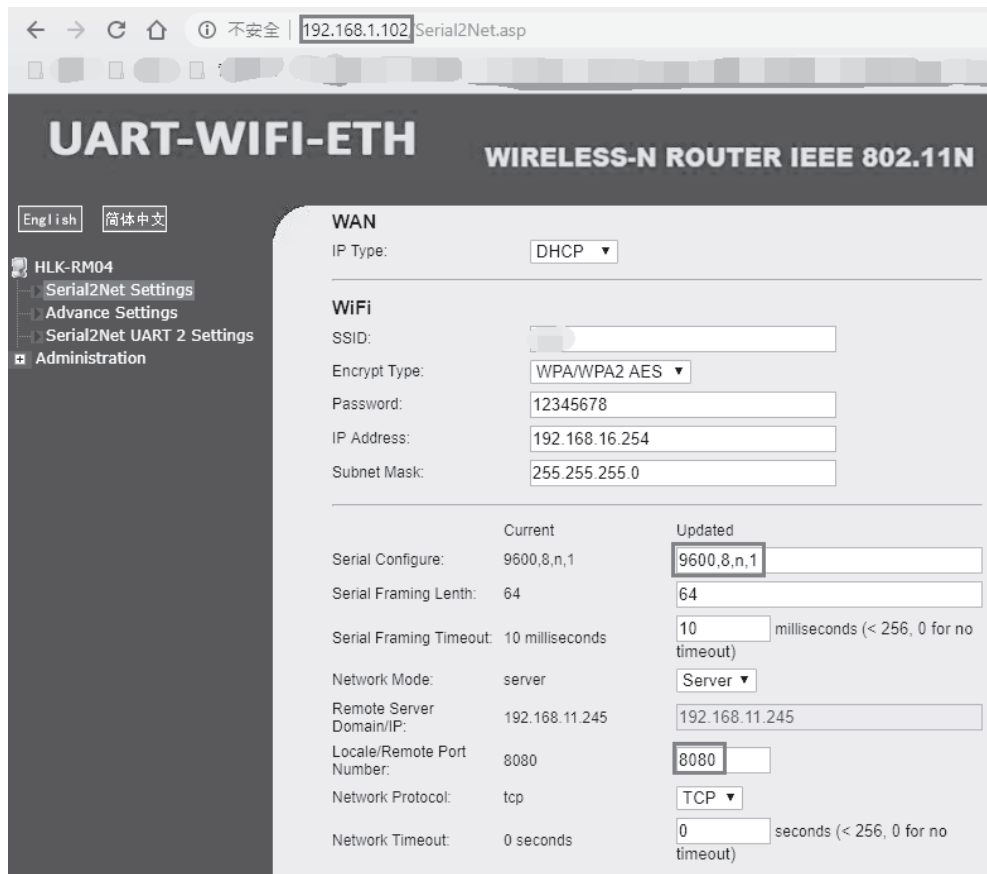
1. Open the IE web browser of PC, log in to the WEB configuration page of local Router to find the IP address of RX 1200 (shown as below)

	X450J 在线时长: 59分钟24秒	IP: 192.168.100.8 MAC: 28-E3-47-C0-64-40
	B01B 在线时长: 59分钟16秒	IP: 192.168.100.11 MAC: 00-22-6C-CA-B0-1B
	B3EC 在线时长: 59分钟15秒	IP: 192.168.100.9 MAC: 00-22-6C-CA-B3-EF
	在线时长: 54分钟23秒 RX 1200	IP: 192.168.100.7 MAC: 10-A4-BE-FB-0C-07
	KENNYLAJ 在线时长: 51分钟12秒	IP: 192.168.100.13 MAC: 4C-ED-FB-D9-D1-80

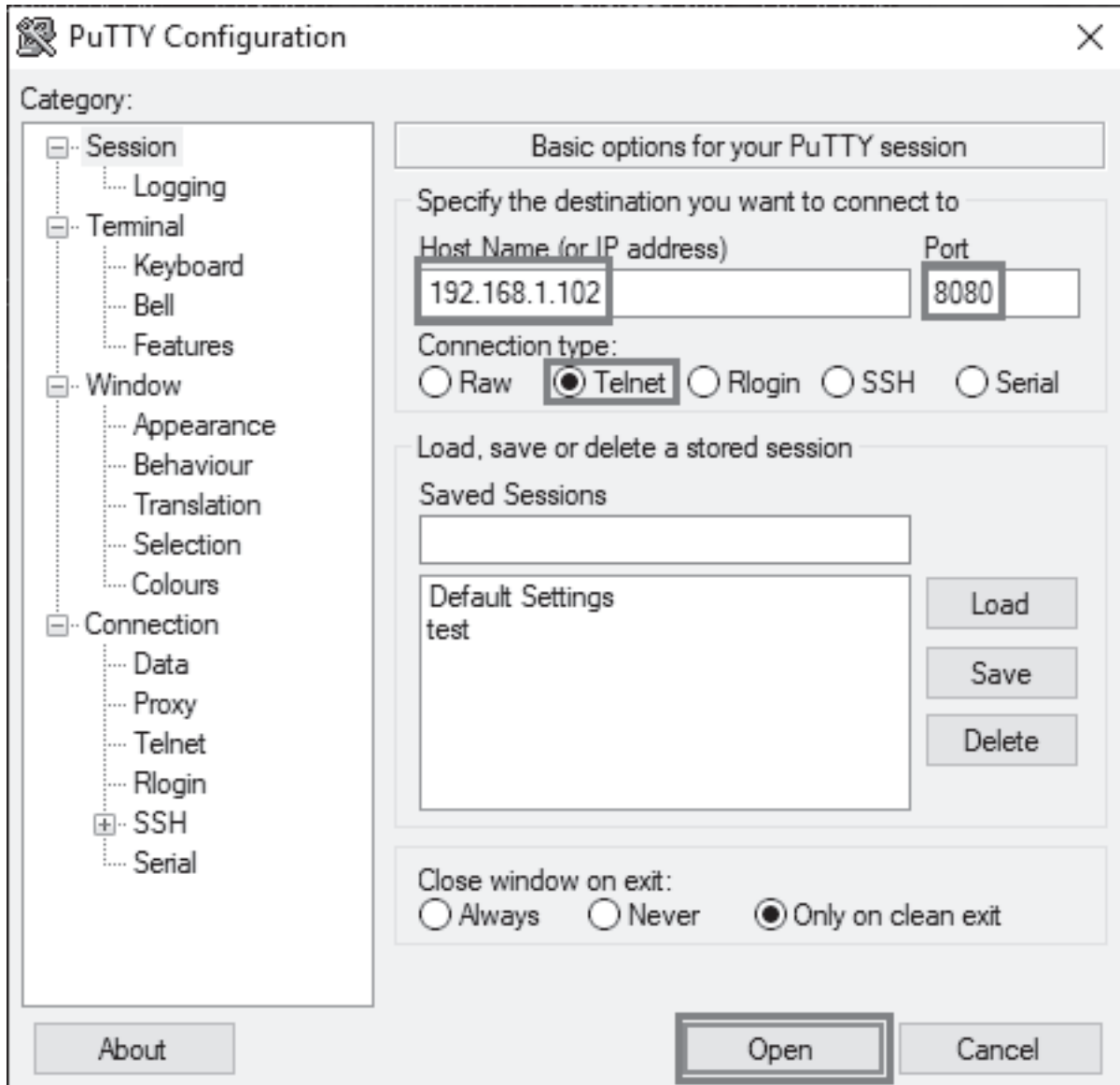
2. Using “Advanced_IP_Scanner” software to find the IP address.
 Please visit www.advanced-ip-scanner.com for free download.



Then enter the IP address of RX 1200 to the IE browser (shown as below), ensure the Serial Configure is 9600,n,8,1. After finishing this step, MAP-1200US could be controlled through the local Network.



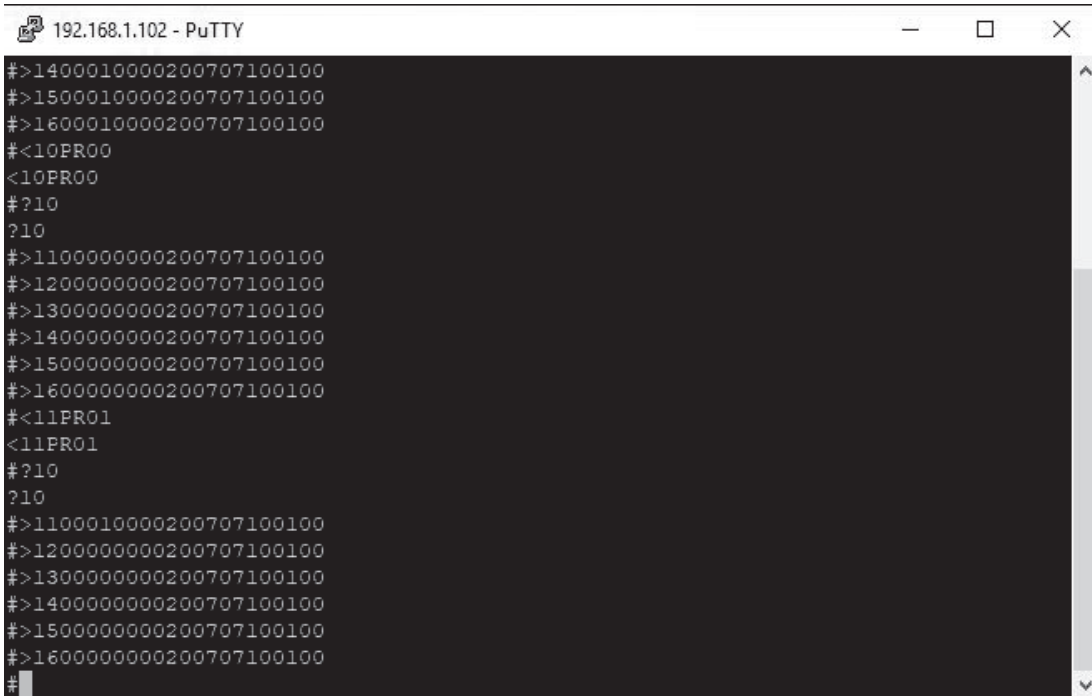
Download free software “PuTTY” Tool from the internet to control the device. Operation diagram as below:



Click Telnet, enter the IP address of RX 1200 and port: 8080.

Click Open.

When the IP address connected, the operation diagram shows as below:



```
192.168.1.102 - PuTTY
#>1400010000200707100100
#>1500010000200707100100
#>1600010000200707100100
#<10PR00
<10PR00
#?10
?10
#>1100000000200707100100
#>1200000000200707100100
#>1300000000200707100100
#>1400000000200707100100
#>1500000000200707100100
#>1600000000200707100100
#<11PR01
<11PR01
#?10
?10
#>1100010000200707100100
#>1200000000200707100100
#>1300000000200707100100
#>1400000000200707100100
#>1500000000200707100100
#>1600000000200707100100
#
```

Key in the command code to control RX 1200.

For the detail of command codes, please find the RS-232 command codes in this instruction manual.

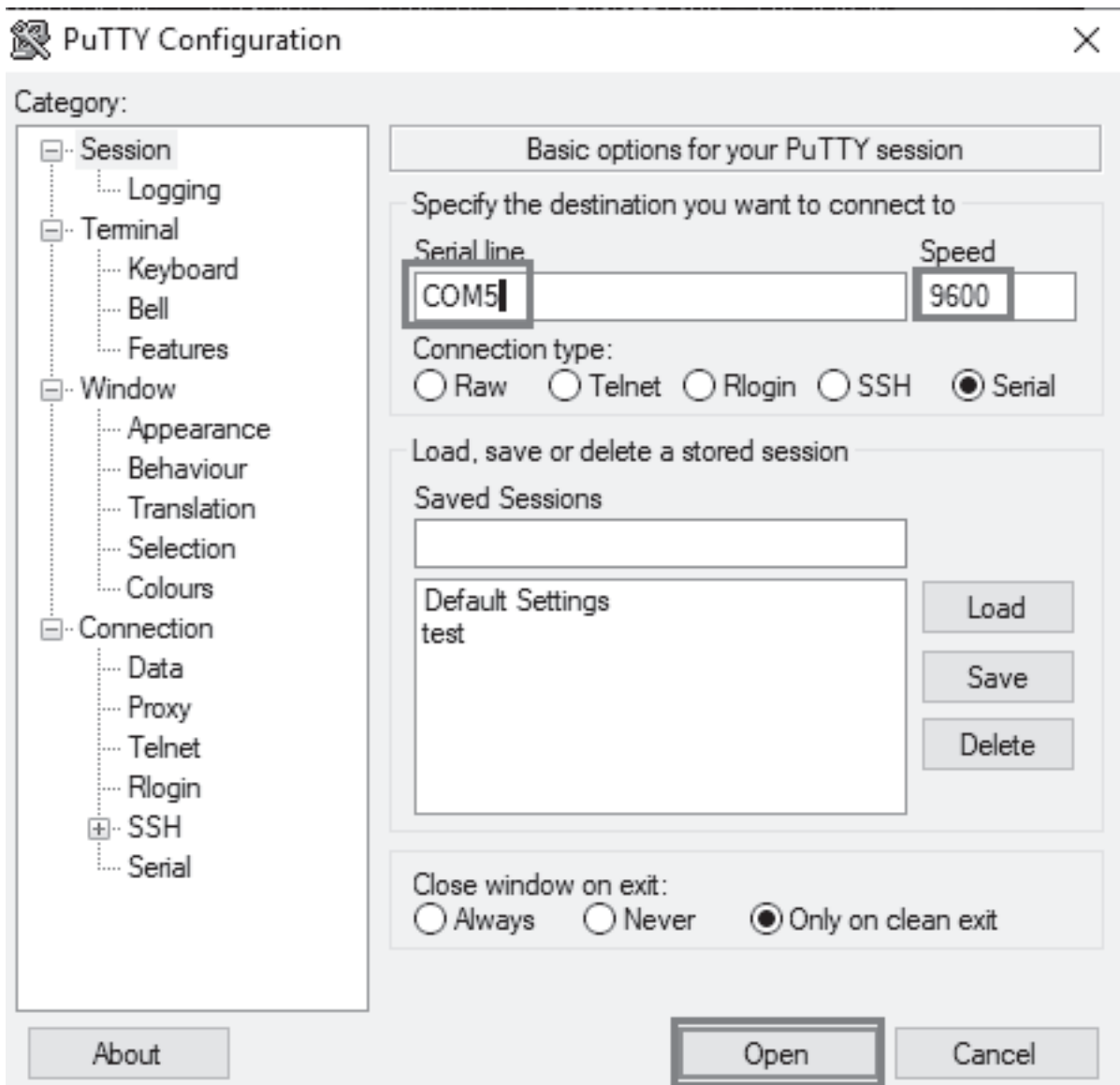
RS232 CONTROL

The RX 1200 provides an RS-232 serial port connection located on the back panel and uses a USB-to-Serial Comm cable connection. The RX 1200 supports bi-directional RS-232 communication with third party automation systems. All keypad and remote control operations can be controlled via RS-232 in addition to system expansion up to 18 zones or 3 RX 1200 units linked together using the included 18 pin expansion cable.

Note: Set the switch to RS232 position.

Baud Rate 9600, 8, N, 1 , DB9 Connector Pin out, Tx, Rx, GND

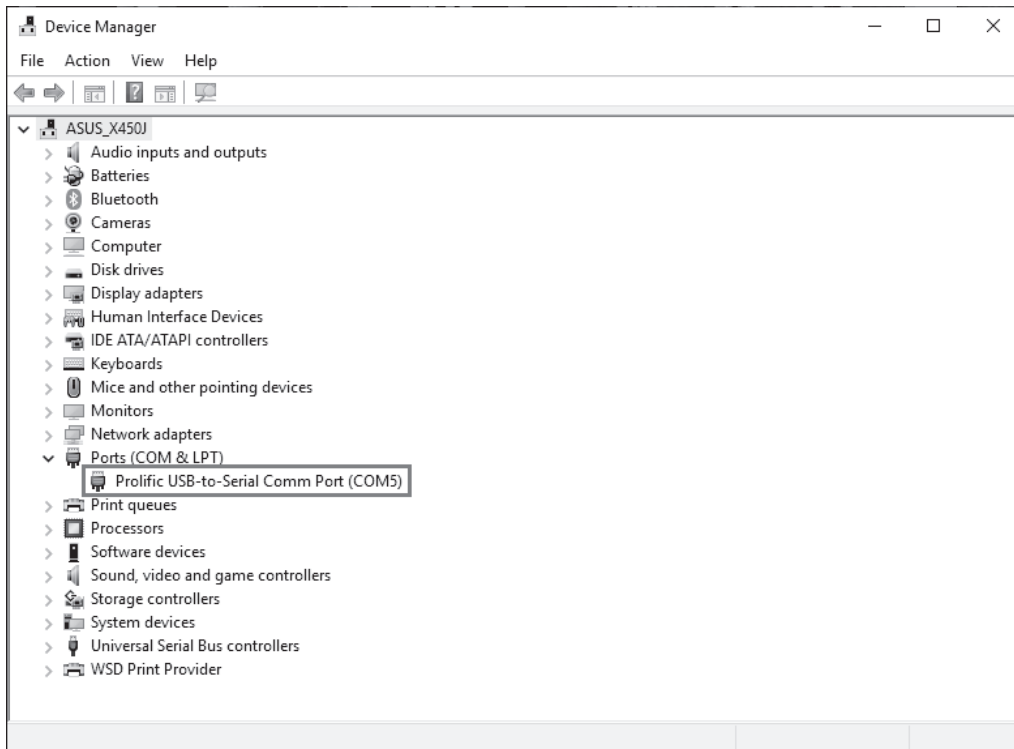
Using free software “PuTTY” Tool to control the device. Operation diagram as below:



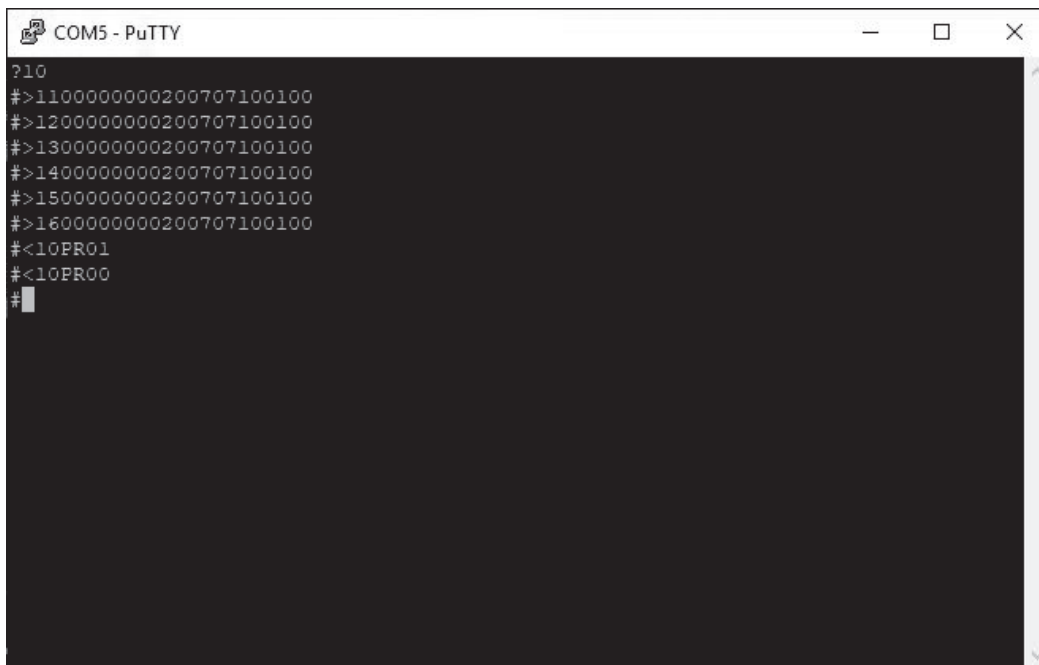
Click Serial, check the COM port and enter the Baud rate 9600.

Click Open.

Note: To find the information for the COM port, please open the device manager of the computer, shown as below:



When the IP address connected, the operation diagram shows as below:



Key in the command code to control RX 1200

RX 1200 RS-232 CONTROL CODES

(Baud Rate: 9600,8,N,1 , DB9 Connector Pin out, Tx, Rx, GND)

'CR':Carriage Return (0x0D)

Not case sensitive

Control Command Structure <xxPPuu'CR'

Reply Control Command Structure >xxPPuu'CR'

xx: Represent control command code

10 :All zones of host computer 1

20 :All zones of host computer 2

30 :All zones of host computer3

11 : Zone1 of host computer 1

12 : Zone2 of host computer 1

13 : Zone3 of host computer 1

.....

PP: Represent Control action code

PR:Power control

PR00:Power off

PR01:Power on

MU:Mute control

MU00:Mute off

MU01:Mute on

DT:Do Not Disturb control

DT00:DT control off

DT01:DT control on

VO:Volume control

VO(00-38):Volume control

TR:Treble control

TR(00-14):Treble control

BS:Bass control

BS(00-14):Bass control

BL:Balance control

BL(00-20):Balance control

CH:Source Channel control

CH(01-06):Source control

Ask command structure(1) ?xx'CR'

xx: Represent control command code

10 :All Zones of host computer 1

20 :All Zones of host computer 2

30 :All Zones of host computer 3

11 :Zone1 of host computer1

12 :Zone2 of host computer1

13 : Zone3 of host computer1

21 : Zone1 of host computer2

22 : Zone2 of host computer2

23 : Zone3 of host computer2

.....

Reply Command: >xxaabbccddeeffgghhijj'CR'

aa:PA Control status

bb:Power Control status ([5]:Backup Zone Power Status (only on zone))

cc:Mute Control status

dd:DT Control status

ee:Volume Control status

ff:Treble Control status

gg:Bass Control status

hh:Balance Control status

ii:Source Control status

jj:The connection status of line control(00:unconnected 01:connected)

Ask command structure (2) ?xxPP'CR'

xx: Control Command Structure

10 :All Zones of host computer 1

20 :All Zones of host computer 2

30 :All Zones of host computer 3

11 : Zone1 of host computer 1

12 : Zone2 of host computer 1

13 : Zone3 of host computer 1

14 : Zone4 of host computer 1

15 : Zone5 of host computer 1

16 : Zone6 of host computer 1

.....

PP: Represent Control action code

PA:PA Control

PR:Power Control

MU:Mute Control

DT:DT Control

VO:Volume Control

TR:Treble Control

BS:Bass Control

BL:Balance Control

CH:Source Control

LS: The connection status of line control

Reply command: >xxPPuu'CR'

Enter1<*****'CR' Change Source 1 display name;*****It must be 8 effective

ASCII code

Enter2<*****'CR' Change Source 2 display name

Enter 3<*****'CR' Change Source 3 display name

Enter 4<*****'CR' Change Source 4 display name

Enter 5<*****'CR' Change Source 5 display name

Enter 6<*****'CR' Change Source 6 display name

Enter M<*****'CR' Change display name of connect control when it starts

Enter <9600'CR' Change RS232 to rate 9600

Enter <19200'CR' Change RS232 to rate 19200

Enter <38400'CR' Change RS232 to rate 38400

Enter <57600'CR' Change RS232 to rate 57600

Enter <115200'CR' Change RS232 to rate 115200

Enter <230400'CR' Change RS232 to rate 230400

When unplugging and re-plugging the AC power cord, the Baud speed rate will return to 9600.

REPRESENT OF CONTROL ACTION CODE

Symbol	Master、 Slave1、 Slave2	Zone	Controlactioncode	ControlRange
<	1、 2、 3	1-6	PR(POWER)	(00-01)
<	1、 2、 3	1-6	MU(MUTE)	(00-01)
<	1、 2、 3	1-6	CH(SOURCE)	(01-06)
<	1、 2、 3	1-6	VO(VOLUME)	(00-38)
<	1、 2、 3	1-6	TR(TREBLE)	(00-14)
<	1、 2、 3	1-6	BS(BASS)	(00-14)
<	1、 2、 3	1-6	BL(BALANCE)	(00-20)

EXAMPLES OF RS-232 COMMAND CODE

AllZoneON	<10PR01	Zone1ON	<11PR01
AllZoneOFF	<10PR00	Salve1/Zone1OFF	<21PR00
AllZoneMuteON	<10MU01	Zone6MuteON	<16MU01
AllZoneMuteOFF	<10MU00	Salve2/Zone5MuteOFF	<35MU00
AllZoneSource01	<10CH01	Zone1Source01	<11CH01
AllZoneSource06	<10CH06	Zone6Source06	<16CH06
AllZoneVolume00	<10VO00	Zone1Volume00	<11VO00
AllZoneVolume38	<10VO38	Zone6Volume38	<16VO38
AllZoneTreble(-7)	<10TR00	Zone1Treble(-7)	<11TR00
AllZoneTreble(0)	<10TR07	Zone1Treble(0)	<11TR07
AllZoneTreble(7)	<10TR14	Zone1Treble(7)	<11TR14
AllZoneBass(-7)	<10BS00	Zone6Bass(-7)	<16BS00
AllZoneBass(0)	<10BS07	Zone6Bass(0)	<16BS07
AllZoneBass(7)	<10BS14	Zone3Bass(7)	<13BS14
AllZoneBalance(atLeftCH)	<10BL00	Zone1Balance(atLeftCH)	<11BL00
AllZoneBalance(atMiddle)	<10BL10	Zone1Balance(atMiddle)	<11BL10
AllZoneBalance(atRightCH)	<10BL20	Zone1Balance(atRightCH)	<11BL20
InquiryMasterAllZoneStatus	?10	InquirySlave1AllZoneStatus	?20

INQUIRY COMMAND STRUCTURE

Symbol	Master、Salve1、Salve2	Zone
?	1、2、3	1-6

InquiryMasterAllZoneStatus	?10
InquirySlave1AllZoneStatus	?20
InquirySlave2AllZoneStatus	?30

REPLY COMMAND

>xxaabbbccddeeffgghhiijj xx:Unit/Zone

>1100000000200707100100 aa:PAINStatus

 bb:PowerStatus

 cc:MuteStatus

 dd:DTStatus

 ee:VolumeStatus

 ff:TrebleStatus

 gg:BassStatus

 hh:BalanceStatus

 ii:SourceStatus

 jj:KeypadConnectionStatus(00:Unconnected,01:Connected)

APP QUICK START

Download the control APP:

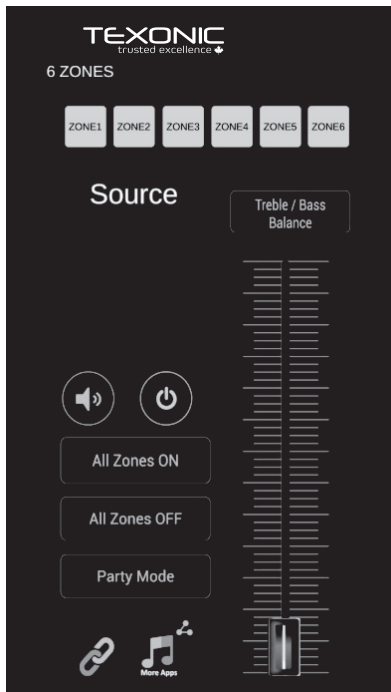
1. The control APP is available for Apple iPhone/iPad and Android smart phone/Pad,



2. Please search “MRX 1200” on Google Play / App Store to download.

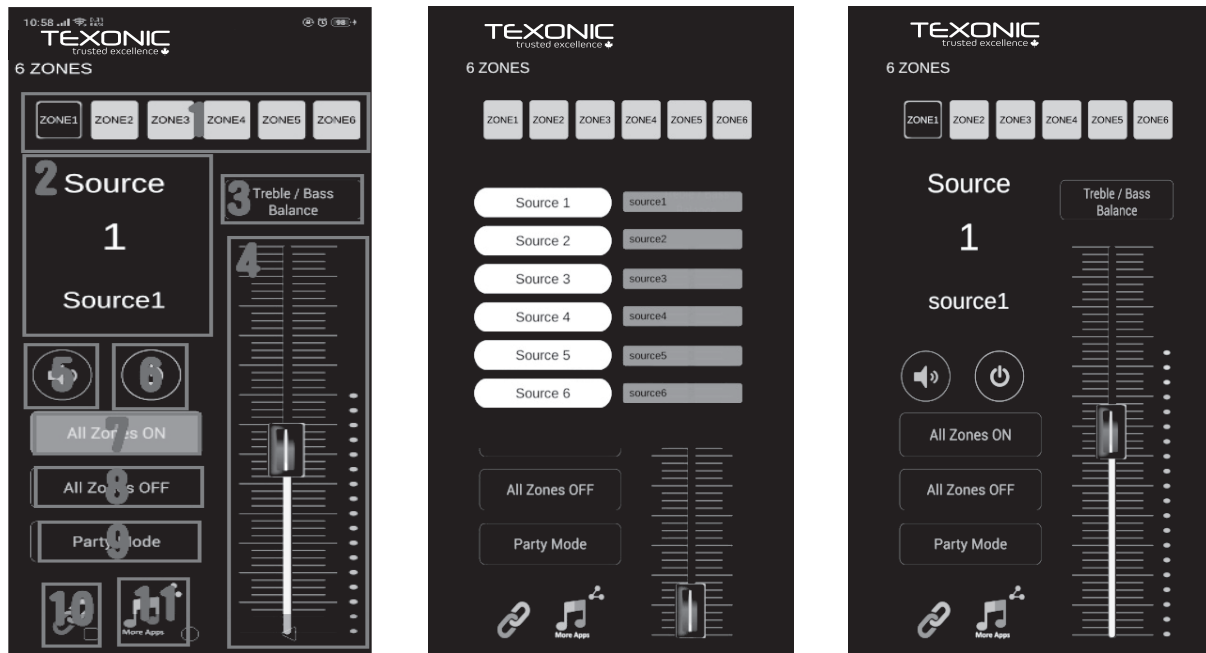


3. Download and install the APP



Note. This APP is applied to TEXONIC controller and Multi-Room amplifiers

APP QUICK START – FUNCTION INSTRUCTION



1. Output Zone Selection

(Press and hold the button to change the zone name)

2. Input Source Selection

Press and select the input source. The name of input source could be changed.

3. Treble/Bass/Balance

4. Volume for individual zone

5. Mute for individual zone

6. Power ON/OFF for individual zone

7. All Zones ON

8. All Zones OFF

9. Party mode

All zones will be synchronize and controlled from the specific zone.

10. Settings and Connection

Please read the instruction in next page for properly connection.

11. Streamer icon

Press this icon to open the streamer APP.

APP QUICK START – SETTINGS AND CONNECTION



1. Mobile phone IP address

When the smart phone or Pad is connected to local network, the IP will automatically show on this area.

2. AUTO

Press AUTO to search the device IP.

3. Device IP address

When the IP is found, the APP will connect to the device automatically.

4. Manually Enter

Manually enter the device IP to connect to the device.

5. MASTER/SLAVE Selection

When the MASTER amplifier connecting with additional SLAVE1/SLAVE2 amplifiers, press one of these buttons to determine which amplifier will be controlled.

6. 6 Zones/4 Zones Selection

Select 6 Zones or 4 Zones for corresponding MASTER/SLAVE1/SLAVE2 amplifier.

Note: MAP-1200PRE is 6 zone controller.