F220 OTT

Android Set-Top Box

User Manual

1. FCC STATEMENT

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

The antenna(s) used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter.

2. Precautions

	Do not disassemble the STB.
	Power off the STB before inserting or removing video/audio cables, or when it is thundering.
	If the STB is not in use for a long period of time, power it off and remove the power plug.
	Do not put liquid containers around the STB. If the STB is wet with liquid, power it off immediately and contact professional maintenance personnel.
	Do not place heavy objects on the STB.
	Keep the STB away from heat sources, moisture, hot and humid places, and the sunlight.
	Keep the STB away from electric appliances with strong magnetic or electric field, such as microwave oven, refrigerator, and mobile phone.
	Remove the power plug before cleaning the STB shell. Do not touch the power cable with wet hands. Do not clean the STB with chemicals containing benzene, alcohol or gasoline.
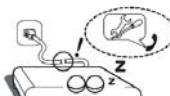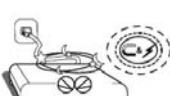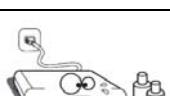
3. List of Articles

Article	Amount
F220 OTT STB	1
Power adapter	1
HDMI cable	1
Coin battery	1
Remote controller	1
User manual	1

▶ Note: This article list is for reference only. If the articles in a packing box are damaged or inconsistent with the list, contact your service supplier, and keep the packing box and the articles in it for exchange.

4. Product Description

4.1 Front Panel
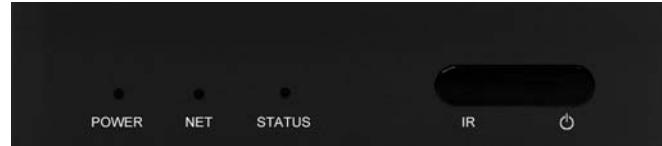
No.	Nam	Description
1	POWER	Power indicator ● Red indicates standby. ● Green indicates working.
2	NET	Network indicator ● Red indicates that Internet is not connected. ● Green indicates that Internet has been connected.
3	STATUS	IR indicator When you press the remote controller, it blinks red every 200~500ms.
4	IR	IR receiving area
5	⏻	Power button After you press it, STB enters sleep or wake-up mode.

4.2 Right-Side Panel

No.	Name	Description
1	IR IN	Interface for IR receiver extension
2	TF Card	TF card port
3	USB	USB ports
4	USB1	

4.3 Rear Panel

No.	Name	Description
1	HDMI	HDMI output
2	SPDIF	Optical audio output
3	LAN	Wired network port
4	YPbPr	Component output
5	AV R/L	Right/left channel output
6	12V DC IN	Power input

4.4 Remote Controller

Power on/off — Mute/restore sound

Arrows Keys

OK

HOME   BACK

MENU   ▶ll — Play/Pause

Turn down the volume —   — Turn up the volume
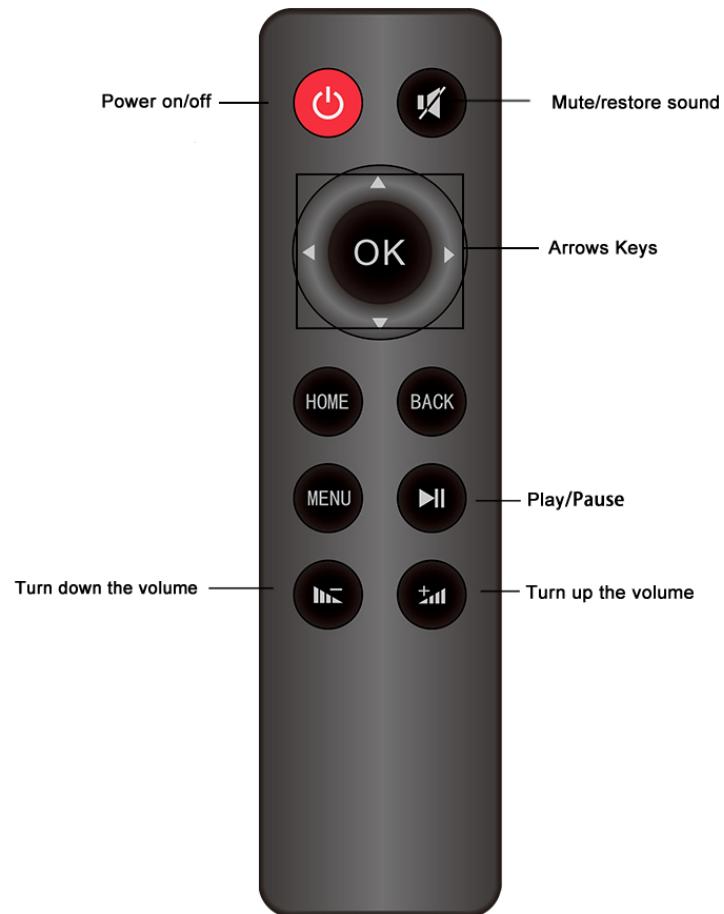
5. Installation and Start-up

5.1 Placing the STB

Place the STB on a stable table.

▶ Note: Do not place anything on the STB. Leave over 10cm space around two sides of the STB for radiating.

5.2 Connecting Cables

Power off all to-be-connected devices (including TV and STB) first.

Step 1	Use the HDMI / MiniCVBS cable to connect the STB HDMI / YPbPr interface to TV.
Step 2	Use the audio/video cable to connect the STB AV interface to TV.
Step 3	Use a network cable to connect the STB LAN interface to the router, or turn on your wireless router.
Step 4	Use the power cable to connect the STB DC IN interface to a household power socket.

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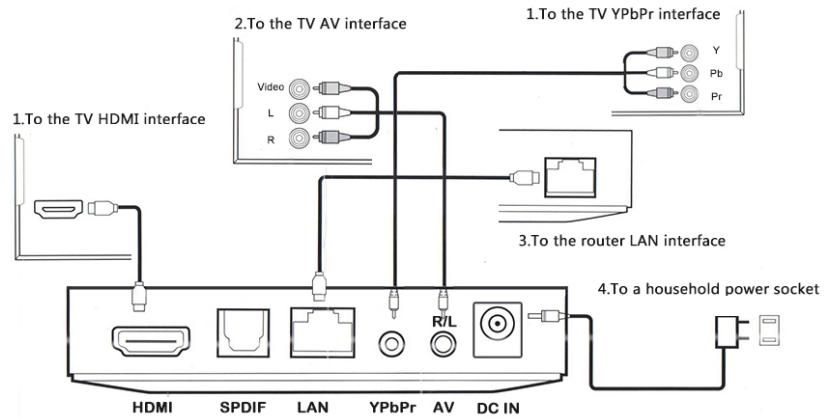
5.3 Starting the STB

Step 1	Verify that all cables are correctly connected.
Step 2	Verify that power supply of all devices is normal.
Step 3	Turn on the TV and STB.

5.4 Automatic Upgrade

After startup, the STB checks whether upgrade is needed. If yes, it is upgraded in the next 3 to 5 minutes. Do not perform any other operations during upgrade.

If the upgrade fails, restart the STB.

5.5 Homepage

Menu	Description
Hotel & Local	Introduces hotel information, hotel services, and local attractions.

Video & Music	Shows video and music apps.
Activate Your iTV	Includes MikroTik radius authentication, EPG user help, account overview, and airplay services.
Sports, News, & TV	Shows sports, news, and TV apps.
Internet & More	Shows browser, social networking sites, world clock, world weather, and miracast.

6. Troubleshooting

Symptom	Possible Cause	Solution
After STB is turned on, power indicator is off.	Power adapter is not connected.	Connect power adapter to STB.
	Power adapter is damaged.	Replace the power adapter.
	Power socket does not supply power.	Ensure that voltage of power socket is normal.
After STB startup, TV does not display any image.	STB is in standby state.	Press power key on controller.
	Video cable is connected improperly.	Refer to "4.2 Connecting Cables" to reconnect cables.
STB cannot connect to the network.	Network cable is connected improperly or broken.	Reconnect or replace network cable.
	Network is unavailable.	Contact network service provider.
	Network configuration is incorrect.	Reconfigure network parameters.
Speaker has no voice.	Audio cable is connected improperly.	Refer to "4.2 Connecting Cables" to reconnect cables.
	Volume of STB or TV is lowest, or in mute state.	Increase volume of STB or TV, or press **MUTE**.
Controller does not work.	Low battery power	Replace the battary.
	STB does not receive commands of controller.	Keep controller within 8m from STB. Aim controller at infrared receiving area of STB, and move away the barriers between STB and controller.
Video sometimes is not smooth.	Weak video signals	Check TV cable connection or strength TV signals.

Symptom	Possible Cause	Solution
	Abnormal carrier network	Contact network carrier.
Audio and video are not synchronous.	Video is transmitted with multiple accompanying sounds.	Adjust sound channel mode.
	Abnormal video source	Change video source.
Other faults	/	Restart STB or email our technical support.

7. Specifications

Item	Specification
CPU	Cortex-A9 @ 1.5GHz dual core
OS	Android 4.2
NAND flash	4G/8G/16G
RAM	1GB DDR3
Power input	12V, 1A
USB port	Two (support wireless mouse and USB optical mouse)
HDMI port	HDMI 1.4
Network	10/100M RJ45, 802.11b/g/n Wi-Fi
RCA output	R/L MIX-MONO, YPbPr, CVBS
Video decoding	MPEG, RMVB, MKV, AVI, MP4, FLV, ect. Support the 1080P 60FPS format at maximum.
Audio decoding	MP3, WMA, OGG, FLAC, WAV, AAC, APE
Image	JPG, BMP, GIF, PNG
Power consumption	Working: < 10W
	Standby: 0.8W
Controller	8m effective operating range within +/- 60°
Environment	Operating temperature: 0 °C to 40 °C
	Operating humidity: 5% to 90% (non-condensing)
	Storage temperature: -20 °C to 70 °C
	Storage humidity: 0 to 98% (non-condensing)
STB	Size (L x W x H): 105 × 100 × 25 mm
	Weight: about 0.11 KG (not including the power adapter)
Package	Size (L x W x H): 195 x 185 x 57 mm
	Weight: about 0.40 KG (not including optional articles)