



Android Player

User Guide

www.ezhometech.com

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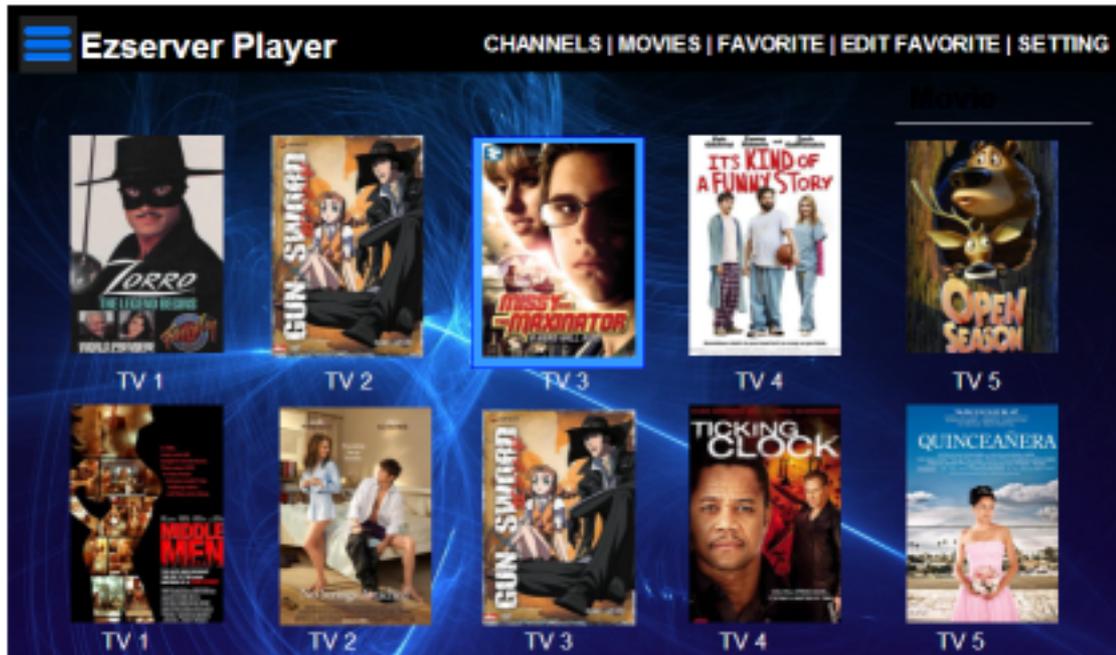
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1. Introduction

Android Player is **streaming player** on Android device with MAC Address protection that can let you watch Live / DVR Channels and Video on Demand from Ezserver.

Features:

- Live Channels
- DVR Channels
- Video on Demand



2. Software Requirement

Items	Version
Ezhomotech Ezserver	3.1
Google Android	Above 4.x

3. Hardware Requirement

Items	Specification
Processor	Above 1.0GHz
Memory	At least 1GB for 200 channels
Network Interface	802.11 a/b/g/n
Disk Space	248K bytes

4. Software Specification

General Function
<ul style="list-style-type: none"> • OS: above Android 4.x
<ul style="list-style-type: none"> • HTTP Streaming Protocol
<ul style="list-style-type: none"> • MAC Address protection
<ul style="list-style-type: none"> • Support Smart TV, IP STB, Tablet PC, Mobile Phone
<ul style="list-style-type: none"> • Support Touch Screen Menu
<ul style="list-style-type: none"> • Support Remote Controller
<ul style="list-style-type: none"> • Support Video Server: EZserver
<ul style="list-style-type: none"> • Automatic App Update
<ul style="list-style-type: none"> • Automatic Start
IPTV/OTT
<ul style="list-style-type: none"> • Video Streaming From Ezserver
<ul style="list-style-type: none"> • Channel Selection
<ul style="list-style-type: none"> • DVR Channels for play, pause, forward/backward seek
<ul style="list-style-type: none"> • Video Format: MPEG2/H264 Transport Stream, Adobe FLV
<ul style="list-style-type: none"> • My Favorite
<ul style="list-style-type: none"> • Time expired checking
<ul style="list-style-type: none"> • Automatic Channel Update
Video On Demand
<ul style="list-style-type: none"> • Video Format : MP4, Adobe FLV
<ul style="list-style-type: none"> • Playback : Pause, Play, Resume, Forward/Backward Seek
<ul style="list-style-type: none"> • Menu Bar for Movie Category
<ul style="list-style-type: none"> • Automatic and Real-Time Movie Category Update
<ul style="list-style-type: none"> • Easy-to-Use Playback Menu
Setting
<ul style="list-style-type: none"> • User Name and Password
<ul style="list-style-type: none"> • Domain Name
<ul style="list-style-type: none"> • Port

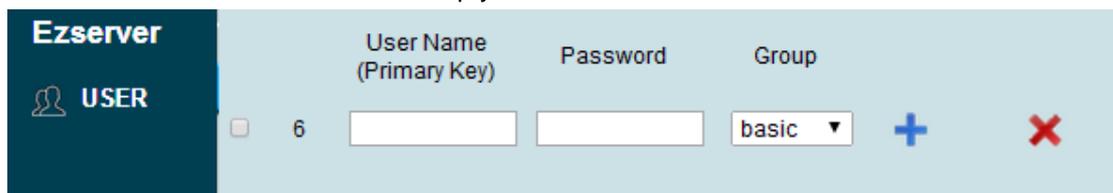
5. Create New User

- Click User button and click + button.



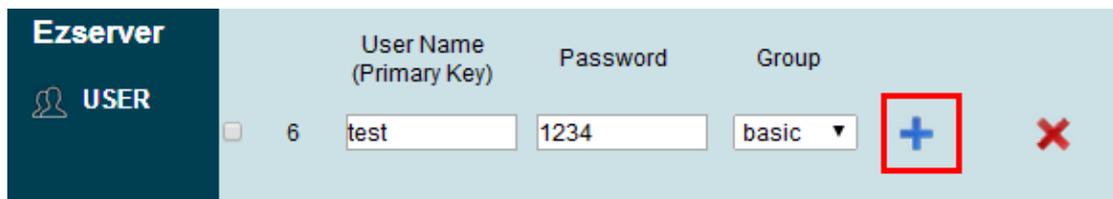
The screenshot shows the 'Ezserver' interface with a dark blue sidebar containing a 'USER' button. The main area has a light blue background with two columns: 'MAC ID' and 'Reseller'. Below these columns is a white input field. To the right of the input field, there is a blue '+' button, a blue save icon, and a red 'X' icon. A red box highlights the '+' button.

- Panel will show the empty user fields



The screenshot shows the 'Ezserver' interface with a dark blue sidebar containing a 'USER' button. The main area has a light blue background with three columns: 'User Name (Primary Key)', 'Password', and 'Group'. Below these columns are three white input fields. The 'Group' field is a dropdown menu with 'basic' selected. To the right of the input fields, there is a blue '+' button and a red 'X' icon. A red box highlights the '+' button.

- Input user id, password and etc., then click + button to save it



The screenshot shows the 'Ezserver' interface with a dark blue sidebar containing a 'USER' button. The main area has a light blue background with three columns: 'User Name (Primary Key)', 'Password', and 'Group'. Below these columns are three white input fields. The 'User Name' field contains the text 'test', and the 'Password' field contains the text '1234'. The 'Group' field is a dropdown menu with 'basic' selected. To the right of the input fields, there is a blue '+' button and a red 'X' icon. A red box highlights the '+' button.

6. User Max. Concurrent Connections

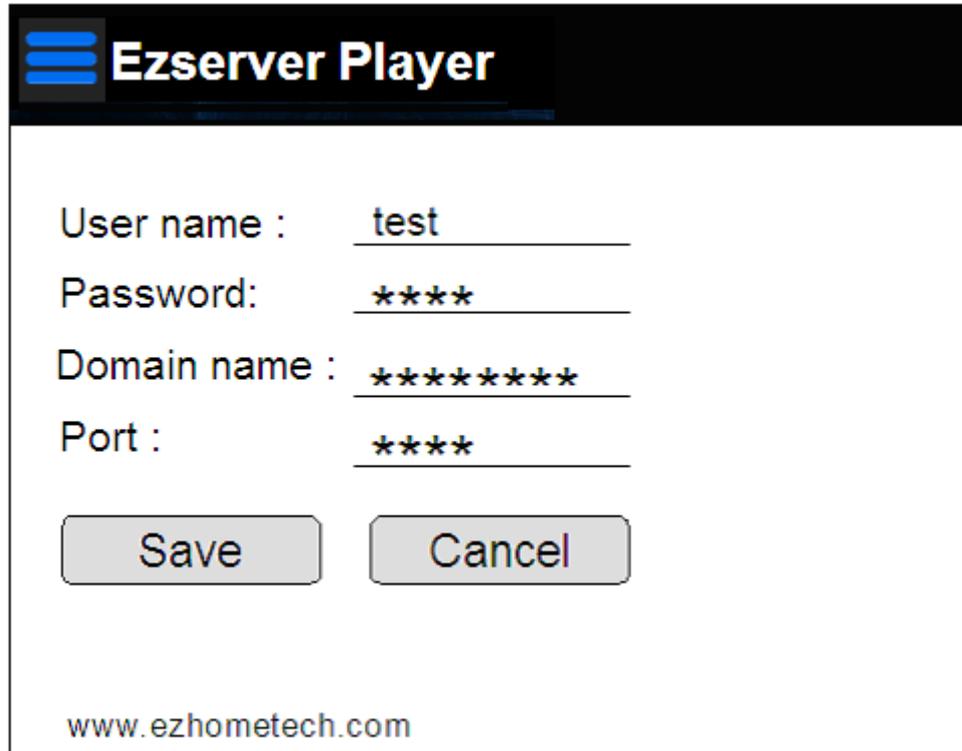
Administrator can click User button and select More icon to set user max. connections as below:



The screenshot shows the 'Ezserver' interface with a dark blue sidebar containing a 'USER' button. The main area has a light blue background with various configuration fields. The fields are: 'User: root', 'IP 2: 192.168.0.1', 'IP 3: 192.168.0.2', 'IP 4: 192.168.0.3', 'IP 5: 192.168.0.4', 'Rating Password: marocco2', 'Level: Administrator', 'Pay Model: free', 'Max. Connections: 1', and 'User Point: 2000.00'. A red box highlights the 'Max. Connections' field.

7. Setting

When you start Android Player first time, you have to input Ezserver Information into the Setting. The Setting includes User name, Password, Domain name and Port No. as below:



Ezserver Player

User name : test

Password: ****

Domain name : ****

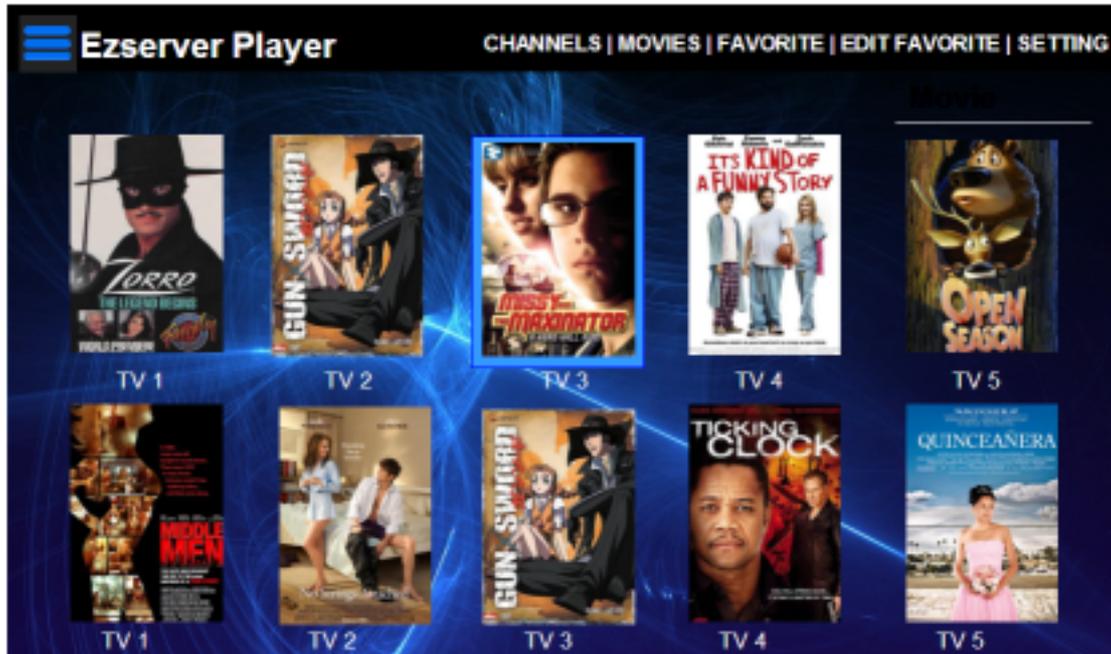
Port : ****

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8. Screenshots

Android Player Menu includes CHANNELS, MOVIES, FAVORITE, EDIT FAVORITE and SETTING on Menu bar.

Main menu



Channel menu



Movie menu



Favorite menu



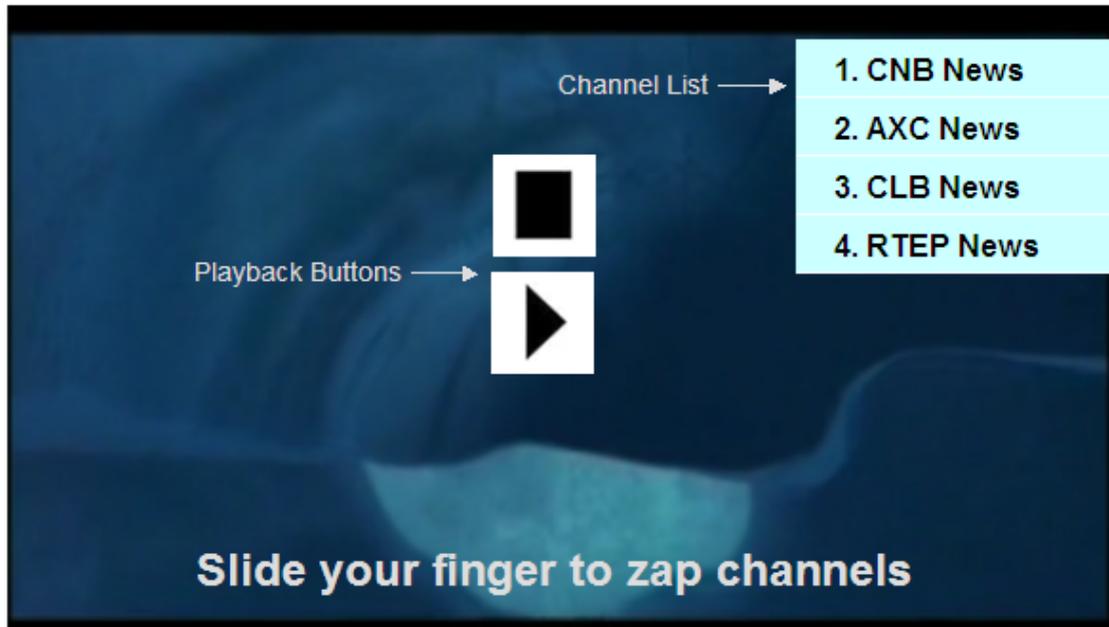
9. Channels

Select CHANNELS in main menu to get all channles with categories as below:



Select one channel icon to watch the channel. You can also click any position of the screen to enable OSD menu for the **channel list** and **playback buttons**.

- For **channel list**, you can slide your finger to select one and click it to watch the selected channel.
- For **playback buttons**,
 - ◆ Click **play button** to disable the OSD menu
 - ◆ Click **stop button** to channel icon menu.
- For **channel zapping**, you can silde your finger from left-to-right or right-to-left to zap a channel.



10. Channel HLS for Android 5.+ devices

Android devices use above version 5.0, Administrator needs to login Ezserver Panel to set channels to HLS type:

- Login Ezserver Panel
- Click Channel Button and Click More icon
- Select option to **Constant Bitrate (internal transcoder)**

Disabled
 AES-128 Encryption (Internal transcoder)
 Constant Bitrate (Internal transcoder)
 Constant Bitrate (External transcoder)
 Adaptive Bitrate (External transcoder)

HTTP Live Streaming :

Mobile Bitrate: kbps
SD Bitrate: kbps
HD Bitrate: kbps
Video Format : ▾
Audio Format : ▾
Encoding Speed : ▾

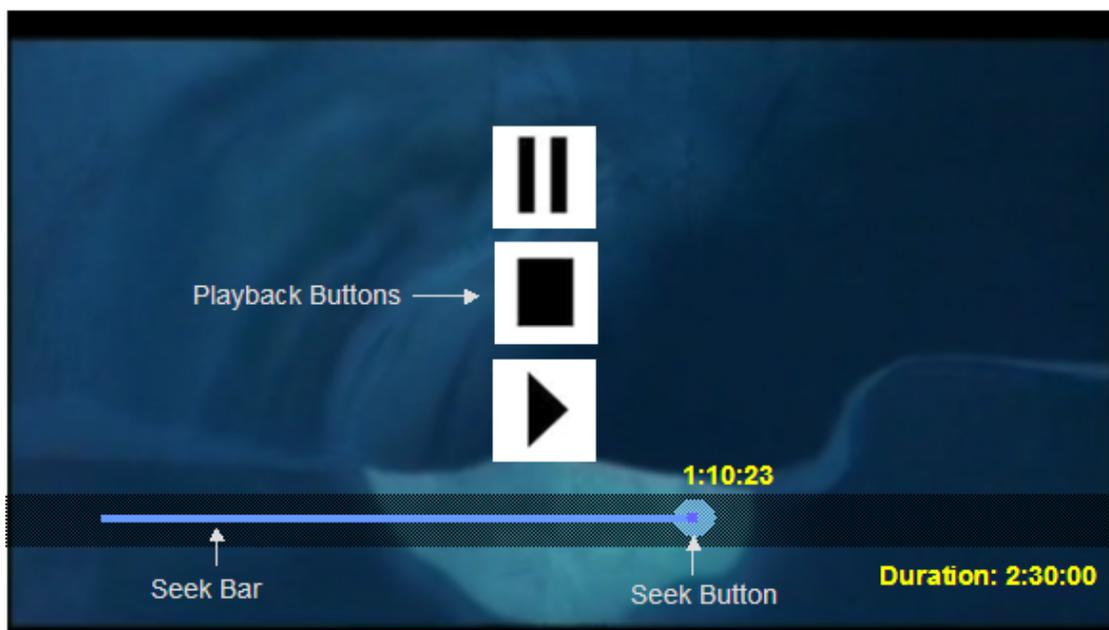
11. Movies

Select MOVIES in main menu to get all movies with categories as below:



Select one movie icon to watch the movie. You can also click any position of the screen to enable OSD menu for the **seek bar** and **playback buttons**.

- For **playback buttons**,
 - ◆ Click **play button** to disable the OSD menu or resume the movie.
 - ◆ Click **stop button** to stop movie or **pause button** to pause movie.
- For **seek bar**, you can click drag the **seek button** to forward/backward movie.

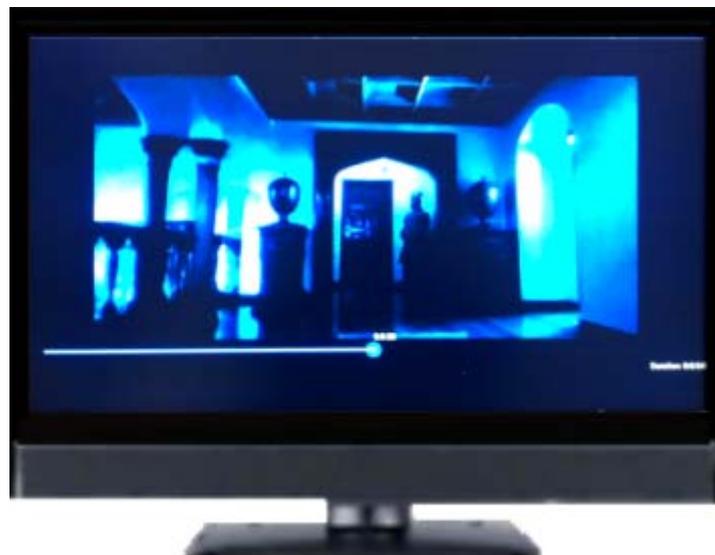


12. Video on Demand for STB with Remote Control

When you select a movie Category on the menu bar, Android Player will show movies in the TV screen and you can watch a movie using a remote control.



When a movie is playing, you can press “OK” button to show the playback menu to pause, resume, even forward seek by “Right-Arrow” button “OK” button, backward seek by “Left-Arrow” button with “OK” button.

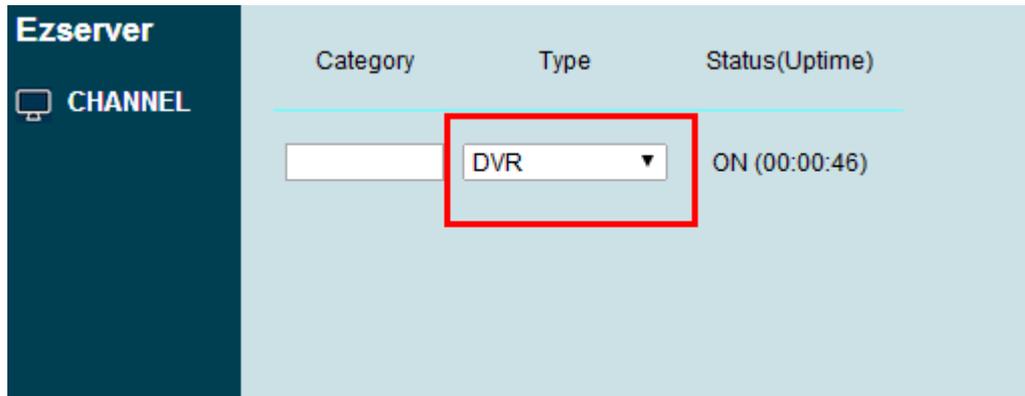


Key Event:

- **“OK” Button:** Pause/Resume, Play for Forward/Backward Seek
- **“Right-Arrow” Button:** Forward Seek
- **“Left-Arrow” Button:** Backward Seek
- **“Back” or “Stop” Button:** Back to VOD Menu

13. Create DVR Channel

Login IPTV panel and click Channel button and set Type to **DVR**, then click Save button.



The screenshot shows the EZserver IPTV panel interface. On the left, there is a dark blue sidebar with the text "EZserver" and a "CHANNEL" button. The main area is light blue and contains a table with three columns: "Category", "Type", and "Status(Uptime)". The "Type" column has a dropdown menu with "DVR" selected, which is highlighted by a red box. The "Status(Uptime)" column shows "ON (00:00:46)".

Category	Type	Status(Uptime)
<input type="text"/>	DVR ▼	ON (00:00:46)

14. DVR Channels for Mobile

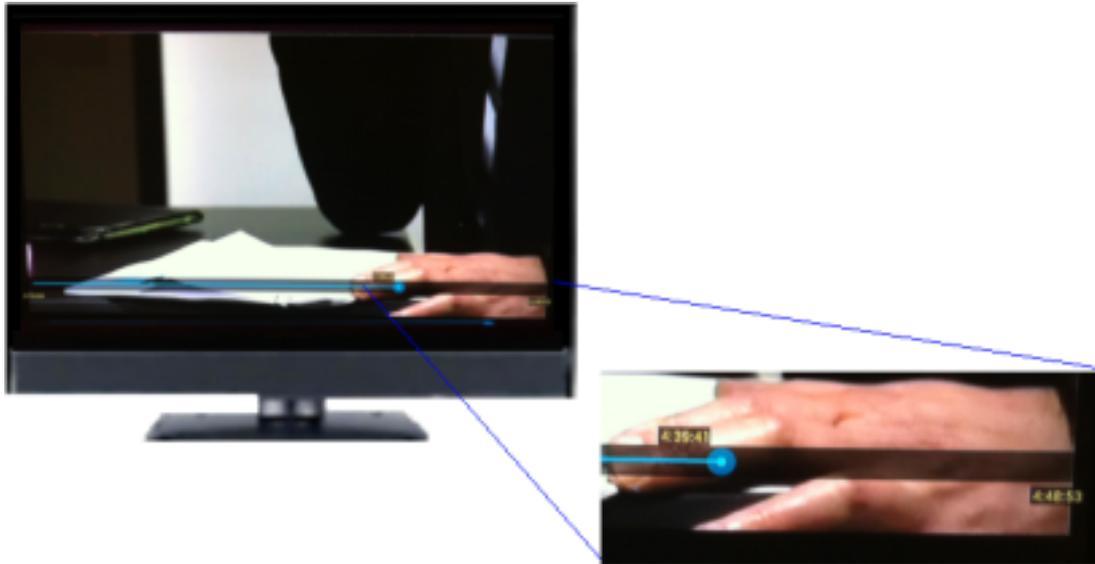
When you click a **dvr channel** icon to watch it, you can click any position of the screen to enable OSD menu for the **channel list**, **seek bar** and **playback buttons**.

- For **channel list**, you can slide your finger to select one and click it to watch the selected channel.
- For **playback buttons**,
 - ◆ Click **play button** to disable the OSD menu
 - ◆ Click **stop button** to channel icon menu.
 - ◆ Click **pause button** to pause the channel.
- For **seek bar**, you can click drag the **seek button** to forward/backward channel.
- For **channel zapping**, you can slide your finger from left-to-right or right-to-left to zap a channel.
- For **ToLive button**, you can watch the live channel back.



15. DVR Channels for STB with Remote Control

Connect Android STB with TV and use backward and forward buttons of a remote control for dvr function.



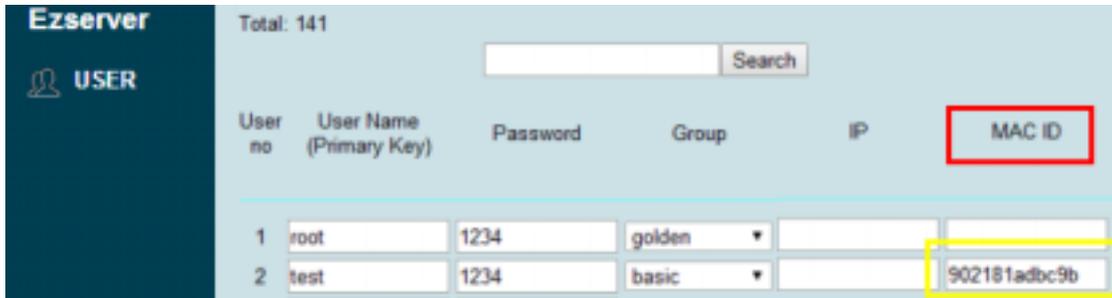
Speical Buttons for DVR:

- Right Arrow Button: Fast Backward
- Left Arrow Button: Fast Forward
- Up Arrow Button: Slow Backward
- Down Arrow Button: Slow Forward

16. MAC Address Protection

Android Player supports MAC Address mechanism with EZserver for Video Streaming Protection.

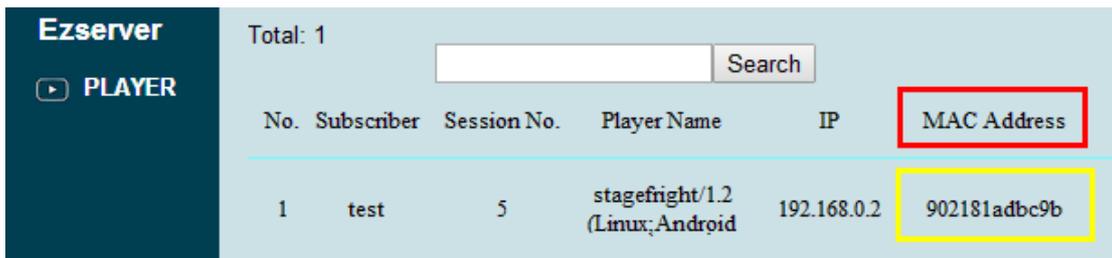
Administrator can define the player MAC address in MAC ID field of each user in User panel.



The screenshot shows the 'EZserver USER' panel. It features a search bar and a table with columns: User no, User Name (Primary Key), Password, Group, IP, and MAC ID. The MAC ID column is highlighted with a red box. Two rows are visible: user 1 (root, 1234, golden) and user 2 (test, 1234, basic). The MAC ID for user 2 is 902181adbc9b, which is highlighted with a yellow box.

User no	User Name (Primary Key)	Password	Group	IP	MAC ID
1	root	1234	golden		
2	test	1234	basic		902181adbc9b

When the player connects EZserver, EZserver will check its MAC Address for the legal connection. If the player has correct MAC Address with its user name, EZserver will show its connection in Player panel with its MAC Address.



The screenshot shows the 'EZserver PLAYER' panel. It features a search bar and a table with columns: No., Subscriber, Session No., Player Name, IP, and MAC Address. The MAC Address column is highlighted with a red box. One row is visible: subscriber 'test' with session number 5, player name 'stagefright/1.2 (Linux;Android)', IP 192.168.0.2, and MAC address 902181adbc9b, which is highlighted with a yellow box.

No.	Subscriber	Session No.	Player Name	IP	MAC Address
1	test	5	stagefright/1.2 (Linux;Android)	192.168.0.2	902181adbc9b

17. App Update

- Upload new apk (**ezserver_player.apk**) into server folder: **ezserver_enterprise/apk/**
- Run App to update it automatically.

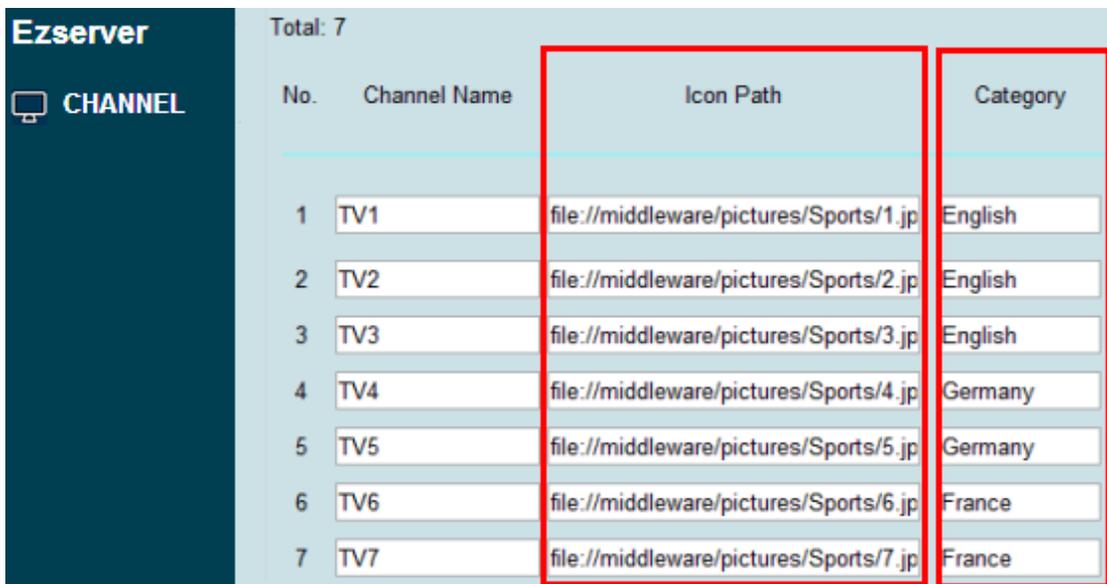
18. DVR Buffer Size

It is the duration for recording live video to do timeshift functions as pause, resume, backward and forward.



19. Channel Icon and Category Customization

Channel icons and categories are defined in the icon path and category field of each channel in the IPTV Panel



The screenshot shows the 'CHANNEL' management page in the Ezserver interface. It displays a table with 7 channels. The 'Icon Path' and 'Category' columns are highlighted with red boxes. The table data is as follows:

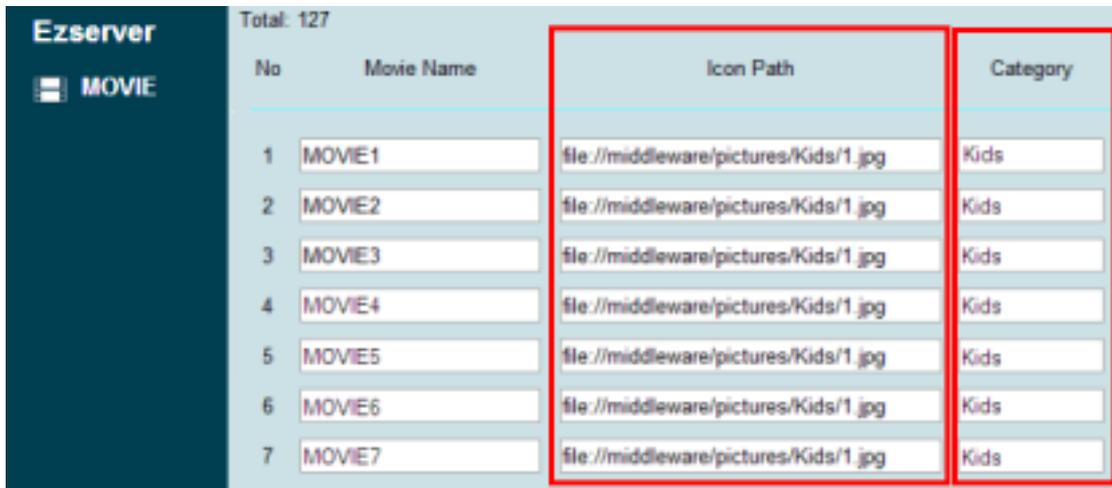
No.	Channel Name	Icon Path	Category
1	TV1	file://middleware/pictures/Sports/1.jp	English
2	TV2	file://middleware/pictures/Sports/2.jp	English
3	TV3	file://middleware/pictures/Sports/3.jp	English
4	TV4	file://middleware/pictures/Sports/4.jp	Germany
5	TV5	file://middleware/pictures/Sports/5.jp	Germany
6	TV6	file://middleware/pictures/Sports/6.jp	France
7	TV7	file://middleware/pictures/Sports/7.jp	France

The icon property is as below:

- Size: 242x350 pixels
- Image format: jpg
- File extension name: .jpg

20. Movie Icon and Category Customization

Movie icons and categories are defined in the icon path and category field of each movie in the IPTV Panel.



The screenshot shows the Ezserver IPTV Panel interface. On the left, there is a dark blue sidebar with the 'Ezserver' logo and a 'MOVIE' menu item. The main area displays a table with the following columns: 'No', 'Movie Name', 'Icon Path', and 'Category'. The table contains 7 rows of data, with the 'Icon Path' and 'Category' columns highlighted by a red border. The total number of items is indicated as 'Total: 127'.

No	Movie Name	Icon Path	Category
1	MOVIE1	file:///middleware/pictures/Kids/1.jpg	Kids
2	MOVIE2	file:///middleware/pictures/Kids/1.jpg	Kids
3	MOVIE3	file:///middleware/pictures/Kids/1.jpg	Kids
4	MOVIE4	file:///middleware/pictures/Kids/1.jpg	Kids
5	MOVIE5	file:///middleware/pictures/Kids/1.jpg	Kids
6	MOVIE6	file:///middleware/pictures/Kids/1.jpg	Kids
7	MOVIE7	file:///middleware/pictures/Kids/1.jpg	Kids

The icon property is as below:

- Size: 242x350 pixels
- Image format: jpg
- File extension name: .jpg