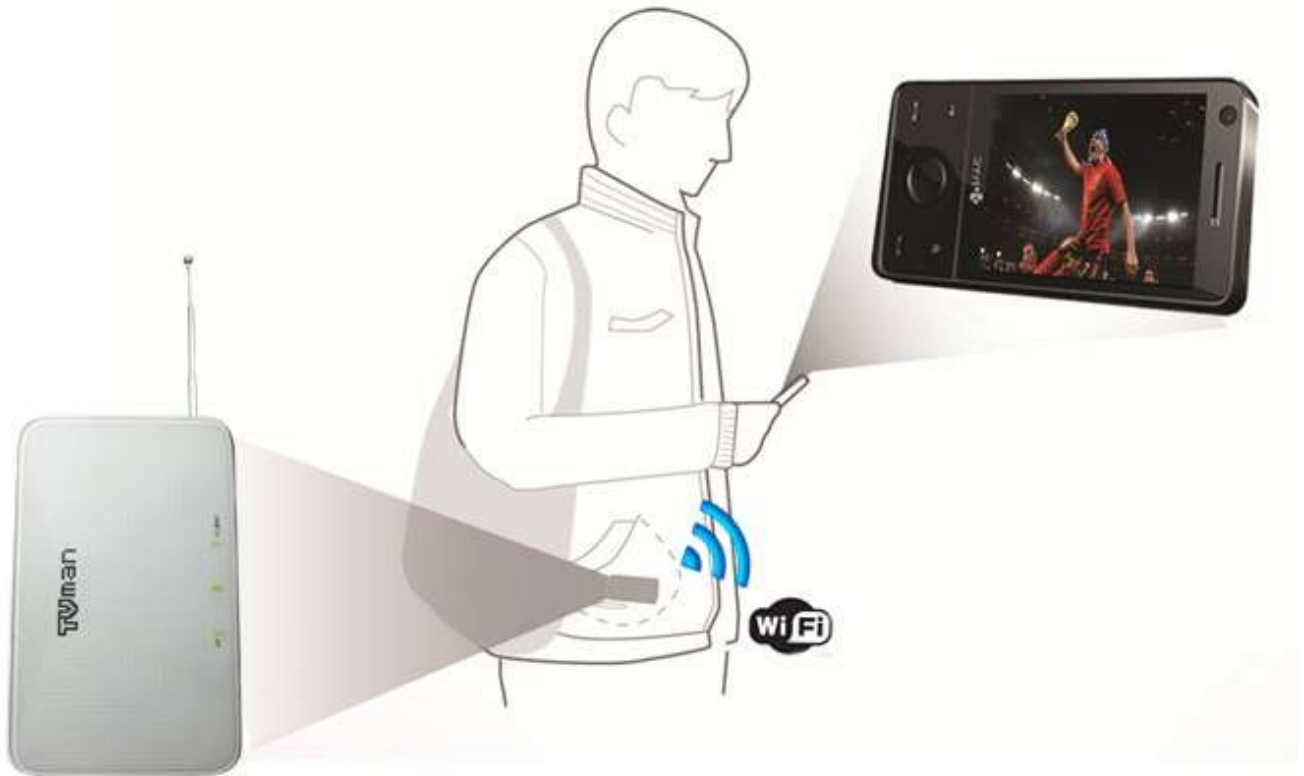


# TVman Mobility

## User Manual V2.0





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## I. About this manual

This manual covers the functions and software instructions of TVman Mobility. Please review this manual before the usage of TVman Mobility. Due to the continued progress in methodology, design and manufacturing of our products, the contents of this document are subject to revision without any prior notice. DediProg assumes no legal responsibility for any error or damage resulting from the use of this document.

## II. Safety warning

Any personnel involved in the use of TVman Mobility must understand and obey the following to keep damage and harm away from product and user:

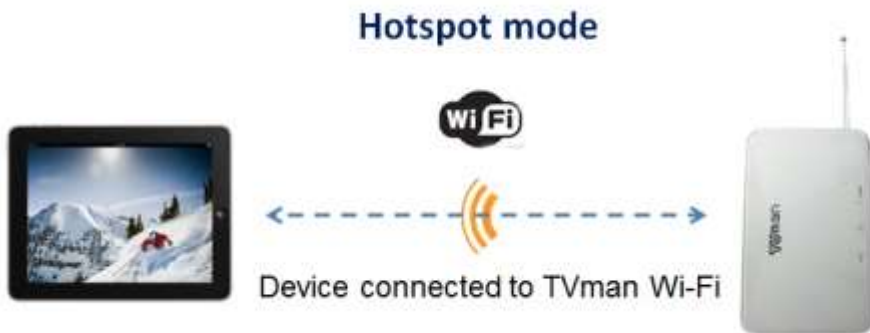
- TVman Mobility must be used exclusively for its application described in this user manual and nothing else.
- Keep the product from external impact.
- Do not dismantle and tamper the product by yourself as it may cause electrical shock.
- Keep the product and accessories such as charger, cable, antenna, etc. away from heating sources. Failure to obey may cause serious injury or death.
- The operating temperature of this product should be between 0°C - 40°C.
- The operating humidity of this product should be between 0% - 40%.
- Only use the provided cable, power supplier, batteries or others accessories.
- Keep the product out of the reach of children, infants, and pets.
- Do not apply strong force to the antenna. This may degrade the reception quality
- This product will generate electromagnetic field that may damage equipments such as portable computer, disk drive, magnetic card, etc. that could be affected by electromagnetic fields emitted from device. Please do not place such predisposed equipments direct on top of the product.
- This product will emit electromagnetic field that may be hazardous to the health of any person who is wearing a pacemaker. A distance of at least 20cm is recommended to be maintained between the antenna and your pacemaker.

### III. Product overview

TVman Mobility is a Portable wireless DVB-T antenna streaming local Digital TV to your Mobile devices through WiFi on the go or at home. Over the Air TV is now available from your smart Phone, tablet or computer by a simple click from anywhere.

#### A. Hotspot mode

In **Hotspot mode**, TVman Mobility creates it is own Wi-Fi network to stream the Live TV directly to your smart device.



#### Advantages of working in Hotspot mode: Personal usage

Hotspot mode is designed for a personal usage or when no Wi-Fi router is available at home or when you are watching DTV outdoor.

#### B. WLAN mode

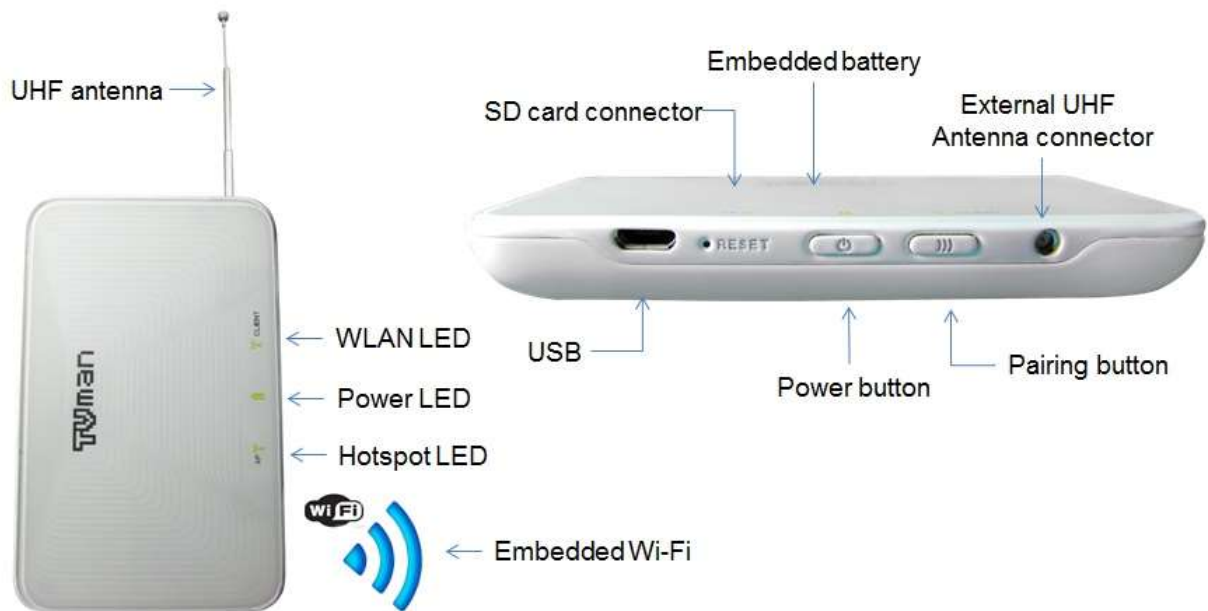
In **WLAN mode**, TVman Mobility is connected to your home router and makes the free to air TV program available from any smart devices connected on the wireless LAN. This mode offers the best flexibility to watch TV from anywhere at home and from different smart devices.



### Advantages of working in WLAN: Family usage

- Router offers a best Wi-Fi coverage of your home so you can watch the TV on your tablet from different room. We recommend using WiFi routers supporting dual band (2.4GHz/5GHz) with 3T3R antenna and connect your smart device through 5GHz Wi-Fi.
- Any smart device connected to your home Wireless network can access the Live TV in a single click in our application (one at a time) and keep internet connection.
- Recorded file are shared in your network to be played from any smart devices connected.

## IV. Product hardware description



Part ID	Description	
Power button	Power on/off	Power on: Press button for 2 seconds.
		Power off: Press button for 2 seconds.
Micro USB	Power input of TVman: supply TVman and charge battery. Input: 5V / 0.5A min	
UHF antenna	Deploy the UHF antenna to receive the over the air DTV	
External RFF antenna connector	Connect an external terrestrial antenna to improve the reception performances.	
Pairing button	Short press in WLAN mode: start Easy pairing with router (WPS)	
	Long press: Change mode from WLAN to Hotspot or Hotspot to WLAN	
Reset	Long Press: restore factory setting	
SD card connector	SD card should be inserted to record the live program	

LED	Behavior description
WLAN LED (Orange)	TVman is connected to your wireless router and transfer the DTV to your Home WLAN. Connect your mobile device to your WLAN and open the player.
	LED solid: TVman is connected to router and available
	LED Slow Flashing: TVman is busy transferring DTV to a smart device in the WLAN. Not available.
	LED Fast Flashing: easy pairing on going (WPS)
Hotspot LED (Blue)	TVman WiFi is available in Hotspot mode. Smart device can be directly connected to TVman Wi-Fi network.
	LED Solid: No Wi-Fi communication on going. TVman is available.
	LED Slow Flashing: Wi-Fi communication with smart device
Power LED	<b>Green:</b> USB powered or battery charging completed
	Solid <b>Red:</b> battery is charging
	Slow Flashing <b>Red:</b> battery low charge
	Fast Flashing <b>Red:</b> Problem
WLAN and Hotpot	Both LED flashing: FW upgrade ongoing
All LED	All LED flashing: boot on going

## V. Installation Guide

### A. TV Antenna:

- **UHF Rod antenna:**

Before using TVman, make sure to deploy the UHF rod antenna vertically. Some countries may have a better reception in horizontal position. If your local TV is broadcasted on the high frequencies (check during the scan), you can decrease a little the length of the rod antenna to improve the reception sensitivity.

- **UHF external Connector:**

If the rod antenna reception is weak, it is possible to connect an external antenna to improve the reception. It could be your home roof antenna or indoor UHF antenna. In that case, TVman will be connected to the external antenna instead of the rod antenna. Use TVman PAL adaptor.

- **Tips to improve the DTV reception:**

- **Get the right direction:** Inform you about the location of the DTV broadcast antenna in your area to position your antenna on this direction. Check the neighbor roof antenna direction. If possible, move TVman in a room which faces this direction.
  - Place TVman close to the window where the DTV signal is usually stronger
- TVman is a wireless antenna and can be place in any room with the best reception while watching the TV in another room. Fine tuning can be performed later when watching the channels.



## B. Power supply

- **Permanent power:**

TVman Mobility can be connected to USB power source (5V/0.5A) for a permanent use. You can use your computer USB connector or Phone charger.

- **Battery:**

Open TVman and insert the battery so it can be charged via the USB power source. Battery will offer the flexibility to take TVman away and enjoy your favorite program from anywhere.

- **USB power bank for your mobile phone:**

Connect your mobile phone to TVman by using the USB cable provided and the adaptor. The maximum current is fixed to 1A.

## C. Micro SD card

A Micro SD card should be inserted below the battery of TVman to schedule and share some recording. The SD card should have been formatted in FAT32 or NTFS format. We recommend NTFS format to record long program of more than 1 hour.



## D. Player software

### 1. Apple devices

Download and install “TVman DVB” from AppsStore on your iPhone or iPad.

### 2. Android devices

Download and install “TVman DVB-T” from Google Play on your smart device.

### 3. Window PC (XP, Vista, W7, W8)

Download Window PC application player from our website.

## VI. Start Guide

### E. Hotspot mode

In hotspot mode, TVman create its own WiFi. You need to connect your mobile device directly to TVman WiFi.

1. Power up TVman by pressing power button for 2 seconds.
2. Open the Wi-Fi setting of your smart device to connect it to TVman Wi-Fi network (TVmanxxxx)
3. Open the TVman application on your smart device and wait until connection with TVman is successful.
4. At first connection, Frequency scanning is required to display the local broadcasted channel list.
5. Select the channel you want to watch

### F. WLAN mode

If you want to stream the DTV to your home WLAN, you must first connect TVman to you router through WiFi.

- Method 1:** if your wireless router supports WPS function, perform a short press on the TVman Pairing button and on the router WPS button. Both devices will communicate for few seconds to exchange the SSID and Password and connect to each other.
- Method 2:** connect your Mobile device to TVman in HOTSPOT mode (as described above) and open the player. Once the player is connected to TVman, Click the setting to enter your home wireless LAN SSID and password. This information will be sent and stored in TVman memory for automatic connection during the following boot. Power OFF and power ON TVman.





1. After boot, TVman will connect automatically to your router and will stream the DTV to your WLAN. TVman own WiFi will be turn off and cannot be find any more from your Phone.
2. Connect your Mobile device to your router WLAN.
3. Open TVman application (TVman player will find TVman through the WLAN network)
4. Scan frequencies at the first time.
5. Select a channel to watch.

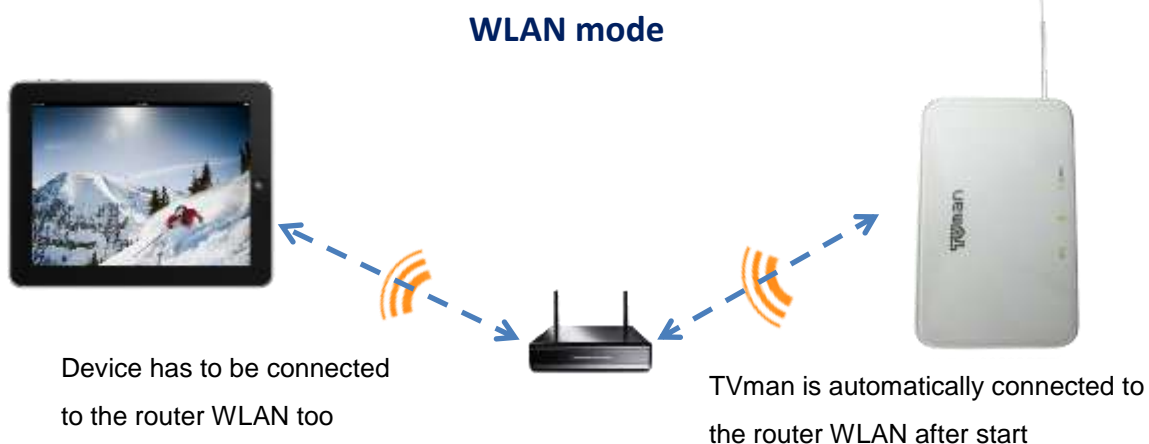
**Important 1:** From that point, TVman will always try to connect on your WLAN after boot. If the wireless LAN is not available, it will switch automatically to hotspot mode.

**Important 2:** When TVman is in WLAN mode, no “TVman Wi-Fi” (TVmanxxx) will be detected by your smart device. You have to connect your smart device Wi-Fi to your home wireless LAN and open TVman application. The Player will detect and communicate with TVman through the router.

**Cannot connect directly to TVman while in WLAN mode:**



**Need to connect the Mobile device to the router while TVman is in WLAN mode.**





## VII. Troubleshooting

### 1) My player display “connection failed”:

- a. Check TVman LED to know its working mode and connect your Mobile device accordingly:
  - If TVman LED is Blue (Hotspot mode): Connect your device WiFi to “TVman Wi-Fi” (TVmanxxx).
  - If TVman LED is Orange (WLAN mode): Connect your device WiFi to your router WLAN. Open the application again.
- b. **Hotspot mode:** Check if your Mobile device is not too far from TVman
- c. **WLAN mode:** Check if your Mobile device and TVman are not too far from your router. Both are communicating through the router and must be close enough from this last one for a good communication.

### 2) My player display “TVman is occupied”:

TVman cannot simultaneously stream DTV to more than one device.

If the orange or Blue LED is flashing, TVman is in communication with another smart device.

### 3) Why TVman is in Hotspot mode (blue LED) while I expect it to be in WLAN mode (Orange LED)?

- a. TVman may have failed to detect your router during the boot and has switched automatically to hotspot mode (Blue LED ON). Try to move TVman closer from your router.
- b. TVman may have failed to connect to your router due to a configuration problem.
  - Try to turn OFF and ON TVman, for new WLAN connection trials.
  - If it still fails, try again to pair TVman with your router using methods described in chapter H. Use WPS button or enter router SSID/Password in Hotspot mode.

### 4) Why TVman is in WLAN mode (Orange LED) while I expect it to be in Hotspot mode (blue LED)?

Once you have paired TVman to the router either with WPS button or by entering the SSID/Password then TVman will always attempt to connect by default to your WLAN router at the boot. If it cannot find the WLAN, it will switch to Hotspot mode.

### 5) How do I force TVman to work in Hotspot mode (Blue LED) while in WLAN mode (Orange LED)?

- a. You can force TVman to switch from WLAN mode to Hotspot mode by a long press on the pairing button.
- b. If you move TVman away from your router WLAN, it will lose the connection and switch to Hotspot mode to create its own WiFi.
- c. You can delete the SSID/Password from TVman and come back to the factory setting by a long press on the reset button. Your router will become unknown for TVman so it will always boot up in Hotspot mode.



**6) I cannot find TVman Wi-Fi (TVmanxx) from my smart device**

- a. Check if TVman is well powered and turn ON. If the Power LED is RED flashing quickly is that your battery is in low charge. Connect to USB source to charge.
- b. Check if TVman is in WLAN mode (Orange LED). If the LED is Orange, it is possible that TVman has detected a known WLAN network at the boot and connected to it. In WLAN mode, TVman will not generate its own TVman Wi-Fi (TVmanxxx). Long press on the pairing button to switch from WLAN mode to Hotspot mode.

**7) Weak TV signal: TV bar graph on player indicated low signal**

After scan, you do not have all the channels listed, some have no name or video results in poor quality. The DTV signal might be weak at your location.

- a. Terrestrial Roof antenna often offers the best reception.
- b. If roof antenna is not available, try first to move TVman antenna outside (open your window) to perform a successful scan and test the antenna direction to obtain the best reception. You can also observe neighbored roof antenna to check the direction.
- c. Move your TVman and antenna to a room facing the local TV broadcast.
- d. Move the TVman antenna close to a window where the signal is usually stronger.
- e. If your window is equipped with UV filter, use high performance antenna or place your antenna outside on the balcony.
- f. Rotate the antenna to face the local broadcast until you can obtain the best video.

**8) Weak Wi-Fi: TV bar graph on player indicated Good TV signal reception but video is not smooth**

**a. Hotspot Mode: Wi-Fi signal quality depends on:**

1. Distance between TVman and your phone: test closer
2. TVman environment: Move TVman away from any metal or electrical equipment generating electromagnetic field.
3. Wi-Fi noise: Wi-Fi communication can be disrupted by different sources of RF signal at home (other Wi-Fi routers, Micro-wave, Wireless Phone etc..).
  - Download “Wi-Fi analyzer” apps and scan the local Wi-Fi network to identify which channels are already used.
  - Enter the TVman setting in the player and change the Wi-Fi channel of TVman to select unused one.

**b. WLAN Mode: Wi-Fi signal quality depends on:**

1. Distance between TVman and the router: Test closer
2. Distance between your phone and the router: test closer
3. TVman and router environment: Move TVman and router away from any metal or electrical equipment generating electromagnetic field.

4. Wi-Fi noise: Wi-Fi communication can be disrupted by different sources of RF signal at home (other Wi-Fi routers, Micro-wave, Wireless Phone etc..).
  - Download “Wi-Fi analyzer” apps and scan the local Wi-Fi network to identify which channels are already used.
  - Enter the router setting (refer to router manual) and change the Wi-Fi channel to select unused one.
  - 2.4GHz WiFi can have more source of disturbance compare to WiFi 5Ghz. If your router support dual band (2.4GHZ/5GHZ) connect your phone to your router by 5GHz Wi-Fi to have a better immunity to noise and better coverage.
  - We suggest using Router supporting IEEE 802.11n or 11AC minimum, Dual band (2.4GHz/5GHz) and 2 or 3 antenna (2T2R or 3T3R) for the best performances and home coverage with Live TV.

#### **9) My video is not smooth while my TV signal and Wi-Fi communication are good**

The problem can be due to a video decoding limitation of your smart Device:

- a. Your smart Device CPU is not power full enough: 1GHz CPU minimum is required for DVB-T SD MPEG2 video. Try with your computer to confirm.
- b. The Video definition of the broadcast is too high to be decoded on your device: TVman Player can decode MPEG2 and MPEG4 (H264) video format but the limitation can be caused by the video compression quality of the broadcast and your smart device CPU performance. Contact us to collect more information about your video broadcast.

#### **10) Can TVman support HD broadcast?**

Yes, TVman is HD ready and can transfer HD video (15Mbs max) to Smart devices and computer. The decoding limitation of HD video is due to Smart device CPU performance and not from TVman.

- Smart Phone and tablet CPU can decode SD video (HD not supported on current devices).
- Computer and MAC CPU can decode SD & HD video

#### **11) Can TVman Player decode H264 format?**

Yes, TVman player can decode MPEG2, MPEG4 and H264 format.

#### **12) What is the video format of TVman recording?**

TVman do not change the video format of the broadcast before transferring to WiFi or recording. The video format will therefore depend on your local broadcast.



**13) Can I schedule a recording to happen when I will not be at home?**

Yes, after the recording schedule has been defined by end user, TVman is totally independent from your smart device. It will check the date, time and switch to the corresponding channel to start the recording while you are not at home.

**14) What are the advantages to record on TVman memory and not on Smart device memory?**

- Smart device memory is limited and costly. DVB-T recording is using lot of space (1hour>1GB)
- TVman is totally independent from your Smart device to schedule a recording when you are not at home.
- TVman can share the recorded file in your home network
- The recording quality will not be dependent of your Wi-Fi environment.

**15) Can I play the Video recorded by TVman with another player?**

Yes, the format of the video recorded by TVman stays the same as the local broadcasts which are usually standard format and can be played with multimedia player like VLC.

**16) Can I play a recorded file from another Smart device?**

Yes, the recorded file is stored in TVman and can be played by any smart devices connected. For example: HD recording can be scheduled from your phone and watch later from your PC.

**17) Can I still access internet while watching Live TV from TVman.**

- Hotspot mode:** When connecting your mobile device to TVman WiFi in hotspot, it will not be connected to your home WLAN anymore. Internet access will only be possible if you have a 3G/LTE data plan.
- WLAN mode:** Use TVman in WLAN mode so your mobile device will be connected to your home WLAN with access to TVman Live TV and Internet through your router.

**18) Can I still receive phone call while watching TV on TVman?**

Yes.



## VIII. Revision history

Date	Version	Changes
10 August 2012	V1.0	First release
03 December 2013	V1.1	Add troubleshooting description
22 October 2013	V2.0	Add troubleshooting helps

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