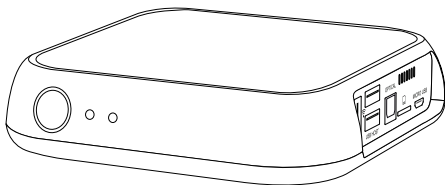


Quick Start Guide

TizzBird® Hybrid PVR
S20 Series



TizzBird®

Please read carefully this Quick Start Guide before use.
Please visit <http://www.tizzbird.com> for downloading full-version of User's Guide.

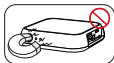
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01 / Safety Notice



Do not try to disassemble the unit. It may cause malfunction or fire.



Keep away the unit from magnetized devices. It may erase the data stored in the connected HDD drive.



Do not place the unit in places that are exposed to oil, water, dust, humidity, rain or wind.



Keep away the unit from overheated areas, such as heaters. Place it well ventilated location. Ensure that a free airflow is maintained around the unit.



Do not drop or shock the unit from heights. Doing so may cause serious damage to the parts inside.



Do not touch the power plug with wet hands or use defective power cables and electric outlets. It may cause electric shocks or fire.

Please install the unit nearby the socket outlet and easily accessible place. Unplug the power cable when the device is not used for a long time.

02 / Features



TizzBird receives and playbacks the terrestrial digital TV at your country. It also supports recording of digital TV program directly or thru EPG. You will not miss any of your favorite programs.



TizzBird provides a full web-browsing capability very similar like PC. Mouse and keyboard can be attached to support various inputs, which enable slick Internet surfing even on the big screen TV.



TizzBird runs applications on TV exact same APPs installed on the Android Smartphone without any conversion. This also includes 3D games or 3D APPs that utilize the superb OPEN-GL 3D accelerator. Some APPs that fixed screen-aspect ratio cannot be applicable in some cases.



TizzBird playbacks various full HD movie contents including HDMV and DVD backup formats as well as AVI, MKV, XVID and TS formats on TV. It supports most recent video formats such as H264 and VC-1. It also supports 3D side-by-side and top & bottom format.



TizzBird playbacks high resolution photo images on TV. It can slideshow the photos while playing back the music in background. Transition effects such as fade-in-out or zooming can be applied during transition of each photo.



TizzBird playbacks high quality lossless music such as FLAC, WAV up to 24bit/96Khz. It also supports compressed MP3, OGG, AAC and CUE.



TizzBird supports Ethernet and optional Wi-Fi 802.11n which enables fastest networking ever before. TizzBird supports NFS, SAMBA, uPnP network protocols to connect various servers.

03 / Specifications

S20T

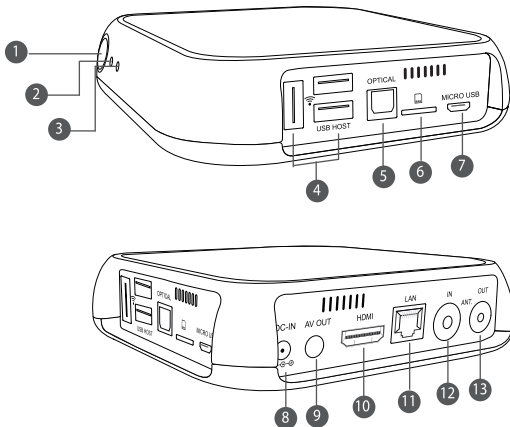
System	1GHz Dualcore CortexA9 / 1GB RAM / 4GB T-flash 4,000+ DMIPS computing power Android 4.2 (Jelly-Bean) operating system 802.11n Wi-Fi for 2.4G / DVB-T on-board tuner
Input & Output	1x Power Button / F connector input & pass-thru output HDMI 1.4 / 1x Optical Digital Audio Output One CVBS + analog stereo audio output port 3.5mm pi headphone-jack 10/100 Ethernet / 2x USB 2.0 Host 1x micro-USB port for downloading FW & debugging
Features (PVR)	High performance HD / H264 reception / recording Decoding / viewing / recording of digital terrestrial television Digital TV Time-shifting / Supports all formats of DVB-T and AS4933. Supports 7 days EPG / Direct recording to NTFS file system
Features (Tizzbird)	Automatic upgrade of system firmware & applications. (OTA) AirLink features -Share contents of iPhone, Android phone and tablet on TV - Share contents of PC/ NAS on TV Playback movie files -AVI, MPEG1/2/4 (Xvid), .VOB, .DAT, .WMV, .TP, .FLV MKV with H264/VC1/WMV9 / Full HD – up to 1920x1080p resolution 3D BD thru HDMI 1.4 & MVC Playback Music files -MP3, .OGG, .WMA, .AAC, .WAV (PCM), FLAC, APE Show Image files -JPG, JPEG, GIF, PNG, BMP Slideshow while background music playing Text Subtitle support -SMI, .SUB, .SRT, .SSA, .ASS, .UTF, .LRC Language -International Languages
File System	NTFS/ FAT32
LAN Connectivity	NFS/ Samba/ DLNA (uPnP) network protocols
Dimension/Weight	115(W) x 27(H) x 115(D) mm / 230g
Bundles	+5V \Rightarrow 2A DC adapter / IR remote & AV cable

03 / Specifications

S20A

System	1GHz Dualcore CortexA9 / 1GB RAM/ 4GB T-flash 4,000+ DMIPS computing power Android 4.2 (Jelly-Bean) operating system 802.11n Wi-Fi for 2.4G / ATSC on-board tuner
Input & Output	1x Power Button / F connector input & pass-thru output HDMI 1.4 / 1x Optical Digital Audio Output One CVBS + analog stereo audio output port 3.5mm pi headphone-jack 10/100 Ethernet / 2x USB 2.0 Host 1x micro-USB port for downloading FW & debugging
Features (PVR)	High performance HD/ H264 reception/ recording Decoding / viewing / recording of digital terrestrial television Digital TV Time-shifting / Supports all 18 formats of ATSC. Direct recording to NTFS file system.
Features (Tizzbird)	Automatic upgrade of system firmware & applications. (OTA) AirLink features -Share contents of iPhone, Android phone and tablet on TV - Share contents of PC/ NAS on TV Playback movie files -AVI, MPEG1/2/4 (Xvid), .VOB, .DAT, .WMV, .TP, .FLV MKV with H264/VC1/ WMV9 / Full HD – up to 1920x1080p resolution 3D BD thru HDMI 1.4 & MVC Playback Music files - .MP3, .OGG, .WMA, .AAC, .WAV (PCM), FLAC, APE Show Image files -JPG, JPEG, GIF, PNG, BMP Slideshow while background music playing Text Subtitle support -SMI, .SUB, .SRT, .SSA, .ASS, .UTF, .LRC Language -International Languages
File System	NTFS/ FAT32
LAN Connectivity	NFS/ Samba/ DLNA (uPnP) network protocols
Dimension/Weight	115(W) x 27(H) x 115(D) mm / 230g
Bundles	+5V \Rightarrow 2A DC adapter / IR remote & AV cable

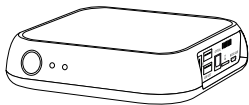
04 / Description of Each Part



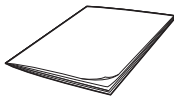
① Power	⑤ Optical	⑨ AV OUT	⑬ ANT OUT
② LED / IR	⑥ Micro SD	⑩ HDMI	
③ LED	⑦ Micro USB	⑪ LAN	
④ USB Host	⑧ DC-IN	⑫ ANT IN	

05 / Package Contents

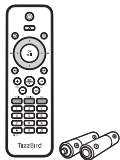
The TizzBird package contains the following items. The shape of items described below may slightly differ from the actual contents.



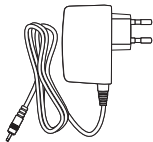
Main Unit



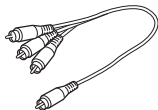
Quick Guide



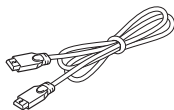
Remote Controller/ Battery



Power Adapter



AV Cable



HDMI Cable(Optional)

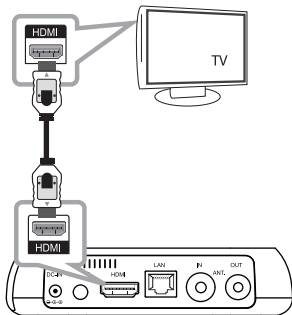
06 / Installation and Connection

Connecting the Video

The TizzBird supports HDMI and Composite video output for connection to a TV, and each output needs to be configured in the settings browser depending on what cable is being used.

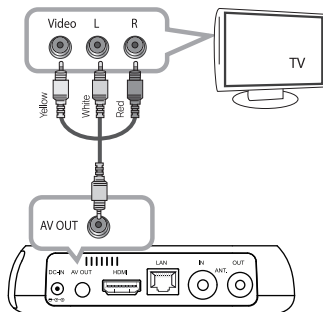
Connection to HDMI Out

Connect the TizzBird output to your TV using an HDMI cable. 1080p full HD contents can be output as 1080p only thru HDMI. HDMI can also transfer the audio signal and no need to connect another cable for audio.



Connection to Composite Out

Connect the TizzBird output to your TV using the included Composite (Yellow one) video cable. Select an appropriate video input mode on you TV until you get the main page of the TizzBird. For the audio, please connect the stereo cable (Red / White one)



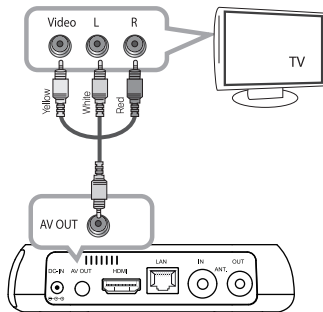
06 / Installation and Connection

Connecting the Audio

The unit provides RCA analog stereo output and optical digital output and HDMI to connect the audio device like AV receiver and TV. Please connect to audio outputs to appropriate port of audio device. Please select the appropriate input at the audio device using remote controller after connection.

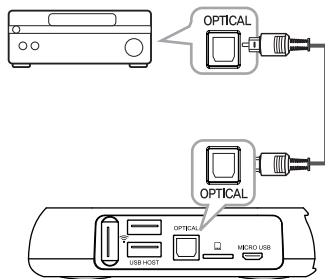
Connection to TV

Connect the two audio cables, the white one on the left side and the red one to the right side, to the appropriate AUDIO terminal on your TV.



Connection to AV Receiver

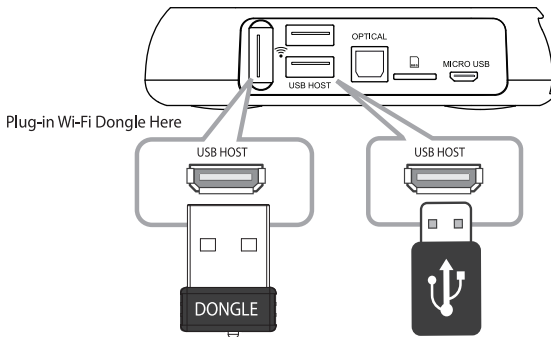
Connect the optical cable to multi-channel AV receiver. The compressed audio stream will be directly transferred to the AV receiver and you can enjoy the multi channel surround sound.



06 / Installation and Connection

Connecting USB Device

TizzBird provides three USB 2.0 host ports to connect various external devices, such as FLASH MEMORY drive, external USB HDD enclosure, digital camera/camcorder, keyboard & mouse, or Wi-Fi USB dongle. The rear-side lower USB host port is actually OTG port, and should be used MOUSE or KEYBOARD. Other device can cause some problems.



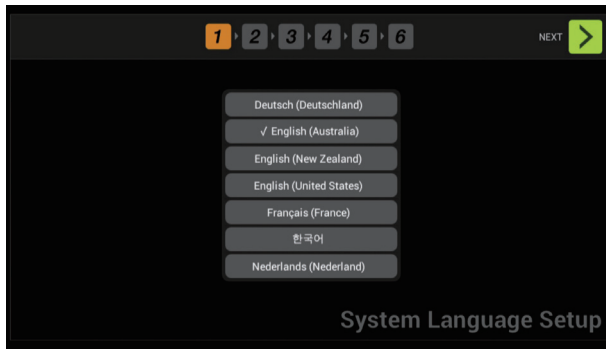
* This procedure is not needed if internal Wi-Fi is already installed.

07 / Initial Setup

Initial setup consists of 6 steps of WIZARD style sequences. The sequence of WIZARD will be
LANGUAGE SETUP ► VIDEO OUTPUT SETUP ► SCREEN FITTING ► NETWORK SETUP ►
TIME&WEATHER SETUP

The PREV/ NEXT button on the top side of each screen will bring the PREV/ NEXT step.

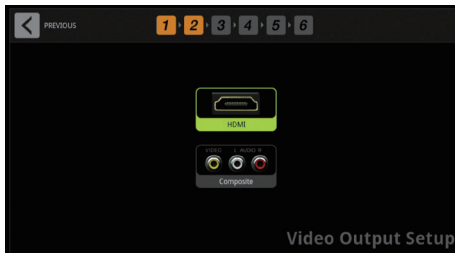
Language Setup



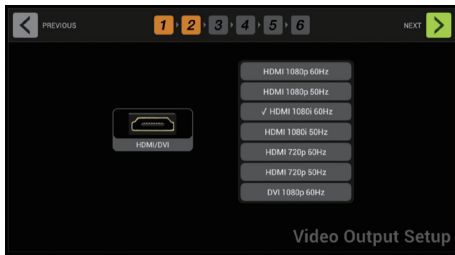
The first step is setup the menu language.
The setup wizard will enumerate all the languages available at the device.

07 / Initial Setup

Video Output Setup



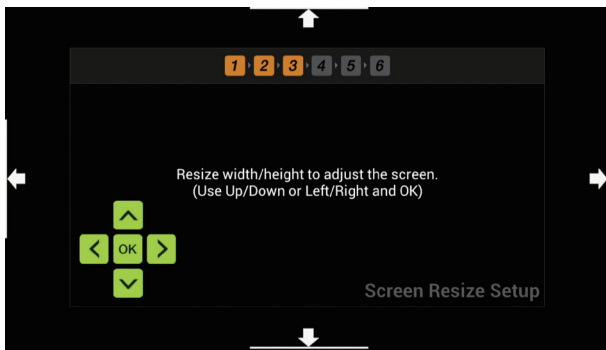
The 2nd setup is video output. Video output screen will pop up both COMPOSITE and HDMI screen. User can select one of these buttons with MOUSE or REMOTE.



If user selects HDMI output then the screen resolution selection screen will appear as above.

07 / Initial Setup

Screen Fitting Setup

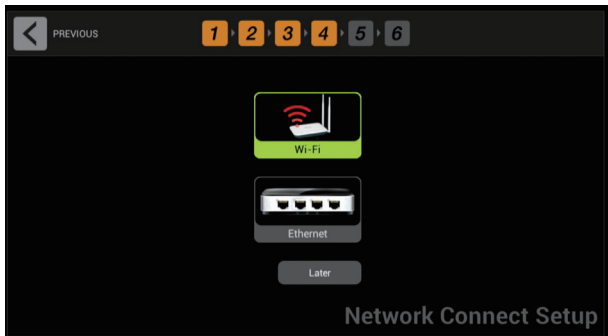


The 3rd step is fitting the screen size according to user's TV.

Clicking UP/DOWN and LEFT/RIGHT button at left-bottom side will increase/ decrease the screen size accordingly. Press OK when done.

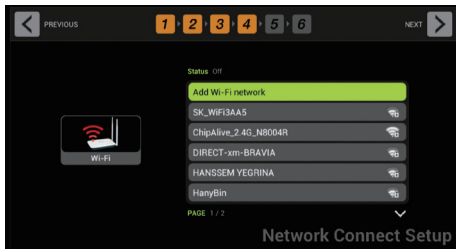
07 / Initial Setup

Network Setup

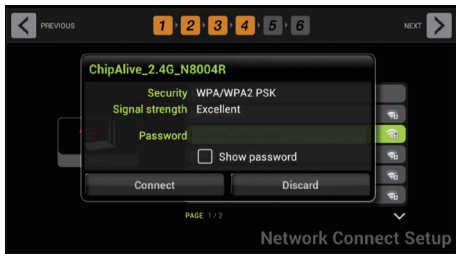


The 4th step is setting up network. Both Wi-Fi and Ethernet can be configured here. If Wi-Fi button were pressed, the following screen will enumerate all available Wi-Fi AP. Select one of them and click it.

07 / Initial Setup



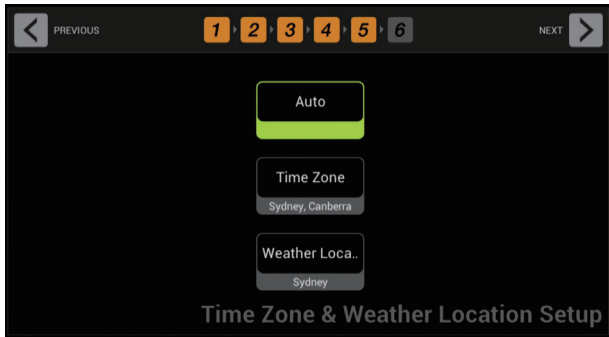
The next page screen will pop up to configure the Wi-Fi.



Typing the password will finalize the Wi-Fi setup and Internet connection will be made.

07 / Initial Setup

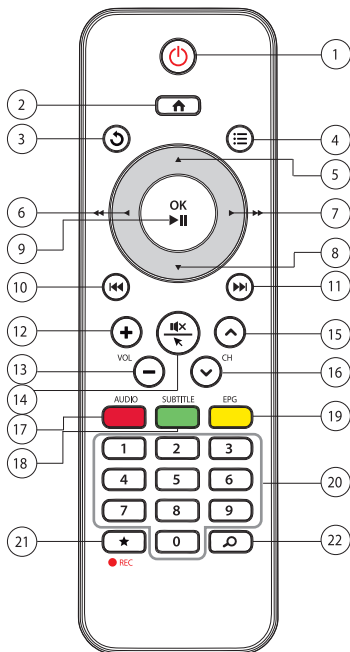
Time & Weather Location Setup



The next step is setting up time zone and weather location. Tizzbird provides automatic setup for those as long as network is connected.

To setup the time-zone automatically, select the "AUTO" button as above screen, if Internet is connected. Otherwise, you can manually input the time-zone or weather location. Select each button accordingly to do that.

08 / Using Remote Controller



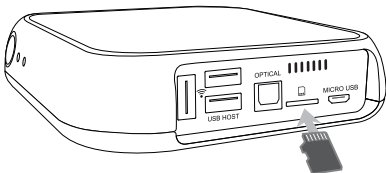
①	Power On/ Off
②	Go to HOME screen
③	Go to PREVIOUS screen
④	Pop-up MENU
⑤	Up Arrow
⑥	Left Arrow
⑦	Right Arrow
⑧	Down Arrow
⑨	Select
⑩	Select Previous (Chapter/ Item)
⑪	Select Next (Chapter/ Item)
⑫	Volume Up
⑬	Volume Down
⑭	MUTE or MOUSE On/Off when long pressed
⑮	Channel Up
⑯	Channel Down
⑰	Color Key – Red (Context Sensitive)
⑱	Color Key – Green (Context Sensitive)
⑲	Color Key – Yellow (Context Sensitive)
⑳	Number Input Keys
㉑	Bookmark/ Record
㉒	Search

09 / Firmware Update & Installation of Apps

The new FIRMWARE can be updated by OTA (Over the Air) when there is new firmware available. The information dialog will be pop-up when there is new firmware.

Go to “Settings” icon ► System Tab and select “Firmware Upgrade”.

If you download many applications from market, internal memory can be full. In this case you need to install the extra micro-SD card into the micro-SD slot for more applications. Then more application can be downloaded and installed.



Some applications are initially configured to be downloaded and installed into micro-SD card only, not internal memory.

TizzBird®

FCC WARNING

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

FCC STATEMENT

NOTE: 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.

Shielded cables must be used with this unit to ensure compliance with the Class B FCC limits.

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.



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- Design & specifications are subject to change without notice.
- Detailed user manual is provided by PDF file in website.
- Please visit www.tizzbird.com and go download >> manual