FCC NOTICE

This product has been tested and complies within the guidelines for Class B digital devices in accordance with Part 15 of FCC rules and regulations. 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 if not installed and used in accordance with the instructions and may cause harmful interference to radio communications. This does not guarantee interference will not occur after installation. If this product has been determined to cause meaningful interference to radio or television reception, the user is encouraged to correct the interference using 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.

IMPORTANT SAFETY INSTRUCTIONS

To reduce the risk of electric shock, do not remove the cover. There are no user-serviceable parts inside. Refer servicing to qualified service personnel.

The exclamation mark inside an equilateral triangle symbol indicates that there are important operating and maintenance instructions in the literature accompanying this product.

The lightning flash with arrow inside an equilateral triangle symbol indicates that dangerous voltages constituting a risk of electric shock are present within this product.

Class II equipment symbol indicates the product has a double system.

1. Read, follow and keep these instructions.
2. Do not use this converter box near water.
3. Clean only with a damp cloth. Unplug power prior to cleaning.
4. Do not block any of the ventilation openings. Install in accordance with the manufacturer’s instructions.
5. Do not install near any heat sources such as radiators, heating vents, stoves, or other apparatus (including amplifiers) that produce heat.
6. Protect the power cord from being walked on or pinched particularly near the product’s power cord exit or the plug and outlet connection.
7. Only use the attachments/accessories included within this package.
8. Unplug this product during lightning storms or when unused for a long period of time.
9. Refer all servicing to qualified service personnel. Servicing is required when the product has been damaged in any way, such as when the power cord or plug is damaged, liquid has been spilled or objects have fallen into the product, or when the product has been exposed to rain or moisture, does not operate normally, or has been dropped.

**WARNING:** Do not expose batteries to excessive heat such as sunshine, fire, etc.

**WARNING:** Make sure the product’s power plug and the electrical outlet are easily accessible so the product can be quickly disconnected from power in case of emergency.

**WARNING:** To reduce the risk of fire and shock, do not expose the product to rain or moisture.

### PRECAUTIONS

Please read these precautions before operating this converter box.

#### 1. Power cord protection

To avoid any malfunction of the converter box and to protect against electric shock, fire or personal injury, please observe the following:

- Hold the plug firmly when connecting or disconnecting the DC power cord.
- Keep the DC power cord away from heating appliances.
- Never place heavy objects on the DC power cord.
- Do not attempt to repair the DC power cord in any way.
- Never make or change connections with the power switched on.

#### 2. Placement

Avoid placing the converter box in areas of:

- Direct sunlight or heating radiators.
- High temperatures (over 95°F/35°C) or high humidity (over 90%).
- Dirt and dust, as the internal parts may be seriously damaged.

#### 3. Non-use periods

Turn the converter box off when it is not being used. Disconnect from power if the converter box will not be used for a long period of time.

#### 4. Do not open and touch internal parts

- Touching internal parts of this converter box is dangerous and may cause serious damage to the converter box. Do not attempt to disassemble the converter box.
- Do not put any foreign objects into this converter box.

#### 5. Keep away from water

- Keep the converter box away from flower vases, tubs, sinks, or any other places or objects containing water or liquids. If liquids are spilled into the converter box, serious damage can occur.

#### 6. Remote control and batteries

- Use AAA (UM-4) batteries.
- Do not use rechargeable (Ni-Cd) batteries.
- Do not attempt to recharge, short circuit, disassemble or burn batteries.
- Do not drop, step on or cause any impact to the remote control. This may damage it, resulting in malfunction.
- Do not mix old and new batteries.
- Remove the batteries if the remote control is not going to be used for a long period of time.
- Keep batteries out of reach of children. If batteries are swallowed, contact a medical professional immediately.

### INTRODUCTION

This user manual is intended as an operation guide for the ATSC Digital TV Converter Box. A password will be required when modifying advanced options in the Menu. The default password is “000000”. When required, enter the default password or the custom password if set.
Product Description

Remote Control

1. STANDBY: Switch the digital converter box between On and Standby
2. CC: Select Subtitles Language
3. MUTE: Turn on/off the volume
4. EPG: Open Electronic Program Guide
5. AUDIO: Select an Audio Language or Audio Mode
6. INFO: Display current channel information
7. REC: Start recording. Recording requires a connected USB memory device.
8. PAGE+: Go forward quickly within a menu
9. PAGE-: Go backward quickly within a menu
10. MENU: Show menu on screen and call command box.
11. EXIT: Quit menu
12. VOL+/VOL-: Volume up and down. CH+/CH-: Channel up and down; navigate through menus; move cursor selection up and down within menus and lists.
13. OK button: Confirm a selection
14. FAV: View or edit the favorite channels list.
15. TV/RADIO: Switch between TV and radio
16. RECALL: Switches back to previous program
17. GOTO: Select the play time of the recorded program.
18. Numeric Buttons (0-9): Enter numeric information and select specific channels
19. REV: Fast rewind during media playback
20. FWD: Fast forward during media playback
21. PREV: Return to the previous track during playback
22. NEXT: Skip to the next track during playback
23. PLAY: Start media playback
24. PAUSE: Pause playback or recording
25. STOP: Stop media playback
26. REPEAT: Turn on/off repeat modes
27. RED/GREEN/YELLOW/BLUE Buttons: For interactive function/submenu function

Installing/Replacing Batteries

Open the battery compartment on the rear of the remote control and remove the compartment cover. Insert two 1.5V AAA batteries using the correct polarity.

Front View

1. Volume +
2. Volume -
3. Menu Button
4. Channel +
5. Channel -
6. OK Button
7. Power On/Off Button
8. LED Display
9. Remote Sensor
10. Power Indicator
11. USB Port

Rear View

1. Digital Terrestrial TV Broadcast Signal Input
2. Digital Terrestrial TV Broadcast Signal Output
3. Digital HDTV Video Out
4. Digital Audio Output
5. Analog Audio Output
6. Composite Video Output
7. Power DC Input 5V 2A
Included Items
1 x Digital TV Converter Box
1 x HDMI Cable
1 x Remote Control
1 x DC Adapter
2 x AAA Batteries
1 x Instruction Manual
1 x AV Cable (only for RCA Connector)

Before using Digital TV Converter Box for the first time, check the package contents to ensure all parts are free of visible damage.

CONNECTING THE CONVERTER BOX
Before you connect the converter box to your TV, make sure the box is laid on a flat and stable surface. Refer to the diagram below and cable installation instructions in your TV manual.

1. Using RF Cable

2. Using HDMI (default output video source: HDMI)

3. Using included RCA Component Cable (default output modes: Video, AV, or Input)

INSTALLATION GUIDE
If you are using the converter box for the first time or have restored the converter box to factory default, the Installation Guide menu will appear on your TV screen.

OSD (On-Screen Display) Language: Press the RIGHT/LEFT buttons to select a language.

Country: Press the RIGHT/LEFT buttons to select a country.

Channel Search: Press the RIGHT/LEFT buttons to select: CH_OFF / CH3_ON / CH4_ON. Press RIGHT or the OK button to begin automatic channel search.

If no channel can be found during the channel search process, check the antenna connections and make sure the antenna is in proper working order. After the scanning process is complete, the converter box will automatically save the scanned channels and display the first channel from the list.
MENU

Main Menu
Most functions are available in the main menu. Follow the operation help information on the bottom of the menu to modify the preference options. A password will be required when modifying advanced options in the menu. Enter the default password of "000000" or the custom set password.

1. Press the MENU button to enter the main menu.
2. There are seven items for set up. Press the LEFT/RIGHT buttons to navigate through the menu.
3. Select the desired item and press the OK button to adjust the settings.
4. Press the EXIT button to exit.

Program Settings
This menu allows users to edit programs, check the TV program guide and sort channels.

1. Program Edit: To edit program preferences (lock, skip, favorite, rename, move and delete a program), a password is required. Enter the default password of "000000" or the custom set password. The master unlock password is "888888".
2. EPG: The EPG (Electronic Program Guide) is an on-screen TV guide that shows scheduled programs seven days in advance for every tuned channel. Press the EPG button to access the Electronic Program Guide.
3. Sort: To sort channels.
   NOTE: It is important to deactivate the LCN (Logical Channel Number) function while sorting the position of the channels. This function allows users to sort channels by different methods:
   By LCN: This will sort the channels by ascending order.
   By Service Name: This will sort the channels in alphabetical order.
   By Service ID: This will sort the channels by Service ID.
   By ONID (Original Network ID): This will sort the channels according to the ONID.

Picture Settings
This menu allows users to set different functions as follows.

Aspect Ratio
Select from a Video Aspect Ratio of 4:3 (for Standard Definition TVs) or 16:9 (Widescreen for High Definition TVs). Refer to the illustrations of Aspect Ratios below:

Resolution
Choose different resolutions according to the connected TV: 480i Coax cable, 720p RCA cable, 1080p or 1080i for HDMI.

TV Format
Choose from PAL or NTSC format.
Channel Search Settings

(a.) Auto Search: This option will automatically search for TV and Radio channels and save them once scanning is complete. All previously saved channels and settings will be deleted.

(b.) Manual Search: This option allows users to scan for new channels without deleting previously saved channels and settings.

2. Press the LEFT/RIGHT buttons to select the channel frequency.
3. Press the OK button to start scanning for new channels.
4. If a new channel is found, it will be saved and stored along with the rest of the channels. If no channels are found, the unit will automatically exit after finishing the scanning process.

Time Settings

Time Offset: Select auto or manual for GMT offset adjustments.
Country Region: Select the Country Region when Time Offset is set to AUTO.
Time Zone: Select the Time Zone offset when Time Offset is set to MANUAL.
Power Down (Sleep): Select the desired time for the Auto-shutoff function (from 1 hour to 12 hours or set function to Off).

Option Settings

OSD Language: Change the ON Screen Display language.
Subtitle Language: Select the subtitle language.
Audio Language: Set preferences here if the program has multiple languages.

System Settings

The menu allows users to change settings for the following items:

Parental Guidance: Setting the age preference from 4 years old to 18 years old. To access this function, enter the default password of “000000” or the custom set password. This function can also be deactivated by simply switching this setting to “OFF”.

Set password: Modify the default password of “000000” to a custom password.

Restore Factory Default: Restore the unit to its default factory settings. Enter the default password of “000000” or the custom set password. Press the OK button once done.

NOTE: This function will delete all saved channels and all personal settings.
Information: Check the software version currently running on the converter box.

USB Settings

(a.) Multimedia

Press the USB button while on TV mode to access the Multimedia menu. This menu contains 4 different icons: Music, Photo, Movie, and PVR.

MUSIC: Select the MUSIC icon and move the cursor to the desired audio file. Press the OK button to play the selected audio file.

PHOTO: Choose the PHOTO icon and move the cursor to the desired photo file. Press the OK button to view the selected photo file.

MOVIE: Choose the MOVIE icon and move the cursor to the desired video file. Press the OK button to play the selected video file.

PVR: Select the PVR icon. Select the desired recorded file and press the OK button to begin playback. Press the RETURN button to move a file to another folder. Press the SCHEDULE button to switch between Preview and Full Screen modes. Use the EPG button to delete a recorded file. Press the ASPECT button to rename a recorded file.

(b.) Photo Configure - Adjust the slide time, slide mode, and aspect ratio.

(c.) PVR Configure - View information for the connected USB storage device, including Format Type, Total Space, and available Free Space on the drive. Select FORMAT to format the compatible USB device in FAT32 or NTFS.

(d.) The USB port is also used to perform Software Updates.
Copy the software update file from your PC to a USB flash drive.

1. To upgrade the converter box via USB, plug the USB flash drive into a PC and backup the entire data of the USB drive. Right click the USB drive and select Format to format the USB device in FAT32.

**NOTE:** To perform a software upgrade for the converter box, make sure the USB flash drive or portable hard disk is in FAT32 file system format. The USB port for software upgrades is not compatible with USB flash drives or Portable Hard Disk Drives in NTFS, FAT16 or U3 PRO file system formats.

2. Press the MENU button, highlight “System” and select “Software Upgrade”. Press ENTER to enter the USB drive and select the update file.

**NOTE:** Do not remove the USB drive from the converter box or power off the converter box during the upgrade process. Doing so may damage the converter box.

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**DAILY USE**

**INFO Button**
Press the INFO button to display the information banner while viewing TV programs.

---

**Audio Button**
Some programs may have multilingual audio language and this audio may be located on a different audio mode such as Stereo, Left or Right. All available audio languages will be displayed on the audio track window when the AUDIO button is pressed. If there is no audio output after an audio language has been selected, this indicates there is no audio on the current audio mode, and the previous audio mode should be selected.

---

**CC Button**
Certain programs have multilingual subtitles. All available subtitle languages will be displayed in the subtitle information window when the CC button is pressed. Follow the help information in the subtitle window to select the desired subtitle.

---

**PREV/NEXT Buttons & REV/FWD Buttons**
The PREV/NEXT and REV/FWD buttons can be used during playback of multimedia programs from the external USB device. Press the PREV/NEXT buttons to go to the previous/next program and REV/FWD buttons to fast rewind/forward during playback.

---

**EPG**
Press the EPG button to display the Electronic Program Guide on the screen. The EPG will display more than 24 hours of scheduled programs for all broadcast stations.
FAVORITE CHANNEL

Setting Up Favorite TV or Radio Channels
Preferred channels can be added to a Favorite Channel List. Press the Menu button to access the Program Edit Menu. The Favorite channel option allows channels to be classified by different genres: Movies/News/Sports/Music. Press the “FAV” or “OK” button to confirm a selection. A heart shaped symbol will appear next to the selected channel, confirming the selection.

Disable a Favorite TV or Radio Channel
Press the Menu button to access the Program Edit Menu. The list of the favorite channels will be displayed. Highlight the desired channel to be disabled. Press the FAV button, select the Disable option and press the FAV or OK button to disable. Press the EXIT button to exit.

View Favorite Channels
While in normal viewing mode, press the FAV button to access the favorite channel menu. Press the LEFT/RIGHT buttons to access the classified Submenu (Movies/News/Sports/Music). Press the UP/DOWN buttons to browse through the favorite channels. Press the OK button to select a favorite channel.

Delete TV or Radio Programs
Press the MENU button to access the Program Edit menu. Select the program to be delete and press numeric button “4”. A warning message will appear on the TV screen. Press the OK button to confirm deletion. Repeat the above procedure to delete more channels.

Skip TV or Radio Channels
Press the Menu Key to access the Program Edit Menu. Select the channel to be skipped and press numeric button “2”. A skip symbol will appear. Now the channel is marked as a SKIP. Press the EXIT button to save this setting and exit the menu.

Move a TV or Radio Program
Press the Menu button to access the Program Edit Menu. Select the desired channel to be moved and press numeric button “1”. A “MOVE” symbol will appear on the TV screen. Press the UP/DOWN buttons to move the channel to the desired position. Press the OK button to confirm this selection. Repeat the above process to move further channels.

PVR FUNCTION

The PVR function allows program recording and playback. To use the various functions, such as the PVR function, Instant Recording, TV Program Guide Timer Recording Function, Timeshift Function, Playback of Recorded Program Function, and Multi-Media Player Function, it is necessary to connect a USB flash drive or an external hard disk to the USB port of the converter. The maximum capacity of HDD supported by the converter box is 3TB (Terra Bytes).

NOTE: Due to the buffer speed requirement, some USB flash drives may not be compatible for use with the Timeshift function. The converter box supports both FAT 32 and NTFS file formats.

1. Instant Recording
Press the REC button to start instant recording of the TV program currently being viewed. The recording symbol will be displayed in the top left of the screen when the REC button is pressed. Press the INFO button to view information about the instant recording. Press the STOP button to stop the instant recording.
2. Electronic Program Guide Timer Recording

Never miss a favorite program again with the Electronic Program Guide recording feature.

While in TV mode, press the EPG button to access the on-screen electronic program guide. Select the channel and program to be recorded and press the OK button. A schedule event window will appear. Select and set the correct parameters to schedule the recording. Set the mode option to “record”.

This program will be automatically recorded at the scheduled time. Edits can be made to the set timer recording in the Schedule Event Menu. Edit the channel number, name, date, start time, and end time. Select the option of Once, Daily, Weekly or Monthly recording as desired. Once the recording schedule setup has been set, the recording schedule can be edited at any time by pressing numeric button “2”. The recording schedule can be deleted by pressing numeric button “3”.

After having finished the schedule recording setup, press the EXIT button to save and exit.

Recording Settings

Highlight “Schedule” to program the channels to be recorded at a scheduled time. A menu will appear.

Add lists of programs or channels to be recorded. Only one program/channel can be recorded at a time.

3. Timeshift

The Timeshift function allows for pausing of the TV program being viewed. Once paused, the TV program will be stored on the connected USB Hard Drive or Flash Drive.

While watching a program, press the PAUSE button to activate the Timeshift function and pause the TV program. Press PLAY to restart the program. Press the REV button to fast rewind up to the point the Timeshift function began. Press the FWD button to fast forward up to live viewing. Press the STOP button to cancel the Timeshift function.

To save the space of the USB hard drive, the recorded program is not stored under timeshift mode. This means a previously scheduled recording will not record when the Timeshift function is active. It is recommended to not use Timeshift at the same time a program recording is scheduled or else the program will not record.

WARNING: For the compatibility of HDD and USB devices with Timeshift and PVR function, refer to the table below:

<table>
<thead>
<tr>
<th>USB Device Type</th>
<th>Timeshift Compatibility</th>
<th>PVR Recording</th>
<th>Formats</th>
</tr>
</thead>
<tbody>
<tr>
<td>USB Stick</td>
<td>Yes</td>
<td>Yes</td>
<td>FAT32</td>
</tr>
<tr>
<td>3.5inch HDD</td>
<td>Yes</td>
<td>Yes</td>
<td>NTFS</td>
</tr>
<tr>
<td>2.5inch HDD</td>
<td>Yes</td>
<td>Yes</td>
<td>NTFS/FAT32</td>
</tr>
<tr>
<td>1.8inch HDD</td>
<td>No</td>
<td>Yes</td>
<td>NTFS/FAT32</td>
</tr>
</tbody>
</table>

Please note the Timeshift function is not compatible with 1.8inch HDDs.

4. Multimedia Player

Press the MENU button and select “Multimedia”. View Photos, play MP3 music files and view Movie files via the multimedia player. NTFS, FAT32 and FAT 16 file systems are supported.

<table>
<thead>
<tr>
<th>Media</th>
<th>Supported Files</th>
</tr>
</thead>
<tbody>
<tr>
<td>Photos</td>
<td>.jpeg / .bmp / .png</td>
</tr>
<tr>
<td>Music</td>
<td>.mp3 / .acc</td>
</tr>
<tr>
<td>Movies</td>
<td>.avi / .mpg / .dat / .vob / .mkv / .mjpeg</td>
</tr>
</tbody>
</table>
5. Formatting A Portable Hard Disk
A format hard disk function is included. Formatting a hard disk will permanently delete all the data on the hard disk. It is strongly recommended to backup all data before formatting a hard disk drive.

Troubleshooting

<table>
<thead>
<tr>
<th>Problem</th>
<th>Possible Cause</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power button has been pressed, but nothing is displayed on screen.</td>
<td>The power outlet has malfunctioned or is providing no power.</td>
<td>Make sure the box is plugged into a functioning wall outlet.</td>
</tr>
<tr>
<td>TV picture drops out and the converter box displays “No Signal”.</td>
<td>Antenna is not properly connected or antenna is in a bad reception area.</td>
<td>Talk to a local TV antenna technician about reception problems in the local area and whether a new antenna would be beneficial.</td>
</tr>
<tr>
<td>Receives digital TV but some channels are missing.</td>
<td>Antenna is not properly connected or you are in a bad reception area.</td>
<td>Talk to a local TV antenna technician about reception problems in the local area and whether a new antenna would be beneficial.</td>
</tr>
<tr>
<td>Remote control is not responding.</td>
<td>The batteries are exhausted or there is interference.</td>
<td>Replace the batteries and make sure there is no direct sunlight on the remote control or the converter box.</td>
</tr>
<tr>
<td>Picture is breaking up.</td>
<td>The signal is too weak.</td>
<td>Check antenna cable and connections.</td>
</tr>
</tbody>
</table>

Specifications

<table>
<thead>
<tr>
<th>Item</th>
<th>Sub-item</th>
<th>Parameter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tuner</td>
<td>Input Frequency</td>
<td>170–230MHz, 470–860MHz</td>
</tr>
<tr>
<td></td>
<td>RF Input Level</td>
<td>-25–82dBm</td>
</tr>
<tr>
<td></td>
<td>IF Bandwidth</td>
<td>6MHz</td>
</tr>
<tr>
<td></td>
<td>Modulation</td>
<td>QPSK, 16QAM, 64QAM</td>
</tr>
<tr>
<td>Video</td>
<td>Decoder Format</td>
<td>MPEG 4 AVC/H.264, HP@L4, MPEG 2 MP@ML,HL</td>
</tr>
<tr>
<td></td>
<td>Output Format</td>
<td>576P, 720P, 1080i, 4:3 and 16:9 1080P</td>
</tr>
<tr>
<td></td>
<td>Output Port</td>
<td>HDMI (V1.3C)</td>
</tr>
<tr>
<td>Audio</td>
<td>Decoder Format</td>
<td>MPEG-1 (layer 1&amp;2&amp;3), AC3</td>
</tr>
<tr>
<td></td>
<td>Audio Output</td>
<td>Coax, RCA</td>
</tr>
<tr>
<td>USB 2.0</td>
<td>Supported Capacity</td>
<td>≤1TB</td>
</tr>
<tr>
<td></td>
<td>Supported Media</td>
<td>MP3, JPEG, BMP, AVI</td>
</tr>
<tr>
<td>Power</td>
<td>Supply Voltage</td>
<td>DC 5V 2A</td>
</tr>
<tr>
<td></td>
<td>Maximum Power Consumption</td>
<td>10W</td>
</tr>
<tr>
<td></td>
<td>Standby Power Consumption</td>
<td>&lt;1W</td>
</tr>
</tbody>
</table>

Disposal

Disposal of the Product

Under no circumstances should you dispose of the product in normal domestic waste.
This product is subject to the provisions of European Directive 2012/19/EU. Dispose of the product via an approved disposal company or your municipal waste facility. Please observe currently applicable regulations. Please contact your waste disposal center if you need any further information.

Disposal of Batteries

Used batteries may not be disposed of in household waste.

All consumers are statutorily required to dispose of batteries at a collection point provided by their local municipality or retail store. The purpose of this obligation is to ensure batteries are disposed of in a non-polluting manner. Only dispose of batteries when they are fully discharged.

The product’s packaging is made from environmentally friendly material and can be disposed of at your local recycling plant.
Customer Service/Kundenservice/Service Clients
Atención al cliente/Assistenza Clienti/カスタマーサービス

US
To ensure speedy handling of your issue, please call or email us for assistance.
Phone: +1 909-391-3888
(Mon-Fri 9:00am - 6:00pm PST)
Email: ushelp@1byone.com

CA
To ensure speedy handling of your issue, please email us for assistance.
Email: cahelp@1byone.com

UK
To ensure speedy handling of your issue, please call or email us for assistance.
Phone: +44 1582 41 2681
(Mon-Fri 9:00am - 6:00pm UTC)
Email: ukwebhelp@1byone.com

FR
Pour vous assurer une assistance rapide en cas de problème, veuillez envoyer un e-mail.
Email: euhelp@1byone.com

IT
Per supporto immediato in caso di bisogno, la invitiamo a contattarci via email.
Email: euhelp@1byone.com

DE
Für eine zügige Bearbeitung ihres Problems, melden Sie sich bei uns wie folgt.
Email: euhelp@1byone.com

ES
Para garantizar una rápida atención de su problema, favor envíenos un email para ayudarle.
Email: euhelp@1byone.com

JP
お客様の問題が直ちに解決されるため、ぜひメールにて弊社までご連絡ください。
Email: jphelp@1byone.com