LG
Life's Good

INSTALLATION MANUAL
LED TV*

Please read this manual carefully before operating your set and retain it for future reference.

UW76**
LW64**
UW96**

www.lg.com

ENGLISH

TABLE OF CONTENTS

3 LOCATION AND FUNCTION OF CONTROLS

3 Parts and Button
4 LED Clock Connection

5 EZMANAGER

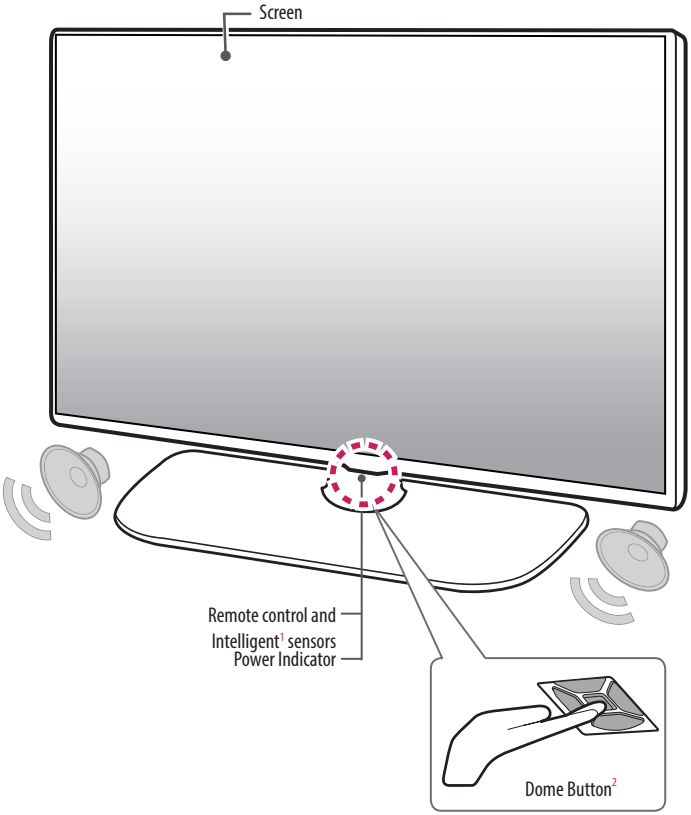
5 INTRODUCTION
5 EZ-MANAGER WIZARD
6 LANGUAGE & COUNTRY SELECTION
7 - Automatically for Setup
10 - Manually for Setup
14 - USB LG Smart Install Utility

17 INSTALLATION MENU

17 INTRODUCTION
18 LG HOTEL MODE
18 - Hotel Mode Operation
18 - Power On Status
19 - Volume
19 - Key Management
20 - Limited Mode
20 - DTV Programme Update
21 - Power On Default
21 - Aux Source Setting
21 - Power Management
21 - Radio Video Blank
21 - Factory Reset
22 NETWORK
22 - MAC Address
22 - Network Setting
23 - IP Stream Control
23 - Wake On LAN
24 PRO:CENTRIC
24 - Mode
24 - WORF
24 - Room Number Setting
25 - Media Type
25 - Receive Data
25 - Native EPG
26 GENERAL
26 - Configuration Setup
29 - External Speaker
29 - Set ID Setup
29 - Power Saving
30 - HCEC Setup
31 - Clock Setup
32 - Password Change
32 - PreLoaded App
32 - Lock Mode
33 MEDIA SHARE
33 - SmartShare
33 - Screen Share
33 - DMR
34 - Bluetooth Sound Sync
34 - DIAL
34 - TV Name
34 - SoftAP
35 TV MANAGER
35 - USB Download Menu

LOCATION AND FUNCTION OF CONTROLS

Parts and Button



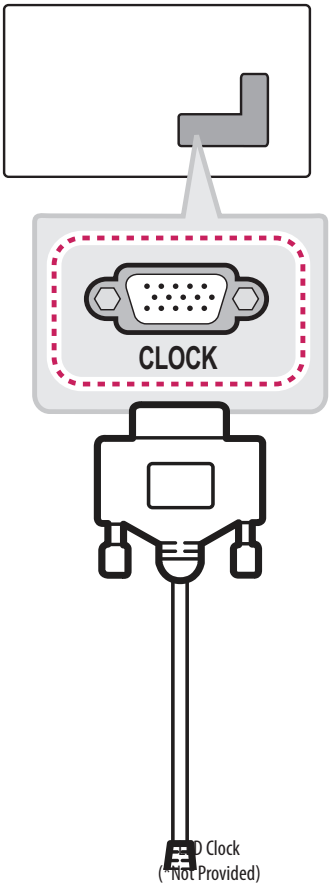
1 Intelligent sensor - Adjusts the image quality and brightness based on the surrounding environment.
2 Dome Button - This button is located below the TV screen.

NOTE

- You can set the power indicator light to on or off by selecting **General** in the main menus.

LED Clock Connection

This TV can be connected to a LED Clock via the **CLOCK** port.



EZMANAGER

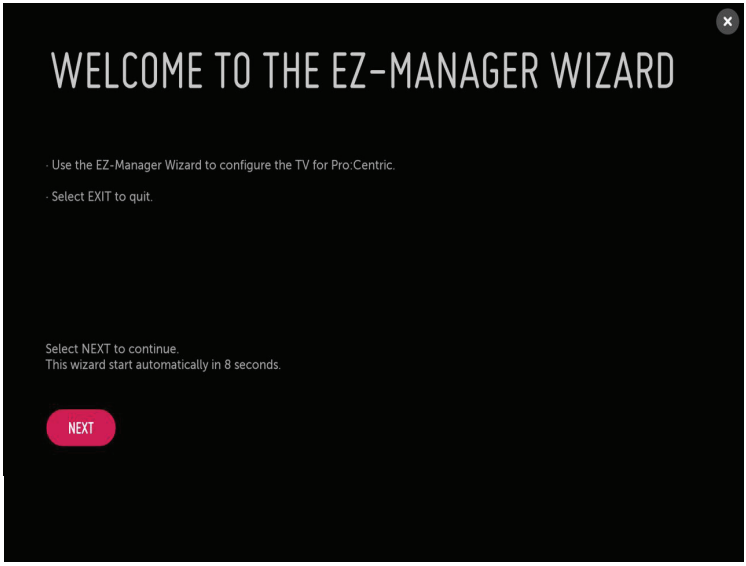
- Image shown may differ from your TV.

INTRODUCTION

The Pro:Centric Platform enables you to simply install, manage and use guest-centric solutions. The default Domain "procentric.local" and IP Server Address are needed to be registered in DNS TV will contact the IP Server using the default Domain "procentric.local" via IP on server search page. If TV doesn't contact the Server, TV will search the pre-defined channel earlier than all channels. (Only DVB-C)

The frequencies of pre-defined channels are below.
Germany: '51000, 858000, 778000, 698000, 618000, 538000, 458000, 378000, 298000, 218000, 138000 khz'.
Philippines 6Mhz: '57000, 651000, 591000, 531000, 471000, 411000, 351000, 291000, 231000, 171000, 111000 khz'.
Other Country: '50000, 842000, 762000, 682000, 602000, 522000, 442000, 362000, 282000, 202000, 122000 khz'.

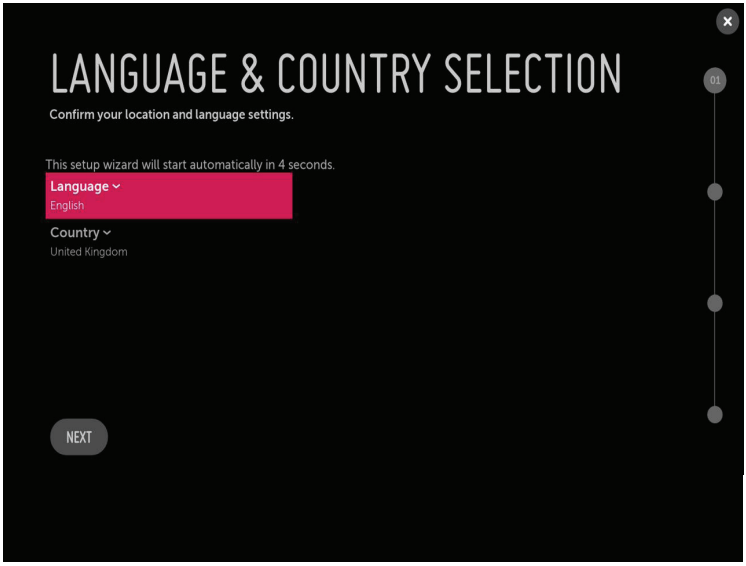
EZ-MANAGER WIZARD



- If you are using Pro:Centric, this setup wizard till help you easily set up the TV. Select '**NEXT**' to continue.
- Otherwise, if you will not be installing a Pro:Centric Server, select '**EXIT**' to quit.

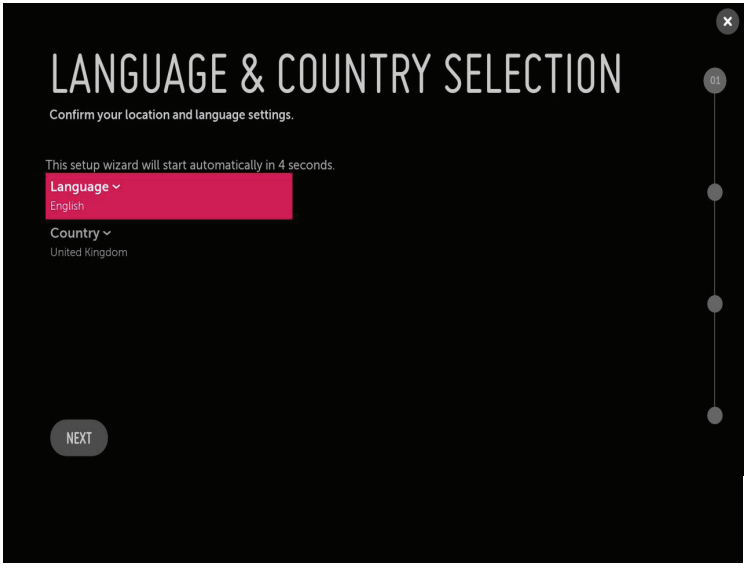
LANGUAGE & COUNTRY SELECTION

(Except for Iran)



- Please select the **Language** and **Country**. Some countries need to select the **Time Zone**.

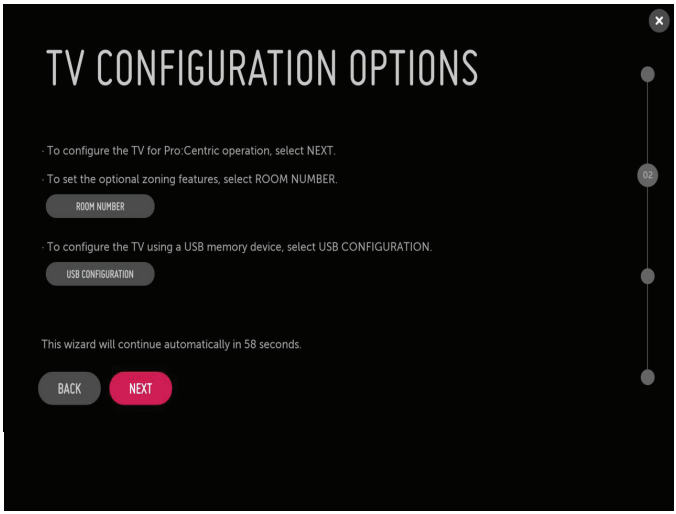
(Only Iran)



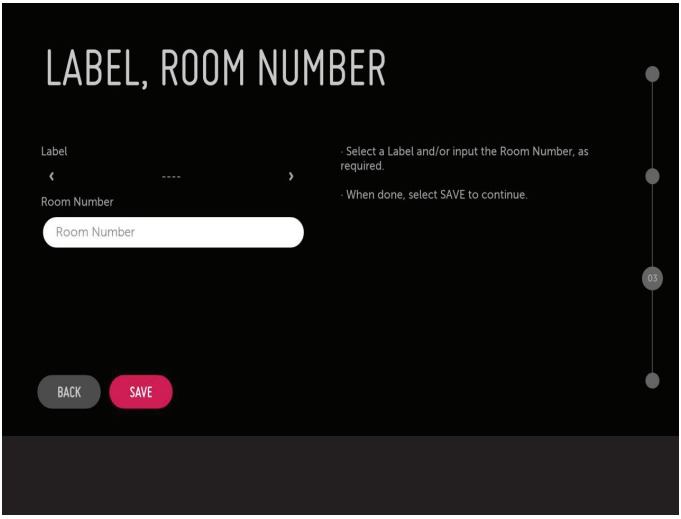
- Please select the **Language**.

Automatically for Setup

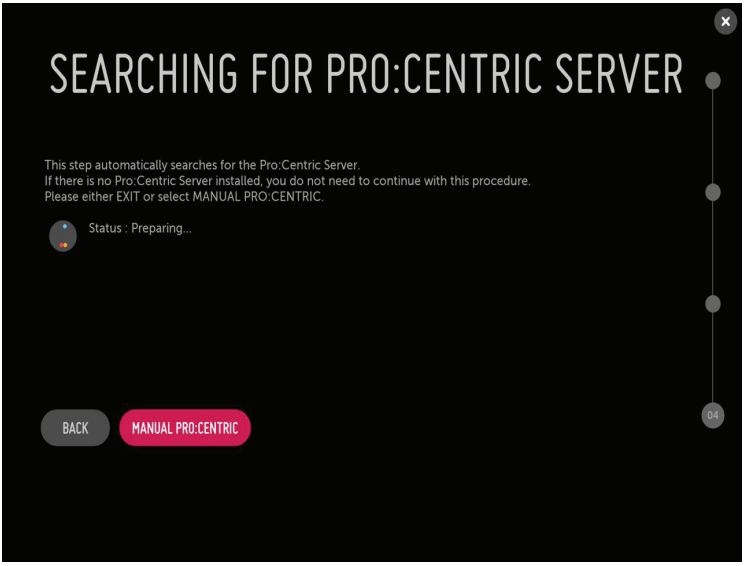
1 From the TV Configuration Options screen, you can choose how to proceed with the configuration of this TV. Whether you will configure the TV for Pro:Centric operation via the wizard or use a USB memory device to configure the TV, you may first wish to set the Room Number on the TV.

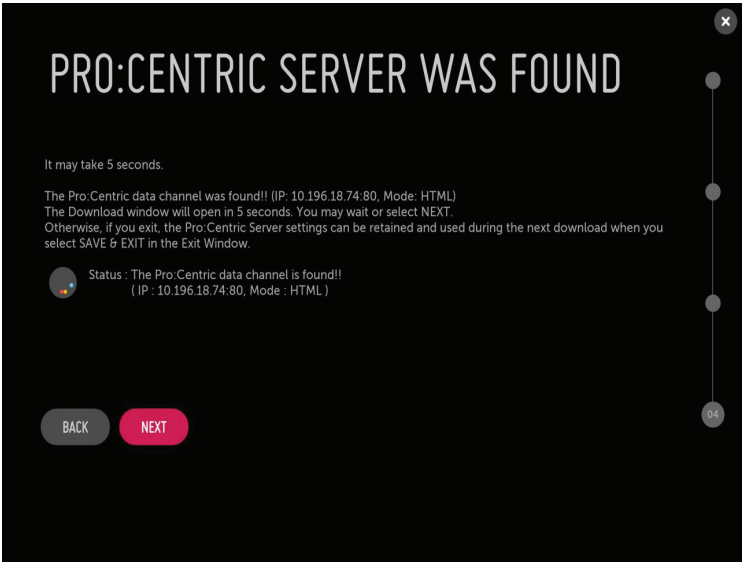


- If you intend to set Room Number as part of the TV configuration, use the Room Number option to assign the Room # for this TV before you continue with additional configuration.
- In the Label field, use the Left/Right arrow keys to specify a North, South, East, or West designation for this TV.
- In the Room Number field, you can use the number keys on the Installer Remote to direct enter a room number or use the virtual keyboard on the TV screen.
- To continue, move and select '**NEXT**'.

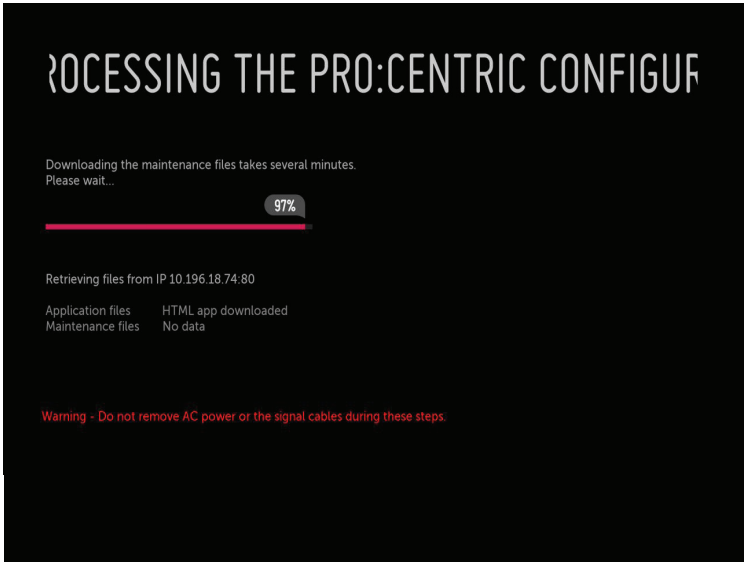


2 This step automatically searches for the Pro:Centric Server. If was found the Pro:Centric data channel, select the '**NEXT**'.

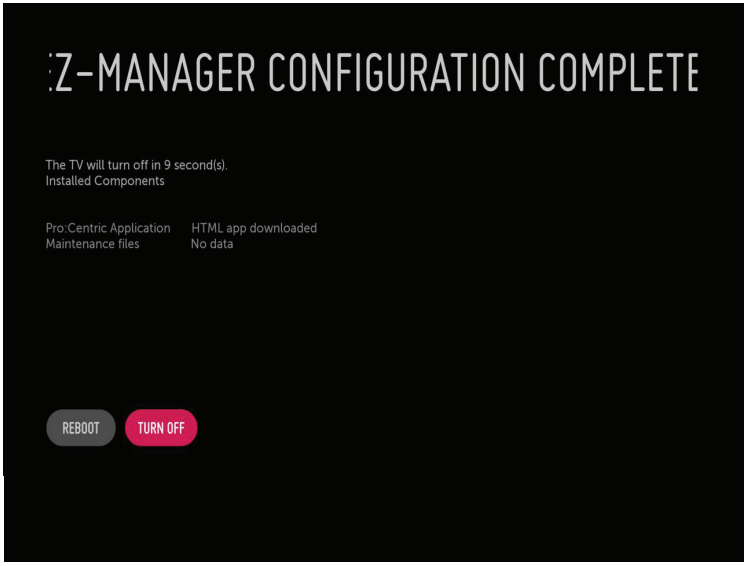




3 Downloading the Pro:Centric application files takes few minutes.

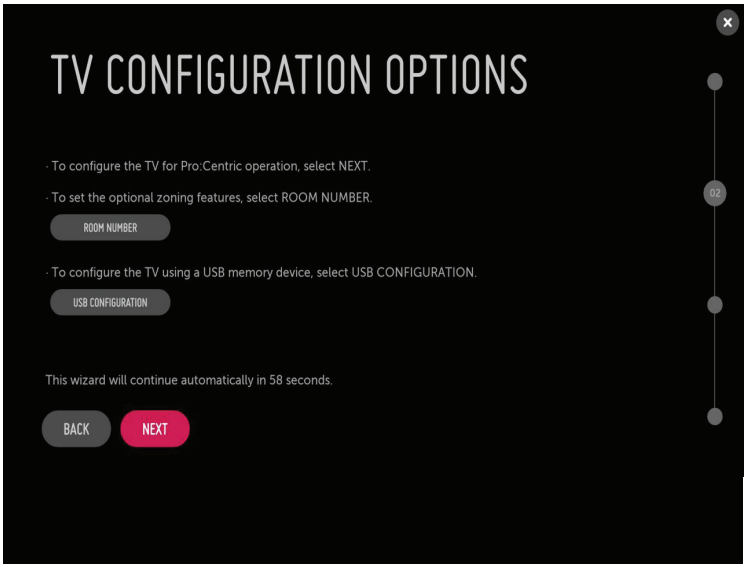


4 After the installation is completed, the following screen will be displayed.

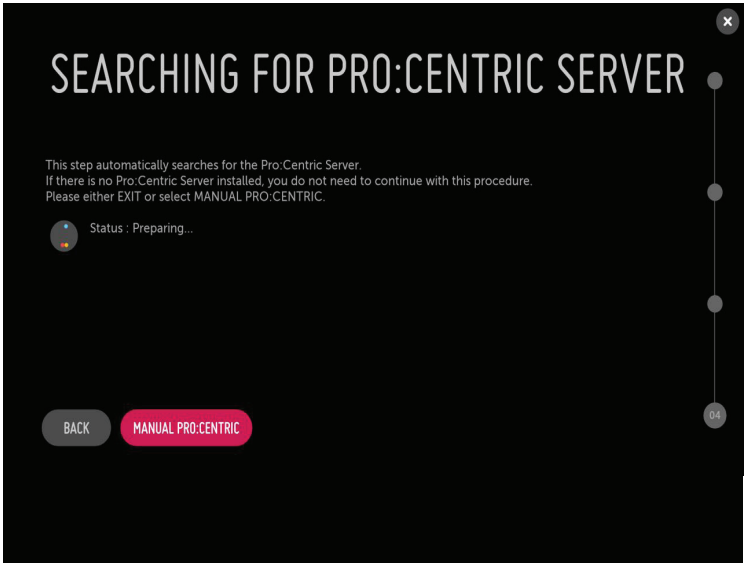


Manually for Setup

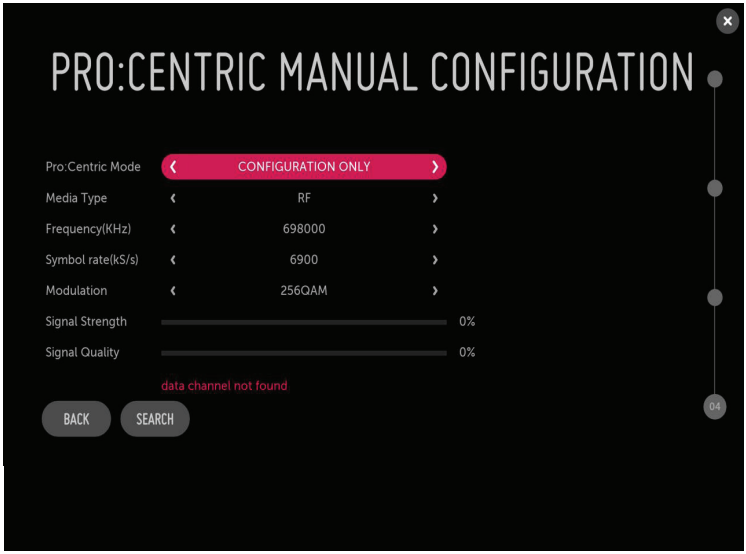
1 Select a Label and/or enter the Room Number using the numeric keypad on the remotes or using the virtual keyboard on the TV screen. To continue, move and select '**NEXT**'.

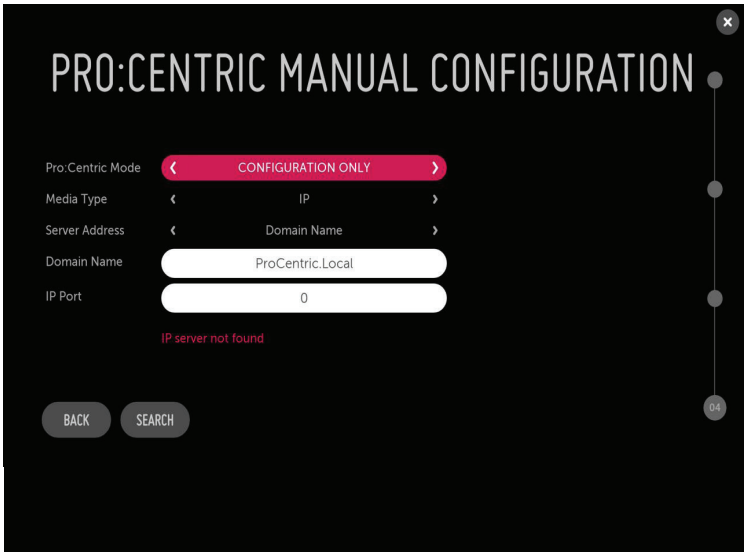


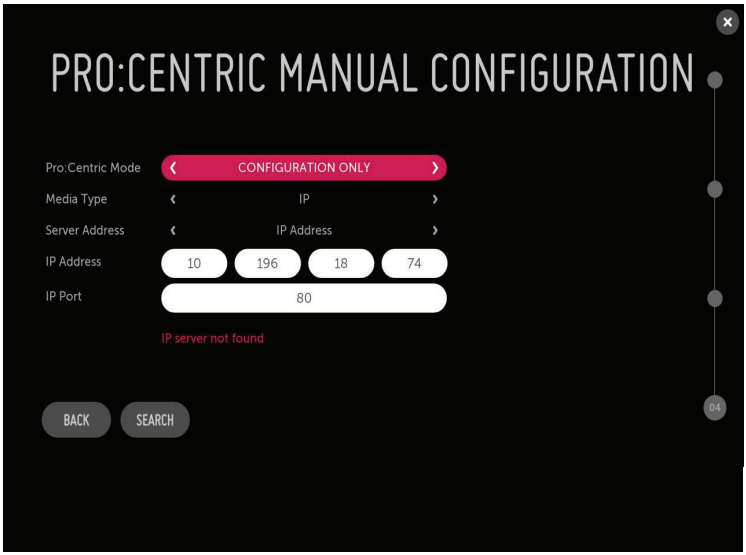
2 Please select the '**MANUAL PRO:CENTRIC**'.



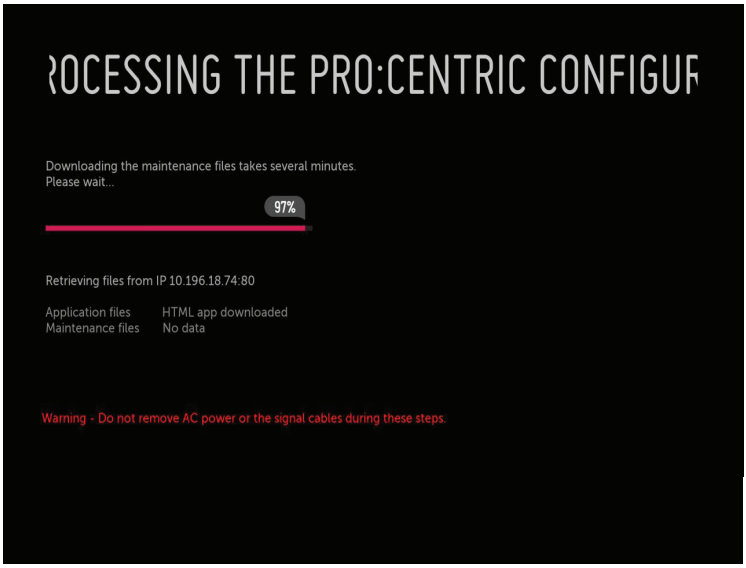
3 Configure the appropriate Pro:Centric settings in the TV.



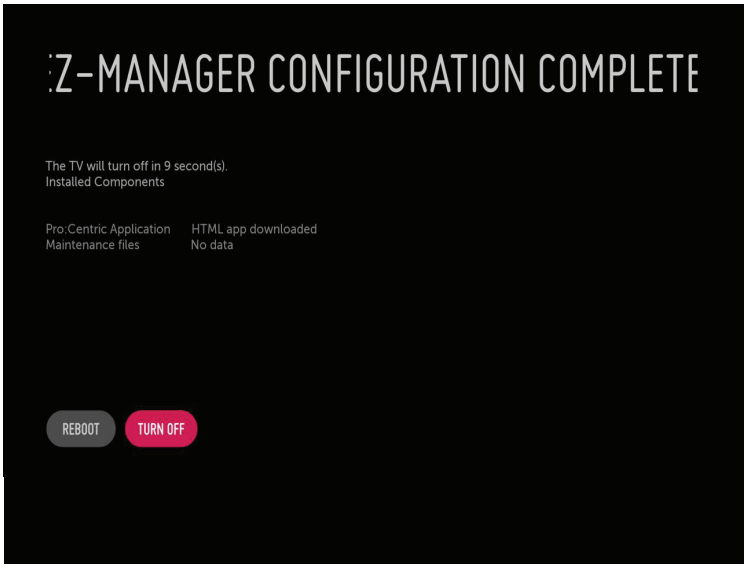




4 Downloading the Pro:Centric application files takes few minutes.

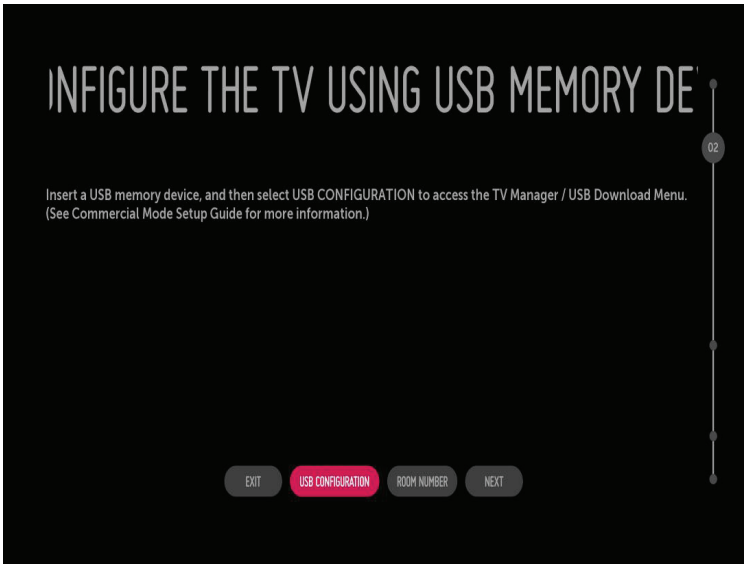


5 After the installation is completed, the following screen will be displayed.

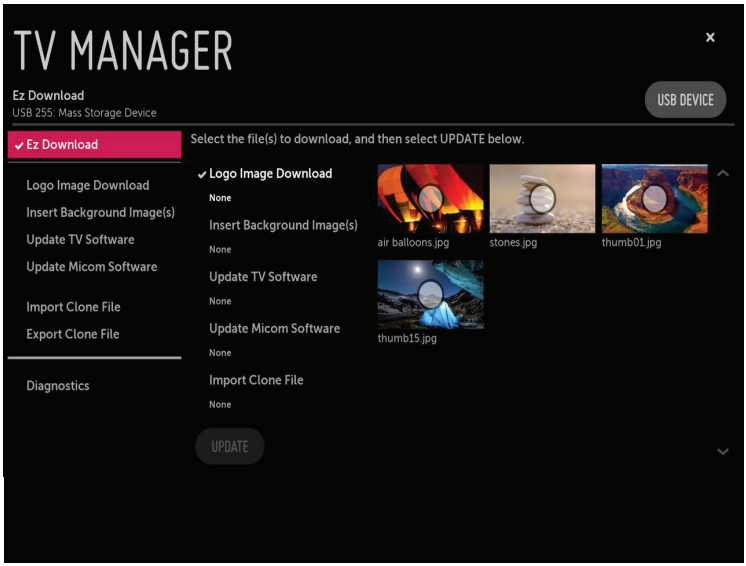


USB LG Smart Install Utility

1 Select the '**USB CONFIGURATION**' → '**TV MANAGER**'.

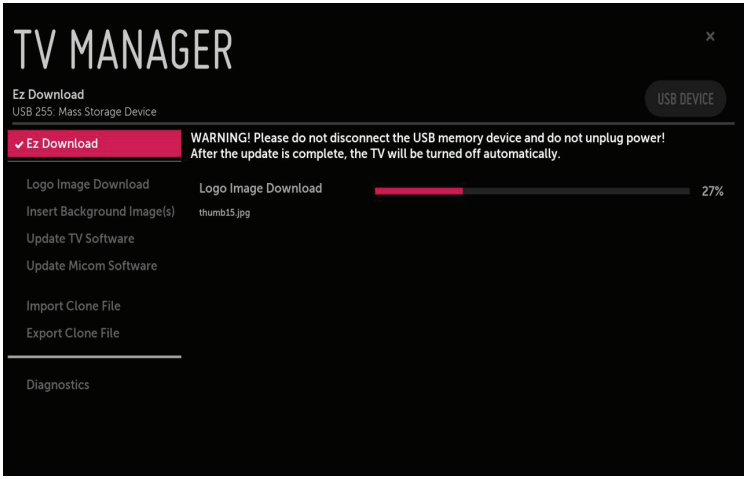


- If you have USB Memory for "LG_DTV" or "lg_dtv" folder, this step shows the USB file list for downloading the items.

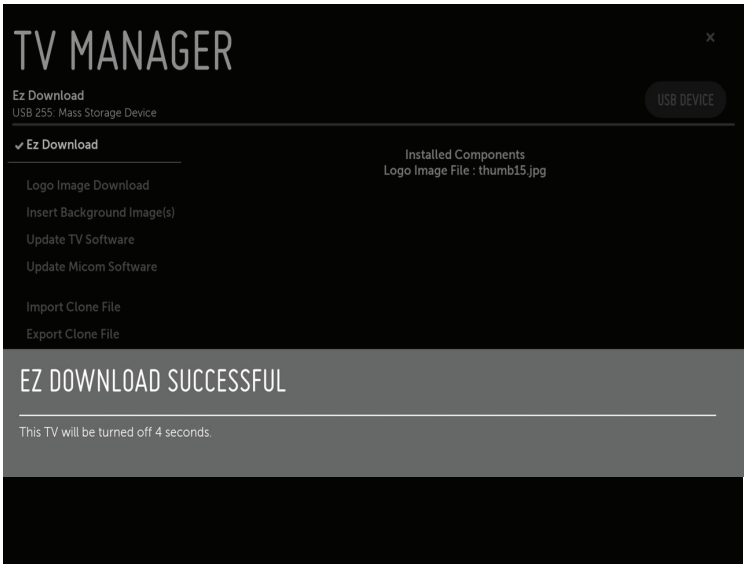


- Detail information is described in TV Manager chapter of Installation Menu.

2 Downloading the files takes few minutes.



3 After the installation is completed, the following screen will be displayed.

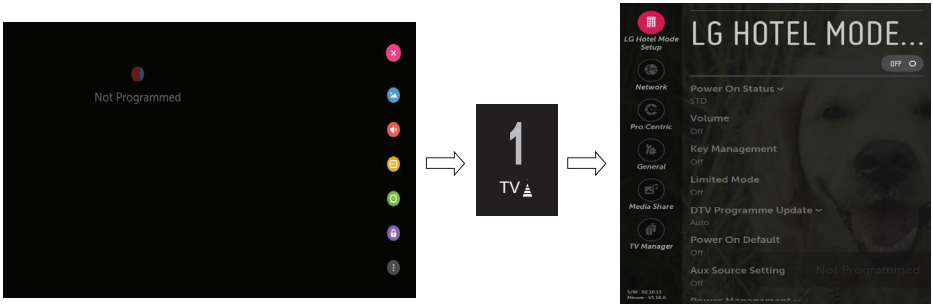


INSTALLATION MENU

- Image shown may differ from your TV.

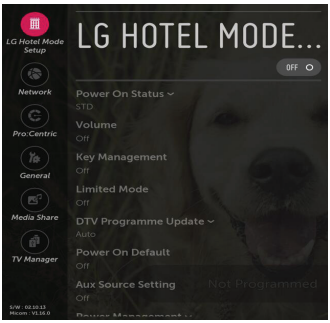
INTRODUCTION

The abundant functions for Hotel TV linked with software installation can be projected on OSD as 'Installation Menu'.
The wide range of hotel features can be performed simply on additional window to enhance the LG hotel TV's easy installation and convenient operation for Hotelier and System Integrators.



1 Press the Setting button for more than 5 seconds using the user remote control, programme information will appear at top left on the screen.
2 Enter a four digit password and press '**OK**' button.
- The TV is set with the initial password "1-1-0-5".
3 Use the ∨ ∧ button to select the desired menu.

LG HOTEL MODE



1 Use the ∨ ∧ button to select the **LG HOTEL MODE SETUP**.
2 Use the '**OK**' button and then ∨ ∧ button to select Hotel Mode Operation.
- When 'Hotel Mode Operation' is set to On (Work), all functions of Hotel Mode apply.

Hotel Mode Operation

- Decide to work all functions of 'Hotel Mode Operation' or not by setting 'Hotel Mode Operation' as On(Work) or Off(Do Not Work)
- When 'Hotel Mode Operation' is set to On(Work), all functions of Hotel Mode apply.
- When 'Hotel Mode Operation' is set to Off(Do Not Work), all functions of Hotel Mode Do Not apply.
- When it is set to 'On', all items reserved at the Schedule list are deleted and the reservation function is not supported.(applied for the model offering the reservation function)
- The TV triggered by the external device (ex: SIMPLINK, TVLink-Tuner, etc.) operates separately from the Hotel mode.
- When it is set to 'On', User Menu ⟶ General ⟶ 'Reset to Initial Settings and Home/Store Mode' are disabled.
- When 'Hotel Mode Operation' is set to On(Work), all skipped programs are not tuned by number keys.
- When 'Hotel Mode Operation' is set to On(Work), Detailed Information about the programme is not available in the EPG.
- When 'Hotel Mode Operation' is set to On(Work), User Menu -> Timer->'Auto Power Off' is disabled.
- When 'Hotel Mode Operation' is set to On(Work), User Menu -> Timer->'2 Hour Auto Power Off' is disabled.

Power On Status

- Decide to select working status of TV Set when turn on main power.
- You can set with PWR, STD, LST.
- PWR always make TV set On status when turn on main power .
- STD make Stand-by status when turn on main power.
- LST make TVSet work like previous power status. As same concept as Power Backup mode; If main power were turned off in Power On status, TVSet would work in On status. If main power were turned off in Stand-by status, TVSet would work in Stand-by status.
- If there Block All is both IR Operation and Local Key Operation from Key Management, In order to provide the Option that must be able to turn on the TV in the TV turned off situation, change the value of the PWR. (Reference the Key Management)

Volume

- Decide to apply volume policy of 'Start Volume', 'Maximum Volume' and 'Minimum Volume' as On(Work) or Off(Do Not Work).
- (0 ≤ Min ≤ Start ≤ Max ≤ 100)

Start Volume

- This entry sets the start volume level when is power on.
  - The level is specified as a number between minimum volume to maximum value. (Min ≤ Start ≤ Max)
  - The default setting is 'Off' (disabled).
  - When enabled, if the value is lower then the minimum specified in the minimum volume entry, the minimum volume entry must be used.
  - When enabled, if the value is larger then the maximum specified in the maximum volume entry, the maximum volume value must be used.
  - Access to a volume in 'On Timer' must be fixed to start volume when 'Hotel Mode Operation' (On) and 'Start Volume' (Off, 0 ~ 100) were set simultaneously.

Maximum Volume

- This entry sets the maximum volume level the set. The level is specified as a number between 'Minimum Volume' to 100. (Min ≤ **Max** ≤ 100).
  - If the command volume up to higher than maximum volume' is received, that should be ignored.
  - The default value is 100.

Minimum Volume

- This entry sets the minimum volume level the set will produce.
  - The level is specified as a number between 0 to 'Maximum Volume'. (0 ≤ **Min** ≤ Max)
  - If the command volume down to lower than minimum volume is received, that should be ignored.
  - The default value is 0.

Key Management

- Manage key usability of Local(Front) Key and Remote Control. When selected to 'On', following 'IR Operation' and 'Local Key Operation' will be worked by below.

IR Operation

- Decide whether work the LG remote control or not.
  - When 'IR Operation' is set to 'Normal', all remote keys are available.
  - 'Use PWR Only' makes block all remote keys except power key.
  - When 'IR Operation' is set to 'Block All', all normal remote keys don't work.

Local Key Operation

- Decide to operate 'Local/Front Key' working behavior by setting 'Local Key Operation' as 'Normal', 'Use PWR Only' and 'Block All'.
  - When 'Local Key Operation' is set to 'Normal', all local keys are available.
  - 'Use PWR Only' makes block all local keys except power key.
  - When 'Local Key Operation' is set to 'Block All', all local keys don't work.

Limited Mode

- Configure TV function's limitation. When selected to 'On', following sub-menus will be worked by below.

Setup Menu

- Permit to tune and manage programmes as 'On'(permitted) or 'Off'(not permitted).

Programme Change

- Decide to change channel or not by setting 'Program Change' as 'On'(Change Possible) or 'Off'(Change Impossible) when present source is TV.
  - When 'Programme Change' is set to Off (Change Impossible)
    - » Program Key, Numeral Key, List Key, Q.View Key don't work and entering 'Channel Menu' in the Main Menu OSD is impossible.
    - » 'Programme' item in 'On Time' menu will be fixed.
    - » Entering 'Programmes' in the 'Main Menu' OSD is impossible regardless of 'Programmes' item.
  - When 'Program Change' is set to On(Change Possible), 'Program Key', 'Numeric Key', 'List Key', 'Q.View' Key, 'TV/RAD Key', ''FAV Key' does work and entering 'Channel Menu' in the Main Menu OSD is possible.

Menu Display

- Function to decide whether work with menu (including relevant menus too) of control key (On – Enter possible) or not (Off – Enter Impossible).
  - Although select Off(Enter impossible), the action that press a Menu button for 5 seconds to enter 'Installation Menu' is available.
  - When select On(Enter possible), Menu works.

OSD Display

- Decide to display OSD or not by setting 'OSD Display' as On(Display) or Off(Do not Display).
  - When 'OSD Display' is set to 'Off'(Do not Display), all OSD is not displayed except some exception.
  - Although select 'Off' (Do not Display), the action that press a Menu button for 5 seconds to enter 'Installation Menu' and entering service menu are available. (In-Start, Power-Only, Adjust, Installation Menu…)

System Provider Mode

- 'System Provider Mode' allows access to the menu system from the front panel or remote control but access is controlled as follows:
  - When value is 'On', Accessible Items on the menu system, others are not permissible.
    - » Input select screens
    - » Sleep timer
    - » Aspect Ratio
    - » Subtitles
    - » 'Safety' / 'Photo & Video' / 'Music' / 'Network' / 'Support' / 'Bluetooth' Menu
  - If the channel map is empty, 'Auto-tuning' guide dialog should be blocked by pressing 'List', 'Fav', 'CH+', 'CH-' keys.

DTV Programme Update

- It is a mode to set whether to update dtv Programme automatically or not.
- When DTV Programme Update is set to 'Auto', the function to update TV's programme map according to dtv programme's stream information.
- DTV Programme Update is set to 'Manual', the function to keep TV's programme map even though dtv programme's information is changed.

Power On Default

- Set the channel to display and Volume Level, etc. when turn on power in AC Power On or Stand-by status.
- Set to On(Work) or Off(Do Not Work).
- When 'Power On Default' is set to Off, it is not applied to the subordinate Input, Programme, A/V Setting, Aspect Ratio menu.
- When Power On Default is set to On, it can set by entering the subordinate menu.

Input

- Set whether it is turned on by the set input source or by the last stored input source.

Programme

- Select start channel number if Input source's value is TV.

A/V Setting

- If 'A/V Setting' is changed from 'Off' to 'On', A/V parameters that are set before entering 'Installation Menu' are applied whenever turn on power.

Aspect Ratio

- The aspect ratio determines the default aspect ratio that the set returns to on power up.

Aux Source Setting

- Set to On(Work) or Off(Do Not Work).
- The Auxiliary (Input) Source Setting feature will enable or disable for each external input.
- User cannot disable the current input's 'Aux Source Setting'.

Power Management

- The Power Management feature will turn off the television receiver if no input control command is received from either the Local or IR Key within a selected hours.
  - Activity on either of these inputs shall reset the 'Power Management' timer and prevent interruption of TV viewing.
  - This entry can be set to a value which is corresponding to the desired hours (1Hour to 7Hours).
  - Default value is 'Off(disabled)'.

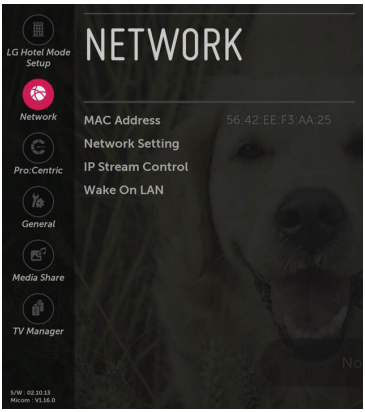
Radio Video Blank

- Set to On(Work) or Off(Do Not Work).
- Programme that is set to 'Radio Programme' and only has Sound should decide whether to set 'Video Blank' or not.
- When 'Radio Video Blank' is set to On(Work), 'Video Blank' works only in case of Radio Programme.
- Although set to On(Work), if there are Video signal, 'Video Blank' wouldn't work. In consideration of case that display background screen and broadcast only with Radio, 'Video Blank 'works only when there is no Video signal.
- When set to Off(Do Not Work), 'Video Blank' do not work although it is the Radio Programme.
- This operates only in the Analog TV Mode.

Factory Reset

- Change all settings to their default values.

NETWORK



1 Use the ∨ ∧ button to select the **NETWORK**.

MAC Address

- Displays the MAC address (not customizable).

Network Setting

One-click network connection

- Connects easily to a wired/wireless network.
- Network Connection to connect to an available network automatically. Follow the prompts on the TV.

To connect to a network through Set Expert

- For use in special circumstances such as in offices (in cases where a static IP is used).

1 Select a network connection, either Wired or Wireless.
2 When connecting via Wired, Configures the IP settings of the TV set. You can set the IP address, subnet mask, gateway and DNS server.
3 When connecting via Wi-Fi, use the one of the following network connection methods.

AP List	Connects to the network selected from the AP List.
Enter the SSID	Connects to the wireless AP typed in.
WPS-PBC	Connects easily when the button of a wireless AP supporting PBC is pressed.
WPS-PIN	Connects easily when the PIN of the wireless AP that you wish to connect to is entered in to the AP website.
Advanced Wi-Fi Settings	After connects Wi-Fi, you can set the IP address, subnet mask, gateway and DNS server.

IP Stream Control

Audio PTS Offset

- Controlling output stream timing of audio.
- You can set the '-500~500' (Change step is -10 or +10)

Video PTS Offset

- Controlling output stream timing of video.
- You can set the '-500~500' (Change step is -10 or +10)

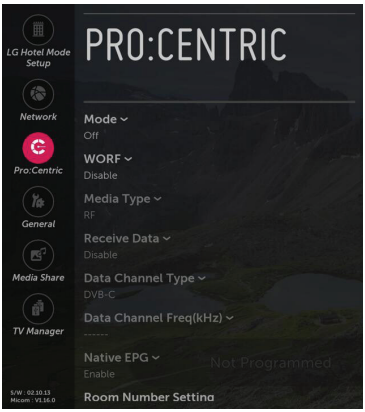
IGMP

- You can set IGMP version. (2 or 3)

Wake On LAN

- Sets the Wake On LAN function to Enable or Disable.
  - The Wake On LAN feature enables the TV to receive software updates and/or be powered ON upon receipt of Wake Up Frame packets and/or Magic Packet data via the wired LAN. To facilitate use of this feature, note that the appropriate wired connection must be made.

PRO:CENTRIC



1 Use the ∨ ∧ button to select the **PRO:CENTRIC**.

Mode

- Sets whether or not enable Pro:Centric and the service method .
- You can set to Off, Configuration Only, Flash(Except for Iran), GEM or HTML using the ∨ ∧ button . The default value is Off; when it is set to Off, all the sub items are disabled. (Except for WORF, Room Number Setting)
- Launching Pro:Centric may require a minute or more depending on the operating environment.

WORF

- Press the '**OK**' button in 'WORF Setting' item to go to the 'WORF' menu.
- When WORF is set to 'Enable', Hour and Minute items are enabled and then the WORF function is enabled.
- When WORF is set to 'Disable', 'Hour' and 'Minute' items are disabled and then the WORF function is disabled.

Room Number Setting

- Press the '**OK**' button in Room Number Setting item to go to the 'Change a room number' menu.
- You can set or change Label and Room Number using the Room Number Setting.

Media Type

- Sets the medium type to RF or IP.
  The default value is RF.

RF

- Data Channel Freq(KHz)
  - Sets the RF frequency at which the Pro:Centric data is received.
- Data Channel Type
  - Sets the RF modulation type to DVB-T or DVB-C.
    The default value is DVB-C.

IP

- P:C IP Setting
  - Server Address is set to IP Address

(IP Address)	Set IPv4 address in 4 octets.
(Port Number)	Sets the actual port or number where the Pro:Centric server is running.

  - Server Address is set to Domain Name

(Domain Name)	Sets the domain name where the Pro:Centric server is running.
(Port Number)	Sets the actual port or number where the Pro:Centric server is running.

  - The default value of IP a/b/c/d is 0 and the range is between 0 and 255. The default value of Port is 0 and the range is between 0 and 65535.

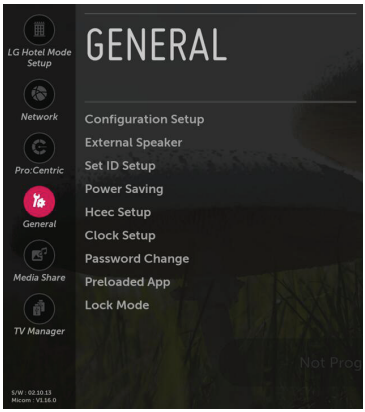
Receive Data

- Sets Enable or Disable. When it is set to Disable, all the sub items are disable.

Native EPG

- When Pro:Centric Mode is set to 'Off' or 'Configuration Only', 'Native EPG' is forced to be 'Enable' and unable to change.
- Disable
- Enable
  - You can use the TV Guide Application in Pro:Centric.

GENERAL



Configuration Setup

Select RCU

- It is a mode to set whether to use Select RCU or not. When 'Select RCU' is set to 'Enable', You can adjust 'Number of RCU' menu.

Number of RCU

- It is a mode to set Number of RCU.
  Number of RCU value range 1~9. (When 'Select RCU' is set to 'Enable')
  Number of RCU value range 0. (When 'Select RCU' is set to 'Disable')

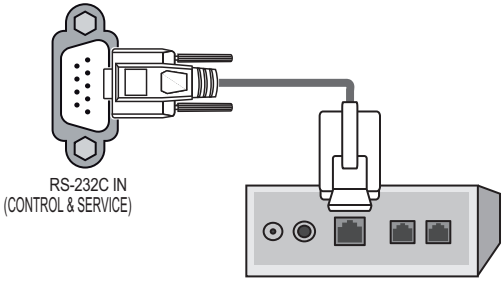
* RCU(Remote Control Unit) : It is special RCU that operates only setted number of RCU in TV.

RS232 DC Power Outlet (Except for LW64**)

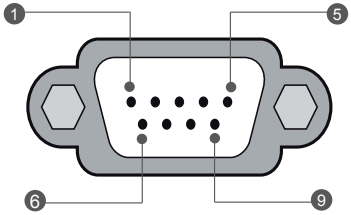
- It is a mode to decide whether to output DC or not for power supply to IB Box in Installation Menu. We offer a output terminal in one Pin of RS232C Jack for the use of communication.
- 5 V DC Power Outlet and 12 V DC Power Outlet must operate mutually exclusively. That is, only one of the two sides must be turned on.

► You can select '**OFF**', '5 V' or '12 V' by pressing ^ ∨ button.

- When select '5 V' the 5 V is forwarded through the port. when select '12 V' the 12 V is forwarded through the port.



- Type of Connector: D-Sub 9-Pin Male



Male connector on box, viewed towards connector.

No.	Signal	Signal requirements
1	VCC	
2	RX RS232	Standard RS232 specification
3	TX RS232	Standard RS232 specification
4	IR from TV	
5	GND	Power ground
6, 8	Not connected	
7	2 A	+5VDC 10%, max 100mV ripple
9	1.5 A	+12VDC 10%, max 100mV ripple

One Channel Map

- If 'One Channel Map' is 'Enable', the TV will operate as below.
  - A. When the TV is auto-scanning, it searches both air and cable channels.
  - B. User can assign a channel number him/herself by manual scan.
  - C. In 'Programme Edit' window, all channels are shown in a single list regardless of input source.
  - D. Automatically scanned channels may not have the user-desired channel numbers.
- If user change the 'Enable/Disable' value, an pop-up window will be displayed to warn that all channel information will be deleted. The Default value is 'Enable'.

DTV Programme Update

- It is a mode to set whether to update DTV programme automatically or not.
  When DTV Programme Update is set to 'Auto', the function to update TV's programme map according to dtv programme's stream information.
  DTV Programme Update is set to 'Manual', the function to keep TV's programme map even though DTV programme's information is changed.

On Timer Operation

- It is a mode to select 'On Timer Operation' working one time or repeatedly.
  'Once': 'On Time' in the user menu operates only one time when the 'On Time' menu is set to 'ON'.
  'Repeat' : 'On Time' operates repeatedly when the 'On Time' menu is set to 'ON'.

Scart Out (Except for UW76**)

- The monitor out signals can or cannot be output through the SCART cable, depending on the setting value of scar t out.You can set to Enable or Disable using the ^ v button. The default value is Enable.

Radio Name Display

- Instead of "Audio Only", the name of a radio channel is displayed on the screen when a radio broadcast is playing.
- Set to On(Work) or Off(Do Not Work).
- If the setting is "On", the name of a radio channel is displayed for the radio channel.
- If the setting is "Off", the text "Audio Only" is displayed for the radio channel.

15Min Auto Off

- When '15Min Auto Off' is set to 'Enable', TV will turn off if there is no signal in 15Min.

Auto Sensing

- If 'Auto Sensing' is set to 'On', the input is automatically switched when the input signal that you set to "ON" is received.
- If 'Auto Sensing' is set to 'Disable', the input is not switched when the input signal is received.

* SIMPLINK and Auto Sensing cannot work simultaneously. If SIMPLINK is set to On, Auto Sensing is automatically set to Disable.

* If the signal is removed while Auto Sensing (automatic input switch) is enabled, the input returns to the previous setting. If the several input are connected by enabling Auto Sensing and the automatic input returns to the previous setting. If the several inputs are connected by enabling Auto Sensing and the automatic input switch is performed several times, the input returns to the previous setting only for the last input and does not repeat the operation for the rest.

* For the AV input connected using the euro scart cable, Auto Sensing does not word for the TV input because the Auto AV function is enabled. (For other inputs, Auto Sensing works normally.) (Depending on model)

InStant On

- Set to 'Instant On Mute Mode' or 'Instant On Reboot mode' to enable the Instant ON feature. The Instant ON feature allows the TV to turn ON when AC power is applied, but with video and audio muted (Muted ON). The TV retains its ON status while appearing to be OFF. Pressing the POWER button toggles Off/On the video and audio mutes, so that the TV appears to turn ON instantly.

* If this item is set to Instant On Mute Mode, the TV will not reboot to check for and download updates at turn OFF. TV seems to be turned off to user(panel is off), but both micom and chipset are on.

* If this item is set to Instant On Reboot mode, the TV will reboot to check for and download updates from the Pro:Centric server at every turn OFF.

Insert Image

- Set to Enable(Work) or Disable(Do Not Work).
- It is a mode to decide whether to display background image when using Bluetooth Sound Sync app or watching Radio channel.
- You can download the background image at TV Manager app.

External Speaker

Volume Control

- Selects the volume control method of an external speaker.
  You can select 'Off', 'Int Variable", Fixed,",Ext Variable' by ^ v pressing button.
  Ext Variable uses the External Vol Up/Down Control Line to change the volume up to 1 Watts.
  Int variable is linked to the main volume OSD and change the volume 0 - 1 Watts.
  Fixed produces a fixed output. The default is Off.

Output

- This item is enabled when Volume Control is set to Fixed. You can choose one of 7 steps.(0.01/0.03/0.05/0.1/0.2/0.5/1 Watts). The Default is 1 Watt.

Set ID Setup

Set ID Lock

- Set the 'Set ID' item in 'GENERAL' Menu whether to activate or not.
- Set to On(Work) or Off(Do Not Work).

Set ID

- Set the 'Set ID' of TV Set with 1~99.

Power Saving

Static Saving

- It is the item for setting the level to reduce the backlight control from the items for saving the consuming power, which is increased or decreased by 10 steps from 0 to 100. 100 makes the consuming power set to the same one from the TV. 0 reduces the consuming power to the minimum. The default value is 100.

* The value displayed at the OSD is not changed and only the actual setting value is converted to percentage based on the static saving value to set.

* 0 ~ 30: HIGH, 40 ~ 60 : MID , 70 ~ 90 : LOW , 100 : OFF

Keyless Off Hours

- Automatically TV will be turned off if there is no key input for the preset time period.
- When it is set to 'Enable', User Menu -> Timer -> 'Auto Power Off' is disabled.
- When it is set to 'Enable', User Menu -> Timer -> '2Hour Auto Power Off' is disabled.

HCEC Setup

CEC Mode

- You will have 3 modes to choose [Default], [HCEC] and [TVLink-CEC].
- If [Default] is selected, you can use SIMPLINK which is provided in LG TV. Also you can enable and disable SIMPLINK through SIMPLINK MENU.
- If [HCEC] is selected, you can use TVLink-HCEC Protocol. For more detailed information, please refer to TVLink-HCEC Protocol document)
- If [TVLink-CEC] is selected, TV will not directly work for key input except for power key. And volume related keys will work just in case of Follower volume control mode. (for more detailed information regarding the scenario of volume control, please refer to "TVLink-CEC protocol" document)

IR Decoding

- When 'IR Decoding' is set to 'Enable', the TV decodes and changes it into a CEC Message and sends it to Command via the HDMI CEC Line. The default value is Disable.

Device ID

- Sets the ID of a device(Logical Address) connected to the CEC Line. You can choose between 'All' and 'E'.
- The default value is 'All'.

StandBy

- Set the sending and receiving scenario of OpStandBy(0x0c) command.
- Ths detailed scenario is described on the table below.

	Send	Receive
Send Only	O	X
Receive Only	X	O
All	O	O
Off	X	X

Forced Initialize

- This setting will be enabled When CEC mode is set as 'TVLink-CEC'
- If 'Enable" is selected, TV will change its input source to HDMI1 by any HDMI-CEC simulation from a device.

HTNG Hotel Mode

- If you use following functions via TVLink-HCEC, HTNG Hotel mode will be set as "Yes" automatically. (*Power On Default, Start Volume, Maximum Volume, Minimum Volume, or Start Volume)
- Even if 'Hotel Mode Operation' is set as No, above settings are still effective.

Clock Setup (Except for LW64**)

Clock Display

- You can select 'Enable' or 'Disable' by pressing ∨ ∧ button.
- After selecting 'Enable', you can see the LED Clock TV.

Dimming Standby

- Standby Dimming value Range : 0~15

Dimming PowerOn

- PowerOn Dimming value Range: 0~99

Clock Source

- You can select 'Off', 'Pro:Centric', 'TV', 'NTP', 'Admin' by pressing ∨ ∧ button.
- NTP : Clock is synchronized using Network Time Protocol. It's only enabled when network cable is connected.
- Admin : It's automatically set to Admin when clock is updated by commercial protocols like TVLink-HCEC, TVLink-Interactive, or HCAP API.
- Off : Clock is synchronized using any available clock source.
- Pro:Centric : Clock is synchronized using Pro:Centric server.
- TV : Clock is synchronized using particular TV program.

- **Input (Depending on model)**
  - You can select 'Input' according to 'Clock Source'.
  - You can select 'RF' or 'IP' when Clock Source is 'Pro:Centric'.
  - You can select TV source when Clock Source is 'TV'.
  - Input is set to 'None', 'HCAP', 'Protocol', 'HTNG' automatically when Clock Source is 'Admin'.

- **Program/Frequency (Depending on model)**
  - Sets the Frequency to get the time information when Clock Source is 'Pro:Centric'.
  - You can select Program when Clock Source is 'TV'

- **Timezone(City) /Timezone(Custom) /Timezone(Offset) (Depending on model)**
  - In the case when there is difference between the time information received from the Teletext and the time of the current area, it can be set up to correct this. The initial value is 0, and it can be changed in the range of -12Hrs ~ +14Hrs. (Timezone(Offset) range is -12Hrs ~ +12Hrs)

Password Change

- To ensure more security, Password can be changed by installers' own design.

1 Change password by using virtual keyboard.
2 Input the password again for confirmation.

PreLoaded App

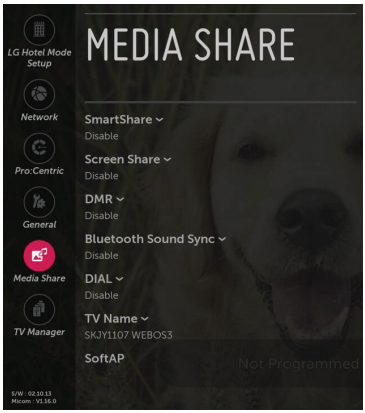
1 If you want to use a particular app, you can choose from the menu. you can setting each apps activation.
2 You can check or uncheck by pressing '**OK'** button.

Lock Mode

- If 'Lock Mode' is 'Yes', the following features will be unavailable.

* USB
  - If it is set to 'Enable',USB devices do not work in relative features.(Exclude S/W update).
* Factory Reset
  - If it is set to 'Enable', User Menu -> General -> 'Reset to Initial Settings' is disabled.

MEDIA SHARE



▶ You can setting Whether to use for "SmartShare"

SmartShare

- Smart Share enables DLNA function. If this value is enabled, TV act as Digital Media Player (DMP) and display Digital Media Service(DMS) contents through Smart Share app.

Screen Share

- Screen Share enables WiFi p2p functions such as Miracast and WiDi. If this value is enabled, Screen Share app is displayed at launcher bar and User can connect to TV by user's Miracast enabled mobile phone or WiDi enabled laptop

DMR

- DMR enables the TV to act as a Digital Media Renderer (DMR) device to receive content from DLNA Certifi ed devices on the same network.

Bluetooth Sound Sync

- Bluetooth Sound Sync enables Bluetooth sound from the mobile device of player. If this value is enabled, phone can pair to TV and user can hear the sound of player through the TV.
- Supported device : Mobile device based on Android (higher than v4.4 Kitkat) / iOS
  » support the lower than v4.4 (Kitkat) on the LG mobile device based on Android
- Supported version : Higher than Bluetooth 3.0

DIAL

- With this DIAL service, you can launch the target app at Smart Home Launcher bar without select the target app by remote controller. The target app should be already selected at Installer Menu > General > Preloaded App.

TV Name

- When other media device(ex: smart phone, desktop, laptop) searching TV, this string was displayed.

SoftAP

- If you want to use SoftAp menu on **MEDIA SHARE** menu, you must select 'On' in this item.
  A SoftAP is a function of TV which is used like Access Point.

Use Default

- If you want to use default password(this password was generated randomly), you must select 'Enable' in this item.

Security Key

- When guests want to use TV's SoftAP function, they need this password. If you want to change this default password, you need to Change 'Use Default' value into 'Disable'.

Wi-Fi Signal Strength

- You can control wireless signal strength on SoftAP mode. This is controlled by 5 step. If you select 'Not Used', wireless signal strength will be set to Max value.

Wi-Fi Channel

- You can control wireless channel on SoftAP mode. This is controlled from 1 to 11 channel. If you select 'Auto', wireless channel of SoftAP will be set to random channel.

TV MANAGER

USB Download Menu

* **USB Cloning** : An Installer can quickly set up and clone multiple TV sets at a property. These cloned TVs will all have the same Master TV Setup: Public Display Mode Installation Menu settings, User A/V settings and the Channel Map. This newer procedure significantly decreases the installation time that would be necessary if the standard RS-232C method were used instead.

1 Overview USB Cloning Procedure
: Commercial TVs have the capability to support cloning internal TV data and programme information with an external clone device called "USB Cloning", in order to copy TV data accurately and quickly. The clone internal functions use slightly different internal processes for the two types of commercial TVs. However, the UI of cloning feature remains the same in both. Regarding the demands over the current cloning feature for quicker cloning, better portability and etc, we would like to announce the cloning process via USB port, named as USB Cloning. USB cloning process is divided into 2 main processes. One is writing the previously saved TV data into the TV, and one another is reading of current TV data into USB memory card. To avoid any confusion due to the words, it is clearly specified as "Import Clone File" and "Export Clone File" in the whole process.

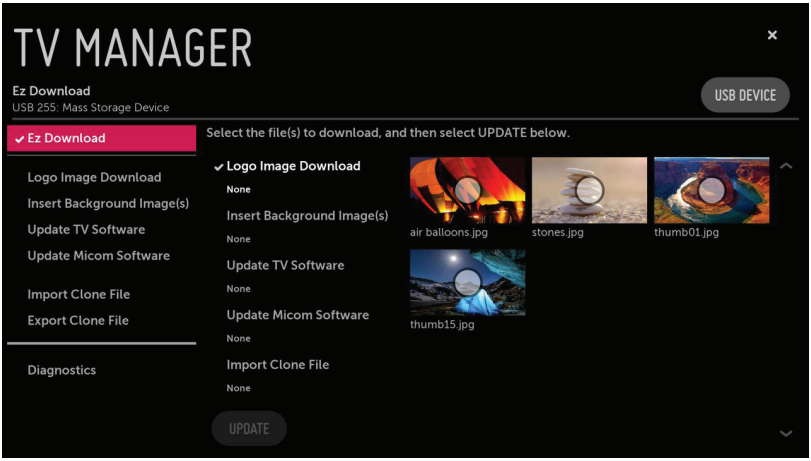
2 Data To Be Cloned
: The data cloned are the same data cloned by previous USB Cloning. Details are explained in the following:
- TV data includes :
  - A. Installer Menu settings
  - B. Main menu settings (Audio, Picture etc)
- Analog / Digital Channel information includes:
  - A. Channel numbers
  - B. Channel label
  - C. Channel attributes including channel type, skipping status and etc.

3 Input Source
: The user needs a USB memory card with FAT formatted to make successive cloning via USB port. A USB memory card size more than 128 Mega Bytes and less than 4 Giga Bytes is recommended.

NOTE

- Currently, support the preceding USB file system for FAT file format only. Other file formats including NTFS is not currently supported. Microsoft Windows officially supports FAT for the USB memory card.
- Only a USB storage device is recognizable.
- If the USB storage device is connected through a USB hub, the device is not recognizable.

Ez Download



- Ez Download is a function that enables users to download the desired items all at once, such as EPK (software update file), TLL (see Export Clone File descriptions for more information regarding file types), Logo Image, etc (TLX, MICOM for Pro:Centric).

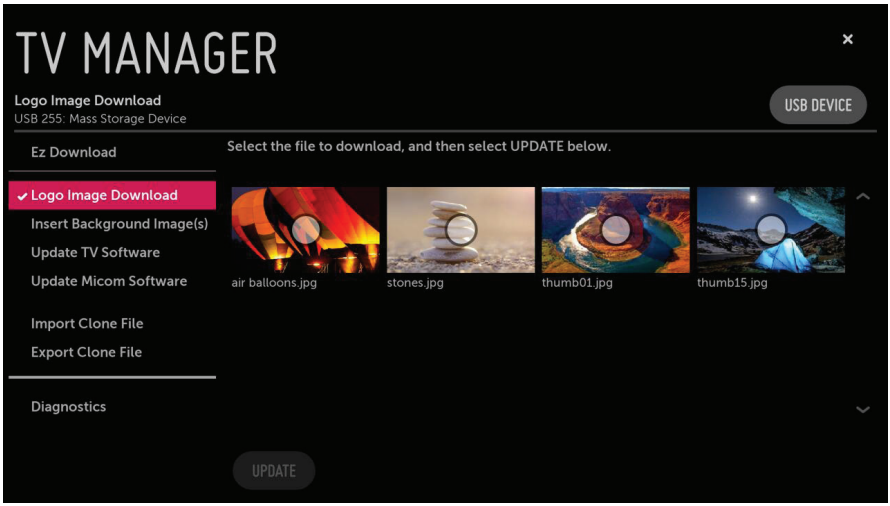
* Splash images and EPK files should be copied into the folder named LG_DTV on the USB.

- TLL files should be copied to the root folder of the USB.
- If you press 'EZ Download' menu, EZ Download is launched.
- Supported file type have to be shown and "None" checked when the is existed in USB. And only one item should be checked on each file format when the page is opened.
- If .DZM file exist file will be selected previously download file.

NOTE

- If the DZM file is still in the USB after the download is complete:
  An Ez Download pop-up window will appear and list the file types, such as TLL, LOGO, EPK or Micom with the previously downloaded lists checked automatically.
- If the global TLL and model TLL files exist in the same USB root directory, then only the global TLL will be shown.
  If the global TLL has been deleted, then the model TLL will be shown.

Logo Image Download

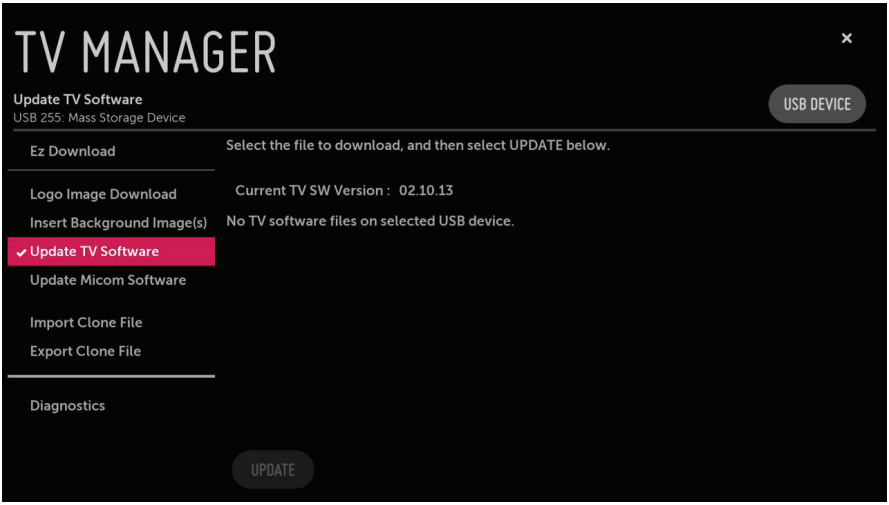


- If there are more than two USB Memory Device, It is possible to select the USB.
- The download sequence is Logo Image Download -> Select Image -> UPDATE.

NOTE

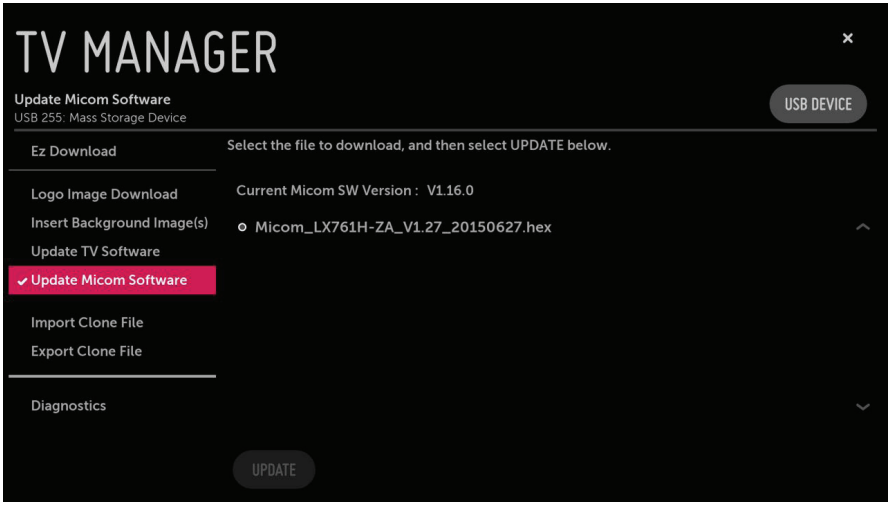
- Splash Image update function supports only JEPG,BMP format file of less than 8 MB filesize.
- We recommend you that splash image resolution match the TV`s panel resolution.
- Max resolution of splash image : Full HD ⟶ 1920 x 1080, HD ⟶ 1360 x 768.
- Min resolution of splash image : Full HD ⟶ 64 x 64, HD ⟶ 64 x 64.
- TV keep splash image until you change a new splash image.
- The target file is located in ₩LG_DTV folder.

Update TV Software



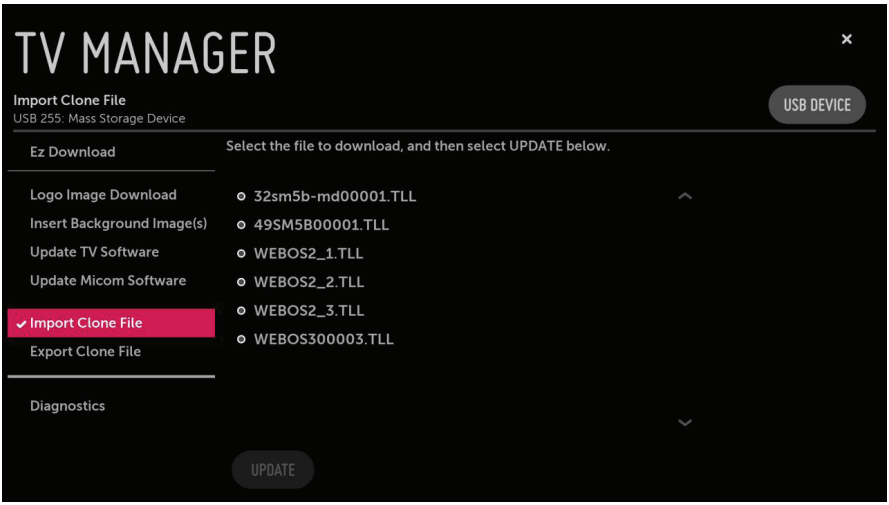
- This feature update EPK of TV through the hex file in USB. The target file is located in \LG_DTV folder.
- If there are more than two USB memory Device, It is possible to select the USB.
- The download sequence is Update TV Software -> Select file(EPK) -> UPDATE.

Update Micom Software



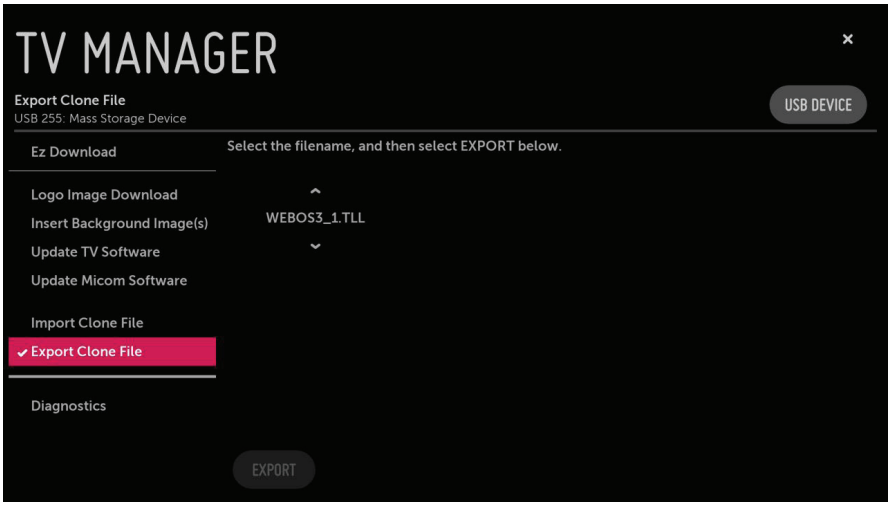
- This feature update MICOM of TV through the hex file in USB. The target file is located in \LG_DTV folder
- If there are more than two USB memory Device, It is possible to select the USB.
- The download sequence is Update Micom Software -> Select file(Micom) -> UPDATE.

Import Clone File



- Once the internal TV data and its channel map information is written to the USB memory card, the user can start "Import Clone File" process with the data file generated and stored in USB memory card. As previously warned in "Export Clone File" process, the user should not turn TV off nor unplug the USB memory card. Detailed steps for "Import Clone File" are illustrated below. The following images might be slightly different than the OSD image.

Export Clone File



- "Export Clone File" must be done first before "Import Clone File" process, as it generate the file to be used in "Export Clone File". While writing is in process, the user must not turn TV off nor unplug the USB memory card. The steps in "Export Clone File" are explained below. The following images might be slightly different than the OSD image.


LG
Life's Good