Ikusi Flow

Set-Top-Box
Installation and Description guide
<table>
<thead>
<tr>
<th>Index</th>
<th>page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. INTRODUCTION</td>
<td>3</td>
</tr>
<tr>
<td>2. BASIC INSTALLATION</td>
<td>3</td>
</tr>
<tr>
<td>3. REMOTE CONTROL</td>
<td>3</td>
</tr>
<tr>
<td>3.1. Description</td>
<td>3</td>
</tr>
<tr>
<td>3.2. Functions</td>
<td>4</td>
</tr>
<tr>
<td>3.2.1. Programmable On/Off</td>
<td>4</td>
</tr>
<tr>
<td>3.2.2. FLOW STB On</td>
<td>4</td>
</tr>
<tr>
<td>3.2.3. Additional functions</td>
<td>4</td>
</tr>
<tr>
<td>3.2.4. Programmable mute/unmute</td>
<td>4</td>
</tr>
<tr>
<td>3.2.5. Programmable A/V input</td>
<td>4</td>
</tr>
<tr>
<td>3.2.6. Language selection</td>
<td>4</td>
</tr>
<tr>
<td>3.2.7. Setup Menu</td>
<td>4</td>
</tr>
<tr>
<td>3.2.8. Teletext</td>
<td>4</td>
</tr>
<tr>
<td>3.2.9. Channel name</td>
<td>4</td>
</tr>
<tr>
<td>3.2.10. Channel list</td>
<td>4</td>
</tr>
<tr>
<td>3.2.11. Virtual keyboard</td>
<td>5</td>
</tr>
<tr>
<td>3.2.12. Skip &amp; Fast play</td>
<td>5</td>
</tr>
<tr>
<td>3.2.13. Exit</td>
<td>5</td>
</tr>
<tr>
<td>3.2.14. Back</td>
<td>5</td>
</tr>
<tr>
<td>3.2.15. Navigation arrows and OK</td>
<td>5</td>
</tr>
<tr>
<td>3.2.16. EPG</td>
<td>5</td>
</tr>
<tr>
<td>3.2.17. Info</td>
<td>5</td>
</tr>
<tr>
<td>3.2.18. Programmable volume</td>
<td>5</td>
</tr>
<tr>
<td>3.2.19. Play/Pause</td>
<td>5</td>
</tr>
<tr>
<td>3.2.20. Stop</td>
<td>5</td>
</tr>
<tr>
<td>3.2.21. Switch channels</td>
<td>5</td>
</tr>
<tr>
<td>3.2.22. Alphanumeric keypad</td>
<td>6</td>
</tr>
<tr>
<td>3.2.23. Aspect ratio</td>
<td>6</td>
</tr>
<tr>
<td>3.2.24. Update</td>
<td>6</td>
</tr>
<tr>
<td>3.3. Learning option</td>
<td>6</td>
</tr>
<tr>
<td>3.3.1. Programming of buttons</td>
<td>6</td>
</tr>
<tr>
<td>3.3.2. Reset of the programme</td>
<td>6</td>
</tr>
<tr>
<td>4. SYSTEM SETTINGS</td>
<td>6</td>
</tr>
<tr>
<td>4.1. Network</td>
<td>7</td>
</tr>
<tr>
<td>4.2. Severs</td>
<td>7</td>
</tr>
<tr>
<td>4.3. Video</td>
<td>7</td>
</tr>
<tr>
<td>4.4. Audio</td>
<td>7</td>
</tr>
<tr>
<td>4.5. Advanced settings</td>
<td>7</td>
</tr>
<tr>
<td>4.6. Keyboard layout</td>
<td>7</td>
</tr>
<tr>
<td>4.7. Network info</td>
<td>7</td>
</tr>
<tr>
<td>4.8. Device info</td>
<td>7</td>
</tr>
<tr>
<td>4.9. Restart portal</td>
<td>7</td>
</tr>
<tr>
<td>4.10. Reboot device</td>
<td>7</td>
</tr>
<tr>
<td>4.11. Reset settings</td>
<td>7</td>
</tr>
<tr>
<td>4.12. Clear user data</td>
<td>7</td>
</tr>
<tr>
<td>4.13. Software update</td>
<td>7</td>
</tr>
</tbody>
</table>
1. INTRODUCTION

This guide describes installation and configuration procedure of FLOW STB. FLOW STB is an IPTV set-top-box especially designed to be used in IPTV distribution networks where an IKUSI Flow headend exists with the Device Manager app activated.

FLOW STB can receive multicast IP contents, decode them (both MPEG2 and H.264) and display them in a TV. Besides, it is integrated in IKUSI Flow headend, so that it can receive commands such as poweron/poweroff, service listing, content currently being displayed on TV, mute/unmute sound.

The registration process of the STB in IKUSI Flow and its identification is done in a very simple and intuitive way. In most of the cases, the default configuration of the device is enough and it is not needed to modify it, being possible to work in plug & play way. Thereby, the STB automatically get the parameters about IP addressing, Device Manager address, channel list, etc., simplifying the installation.

2. BASIC INSTALLATION

In FLOW STB packaging, you can find an instructions guide where are detailed:

- the product specifications
- how to unpack the STB
- how to connect it to the TV
- introduction into the remote control unit

You can download this instructions guide from our web page www.ikusi.tv

3. REMOTE CONTROL

3.1 Description

FLOW STB includes a remote control that allows a simple and friendly use of the STB. Also, it has available a special block of five programmable buttons (marked with blue print colour), which you may want to choose for controlling other devices (TV set, amplifier).
Ikusi Flow STB guide

The following sections describe function of each button and how to customize the programmable buttons.

- **3.2 Functions**

  3.2.1 Programmable On/Off
  Set up this button to use it as TV On/Off button. For more details, refer to section 3.3.

  3.2.2 FLOW STB On
  Use this button to switch on FLOW STB when, previously, it has been switch off remotely with IKUSI Flow Device Manager app. Switching off option with the button itself is disabled.

  3.2.3 Additional functions
  The functions of this buttons are covered in apps. Their tasks may differ depending on a current app. Also, they are used in some configuration menus to access to additional options.

  3.2.4 Programmable mute/unmute
  Set up this button to use it as TV mute/unmute button. For more details, refer to section 3.3.

  3.2.5 Programmable A/V input
  Set up this button to use it as TV external audio/video input selection button. When it is not programmed, by default, pushing the button, a list with the available TV channels is displayed, allowing to change the channel using the navigation arrows and OK button. For more details, refer to section 3.3.

  3.2.6 Language selection
  Pushing this button, you can choose among the different languages transmitted in a TV program, both for audio and teletext.

  3.2.7 Setup Menu
  Push this button to launch the FLOW STB setup screen. The TV will display System settings screen, where you can modify the configuration parameters of the device (see section 4).

  NOTE: this button may be blocked from the IKUSI Flow headend in order to avoid that the final users modify the STB configuration. If that is the case, pushing the button do not perform any action. For more details, refer to Device Manager user guide.

  3.2.8 Teletext
  Use this button to access to the teletext of the TV channel that is currently being received.

  3.2.9 Channel name
  Pushing this button, the name of the TV channel is displayed overlayed to the TV picture.

  3.2.10 Channel list
  Pushing the button, a list with the available TV channels is displayed, allowing to change the channel using the navigation arrows and OK button.

  3.2.11 Virtual keyboard
  Push this button to open a virtual keyboard in the screen of the TV.

  3.2.12 Skip & Fast play
  Use these buttons during playback of a VOD content to skip backward/forward or to play faster backward/forward.

  3.2.13 Exit
  Push this button to exit from the current menu or when you want to do an action indicated in the TV as “Exit”. 
3.2.14 Back
Push this button to return to the previous menu. When you are watching a TV channel, pushing this button the channel will change to first channel of the channel list.

NOTE: the behaviour of this button is not the same in all menus. It is recommended to use "Exit" button instead of this button.

3.2.15 Navigation arrows and OK
Use the arrows to move into the menus and lists. Push OK button to confirm a selection.

3.2.16 EPG
Push this button to display the electronic program guide, where you will find a list with the scheduling information of each of the TV channels.

3.2.17 Info
Pushing this button, the name of the TV channel is displayed overlayed to the TV picture.

3.2.18 Programmable volume
Set up this button to use it as TV volume adjustment button. For more details, refer to section 3.3.

3.2.19 Play/Pause
Use this button during playback of a VOD content to play or pause it.

3.2.20 Stop
Use this button during playback of a VOD content to stop it.

3.2.21 Switch channels
Use this button to switch the channel, moving sequentially into the channel list received by the STB.

3.2.22 Alphanumeric keypad
Use the keypad to proceed directly to a channel, pushing the corresponding channel number. Also, you can use the buttons to introduce text in the menus that require it.

3.2.23 Aspect ratio
Use this button to convert the video format when image aspect ratio does not match TV screen format.

Additionally, this button is used in some menus to access to drop-down lists.

3.2.24 Update
Push this button to update the content displayed in the TV.
3.3 Learning option

The remote control of FLOW STB has available a block of five programmable buttons (marked with blue print colour), which you may want to choose for controlling other devices (TV set, amplifier).

You can clone TV remote control function in the STB remote control (such as On/Off, volume adjustment, etc.), so that you can perform the most common actions with a single remote control.

The procedure to program the buttons and to reset the programme is described below.

3.3.1 Programming of buttons

To program any of the buttons printed in blue colour, do the following:

- Press Programmable On/Off and Programmable A/V input buttons at the same time and hold them for 2 seconds. When the green light of Programmable On/Off button will stop blinking and will light steadily, it means the remote control is ready to learn.
- Press the button you want to “teach”. The green light will start blinking.
- Place the infrared lamp of the two remote controls opposite each other and press the button on the remote control of the other device, the function of which you wish to copy on the FLOW STB remote control. Hold for 2 seconds.
- After the green light two quick blinks you may continue programming other buttons.
- Repeat the procedure described above for all buttons you want to program for controlling external devices.
- Press Programmable On/Off button and Programmable A/V button to save the programmed data; the green light should face off.

3.3.1 Reset of the programming

If you want to remove the programming of the configurable buttons, press Setup menu and OK buttons at same time and hold for 2 seconds. Red LED will flash 5 times. Reset is done.

4. SYSTEM SETTINGS

FLOW STB is supplied configured with a set of parameters by default. These parameters can be modified from the System settings menu. There are two ways to reach this menu:

- Push Setup menu button in the remote control.

  ATTENTION: this button may have been locked from the IKUSI Flow headend in order to avoid that the final users modify the STB configuration.

- If there is not a middleware server managing the TV terminals yet (for example, Device Manager app), the STBs will access to the Embedded Portal. From there, select Settings ➔ System settings option

4.1 Network

It allows to configure the network parameters of the STB, according to three connection types:

- Wired (ethernet)
- PPPoE
- Wireless (WiFi)

In the most common case, Ethernet, the user can choose between to acquire all the data automatically by DHCP, to acquire the IP address, network mask and default gateway by DHCP but introducing DNS information manually, to introduce all the information manually or do not assign IP configuration.

4.2 Severs

It allows to configure three types of servers:

- NTP (Network Time Protocol) server: in Servers ➔ General, NTP server field appears. You can introduce in this field the address of the NTP server.
- Middleware servers: in Servers ➔ Portals, you can configure up to 2 middleware servers, through a name and its address.
- DHCP server: in Servers ➔ More, you can configure if you want to use a DHCP server and which is its address. Additionally, in the same screen you can configure the bootstrap url, the update url and the channel control url.
4.3 Video
It allows to configure the video output resolution and the Graphic resolution. Also, pushing F1, it allows to select the frame rate value and to choose between HDMI and DVI output.

4.4 Audio
It allows to configure the initial audio level and the output audio type (mono or stereo). Additionally, pushing F1, it allows to configure other parameters such as dynamic range compression, operating mode, SPDIF mode and HDMI audio.

4.5 Advanced settings
It allows to modify the advanced settings such as language, time zone, UPnP client and buffer size. Also, pushing D1 you will find other options such as storages access mode, IGMP version and configuration of multicast proxy.

4.6 Keyboard layout
It allows to define the keyboard layout (language) that is being used.

4.7 Network info
It displays the network information associated to the STB.

4.8 Device info
It provides the specific information of the STB, such as model, serial number, MAC address or hardware version.

4.9 Restart portal
It allows to reload the middleware portal. In case of fail, it presents three options: to try again, to launch Embedded portal or to return to System settings screen.

4.10 Reboot device
It allows to reboot the STB.

4.11 Reset settings
It removes the configuration that have been introduced manually, restoring the factory parameters.

4.12 Clear user data
It deletes all user settings from the device memory: access to e-mail accounts and online services, location for weather forecasts, channel lists and favourites, saved web bookmarks, keyboard layouts, lists of network resources, etc.

4.13 Software update
It allows to select the updating method of the STB (HTTP or USB) and to configure it.

4.14 Remote control
It allows to configure the device in order to be controlled remotely. You must define a name and a numeric password.