

065-9021 USER'S GUIDE

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ABSTRACT Thank you for choosing this IP-STB. This manual will help you better understand the installation, operation and maintenance of 065-9021. Please read carefully before using it.

Functions

Media On demand Plays the video program in the playlist of EPG, supports play/stop/pause/fast forwarding and backward/mute/volume up/volume down/Left and Right Audio channel/Stereo. It supports progress indication as well. It can also plays MP3 program in the play list of EPG, supports play, stop, pause, mute, volume up, volume down and progress indication.

Multicast program Gets the channel information from the EPG and supports channel lineup. It does not support fast forwarding, fast backward, and pause. It supports mute, volume up, volume down, left and right Audio channels and stereo.

WEB Browsing Browses the Internet web pages of HTML 4.0 and Javascript1.5 with the embedded browser.

Electronic Program Guide Enters the main EPG screen of the operator. Gets the information of the program and the playlist. Supports EPG dynamic upgrade, VOD, music on demand, picture viewing and network games.

Manual Upgrade of the Software Upgrades the application software through HTTP protocol (the STB works as client).

Automatic Upgrade of the Software Application software will update new software version through HTTP when the STB starts.

Supports digital and English letters input (both capitalization and lower case)

Parameter configuration and display Supports PPPoE dialing through STB (modem bridge connection mode)

Supports statically and dynamically obtain IP address. Configures the network parameter such as user name, password, DNS server, subnet mask, gateway and static IP address. Configures HTTP upgrade server, default EPG server and default URL address. Modifies Password. Configures TV mode. Displays product information. Configures NTP server address Configures Time Zone

Software reset

Standby mode

1、 Hardware specifications

1.1 front panel

POWER: power indicator, indicates the STB is working well when the light is on. STATUS : Play or Status Flicker : HTTP upgrade status ; Flicker stops: Normal-playing mode LINK : Network connection indicator Flicker: Normal connection Flicker stops: No connection IR Receiving Interface : IR receiving interface 6

1.2 Rear panel Rear Panel S-Video Video out, connected to TV L/ R Audio out, connected to TV 10/100 Base-T RJ45 interface Power switch, to turn the STB on when pressed Power supply interface

1.3 Remote Control Remote Control

“ Reset” : Resets the STB. 0---9 : Digital keyboard: When receiving multicast channel, presses the number to select the channel program; in menu, presses the number, letter or symbol to select the related content. To switch to a different value by pressing the same key quickly. 0: / + - & _ 1: . : # % 2: a b c @ A B C 3: d e f “space” D E F 4: g h i (G H I 5: j k l

J K L 6: m n o ? M N O 7: p q r s P Q R S 8: t u v T U V 9: w x y z W X Y Z

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“ Clear” : Deletes the input when operating in the menu. “ Menu” : Displays the “help” menu and check the STB status when the STB is not in video/audio mode. “ VOL—” : Shifts to the left in the menu or turn down the volume in video/audio mode. “ OK” : Confirms operation in the menu. “ PgUp” : Go back to the previous page.

“ Play/pause” : Switches between PLAY and PAUSE in the VOD mode. During fast forwarding and fast backward, switches to play. “ Progress” : Displays the content progress in percentage during the VOD mode. “F.FWD” : Positive X speed fast forward in the VOD mode : Each time pressing the key, the speed will fast forward as 2X, 4X, 8 X, and 16X.

“F.REW” : Negative X speed rewind : Each time pressing the key, the speed will rewind as 2X, 4X, 8X, and 16X.

“ Mute” Switches between sound and mute in the VOD mode. “ INFO” : Clicks this key in the opening screen, the parameter configuration page will appear. “ EPG” : Returns to the operator’s main EPG page when it is not in the VOD mode. “ CH+” : Shifts up the focus in the menu; Switches to the previous channel in multicast channel program. “ VOL+” : Shifts the focus to the right in the menu; turns up the volume in the VOD mode. “ CH-” : Shifts down the focus in the menu; Switches to the next channel in multicast channel program. “ PgDn” : Go to the next screen. Reserve: Reserved for future development. “ Stop” : Stop. “ Standby” : Switches between standby and operating mode. “ L/R” : Switches between the left/right audio channels and the stereo in the VOD mode. “WWW”: to log on the Internet.

Note :

- 1、 when playing multicast program, fast forwarding, backward and progress indication are not available.
- 2、 press reset key when there is an error with the STB or it is dead.
- 3、 As every step of the operation reads data from the network. Please be patient after pressing each key, especially during fast forwarding or rewinding. The waiting period is about 2 seconds.

2、 System connection Please connect the power cord, AV line and TV or any other related devices as shown below. If you need other accessories, please contact the operator. Switch Power **EthernetRJ45** System Connection

3、 Quick Installation

1. **Check the system’s connection** Please connect the Ethernet line, TV and IPSTB as shown above.
2. **Turn on the power of IPSTB** Please switch on the power after you make sure the connection is correct. When the IPSTB is booting, the power indicator should be on. Turn on the TV and switch to the video mode.
3. **Opening Screen** A few seconds after you switch on the IPSTB, the opening screen as shown below should appear. Opening Screen If the EPG server address and the network configuration are correct, the STB will enter the main EPG screen of the operator like the one shown below:

EPG main screen Otherwise, an error message screen will appear like the one shown below: Error message screen

4. EPG server address configuration Press “Info” to enter the password blank when the STB is not in the VOD mode. Password Blank After the password is entered, press “confirm”, if the password is correct, the EPG server configuration screen will appear as below: (Reminder: the factory default password is Signamax) EPG server address configuration screen Configuring the IP address of the headend address, such as 192.168.89.130.8080. After entering the password, use “up/down”, “left/right” keys to save the input by clicking “ok”. If this process is correct, the following screen will appear. Configuration is done Screen

In the EPG server address configuration screen, use “up/down”, “left/right” keys to click “ok” at “upgrade configuration” as will appear. If you click “network configuration” by doing the same, will appear. If you click “advanced configuration”, will appear. .

5. Upgrade Configuration Click “info” when the STB is not in the VOD mode, input the password, the first screen you enter is the EPG server address configuration screen. Use “up/down” key to click “ok” at “upgrade configuration” as the following picture is shown: Upgrade Configuration According to the specifications provided by the operator, configure the address of the HTTP upgrade server address. After configuring, use “up/down”, “left/right” keys to save the configuration by clicking “ok”. If the process is correct, will appear. In the upgrade configuration screen, to enter the EPG server configuration screen, use “up/down”, “left/right” key by clicking “ok” in the EPG main EPG screen. By clicking “ok” at the network configuration screen, the network configuration screen will be entered. By clicking “ok” at the advanced configuration screen, the advanced configuring screen will be entered.

6. Network Configuration Press “info” to input the password when the STB is not in the VOD mode, if this process is correct, the EPG server address configuration screen will appear first. Then, use “up/down” key to enter the upgrade configuration screen by clicking “ok” as the network configuration

screen is entered. There are 4 ways to configure the network specifications:

1. **LAN + Static IP Configuration** LAN + Static IP Configuration In the LAN + static IP configuration screen, configurations include: IP address, subnet mask, gateway and DNS server. According to the specifications provided by the operator, configure the IP address, subnet mask, gateway and DNS server. After configuring, use “up/down”, “left/right” keys to save the configuration by clicking “ok”. If the process is correct, will appear. Attention: The DNS server address can be left empty.
2. **LAN + Dynamic IP Configuration**
3. **LAN + Dynamic IP Configuration** In the LAN + Dynamic IP Configuration screen, the only factor users can configure is the DNS server. According to the specifications provided by the operator, configure the DNS server. After

configuring, click “ok” by using “up/down”, “left/right” keys at “save” as the configuration will be saved. If the process is correct, will appear. Attention: The DNS server address can be left empty.

4. WAN + Static IP Configuration

5. WAN + Static IP Configuration In the WAN + static IP configuration screen, configurations include: IP address, subnet mask, gateway, PPPoE user name and password, and DNS server. According to the specifications provided by the operator, configure the IP address, subnet mask, gateway, PPPoE user name and password. After configuring, click “ok” by using “up/down”, “left/right” keys at “save” as the configuration will be saved. If the process is correct, will appear.

6. WAN + Dynamic IP Configuration

7. WAN + dynamic IP Configuration In the WAN + Dynamic IP Configuration screen, the only factors users can configure are the PPPoE user name and password. According to the specifications provided by the operator, configure the PPPoE user name and password. After configuring, click “ok” by using “up/down”, “left/right” keys at “save” as the configuration will be saved. If the process is correct, will appear. Either in the static IP configuration screen or the dynamic IP configuration screen, click “ok” by using “up/down”, “left/right” keys at “EPG main screen” as the EPG server configuration screen will be entered. Click “ok” at “upgrade configuration” as the upgrade configuration screen will be entered. Click “ok” at “advanced configuration” as the advanced configuration screen will appear.

7. Output Configuration Press “info” key and input the password when the STB is not in the VOD mode as the EPG server configuration screen is entered first. Click “ok” by using “up/down” key at “advanced configuration” as the advanced configuration screen will appear. You may configure the output mode in this screen as shown below:

Advanced Configuration Click “ok” by using “up/down”, “left/right” keys at “PAL” or “NTSC” as the small dot in front of each mode turns into red. Click “ok” at “save” to save the configuration, as picture3-6 will appear. In the advanced configuration screen, click “ok” by using “up/down”, “left/right” keys at “EPG main screen” as the EPG server configuration screen is entered. Click “ok” at “upgrade configuration” as the upgrade configuration screen is entered. Click “ok” at “network configuration” as the network configuration screen is entered.

8. Content Broadcasting After configuring the STB, click “ok” by using “up/down”, “left/right” keys at “exit” as the opening screen will appear. If all specifications are correct, the EPG main screen of the content provider will appear. You may enjoy the services offered according to the EPG main screen. Warning: The content displayed is the related to the content played by the headend of the provider.

4. Specifications of other functions:

4.1 Failure of connecting to the network The following screen will appear when the IPSTB is failed to connect to the network. Please check the cause of the connection failure.

4.2 Manual Upgrade

1. HTTP upgrade server address configuration: Entering the upgrade configuration screen according to step 5 in the “quick installation”, and configure the HTTP upgrade server address according to the specifications provided by the operator.
2. Entering the advanced configuration screen Entering the advanced configuration screen according to step 7- output mode configuration in the quick installation.
3. Manual upgrade Click “ok” by using “up/down”, “left/right” keys at “software upgrade” as the upgrade reminder screen as shown below will appear: Upgrade Reminder Click “ok” by using “up/down” key at “confirm” as the manual upgrade reminder screen will appear as shown below: (Warning: Do not turn off the STB during the upgrade process.) Manual Upgrade Reminder The STB will restart after the upgrade process is completed. If the upgrade process is failed, the following reminder will appear: Manual Upgrade Failure Reminder

4.3 Automatic Upgrade If the network connection, network address and the HTTP server address are correct, the STB will automatically check to see if there is a newer version of upgrade by connecting to the HTTP upgrade server when the STB is turned on. If there is one, the STB will upgrade itself automatically and the reminder shown below will appear (Warning: do not turn off the STB during the upgrade process.) The STB will restart after the upgrade process is completed.

Automatic Upgrade Reminder

Warning :

1. If the HTTP server is not configured, it will not be upgraded automatically. Please refer to *upgrade specifications configuration* for how to configure HTTP server.

2. Do not press the power switch on the rear panel or unplug the power cord during the process of upgrade. The STB will be working normally after it restarts.

4.4 Modify Password Entering the “advanced configuration” screen by following “configuration of the output mode”, which is the step 7 of the quick installation mentioned before. Click “ok” by using “up/down”, “left/right” keys at “password change” as the password change screen as shown below will appear: **Password Change Screen** Input the old password, the new password and the new password confirmation, then click “ok” by using “up/down”, “left/right” keys at “confirm” as the configuration saved reminder like will appear.

4.5 Factory Default Setting Entering the “advanced configuration” screen by following “configuration of the output mode”, which is the step 7 of the quick installation mentioned before. Click “ok” by using “up/down”, “left/right” keys at “factory default setting” as the factory default setting screen will appear as shown below: **Factory Default Setting Reminder** Click “ok” by using “up/down” key at “confirm” as the “factory default setting” screen will appear as shown below: **Factory Default Setting** After the configuration is completed, the screen will switch to the opening screen automatically. The STB will reconnect to the network.

4.6 Checking STB Status Messages Users can check the STB status messages by clicking the “menu” key when the STB is not in the VOD mode as shown below: **STB Status Messages** Click “ok” key to back to the previous screen.

4.7 NTP Server Address Configuration Entering the “advanced configuration” screen by following “output mode configuration”, which is the step 7 of the quick installation mentioned before. Users are able to configure the NTP server address according to the specifications provided by the operator. (Reminder: the NTP server address can be configured as empty.) After configuration, click “ok” by using “up/down”, “left/right” keys at “confirm” as the configuration saved screen will appear if the entered NTP server address is correct.

4.8 Configuring Time Zone Entering the “advanced configuration” screen by following “configuration of the output mode”, which is the step 7 of the quick installation mentioned before. Click “ok” by using “up/down”, “left/right” keys at “choose your time zone” as a menu will appear. This menu includes 25 time zones in the world. Click “ok” by using “up/down” key to choose your time zone, then click “ok” again by using “up/down”, “left/right” keys at “confirm” as the configuration saved screen will appear if the configuration is correct.

4.9 One Key Log On Function Press the blue “log on” key, as the “one key log on” screen as shown below will appear if the STB is not in the VOD mode. **One Key Log On Screen** Configure the address in this screen. After configuration, click “ok” by using “up/down”, “left/right” keys at “save”. If the input address is correct, the STB will be back to the opening screen and log on the Internet.

4.10 Software Reset When 065-9021 is dead or malfunctioned, press the “reset” key as 065-9021 will restart itself and be back to normal operation. Attention: During the VOD mode or the configuration of the STB, there might be a delay for data loading, please be patient when this happens. The waiting period is up to 30 seconds, if it is beyond that, the STB should be considered as dead. (Except manual and automatic upgrade)

4.11 Standby Mode 065-9021 standby mode can be realized any time by pressing the “standby” key. (Except manual and automatic upgrade) When the STB is in standby mode, press “standby” key again as the standby mode will be canceled.

5、 Media Formats

Video Formats: MPEG-4 ISO/IEC 14496-2 Advance simple profile without GMC and QPEL

Audio Formats: MP3 and AAC

Picture Formats: JPEF and GIF static pictures

6、 Network Protocols

HTTP 1.0/1.1, DHCP, NTP1.1 and IGMPV1/V2. Supports IPv4

7、 Streaming protocols

Internet Streaming Media Alliance (ISMA) Implementation Specification version 1.0, including the following:

Transport Protocols: RTP: A Transport Protocol for Real-Time Applications, IETF RFC 1889 ; RTP Profile for Audio and Video Conferences with Minimal Control, IETF RFC 1890 ; Transmission Control Protocol, IETF RFC793; UDP: User Datagram Protocol IETF RFC768.

RTP Payload formats: RTP Payload Format for Transport of MPEG-4 Elementary Streams, IETF RFC 3640

RTSP, IETF RFC 2326

Media Announce: SDP: Session Description Protocol, IETF RFC2327

Video MPEG-4 ASP, SP 4 : 3 and 16 : 9-aspect ratio NTSC/PAL TV signal 720x480 or 720x576 SD output

OSD 256 colors 16 level alpha blending

9、 Accessories When you open the package, please make sure the following equipment and accessories are included:
IPSTB Box : 1 Audio/Vido line : 1 suit Net line: 1 Power Supply: 1

10、 Trouble Shooting Trouble phenomena Likely cause Resolution No picture after boot-strap The power cord is not connected or no power in the outlet. Reconnect the power cord and make sure there is power in the outlet. The network is disconnected Check the network connection Configuration of the EPG er is incorrect servPress “info” key to enter the EPG server configuration Freeze in the opening screen or display “connecting” for a long time after boot-strap Network configuration is incorrect Press “info” key to enter the network configuration The remote control is not aiming at the IR interface of the STB. Please aim towards the IR in the panel Remote Control failure Lack of power in the batteries.Please change the batteries The network speed is limited Please wait, or watch another program Network link is deviant, and disconnected sometimes. Please check the line. The image pauses or mosaics when playing video The original movie is malfunctioned. Please wait, or watch another program Strange noise or asynchronous of The original movie is malfunctioned. Please wait, or watch another program

32 video/audio Audio line is disconnected Please reconnect the audio line The STB is in the “MUTE” Press “mute” to go back to normal The volume is turned down Increase the volume Normal video but no sound Audio malfunction in the original movie Please wait, or watch another program Video line is disconnected Please reconnect the video line Normal audio but no picture Video malfunction in the original movie Please wait, or watch another program

Attention: The last 12 digits of the bar code are MAC address.