RF Set-Top-Box OMC1007

USER MANUAL

Rev. 1

Note: The specification and contents in this manual is subject to change.





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IMPORTANT SAFETY INSTRUCTIONS:

Important safety instructions shall be provided with each apparatus. This information shall be given in a separate booklet or sheet, or be located before any operating instructions in an instruction for installation for use and supplied with the country where the apparatus is intended to be used. The important safety instructions shall be entitled important Safety Instructions? The following safety instructions shall be included where applicable, and, when used, shall be verbatim as follows. Additional safety information may be included by adding statements after the end of the following safety instruction list. At the manufacturer option, a picture or drawing that illustrates the intent of a specific safety instruction may be placed immediately adjacent to that safety instruction:

- 1) Read these instructions.
- 2) Keep these instructions.
- 3) Heed all warnings.
- 4) Follow all instructions.
- 5) Do not use this apparatus near water.
- 6) Clean only with a damp cloth.
- 7) Do not block any of the ventilation openings. Install in accordance with the manufacturer instruction.
- 8) Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- 9) Do not defeat the safety purpose of the polarized or grounding type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third prong is provided for your safety. When the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- 10) Protect the power cord form being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
- 11) Only use the attachments/ accessories specified by the manufacturer.
- 12) Use only with a cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.



- 13) Unplug this apparatus during lightning storms or when unused for long periods of time.
- 14) Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
- 15) "WARNING To Reduce The Risk Of Fire Or Electric Shock, Do Not Expose This Product To Rain Or Moisture."

Shocking Hazard Marking and Associated Graphical Symbols







or Equivalent.

Explanation of Safety Related Symbols







CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK DO NOT REMOVE COVER (OR BACK) NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL

electric shock to persons.



The lighting flash with arrowhead symbol, Within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product s enclosure that may be of sufficient magnitude to constitute a risk of



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

or Equivalent words.

Remark: The product label is attached on the bottom.



Table of Contents

| Remote Control Unit 1 |
|--|
| Product Overview 2 |
| Front View |
| STB Installation 4 |
| Connecting to TV & Cable Network \[\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ |
| Getting Started 5 |
| Power On/Off |
| Force Tune |
| Surf Free-to-Guest Channel |
| PPV/VOD Service Use \(\Boxed{1} \Bo |
| Previous Viewing VOD Content □ □ □8 |
| Technical Specification 9 |
| |

Remote Control Unit

(RCU, C500R)



Product Overview

Front View



- □ COMPANY LOGO
- □ LED SCREEN

Display the channel information set by RCU

☐ MODEL NUMBER

Rear View

RFIN



- AC RECEPTACLE FOR TV
 2 blade polarized AC receptacle for TV

 POWER CORD
 110-120 VAC 60Hz power source

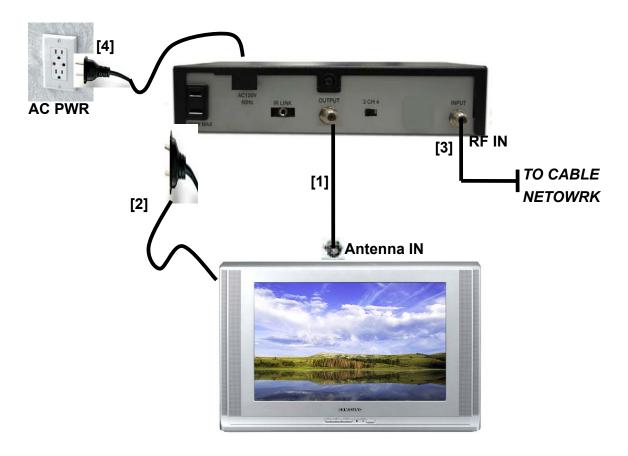
 REMOTE IR PORT
 Screw to fix the cover to the body

 RF OUT
 For connecting to TV

 TV OUTPUT CHANNEL SWITCH
 Switch Channel 3 or 4.
 - For connecting to RF cable coming from Headend System.

STB Installation

Connecting to TV & Cable Network



- [1] Connect RF cable to Antenna IN port on rear panel of TV.
- [2] Connect AC power cable from TV to AC receptacle on the STB.
- [3] Connect RF source cable to RF IN at back panel of the STB
- [4] Connect AC power cord of STB to Power soruce.

Getting Started

POWER ON/OFF

The STB is always standby mode with impressed power when it is not used.

 Press Power button on RCU to have the STB power on/off state.

FORCE TUNE

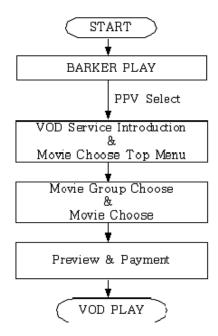
Once the STB has power on, the STB is set to channel 3 or 4. The channel 3 or 4 can be changed by switch at rear panel.

SURF FREE-TO-GUEST CHANNEL

 Press channel up and down key to surf Free-to-Guest Channel.

PPV/VOD SERVICE USE

PPV/VOD Ordering sequence is as follows.;



 When the TV set is turned on, TV is tuned to CH3 or CH4 of Barker Channel as shown below.



 Select highlighted item and press UP/DOWN/LEFT/RIGHT keys on RCU to move the category and select the movie. Menu contents will be shown on screen. From menu lists you can select movie that you want to order for view.



Press OK key on RCU to select a movie title.

 Press OK key on RCU to go to next steps after selecting a movie title. Then, you will see Payment Method Screen to make payment.



- Press OK key on RCU after you select your preferrable payment method. The selected Payment Method will be highlighted.
- If you select Credit Card to pay this movie, enter your Credit Card No. by using numeric keys on RCU.
- Now, you can enjoy the movie that you purchased.

PREVIOUS VIEWING VOD CONTENTS

Press LAST key on RCU to view Previous Viewing VOD content.

Technical Specification

| Control Part | |
|--------------|----------------------|
| MCU | MX10FBPD (Micronics) |
| Clock Speed | 11.0592 MHz |
| ROM | 64 Kbytes |
| RAM | 256 Bytes |

| RF Specification | | |
|---------------------------------|---|--|
| Video/Audio | | |
| Frequency Range | 54 to 450 MHz | |
| Channels | TV 2 – 61 (CATV ? - YY? | |
| Video/Audio RF Channels Input | 0 to +15dBmy | |
| Level | O to + 15dbilly | |
| Input Impedance | 75 ohms (+/- 10%) | |
| RF Input to RF Output Isolation | 55 dB Minimum, (60 dB typical) | |
| In Band Spurious Inter- | - 55 dBc | |
| modulation | | |
| Phase Lock Loop(PLL) Primary, | - 55 dBc Minimum | |
| Sidebands and Harmonics | - 99 dBC Willilliam | |
| Channel 3 & 4 output | Output Impedance: 75 ohms (+/- 10%) | |
| | Output RF power level (Ch 3/4 to TV Set): +5 to | |
| | +15dBmV | |
| Noise Figure | VHF & CATV 12.5 dB Maximum, UHF 14dB | |
| | Maximum | |

| RF Modem Section | | |
|--------------------------------|----------------------------|--|
| TX and RX Command Symbol | 9600 bps | |
| rate | 9000 bps | |
| TX -Outbound (to STBC) | Binary FSK | |
| Command Modulation Method | Billary FSK | |
| TX - RF Output Center | 10.7 MHz | |
| Frequency | | |
| Deviation | +/- 50Khz Minimum | |
| TX - RF Output Level | + 35dBmV (+/- 2 dB) | |
| RX-Inbound (from STBC) | Dinary ESV | |
| Command Demodulation Method | Binary FSK | |
| RX - RF Input Center Frequency | 108.00 MHz | |
| RX - Channel Bandwidth | 107.850 MHz to 108.150 MHz | |
| RX - RF Input Level | -15 to + 25dBmV | |
| Demodulation deviation | +/- 50kHz | |

| Video | |
|----------------------------|--------------------------------------|
| Frequency Response | 20 Hz to 4.2 MHz +/- 1.0 dB |
| P-P Video to RMS Hum ratio | 65 dB Minimum |
| Differential Gain | 5% Maximum |
| Differential Phase | 5.0 degrees Maximum |
| Descrambling Method | Composite Video Inversion Technique: |

| Environmental Specification | | |
|-----------------------------|---------------------------------|--|
| Power Requirements | Voltage: 115 VAC +/- 10%, 60 Hz | |
| Operating Temperature Range | 0 to +50 degrees C | |
| Operating Humidity Range | 20 to 95% (non-condensing) | |

| Physical Specification | | |
|---------------------------|-------------------------------------|--|
| Overall Dimensions(W/H/D) | 214 x 50 x 176 (mm) | |
| Weigh | 1.1 kg | |
| Case color | Black (Charcoal Gray) with Red Lens | |

FCC Warning

FCC15.19

This device is verified to comply with part 15 of the FCC Rules for use with cable television service.

FCC 15.105

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

Reorient or relocate the receiving antenna.

Increase the separation between the equipment and receiver.

Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

Consult the dealer or an experienced radio/TV technician for help.

FCC 15.21

The users manual or instruction manual for an intentional or unintentional radiator shall caution the user that changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. In cases where the manual is provided only in a form other than paper, such as on a computer disk or over the Internet, the information required by this section may be included in the manual in that alternative form, provided the user can reasonably be expected to have the capability to access information in that form.