



#### LIMITED WARRANTY

PANAREX Inc. warrants to the original purchaser that this product shall be free from defects in workmanship and material for two years from the date of original purchase. During this warranty period PANAREX will provide free of charge both parts and labor necessary to correct defects in workmanship or material.

This warranty does not cover damage due to lightning, fire, flood, or other acts of God, damage from accident abnormal conditions, improper use, or faulty installation, or damage by attempts to repair the units other than by the authorized service of PANAREX.

PANAREX's liability under this warranty is limited to servicing or adjusting equipment returned to PANAREX authorized service centers with freight prepaid.

#### **Panarex Electronics**

 **Pansat**® Satellite TV System

[www.pansatusa.com](http://www.pansatusa.com)

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# User's Manual



## 3500S

**DVB Digital Video Broadcasting Receiver  
CONAX/SD MEMORY CARD INTERFACE**  
(Note : MMC CARD may be also interfaced)

### UNIVERSAL REMOTE



### **Panarex Electronics**

SUN VALLEY, CALIFORNIA, U.S.A.

# IMPORTANT SAFETY INSTRUCTIONS

	<b>CAUTION</b> RISK OF ELECTRIC SHOCK DO NOT OPEN	
<b>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.</b>		



The lightning 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 electric shock.



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

## **WARNING**

TO REDUCE THE RISK OF FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

## **CAUTION**

CHANGES OR MODIFICATIONS NOT EXPRESSLY APPROVED BY THE MANUFACTURER COULD VOID THE USER'S AUTHORITY TO OPERATE THE EQUIPMENT.

## **NOTE TO CATV SYSTEM INSTALLER**

THIS REMINDER IS PROVIDED TO CALL THE CATV SYSTEM INSTALLER'S ATTENTION TO ARTICLE 820-40 OF THE NEC THAT PROVIDES GUIDELINES FOR PROPER GROUNDING AND, IN PARTICULAR, SPECIFIES THAT THE CABLE GROUND SHALL BE CONNECTED TO THE GROUNDING SYSTEM OF THE BUILDING, AS CLOSE TO THE POINT OF CABLE ENTRY AS PRACTICAL.

## **CAUTION**

The AC power cord provided with this product is polarized (one blade wider than the other).

To prevent electrical shock, match wide blade of plug to wide slot, fully insert the AC plug into a standard 120V~, 60Hz polarized outlet.

# IMPORTANT SAFETY INSTRUCTIONS

## NOTE

Never connect the plug to an electrical source other than one providing 120V~, 60Hz power. Use only the attached power cord. If the polarized AC cord does not fit into a non-polarized outlet, do not cut or file the blade. You are responsible for having the obsolete outlet replaced with a polarized outlet.

If you feel a static discharge when touching the unit, and the unit does not function, simply unplug the unit from the outlet. When you plug the unit back in, it should work normally.

Do not install power cords near any heating element or cooking appliances.

Important Safeguards

## IMPORTANT SAFEGUARDS

**PLEASE READ ALL THESE INSTRUCTIONS REGARDING YOUR SATELLITE RECEIVER EQUIPMENT AND RETAIN FOR FUTURE REFERENCE. FOLLOW ALL WARNINGS AND INSTRUCTIONS MARKED ON THE TV RECEIVER.**

- 1 Read all of these instructions.
- 2 Save these instructions for later use.
- 3 Unplug this Satellite Receiver equipment from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.
- 4 Do not use attachments not recommended by the Satellite Receiver equipment manufacturer as they may result in the risk of fire, electric shock or other personal injury.
- 5 Do not use this Satellite Receiver equipment near water, for example, near a bathtub, washbowl, kitchen sink, or laundry tub, in a wet basement, or near a swimming pool, or the like.
- 6 Do not place this Satellite Receiver equipment on an unstable cart, stand, or table. The Satellite Receiver equipment may fall, causing serious injury to a child or adult, and serious damage to the equipment. Use only with a cart or stand recommended by the manufacturer, or sold with the Satellite Receiver equipment. Wall or shelf mounting should follow the manufacturer's instructions, and should use a mounting kit approved by the manufacturer.
- 6A An appliance and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the appliance and cart combination to overturn.
- 7 Slots and openings in the cabinet and the back or bottom are provided for ventilation and to ensure reliable operation of the Satellite Receiver equipment; and to protect it from overheating, these openings, must not be blocked or covered. The openings should never be blocked by placing the Satellite Receiver



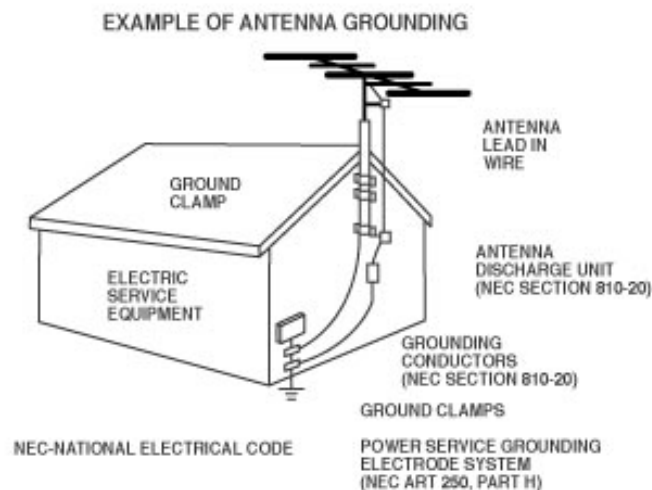
# IMPORTANT SAFETY INSTRUCTIONS

equipment on a bed, sofa, rug, or other similar surface. (This equipment should never be placed near or over a radiator or heat register.) This Satellite Receiver equipment should not be placed in a built-in installation, such as a bookcase, unless proper ventilation is provided.

- 8 This Satellite Receiver equipment should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supplied to your home, consult your Satellite Receiver dealer or local power company.
- 9 This Satellite Receiver equipment is equipped with a polarized alternating current line plug (a plug having one blade wider than the other). This plug will fit into the power outlet only one way. This is a safety feature. If you are unable to insert the plug fully into the outlet, try reversing the plug. If the plug should still fail to fit, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the polarized plug.
- 10 Do not allow anything to rest on the power cord. Do not locate this Satellite Receiver equipment where the cord will be abused by persons walking on it.
- 11 Follow all warnings and instructions marked on the Satellite Receiver equipment.
- 12 For added protection for this Satellite Receiver equipment during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the antenna or cable system. This will prevent damage to the equipment due to lightning and power-line surges. Important Safeguards
- 13 An outside antenna system should not be located in the vicinity of overhead power lines or other electric light or power circuits, or where it can fall into such power lines or circuits. When installing an outside antenna system, extreme care should be taken to keep from touching such power lines or circuits, as contact with them might be fatal.
- 14 Do not overload wall outlets and extension cords, as this can result in fire or electric shock.
- 15 Never push objects of any kind into this Satellite Receiver equipment through openings, as they may touch dangerous voltage points or short-out parts that could result in a fire or electric shock. Never spill liquid of any kind on the Satellite Receiver equipment.
- 16 Do not attempt to service this Satellite Receiver equipment yourself, as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.
- 17 Unplug this Satellite Receiver equipment from the wall outlet and refer servicing to qualified service personnel under the following conditions:
  - (a) When the power-supply cord or plug is damaged or frayed.
  - (b) If liquid has been spilled, or objects have fallen into the Satellite Receiver equipment.
  - (c) If the Satellite Receiver equipment has been exposed to rain or water.

# IMPORTANT SAFETY INSTRUCTIONS

- (d) If the Satellite Receiver equipment does not operate normally by following the operating instructions. Adjust only those controls that are covered by the operating instructions as an improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the TV receiver to its normal operation.
  - (e) If the Satellite Receiver equipment has been dropped or the cabinet has been damaged.
  - (f) When the Satellite Receiver equipment exhibits a distinct change in performance - this indicates a need for service.
- 18 When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer that have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock or other hazards.
- 19 Upon completion of any service or repairs to this Satellite Receiver equipment, ask the service technician to perform safety checks to determine that the Satellite Receiver is in a safe operating condition.
- 20 If an outside antenna or cable system is connected to the Satellite Receiver receiver, be sure the antenna or cable system is grounded so as to provide some protection against voltage surges and built-up static charges. Section 810 of the National Electrical Code, ANSI/NFPA N0.70-1984, provides information with respect to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding conductors, location of antenna-discharge unit, connection to grounding electrodes, and requirements for the grounding electrode.



# IMPORTANT SAFETY INSTRUCTIONS

## FCC RF INTERFERENCE STATEMENT

### 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 technical for help.
- Only shielded interface cable should be used.

Finally, any changes or modifications to the equipment by the user not expressly approved by the grantee or manufacturer could void the users authority to operate such equipment.

## PREFACE

### 1 OVERVIEW

- 1) How to use the REMOTE CONTROL KEY
- 2) FRONT PANEL
- 3) REAR PANEL
- 4) Simple Digital Connections
- 5) Analogue / Digital Connections

### 2 OPERATING

1. Start Up
2. Installation
3. Parental Control
4. Channel Edit
5. User Setup
6. Factory Setting
7. System Information
8. Channel List
9. Program Guide
10. Audio Change
11. SD Memory
12. Embedded
13. Recall the Favorite Channel
14. How to download Software via RS-232 Serial Cable

### 3 UHF REMOTE CONTROL KIT (Optional)

### 4 SPECIFICATIONS

### 5 TROUBLE SHOOTING

## 1. WHAT IS THIS PRODUCT FOR?

This product is designed for using Digital Satellite Broadcasting and allows you to enjoy a lot of broadcasting whenever you want to watch it anytime. By simply pressing the button of the remote control unit, the vivid picture and life-like sound of digital broadcasting that your TV portrays through this product, allows you to watch whatever channel you wish of the digital broadcasting.

Throughout this manual you will notice that the operation is easy to use.

This manual will help you get the most from this product and guide you through installation, channel selection and many other functions.

In case you experience any difficulties to use this product, please consult the relevant section of this manual.

From now on, enjoy digital broadcasting with digital satellite receiver!!!

## 2. WHAT FEATURE DOES THIS PRODUCT OFFER?

### 2.1 General Features

- EPG (Electronic Program Guide)
- Full Compliant of MPEG-2 Digital & DVB broadcasting
- 950-2,150 MHz input Frequency (IF Loop Throughout)
- Variable Input Symbol Rate (1-45 Msps)
- Multi Language OSD
- Automatic PAL/NTSC Conversion
- Fast Channel Change
- 5,000 Channels TV & Radio Program
- Universal Remote
- Flexible reception of SCPC & MCPC from C/Ku-Band Satellites
- S/PDIF (Digital Audio or Dolby AC3 Stream out)
- Timer Function (Automatic Turn On/Off by Setting Function)
- 256 Colors (Graphic User Interface) Number
- PIG (Picture In Graphic)
- 5 Favorite List & Unlimited Programs per each
- Powerful Channel Editing Function
  - Sorting : Alphabetic, Satellite, FTA/Scramble, Parental Lock
  - Move, Delete, Favorite Edit
  - Parental Lock, Channel Rename, Channel Skip
- Manual PID / Satellite & TP / Network Scan
- Smart Search
- Satellite Scan - Simultaneous Scan with 4 Satellites

- DiSEqC 1.3 Control Compatible (STAB USALS)
- Capable of Setting the Frequency for SMATV System
- Software Upgrade via RS-232C (Receiver to Receiver, PC to Receiver)

## 2.2 Additional Features

- Component Out (YPbPr)
- RTC (Real Time Clock)

## 2.3 Conditional Access

- Conax CAS Embedded

## 2.4 Secure Digital(SD) Card Access

- MP3 Audio file decoding
- Firmware Download via SD-Card
  - Easy software upgrading
  - (Note : MMC CARD may be also interfaced)

## 3. FOR YOUR SAFETY

- Do not open the cover. It may cause malfunction or electric shock.
- When you do not use the product for a long rime, please pull the power cord out from the outlet. Also do not use a damaged power cord that may cause fire or electric shock
- Do not use or install the product in a humid area.
- Do not cover the product or place anything heavy on the product, Keep clear space around the product for sufficient ventilation.
- Avoid using spray or liquid materials around the product.
- Do not plug in power core before finishing all connections.





## 4. PLEASE CHECK THE FOLLOWING ACCESSORIES ARE ENCLOSED

- User Manual 1 set
- Remote Control Unit 1 Set
- Batteries(AAA Type) 2EA

### Note

If any of the accessories listed above are missing, Please contact the sales outlet where this product was initially purchased.

## 1. How to use the REMOTE CONTROL KEY

Key	Function
<b>POWER</b> 	Turns this receiver on/off. In the standby mode, it is automatically changed to TV mode that enables to watch terrestrial TV broadcasting.
<b>TV/SAT</b>	Toggles between TV & SAT
<b>TV/VCR</b>	Toggles between TV & VCR
<b>TIME</b>	TIME Shows current Time
	Sounds Off/On
<b>i</b>	Shows channel information, such as channel number, channel name, Frequency, Polarity, Symbol Rate, Video PID, Audio PID and PCR PID & HDD info
<b>EPG</b>	Electronic program guide
<b>TV/RADIO</b>	Toggless between the TV service and radio service
<b>PAUSE</b>	Holds the picture or release the pause only for live broadcasting
<b>SIG</b>	Shows signal quality
<b>AUDIO</b>	Selects audio mode(Stereo, left only and right only). Selects language in case of Multilingual program.
<b>MENU</b>	MENU Enters main menu screen or Exits menu screen
<b>EXIT</b>	EXIT Moves to upper menu
<b>CH ▲▼</b>	Channel up/down. Moves the cursor upward/downward in the menu screen.
<b>OK</b>	Shows channel list or confirms selection
<b>VOL ◀▶</b>	Volume down/up. Changes the value of a selected item
<b>LAST</b>	Returns to previous program.
<b>FAV</b>	Enters favorite program or Exit from Favorite program.
<b>0~9</b>	Changes channel directly. Controls the numerical operation. Inputs the alphabet in the name edit screen.
	Execute page down function in the menu.
	Execute page up function in the menu.
<b>SAT</b>	Classifies satellite by satellite



## Special keys for Pansat 5000HC, VCR & AUX (DVD, CATV)

Key	Function
<b>HDD</b>	Enter HDD menu
◀◀	Fast Rewind (1. 2. 4. 8)
▶▶	Fast Forward (1. 2. 4. 8. 12)
▶	Start Playing / Release Pause
■	Stop Recording
●	Start Recording
	Pause
◀	Slow Rewind (1/2, 1/4, 1/8)
▶	Slow Forward (1/2, 1/4, 1/8)
◀◀	Time-Shift (Reverse)
▶▶	Time-Shift (Forward)
■	PIP (Picture In Picture)
↔	Swap from main picture to sub-picture on PIP
● Red key	A) Confirmation for cutting out selected region "Cut Recorded Channels" Menu
● Green key	A) Selecting starting point to cut wanted region of recorded file on "Cut Recorded Channels" Menu
● Orange key	A) Selecting ending point to cut wanted region of recorded file on "Cut Recorded Channels" Menu
<b>EXIT</b>	Moves to upper menu / Saving others except cut-region (HDD menu)

## Universal Remote Interface Programming

1. Turn the TV set power on.
2. Press the remote TV & OK buttons (1-2 second) simultaneously until power button red light appears.
3. Aim the remote to the TV set and press the 3 digit specific code number of the TV set (refer attached chart). The TV set power will be turned off right away. If not, try another 3 digit code in the chart.
4. Press the remote TV button to save the program (power button light will blink 3 times).

**NOTE:** If power button function respond and other buttons not , repeat above procedure with another 3 digit code in the chart.

\*Repeat same procedure for other items , VCR, AUX( DVD, CATV).

### Brand List (NTSC TV Set)

ADMIRAL	072 081 160 161	DAEWOO	001 004 016 026
A MARK	112		043 076 103 114
AKAI	070 146		120 127 128 136
AMSTRAD	052		192
ANAM	043 054 056 080	DAYTRON	001
	112	DYNASTY	043
AOC	001 058 070 112	ELECTROHOME	024 076 120
AUDIOVOX	076 120	EMERSON	001 005 028 043
BLAUPUNKT	088		047 048 050 051
CANDLE	001 003 004 070		070 076 096 120
CAPEHART	058		153 154 155 191
CCE	001 024 211	FISHER	007 057
CETRONIC	043	FUJITSU	198
CITIZEN	001 003 004 043	FUNAL	028 043
	070 101 103	FUTURETECH	043
CLASSIC	043	GE	001 008 009 034
CONCERTO	001		056 070 073 074
CONTEC	043 050 051		130 145 155 160
CRAIG	043 054 191		161 165 167
CROWN	043	GOLDSTAR / LG	001 017 106 110
CURTIS MATHES	001 070 101		112 119 127 193
CXC	043	GRADIENTE	001 106

## Brand List (NTSC TV Set)

HALL MARK	001	ONWA	043
HITACHI	001 007 009 010 011 012 072 158	OPTONICA	019 081
HYUNDAI	002	ORION	201 202 203 204 205
INFINITY	164	PANASONIC	034 056 080 164
JBL	164	PHILCO	001 003 024 056 059 060 070 164
JCPENNEY	001 008 009 024 030 070 101 160	PHILIPS	001 003 005 059 070 093 127 164
JENSEN	013	PIONEER	001 018 025 070
JVC	034 083 211	PORTLAND	001
KEC	043	PROSCAN	145 160 161 167
KENWOOD	070 211	PROTON	001 058 112 171 173
KLOSS	004 059	QUASAR	034 056 080 164
KTV	043 070 154	RADIO SHACK	001 019 043 127
LODGENET	072	RCA	001 024 056 070 074 145 152 160 161 165 167
LOGIK	072	REALISTIC	007 019 043 047
LAUXMAN	001	RUNCO	072 130
LXI	007 015 052 081 160	SAMPO	001 058 070 207
MAGNAVOX	001 003 022 059 060 061 070 127 160 164	SAMSUNG	001 006 021 050 089 101 105 127 133 160
MARANTZ	070 164	SANYO	007 020 053 057 082
MATSUI	164	SCOTT	001 028 043 048
MEMOREX	001 007 072	SEARS	001 007 015 028 030 057 082 160 167
METZ	088	SELECO	200
MGA	001 024 024 028 042 070	SHARP	001 014 019 022 028 081
MINERVA	088	SIEMENS	088
MITSUBISHI	001 024 028 040 042 146	SIGNATURE	072
MTC	001 070 101	SONY	027 029 079 126 211
NAD	015 025		
NEC	001 016 019 024 040 056 070 130 134		
NIKEI	043		
ONKING	043		

## Brand List (NTSC TV Set)

SOUNDESIGN	001 003 028 043	TMK	001
SPECTRICON	112	TOSHIBA	007 015 030 040 101
SSS	001 043	UNIVERSAL	008 009
SUPRE MACY	004	VIDEO CONCEPTS	146
SYLVANIA	003 044 059 060 070 127 160 164	VIDTECH	001
SYMPHONICS	194 052	WARDS	001 008 009 019 028 060 061 072 074 164 165
TANDY	081	WESTING HOUSE	076 120
TATUNG	056	YAMAHA	001 070
TECHNICS	034 080	YORK	001
TECHWOOD	001	YUPITERU	043
TEKNIKA	001 003 004 024 028 043 072 101	ZENITH	072 073 095 103
TELERENT	072	ZONDA	112
TERA	173		

## Brand List (NTSC VCR)

AIWA	001	EMERSON	029 031 035 036 037 044 046 101 129 131 138 152 153 157
AKAI	016 043 046 124 125 146	FISHER	003 008 009 010
AMPRO	072	FUNAI	001
ANAM	031	GE	031 072 144 147 151 156
AUDIO DYNAMICS	012 023 039 043	GO VIDEO	040 132 136
BROOKSONIC	035 037 044 129 152	GOLDSTAR / LG	012 101 123 163 114
CANON	028 031	HARMAN KARDON	012 045
CAPEHART	108	HITACHI	001 026 137 150 156 163
CRAIG	003 040	HUGHES	163
CURTIS MATHES	031 156	INSTANTREPLAY	031
DEAWOO	005 007 010 108 110 112 116 117 119	JCL	031
DAYTRON	108	JCPENNY	012 040 066 101 156 163
DIMENSIA	156	JENSEN	043
DBX	012 023 039 043	JVC	012 031 043 130 150
DYNATECH	001 053		
ELECTROHOME	059		
EMERSON	001 006 017 025 027		



## Brand List (NTSC VCR)

KENWOOD	001 014 023 047	SALORA	014
LLOYD	001	SAMSUNG	032 034 040 104 112
LXI	001 003 009 017		113 115 120 122 125
MAGIN	040		159
MAGNAVOX	001 031 067 068 154	SANSUI	022 043
MARANTZ	012 023 031 067 067 069	SANYO	003 007 010 014 102 134
MARTA	101	SCOTT	017 037 044 112 129
MATSUI	027 030		131 159
MEI	031	SEARS	003 008 009 010 014
MEMOREX	001 003 010 014 031 053 072 101 102 134 139		017 081 101 163
MGA	045 046 059	SHARP	031 053 054
MINOLTA	156 163	SHINTOM	024
mitsubishi	045 046 051 059 061 162 163	SIGNATURE	001
MTC	001 040	SONY	003 031 052 056 057 058 155
MULTITECH	001 024	SOUNDESIGN	001
NEC	012 023 039 043	STS	163
NORDMENDE	043	SYLVANIA	001 031 059 067
OPTONICA	053 054	SYMPHONIC	001
PANASONIC	031 066 070 133 161	TANDY	001 010
PENTAX	031 156 163	TATUNG	023 039 043
PHILCO	001 031 067	TEAC	001 023 039 043
PHILIPS	001 031 054 067 071 101	TECHNICS	031 070
PILOT	101	TEKNIKA	001 019 031 101
PIONEER	021 163	TMK	006
PORTLAND	108	TOSHIBA	008 042 047 059 082 112 131 163
QUARTZ	002 014	TOTEVISION	040 101
QUASAR	031 066 070 133 161	UNITECH	040
RADIO SHACK	123	VECTOR RESEARCH	012
RCA	001 031 040 140 144 147 151 156 163	VIDEO CONCEPTS	001 012 046
REALISTIC	001 003 008 010 014 031 040 053 054 101	VIDEOSONIC	040
RICO	058	WARDS	001 003 017 024 031 040 053 054 131 163
		YAMAHA	001 012 039 043
		ZENITH	001 056 058 072 080 101

## Brand List (NTSC DVD)

Alpine	009	Mx Onda	001
Apex Digital	075 076 061	NAD	057 077
Brandt	001	Onkyo	207 071 072
California Audio	002	Oritron	001
Crown	001	Panasonic	002 003 039 051
Cytron	001		054 079 073
Denon	030 043 044 226	Philips	038 048 074
	062	PROCEED	083
Diamond	001	Proline	001
Dual	001	Pioneer	055 057 085
DVD-Video	063	Proscan	035
ECA	084	QUASAR	002
Ferguson	001	RCA	035 001
Fisher	002	Saba	001
GE	035 084	Samsung	040 047 065
GoldStar / LG	028 041 069	Sanyo	052
Goodmans	001	Schneider	001
GRADIENTE	064 065	Scott	001
Grundig	001	Sharp	060 078
Harman Kardon	217 066 067	Standard	001
Hitachi	011	Sony	037 050 053 086
Kenwood	060 068	Technics	002 051 054 079
Koss	001	Tensai	001
Lenco	001	Tevion	001
Lifetec	001	THOMSON	084
Magnavox	008 038 048 057	Toshiba	038 060 206 072
MARANZ	070		080 081
Matsui	001	Yamaha	039 045 059 079
Medion	001		073 082
Mitsubishi	032 057	Zenith	028 041 069

## Brand List (NTSC CATV)

HAMLIN	107 109	PIONEER	103 112 113
JERROLD / G.I	105 111	Scientific/Atlanta	100 102 106
OAK	104 108 110	ZENITH	101

## Operating Principle

- Select an item by using up and down key and change the value of the highlighted (selected) item by using keys shown on the screen. Press OK key to enter the sub-menu if there is no instruction marked on the screen.
- The item is automatically stored and moved the upper menu by pressing the 'EXIT' key
- You can return to normal mode at any time by pressing the menu key from the menu mode

## 2. FRONT PANEL

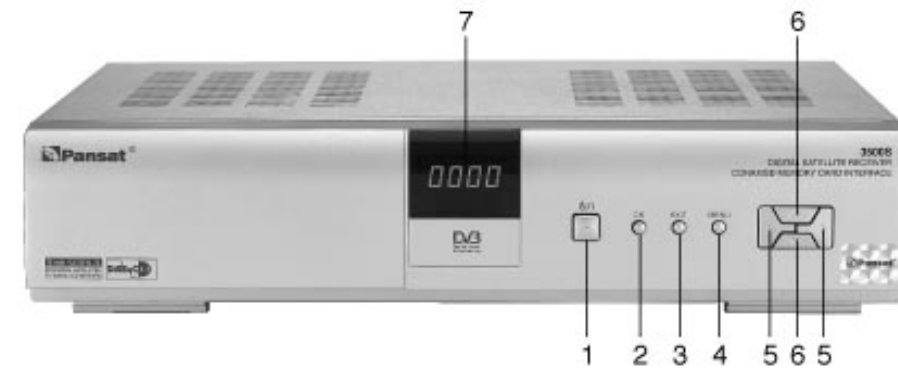


Fig 2-2 Front panel

### 1. POWER

Switches Stand by mode and Normal viewing mode.

### 2. OK

Confirm selection, shows list.

### 3. EXIT

Moves to upper menu.

### 4. MENU

Enters main menu screen.

### 5. VOLUME

To make volume up and down.

### 6. CH ▲, CH ▼

Changes Channel Up/Down

### 7. CHANNEL DISPLAY (4 digit / 7 Segment)

After pressing the power button, "Init" is showed on screen.

After the receiver searches program, the program number is displayed as "0001~2000". Real time will be displayed at stand by mode.