



# SATMARK user's guide

FUTURE SOLUTIONS

## MERITS

- Plug and play
- No installation costs
- Portable
- Compact design
- Multi satellite searching
- Error-free
- Auto positioning capability

## FEATURES

- Multi auto-searching / Adjustable LNB skew angle
- Regional elevation angle selection touch switch
- Program update port
- Working status on LCD / Built-in compass



## PAPSA

Portable Auto Positioning Satellite Antenna



# PAPSA

## User's Guide

Congratulations' on purchasing your new PAPSA unit. The PAPSA is state of the art antenna technology. This user guide contains all the information required for setup and operation of the PAPSA unit. Please follow the user guide carefully.

**WARNING: TO REDUCE RISK OF FIRE  
OR ELECTRICAL SHOCK,  
DO NOT EXPOSE TO RAIN OR MOISTURE.**



A helpful tip that either directs you to a related area within the manual or offers suggestions on getting the highest quality out of your system.



An alert to important information regarding procedures, product specifications, or product use.



An electrical safety warning to help identify electrical issues that can be a hazard to either this SATMARK product or a user.



Information about installation, maintenance, troubleshooting, or other mechanical issues.



### **PAPSA Serial Number**

*This serial number will be required for all troubleshooting or service calls made regarding this product.*

## Introduction

### System Diagram

### Components

### Open

### Contents / Assembling

### Installing

### Watching TV

### DATA Update

### Specification

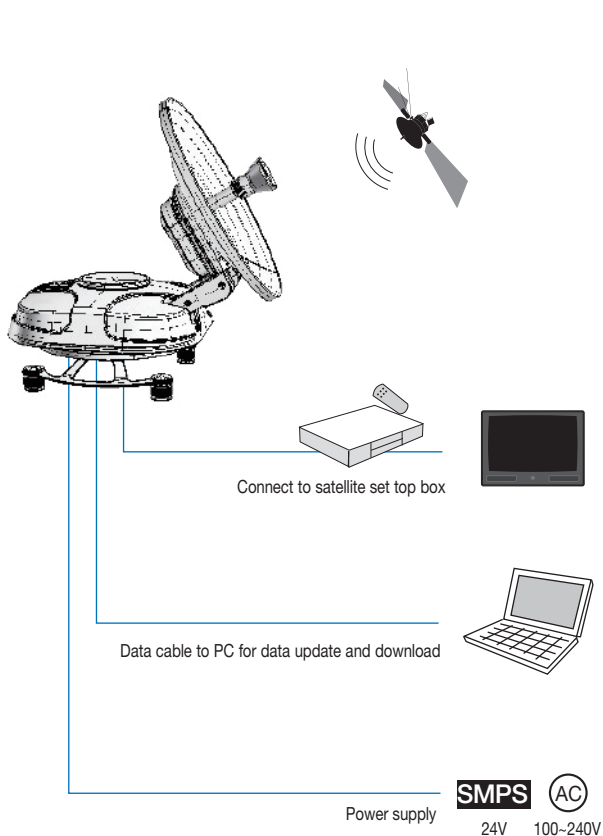
### Causes and Remedies for Common Operational Issues

### SATMARK Industries Limited Warranty

## System Diagram

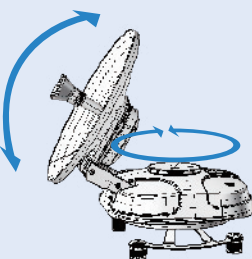
### Feature

PAPSA is plug and play and will automatically search satellite signal. PAPSA can be located inside dwelling or outside.



### Auto Positioning

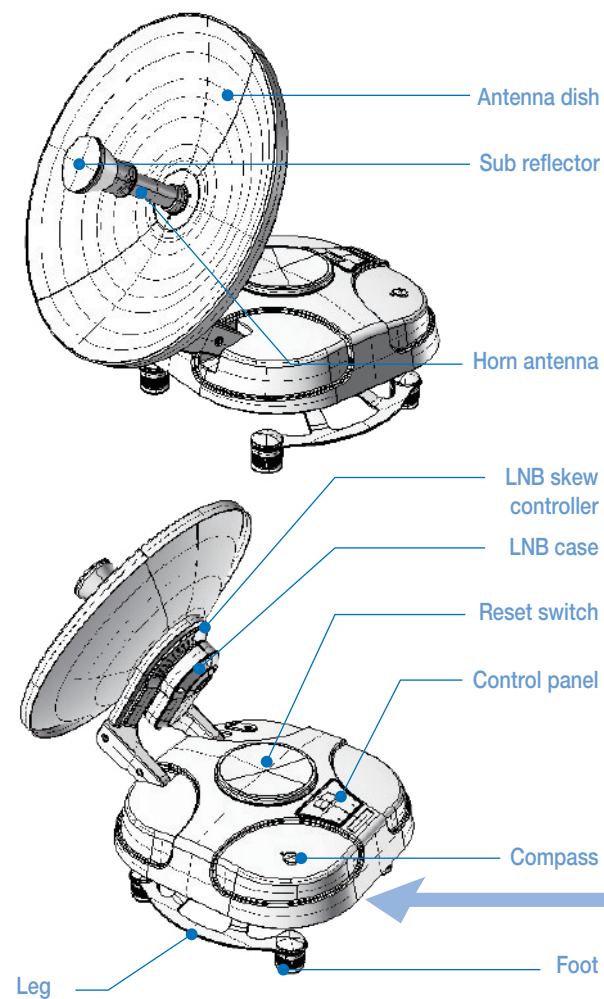
*Auto-Positioning seeks Satellite optimum signal  
No user interface required.*



### Caution!

*Do not touch antenna during automatic setup.*

## Components



*Please remember the name of components.*



### Connections!

*Check all connections before operation to avoid problems.*

**STB-1**: Connect to set top box

**STB-2**: Connect to set top box

**DC**: Connect to power supply

**POWER**: System on/off

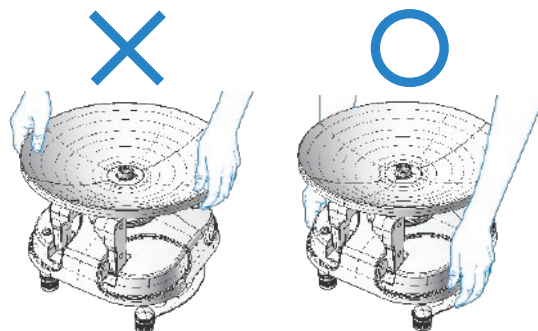
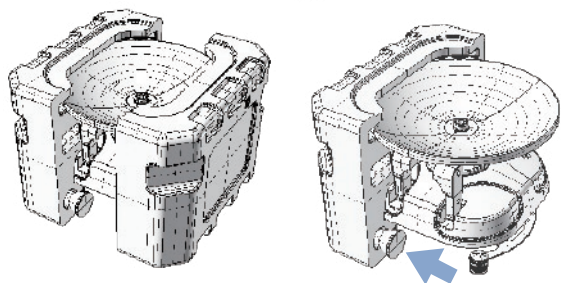
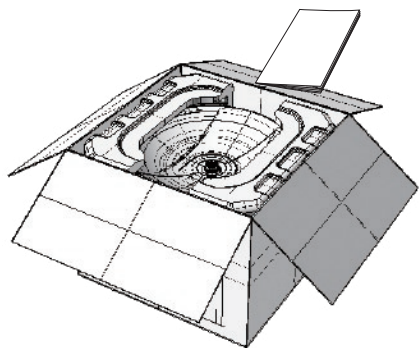
**DATA**: Program update port

\* Set top box must be connected to STB-1 port

## Open

### Open

Remove tape from packaging (Do not use knife)  
packaging contains user manual, Please read carefully  
Remove antenna gently from packaging  
Remove antenna parts from packaging foam



Do not handle antenna "dish" Hold antenna by leg or body "only"



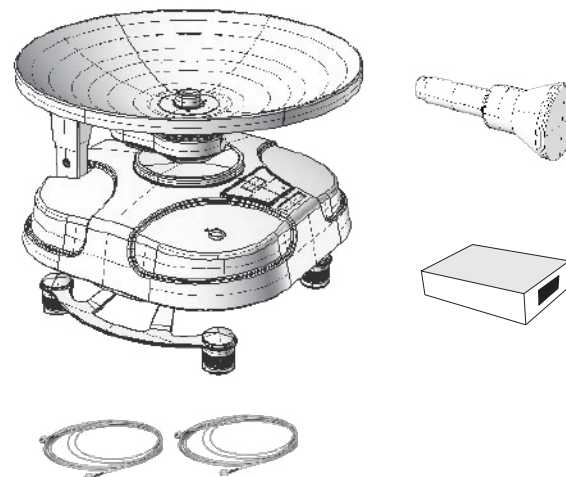
### Caution

Do not handle antenna dish  
May cause antenna damage.

## Contents/ Assembling

### Contents

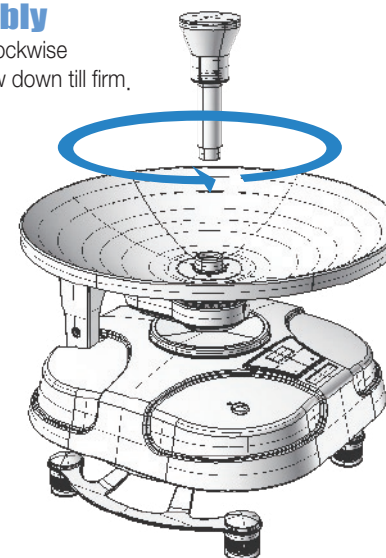
User manual, antenna body, antenna horn, 4 legs, power cable, power supply.



Check contents carefully.

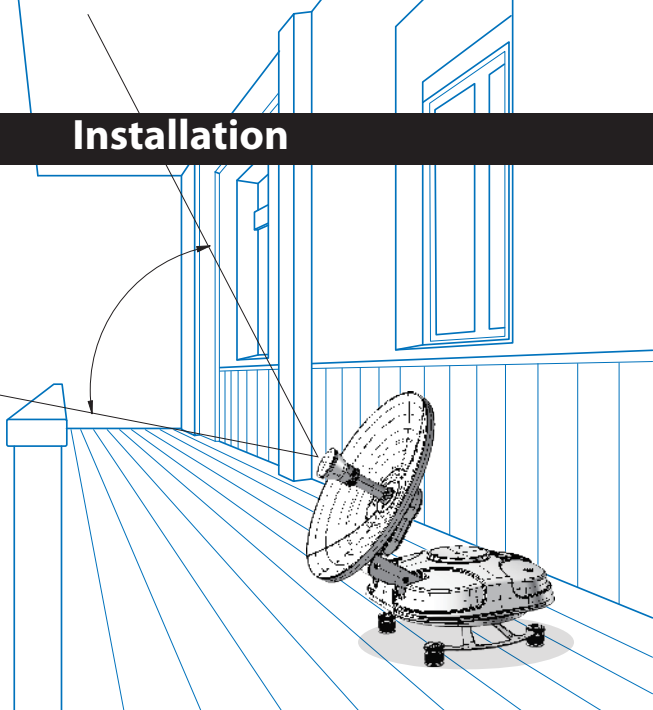
### Horn Assembly

Insert Horn screw clockwise  
by hand gently screw down till firm.



After assembly do not move  
antenna by hand.

## Installation



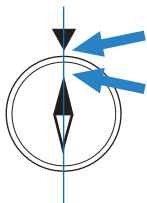
### Antenna Location

Place antenna with unobstructed line of sight (sky).  
Avoid placement near excessive moisture.  
Antenna may be placed on stand.

### Setting Antenna Direction



Move antenna body until  
compass direction to target  
satellite aligns with triangle.



*Installation is possible where there  
is clear line of sight facing north.*



*Terrace or similar location*



*Roof or similar place*



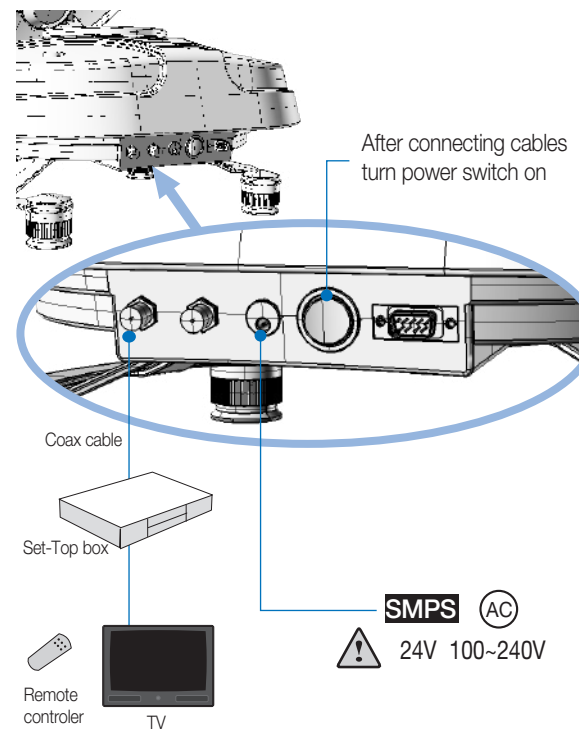
*Stand or similar*



*When adjusting position handle  
only body or legs.*

## Watching TV

### Power/Connect to TV



*Avoid placement near  
excessive moisture.*

### Check Satellite operation/watching TV

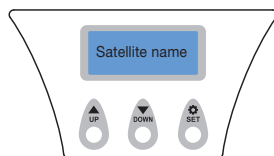
Turn on TV and set-top box  
Power on PAPSA  
Wait until antenna searching and positioning is completed  
(approx 1 minute)  
After antenna positioning is complete PAPSA will start  
automatically and TV can now be viewed  
If no TV picture check all conditions set-top box PAPSA and TV  
Follow the above steps again  
Refer to users guide.



*If you use single output set  
top box always connect to STB-1.*

## Elevation Angle Setting

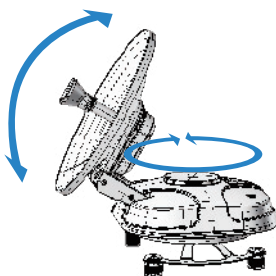
A few seconds after System Power On, "satellite name" will appear elevation angle set menu.



Elevation angles are set from 35 degree to 70 degrees. User's can also choose elevation angle by location name.

Use up and down switch to choose your location and push set switch. All settings are finished. Now push start switch and system will start searching satellite signals.

Factory setting will be 50 degrees. After the first settings have been activated they will be automatically memorised. There is no need to reset as long as you remain in the same location.



LCD window shows current status of auto searching system

**H POL. SELECTED** 18V from set top box (Vertical signal)

**V POL. SELECTED** 13V from set top box (Horizontal signal)

 Only applicable for the above two cases (Linear signal)

**CHECK, STB CBL.** Not connected with set top box- Check cable connected with STB-1

**SIGNAL DETECTED** Satellite signal found

**NIT DETECTED** Confirm the signal is right information from target satellite

**SIGNAL LOST.** Cannot find satellite signals - check antenna direction



### Elevation Angle / Location name

Use up and down switch to set locations.

#### Example(Australia)

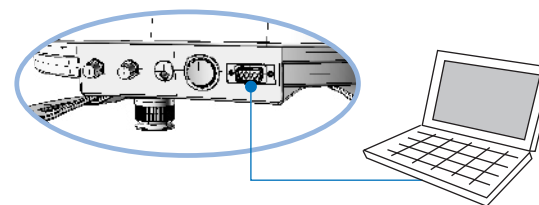
↓ ↑  
EL 70DEG  
COOKTOWN  
↓ ↑  
EL 65DEG  
TOWNSVIL  
↓ ↑  
EL 60DEG  
BRISBANE  
↓ ↑  
EL 55DEG  
DARWIN  
↓ ↑  
EL 50DEG  
SYDNEY  
↓ ↑  
EL 45DEG  
MELBOURN  
↓ ↑  
EL 40DEG  
HOBART  
↓ ↑  
EL 35DEG  
PERTH



After antenna is locked in with satellite you may power off to save unnecessary power usage.

## DATA Update

### future work



Data cable to PC for data update or download.

## Specification

Antenna Type	Parabolic 46 cm
Input Frequency	10,7-12,75 GHz
Output Frequency	950-2,050 Mhz
Antenna Gain	33[dBi] / 35[dBi]
Antenna Size	460mm / 600mm
Polarization	Horizontal / Vertical or RHCP / LHCP
Cross Polarization	< -20dB min.
LNB Noise Figure	0,9dB max.
L/O Frequency	Suitable for most frequency ranges world wide
Output Impedance	75[Ohm]
Az Controll Range	360° ±10°
EL Controll Range	25~80°
Power Supply	AC100-240[V] / DC24[V]
Operation Temperature	-30℃ ~80℃
Storage Temperature	-40℃ ~85℃
Humidity	95%@40degrees
Weight	7kg
Dimension	460 x 460 x 410mm



## Causes and Remedies for Common Operational Issues

There are a number of common issues that can affect the signal reception quality or the operation of the PAPSA. The following sections address these issues and potential solutions.

### Blown Fuse, Low Power, or Wiring

If the antenna unit is installed but entirely non-responsive, there are three key factors to check as part of the troubleshooting process:

#### Blown Fuse

With the system powered on, move the antenna reflector slowly by hand. If the reflector does not move freely, a fuse is not the problem. If the reflector does move freely, one of the two fuses mounted on the CPU Board may have blown or been broken. The PAPSA Technical Manual provides detailed instructions for authorized service personnel who may be required to replace a fuse. Contact your local SATMARK dealer or service center for assistance.

#### Low Power

If the power cable to the antenna unit is more than 50ft (15 m), the power levels can decrease over the course of the cable, resulting in a voltage or current level at the antenna unit that is too low to power the system properly. The PAPSA Technical Manual provides detailed instructions for supplying adequate power to the antenna unit. Contact your local SATMARK dealer or service center for assistance.

#### Wiring

If the system has been improperly wired, it will not operate correctly. The PAPSA Technical Manual provides detailed instructions for authorized service personnel who may be required to check the wiring. Contact your local SATMARK dealer or service center for assistance.



*If you need help troubleshooting your system, Please contact an authorized SATMARK dealer. To find an authorized dealer near you, visit [www.satmark.com](http://www.satmark.com), or contact SATMARK directly at the numbers provided on the first page of this manual.*

### Satellite Signal Blocked

Satellite signals can be blocked or degraded by buildings, other vessels, or equipment on the vessel itself. Simply moving the vessel or obstruction will clear the signal.

### Satellite Coverage Issue

PAPSA will provide outstanding reception within the 18" (45 cm) antenna coverage area for your satellite television service of choice.

However, reception can be degraded as you approach the fringe coverage areas.

Refer to your satellite television service manual to check the viable coverage area for a 18" (45 cm) antenna.

### Radar Interference

The energy levels radiated by radar units can overload the antenna's front-end circuits. Check with your installer to make certain that the PAPSA antenna unit is in the optimal location with regard to your radar unit.

### Satellite Frequency Data Changed

If some channels work while one or more other channels do not, or if the antenna is unable to find the satellite, the selected satellite's frequency data may have changed.

This frequency data can be updated via the maintenance port. Contact your local SATMARK dealer or service center for assistance.

### Incorrect or Loose RF Connectors

A loose RF connector can reduce the quality of the satellite signal.

Also, if you cannot switch satellites using your IRD remote, your IRD may be connected to the wrong antenna base plate connector. The PAPSA Technical Manual provides instructions for authorized service personnel who may need to check the RF connections. Contact your local SATMARK dealer or service center for assistance.



*For your convenience, SATMARK provides links to several web sites that offer satellite coverage information. Simply go to our website at [www.satmark.com](http://www.satmark.com)*