

THE USER GUIDE



THE BIG **MantaRay**[®]
ENTERTAINER

Introducing



Hi, welcome to the MantaRay User Guide

Please take the time to read through the *Important Safety Information* on the following pages prior to experiencing the (nff)[∞] of **MantaRay**.

What is (nff)[∞]?

(nff)[∞] = Net Fun Factor to the Power of Infinity

MantaRay is a unique and stylish portable entertainment unit, which allows you to immerse yourself in a large image on your wall or screen*. It is a video projector with a series of enhanced features designed specifically for your enjoyment at home, **MantaRay** rocks the home entertainment experience!

MantaRay has a stack of applications. It is fully compatible with all games consoles, DVD players, VCR's, and cable TV set top boxes. **MantaRay** also has television reception capabilities, which enables it to be used as an independent TV.

You don't need a science degree to operate **MantaRay** – just plug and play. Clever design has resulted in user-friendly functionality, with an emphasis on safety.

If you require further information, visit:

www.mantaray.net.au

Enjoy! – It won't be hard.

*(For best viewing a 1.5m diagonal image is recommended).

Disclaimer

Every effort has been made to ensure that the details in the User Guide are accurate at time of printing.

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IMPORTANT SAFETY INFORMATION



WARNING:
**TO REDUCE THE RISK OF FIRE OR
SHOCK HAZARD, DO NOT EXPOSE
THIS UNIT TO RAIN OR MOISTURE.**

CAUTION:

TO ENSURE PERSONAL SAFETY, OBSERVE THE FOLLOWING IMPORTANT SAFEGUARDS REGARDING THE USE OF THIS UNIT.

1. Read Instructions

All the safety and operating instructions should be read before **MantaRay** is operated.

2. Retain Instructions

The safety and operating instructions should be retained for future reference.

3. Observe Warnings

All warnings on the unit and in the *Set Up & Use Instructions* should be observed and adhered to.

4. Follow Instructions

The *Set Up & Use Instructions* should be followed at all times.

5. Operating Surface

Always set up **MantaRay** on a stable and secure surface. If the surface is unstable, the unit may fall and be damaged.

6. Power Sources

MantaRay should be operated only from the type of power source indicated on the marking label and as defined in the User Guide (240V, 50/60 Hz). If you are not sure of the type of power supply to the place of use, consult your local power company.

When the unit is not in use for a long period of time, disconnect the power cord from the AC outlet.

7. Power Cord & Connector Lead Protection

Avoid damaging the AC plug, power cord and any connector leads to other electrical devices. Power-supply cords and connector leads should be positioned so that they are not likely to be walked on or pinched by items placed on or against them. Take specific care with the power cord and connector leads at attachment points.

8. Object & Liquid Entry

Never push objects or allow liquids of any kind to enter vents as they may touch dangerous voltage points or cause a short circuit that may result in fire or electric shock. Keep all liquids clear of **MantaRay**.

9. Water & Moisture

Do not use **MantaRay** near water or other liquids. Do not operate this unit in a moist environment.

10. Heat

It is recommended that **MantaRay** not be operated at temperatures over 35°C or humidity over 85%. The unit should be situated away from any source of heat. Always position the unit in a well ventilated environment.

11. Ventilation

Keep **MantaRay** vents clear and uncovered to prevent overheating. For minimal servicing and to maintain high image quality, we recommend that this unit be used in an area free from high humidity, dust, and cigarette smoke. When the unit is subjected to these environments, the filter will require more regular replacement.

12. Lamp Replacement

If the lamp blows, it will remain hot for a short period before it cools down. We recommend that the user waits at least 10 minutes prior to touching the lamp for replacement.

13. Lens Cap

Always remove the lens cap prior to use. When **MantaRay** is not in use, re-fit the lens cap.

14. Replacement Parts

Only use original manufacturer's replacement parts, as the use of non-original parts may damage **MantaRay** and will void the warranty.

15. High Brightness Light source

Do not shine projector light directly into the eyes – be especially careful that children do not stare directly into the beam of light.

16. Accidental Damage Requiring Service

Please refer to the *Troubleshooting checklist* accompanying this User Guide for all information regarding damage to the unit.

17. Servicing

The only **MantaRay** components that you should attempt to change are the lamp and air filter. All other servicing requirements must be carried out by an authorised **MantaRay** service agent. In the event of a fault, do not attempt to service the **MantaRay** or disassemble this unit, as opening or removing covers may expose you to dangerous voltage or other hazards. It will also void the warranty. Simply unplug the unit and refer all servicing enquiries to:



Freecall 1800 422 877 (Australia only)



www.mantaray.net.au

18. Cleaning

Unplug **MantaRay** from the wall outlet before cleaning. Use a damp cloth only for cleaning external surfaces. Do not use liquid cleaners or aerosol cleaners.

19. General Use

MantaRay is designed to be tilt-adjusted to an angle of 30 degrees. Under no circumstances should you place anything underneath the front of the base to angle the unit's image up higher on the screen/wall.



PACKAGE CONTENTS



A	1	MantaRay unit in a sealed plastic bag
B	1	Mains power lead
C	1	Connector lead (RCA lead), having 1 yellow, and 1 white plug at each end
D	2	Adaptors
E	1	Telescopic antenna
	1	User Guide
	1	Warranty Form, including Warranty Registration Form



1	Objective lens
2	Focus ring
3	Top vent
4	Filter cover
5	Bottom air vent
6	Tilt adjustment thumbscrew
7	Speaker
8	Lamp access screw
9	Lamp access door



10	Control buttons
11	Rear vent
12	Mains power socket
13	On/off switch
14	Antenna socket
15	Video input
16	Audio input
17	Headphones / audio out
18	Top vent release slot

RECOMMENDED VIEWING & SET UP GUIDELINES

- **MantaRay** performs at its best when the image is projected onto a clean white wall or a non-reflective screen
- The maximum recommended projected image size from **MantaRay** is 1.5 metres (measured diagonally)
- The size of the projected image is dependent upon the distance **MantaRay** is placed away from the projection surface (ie. wall or screen)
- We recommend that for every 1 metre of image projected (measured diagonally) the viewer should be 3 metres back from the image. These measurements are to be used as a guide only, and will not be practicable in all conditions and environments
- To adjust the image position on the projection surface, support the rear of **MantaRay**, and turn the tilt adjustment thumbscrew on the neck of the unit $\frac{1}{4}$ turn anti-clockwise. Whilst holding **MantaRay** at the required image height, re-tighten thumbscrew to lock unit in position. NOTE: Do not over-tighten the tilt adjustment thumbscrew
- If headphones are required, plug headphones into the headphones / audio out socket, designated by a headphones symbol on the base of **MantaRay**



The best television reception will always be via an external antenna socket. If you do not have access to an external antenna socket, a telescopic antenna has been supplied.

Initial Set Up

1. Place **MantaRay** on a flat level surface, facing a wall or a screen
2. Insert power lead into **MantaRay** base
3. Plug other end of power lead into mains power outlet and turn switch on at the wall
4. Remove the lens cap
5. Insert the supplied telescopic antenna into the antenna socket and extend for TV reception

NOTE: If a connection to an external antenna is available, this will provide the best reception. Simply attach an RF lead (not supplied) to the antenna socket of **MantaRay**. Attach the other end to the external antenna socket

6. Turn on the power switch located on the base of **MantaRay** (indicated by having the hyphen symbol depressed)

Tuning, programming and watching television

You may need to tune your **MantaRay** for television reception in your own region.

MantaRay is controlled by the use of 3 buttons on the back of the fin:

A	Down	left button
B	Mode	centre button
C	Up	right button



1. Press and hold MODE button and simultaneously press the UP button. The On Screen Display will show the word 'SCAN'
You have 2 options:
 - a. Press the UP button to SCAN for television channels
OR
 - b. Press the MODE button again to exit from this option. No television channels will be programmed.
2. When SCAN, begins the On Screen Display will display 'SCANNING 1...2...'
3. When **MantaRay** detects a television signal, the corresponding audio will be heard. You have 3 options:
 - a. Press UP button to accept the channel
OR
 - b. Press DOWN button to reject the channel and continue the SCAN
OR
 - c. Press MODE button to terminate the SCAN procedure
4. Once desired channels have been programmed into the memory, scroll up or down using the UP and DOWN buttons to select a television channel for viewing

5. AV will appear on the On Screen Display after scrolling to the highest or lowest programmed television channel. (AV = Audio Visual. AV is the appropriate channel when using your **MantaRay** with other devices, eg. DVD, VCR, games consoles, etc.)

Image Adjustments

Focus

To adjust focus turn the front lens clockwise or anti-clockwise until a sharp picture is viewed

Height

To adjust image height:

- a. Support the rear of **MantaRay**
- b. Turn the tilt adjustment thumbscrew located between the top and base $\frac{1}{4}$ turn anti-clockwise
- c. Hold the unit at the required image height
- d. Tighten thumbscrew to lock it into position. NOTE: Do not over-tighten the tilt adjustment thumbscrew

Additional Adjustments

When there is no On Screen Display, press the MODE button to initiate the following cycle: VOLUME, CONTRAST, BRIGHTNESS and COLOUR.

VOLUME ADJUSTMENT

- a. Press the MODE button (in the centre) once. The word VOLUME, a green bar, and a VOLUME SETTING (range of 0-30) will appear on the bottom of the On Screen Display
- b. Press and release left button to lower VOLUME. The On Screen Display will display the volume setting. Press and release right button to increase VOLUME. The number increases or decreases as the VOLUME is adjusted. The green bar becomes shorter or longer depending on VOLUME selected

CONTRAST ADJUSTMENT

- a. Press the MODE button (in the centre) once. The word CONTRAST, a green bar, and a CONTRAST SETTING (range of 0-30) will appear on the bottom of the On Screen Display
- b. Press and release left button to decrease CONTRAST. The On Screen Display will display the CONTRAST setting. Press and release right button to increase CONTRAST. The number increases or decreases as the CONTRAST is adjusted. The green bar becomes shorter or longer depending on CONTRAST selected

BRIGHTNESS ADJUSTMENT

- a. Press the MODE button (in the centre) once. The word BRIGHTNESS, a green bar, and a BRIGHTNESS SETTING (range of 0-30) will appear on the bottom of the On Screen Display
- b. Press and release left button to decrease BRIGHTNESS. The On Screen Display will display the BRIGHTNESS setting. Press and release right button to increase BRIGHTNESS. The number increases or decreases as the BRIGHTNESS is adjusted. The green bar becomes shorter or longer depending on BRIGHTNESS selected

COLOUR ADJUSTMENT

- a. Press the MODE button (in the centre) once. The word COLOUR, a green bar, and a COLOUR SETTING (range of 0-30) will appear on the bottom of the On Screen Display
- b. Press and release left button to decrease COLOUR. The On Screen Display will display the volume setting. Press and release right button to increase COLOUR. The number increases or decreases as the COLOUR is adjusted. The green bar becomes shorter or longer depending on COLOUR selected

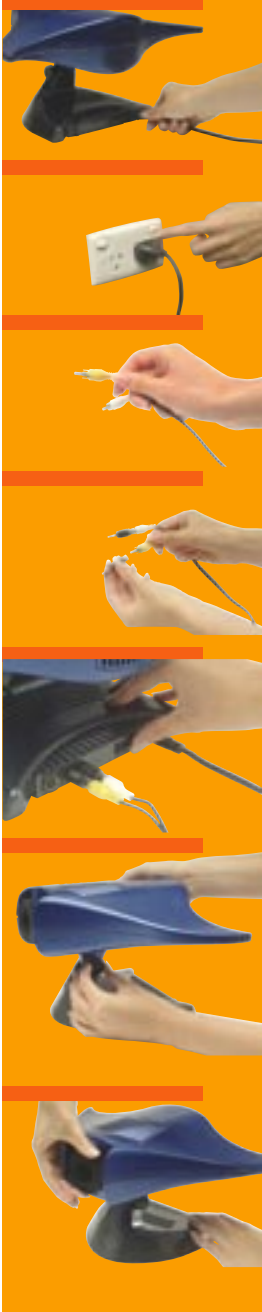
NOTE:

Each adjustment option will 'time out' after approximately 3 seconds. This means, for example, to adjust CONTRAST, you will need to press the MODE button whilst the VOLUME option is still visible on the On Screen Display to gain access to the CONTRAST adjustment

Memory

MantaRay will store the programmed television channels in its memory. If TV is the last source that you were using prior to turning off **MantaRay**, it will remember the particular channel you were viewing. **MantaRay** will project that channel the next time it is turned on. A channel will appear in the bottom centre of the On Screen Display, eg. 2. The icon will disappear after 3 seconds if no control buttons have been pressed.

USING MantaRay WITH AN EXTERNAL VIDEO SOURCE



External video sources may include:

- DVD players
- Games consoles
- VCRs
- Cable & satellite TV
- Digital cameras
- Video cameras
- VCD players

and any other video source with 'composite video' or RF out.

Initial Set Up

1. Place **MantaRay** on a flat level surface, facing a wall or a screen
2. Insert power lead into **MantaRay** base
3. Plug other end of power lead into mains power outlet and turn switch on at the wall
4. Remove the lens cap
5. Insert the connector leads into the source device by inserting one of the yellow-ended plugs into the 'video out' socket of your source
6. Insert the white ended plug into the 'audio out' socket of your source
7. Plug the 2 supplied adaptors onto the 2 free ends of the connector leads
8. Insert the yellow plug with adaptor attached, into the video input (marked with a square screen) on the **MantaRay** base

9. Insert the white plug with adaptor attached, into the audio input (marked with a musical note) on the **MantaRay** base

*To watch cable/satellite television attach an RF lead into the antenna socket of **MantaRay**. Operate **MantaRay** as per the To Use **MantaRay** as a television instructions above

To Use MantaRay

1. Turn on the power switch located on the base of **MantaRay**, (indicated by having the hyphen symbol depressed)
2. Press the UP button (right button) on the back of the **MantaRay** fin until you select the AV channel option
3. Operate the source device as stipulated in its user manual
4. Refer to Additional Adjustments above to adjust VOLUME, CONTRAST, BRIGHTNESS and COLOUR
5. Refer to Image Adjustments above to adjust height of the image

*Mains power outlet must be 240V, 50 Hz

AIR FILTER REPLACEMENT INSTRUCTIONS



1	Top vent release slot
2	Top vent
3	Air filter

Replace air filter each time you replace the lamp

To replace the air filter follow these simple steps:

1. Unplug the power lead
2. Using the tool from the **MantaRay Service Kit** (not supplied with unit), insert flat end of tool into top vent release slot (1) and lever away from the lens until top vent (2) is released and remove the air filter (3)
3. Place the new air filter (3) into position
4. Replace the top vent (2)

LAMP REPLACEMENT INSTRUCTIONS



4	Lamp access screw
5	Lamp access door
6	Lamp connector
7	Lamp

CAUTION: If the lamp fails, wait 10 minutes to allow the lamp to cool down prior to replacing with a new lamp.

1. Unplug the power lead and all connector leads connected to the **MantaRay**
2. Place **MantaRay** upside down on a clean stable surface. Loosen tilt adjustment thumbscrew and swivel base for ease of access to lamp access door
3. Unscrew the lamp access door using the Phillips head end of the tool in the **MantaRay Service kit** (not supplied), slide out lamp gently with fingers
4. Holding the lamp connector in one hand, use the other hand to remove the lamp from its socket
5. Avoid touching the filament of the new lamp* (by holding the outer surface of the lamp), push the new lamp into the 2 centre holes of the lamp connector
6. Push the newly connected lamp gently back inside the **MantaRay** body
7. Close the lamp access door and tighten the screw** using the tool in the **MantaRay Service kit** (not supplied)
8. Remember to replace the air filter at this time (see instructions on previous page)

NOTE:

* Touching the filament will dramatically reduce the lifetime of the lamp

** Do not over-tighten the tilt adjustment thumbscrew

TROUBLESHOOTING CHECKLIST

Please **Note**: Carefully read through the checklist below before returning **MantaRay** to the point of purchase. In an attempt to avoid unnecessary returns, a service fee may apply in such circumstances.

Issue	Solution
No image	<ul style="list-style-type: none">• Make sure that the power lead is properly connected to a fully functional AC electric outlet• Make sure that the power lead is properly connected to MantaRay• If MantaRay is plugged into a power board, make sure that the power board is turned on• Make sure that you have removed the lens cap on the lens at the front of MantaRay• Make sure that MantaRay is switched ON at the switch on the base of the unit• Check the lamp to ensure that it is securely connected in the lamp connector. See “Lamp Replacement Instructions” on page 19 of the User Guide• Make sure that the cable connectors do not have any bent pins• Make sure that the cables are correctly connected to both MantaRay and the source device (ie. DVD,VCR etc)• Check the lamp to ensure that it has not blown. If it has, see “Lamp Replacement Instructions” on page 19 of the User Guide• If you are watching TV, check that the antenna is inserted into the antenna socket and extended

Issue	Solution
No sound	Adjust volume: <ul style="list-style-type: none"> • Press the middle control button on the back of the MantaRay fin once to bring up Volume control on the on-screen display • Press left control button on back of fin to lower the volume • Press the right control button on back of fin to increase the volume Verify audio / input connections Adjust audio source
Colour or text not being projected	You might need to adjust the brightness up or down until the text is visible <ul style="list-style-type: none"> • Press left control button to darken the image • Press right control button to lighten the image
Image isn't centred on the wall/screen	Reposition MantaRay Adjust the tilt of the MantaRay by turning the tilt adjustment thumbscrew 1/4 turn anti-clockwise and tilting up or down. Tighten the thumbscrew again
Image is out of focus	Suggested solutions: <ul style="list-style-type: none"> • Adjust the focus by turning the projection lens to focus the image • Check the projection lens to see if it needs cleaning. If required, do so with a lens cleaning tissue/cloth

Issue	Solution
Projector displays “bleeding,” or spots.	Adjust the brightness: <ul style="list-style-type: none"> • Press left control button on back of fin to darken the image • Press the right button on back of wing to lighten the image • Check the projection lens to see if it needs cleaning
Poor colours	Adjust the colour and brightness from the onscreen menu display. See Display Menus in your User Guide
Lamp blows	Replace the lamp as described in “Lamp Replacement Instructions” on page 19 of the User Guide
Lines in the picture source (using the TV tuner feature)	Reposition the antenna
Lamp shuts off	A minor power surge may cause the lamp to shut off. Turn MantaRay off, wait at least one minute, then turn it back on

Visit www.mantaray.net.au for a full list of FAQs and regularly updated troubleshooting information

TECHNICAL SPECIFICATIONS - MantaRay

Optical

Projection system	Anamorphic LCD technology
LCD panel	181470 pixels, 4:3 aspect ratio
Projection lens	Fixed-focal manual focus
All lenses	Multi coated glass lenses
Lamp	100W TH lamp
Brightness	575 ANSI lumens
Number of colours	16.7 million
Image size	1.5m diagonal (optimum)
Projection distance	3m optimum

Video

Colour System	PAL
Video Input	3.5mm connector

Audio

Audio input	Mono mini jack
Audio output	Mono mini jack

Television

Built-in TV tuner	PAL
Antenna input	RF coaxial, 75 ohm

General

Operation	On screen menu display
Unit colour	Blue & black / dark grey
Internal speaker	2.5W mono
Power input	240V AC, 50Hz
Dimensions	A4 footprint
Weight	3kg
Fan noise	28 dB
Operating temperature	5-35degC

WARRANTY REGISTRATION

Fill out the warranty registration card enclosed within the packaging of **MantaRay** and send to the following address:

Digislide
PO Box 20
NORTH ADELAIDE SA 5006

ACCESSORIES AVAILABLE

Service Kit

includes:

- Spare lamp
- **MantaRay** tool for replacing air filter and lamp
- Replacement filter

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