



PARD TS31
Thermal Rifle Scope
Additional Information

July 2023

Applies to the Australian and New Zealand Market

Important

- This manual applies to all models of the TS Series, the LRF Model contain extra features which aren't useable in the standard version – i.e. Ballistics
- Never remove the battery while the unit is switched on, even in sleep mode as this may cause the device to fail to start up or function abnormally. You may need to reinstall the software to correct this
 - Ensure that the LED is NOT on before removing the battery
- Always remove the Battery from the device for charging and only use a quality charging device and batteries
 - These devices use 18650 FLAT TOP batteries (3.7v)
 - Remove the battery when the device is not being used (Storage)
- DO NOT power the unit from an external USB Battery source
- **Never point the device at strong sources of light, such as the sun, welding or a laser; damaged caused by such will void the warranty**

Videos

We have made a series of videos on setting up the PARD

All our videos are taken in New Zealand, they show the real-world results that can be achieved with the PARD. Visit pard.co.nz and look for 'How to videos' under the Support Menu

Support

If you have any questions or issues with your device, please contact us via the pard.co.nz website

Some variations may exist due to variations in the firmware

This manual is for New Zealand Only.

If you are after after hours support, please txt or email us as we do have families – it maybe a simple fix and we can reply quickly if available

Warranty

In New Zealand this device is warranted against defects in materials and workmanship for a period of Three years from the date of purchase

This applies to the original purchaser only

Do not attempt to disassemble the device by yourself. If there are any issues please contact us.

All damage caused by misuse or accidental damage, including use in abnormal working conditions, damage caused by failure to follow the instructions or damage by batteries is not covered by the warranty

Setup

Videos

We have made videos of unboxing and setup/zeroing – they can be found under the Support menu of the website

Please watch them – Especially the Zeroing Video

Setup Steps

1. Install the Rings – ensure that you can rotate the focus on the lens
 - a. The Screws are in the plastic bag and an Allen key is provided
 - b. Ensure they are tight
 - c. As this is a 30mm Tube you can use any 30mm Rings
2. Turn it on
3. Press the MENU Button to bring up the menu
4. Adjust the Dioptre on the eye piece so you can read the text
5. Close the Menu
6. Adjust the front lens focus to suit what you are looking at
7. You are ready to Zero your rifle

How zero TS Series

We highly recommend that you watch the video we've prepared – its under the Support Menu and How To Videos on our website.

*One key point to stress – all digital and thermal scopes are different to 'day scopes' – for these you **MOVE** the Reticle **TO** the bullet hole – this is the opposite to what you normally do in a 'day scope' – its actually very simple*

NOTE – to Change Profiles (A,B,C,D,E) or change the reticle style or colour – you need to do this in the Reticle Adjustment Menu

IMPORTANT – before a LONG Press of the OK button, move to the Save tab on the right and plus or minus on that to Y (Yes Save) before these changes will be SAVED

Ballistics

Both models of the TS are equipped with Ballistics – the LRF version takes the data from the LRF

To use it

Turn it on in the menu to enable it if not done so already

- Press the LRF Button

- A Range Marker will appear
- Place the LRF Aiming Box over the target
 - Press the LRF Button to Enter the range
- A New Aiming Point will appear with the Selected Range beside it – THIS IS YOUR NEW AIMING POINT

To adjust just repeat the process

WE RECOMMEND THAT YOU TEST YOUR DATA ON A TARGET AT YOUR INTENDED RANGES FIRST BEFORE HUNTING

We recommend to Register the SA on pard.co.nz under the support menu to be informed of any software updates as their will likely be updates and upgrades over time

Ballistics and Range Unit Selection

NOTE – Metric or Imperial settings are controlled from the Range Unit Menu

Parameters Menu

See Notes on How Ballistics Work

- Profile – A to E – Selectable for different rifles or Ammo (Ensure it matches the correct Profile)
- Velocity – either FPS or MS (see above)
 - This should be obtained via a Chronograph
- Bullet Weight (gr)
- Bullet BC (G1 only at this stage)
 - This should be taken from the ammunition box or maker or from your calibrations
- Altitude – Used for calculations – set this to your normal altitude
- Temperature Used for Calculations – Set this either to a normal hunting Temperature or what it actually is if shooting further
- Scope Height – Inch or MM – Height from the Bore to the centre of the lens
- Zero Range – Yards or Metres – the range you have zero'd the scope at
- Reference Point and Colour – Shows either a Line, Cross or Box for the new Aiming Point – plus Colour Options

NOTE When changing rifles, you ONLY select the Profile in the Reticle Adjustment Menu; the scope will read the ballistics related to the Letter

On and Off

Selects if the ballistics is active or not

- NOTE this doesn't affect your zero – if you don't active the ballistics it will not affect your zero.
- At all times when using the ballistics a NEW aiming point appears – the normal reticle remains where it is

Range Unit Selection

This controls BOTH what the LRF reads and also your ballistic settings

You can select:

- Metric – select Metres (Metres, m/s, mm)
- Imperial – select Yards (Yards, fps, inches) by selecting the RANGE

LRF Laser Rangefinder

Distance

The distance that you can range is very much dependant on the conditions at the time – even big brand binoculars L or S etc who say their (Normal Binoculars) are rated to 3200 yards on highly reflective targets, very quickly point out that you are down to 2020 yards on trees and 1310 yards on game.

The SA32 is rated to 1000m on highly reflective targets

Factors that affect ranging colour, Angle to Lens, Large Size, Sunlight, Atmospheric Conditions, and the object itself

Noise

You may hear a dit dit noise when the Laser Rangefinder is active – this only occurs when the LRF is on.

This is caused by the LRF unit inside the device and the body being lightweight and very compact – we don't have a large bump out the side interfering with the use and portability of the unit which allows for more space for shielding.

The noise doesn't go very far either so its not going to disturb something.

The benefits of the small compact lightweight device with Ballistics with a LRF far outweigh this

ALL devices have been personally tested by us in New Zealand before they are sent out – the noise level isn't an issue to either its use or a warranty issue.

LRF Aiming Box

The LRF laser is fixed and cannot be moved

There is always variation as the laser isn't exactly in the main thermal scope lens as it is offset

WE CANNOT MAKE THE BOX MATCH THE LASER AS:

The neat feature of keeping the reticle centred when zeroed means that whenever you are different to 0,0 then the box will not match where the laser is anymore.

You can adjust it yourself by 1 of 2 methods

Method 1

Your Laser was set using the Scope Reticle Zero of X 0 and Y 0

You will need to move the laser by the opposite amount

Example

If after you zero the rifle the X and Y is now 20, 10 then you need to move the aiming box also by the opposite amount -20 in both X and -10 in Y

So if the laser XY was 44 and 22 originally (see below) then you now need to make it 24 and 12

Video Coming

Method 2

To do this you will need a device that can see the laser – say a PARD 008, DS45, 007 or a True Night Vision device

Aim the thermal LRF at a target at the range you want to calibrate it too.

The top of an obvious tree is a great choice

Hold it steady

Now look through the night vision device or have friend do this for you

Check if the aiming box (Thermal Scope) and the Laser itself (in the night vision scope) are pointing at the same place.

If it is not then this is how you move the aiming box (Below)

To Move the Aiming Box

1. Open the Main Menu
2. LONG Press of the Day/Night Button
3. **WRITE DOWN the original figures**
4. Dial using the turret the X and Y – Press the Turret to move between
5. LONG Press of the turret to save

Always with anything involving hunting we recommend that you test the LRF on known targets at the ranges you intend to shoot at.