INSTRUCTION MANUAL
for STEINER Binocular
MILITARY 10x50 Laser Rangefinder
# Table of Contents

Table of contents .................................................................................................................................................. 2  
Information for your safety .................................................................................................................................. 3  
  - User information for the disposal of electronical equipment ......................................................................... 3  
  - Battery disposal .................................................................................................................................................. 3  
  - Important notice for USA .................................................................................................................................... 3  
Identification of the components .............................................................................................................................. 4  
Inserting and changing the battery .......................................................................................................................... 6  
  - Battery charge level .............................................................................................................................................. 6  
Range estimation accuracy .......................................................................................................................................... 7  
Distance measuring ................................................................................................................................................... 8  
  - Scan mode ......................................................................................................................................................... 9  
Technical specifications .............................................................................................................................................10  
Notes ......................................................................................................................................................................11
User information for the disposal of electrical and electronic equipment (private households)

This symbol on products and/or accompanying documents indicates that used electrical and electronic products are not to be mixed with ordinary household waste. Take these products to the appropriate collection point for proper handling, recovery and recycling, where they will be taken back for free. In some states, it may also be possible to hand in these products to your local dealer when purchasing a corresponding new product. The proper disposal of this product serves to protect the environment and prevents possible harmful effects on human beings and their surroundings, which may arise as a result of incorrect handling of waste.

More detailed information on your nearest collection point is available from your local authority. According to state law, fines may be issued for the incorrect disposal of this type of waste.

For business customers within the European Union

To dispose of electrical and electronic equipment, please contact your dealer or supplier, who will be able to provide you with more information.

Information on disposal in other countries outside of the European Union

This symbol is applicable only in the European Union. Please contact your local authority or your dealer if you wish to dispose of this product and enquire about how to dispose of it.

Battery disposal

- Do not dispose of batteries with household waste!
- Please use any existing return system in your local area when returning used batteries.
- Please only hand in discharged batteries.
- Batteries are generally discharged when the equipment operated with them:
  - switches off or indicates ‘battery empty’
  - the battery no longer functions correctly after an extended period in use.

To prevent short circuits, cover the battery contacts with an adhesive strip.

Germany: As a consumer, you have a legal obligation to return used batteries. You can hand in your batteries for free to wherever the batteries were purchased or to the public collection points in your city or community.

You will find these symbols on batteries that contain harmful substances:
- Pb = Battery contains lead
- Cd = Battery contains cadmium
- Hg = Battery contains mercury
- Li = Battery contains lithium

Important notice for USA

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.
Identification of the components

1a 1b
2a 2b
3
4
5
6
Identification of the components

1a. Eyepiece with rubber eyecup, left
1b. Eyepiece with rubber eyecup, right
2a. Diopter adjustment, left
2b. Diopter adjustment, right
3. Button for distance measuring
4. Set button
5. Battery compartment
6. Laser transmission optics
Inserting and changing the battery

The laser range finder is powered by a type 3 volt CR 123 A lithium battery.

1. To insert and replace the battery, unscrew the battery cover (5) by turning anticlockwise.
2. Insert the battery with the positive end forward (according to the symbol in the battery compartment).
3. Then screw the battery cover back on by turning clockwise.

Battery charge level

A new battery is sufficient for more than 5,000 measurements at 20°C.

Depending on the conditions of use, the battery life can be significantly shorter or longer than this. Low temperatures and frequent use of the scan mode shorten the battery life.

A flat battery is indicated by a flashing measured value and target display.

Warning: Cold conditions impair the battery performance. At low temperatures, the LRF should therefore be carried close to the body and used with a fresh battery.
Range estimation accuracy

The STEINER Military 10x50 Laser Rangefinder binocular has a measuring accuracy of up to ±1 meter/yard. The maximum range is achieved with highly reflective target objects and visibility of 10km. The metering range is affected by the following factors:

<table>
<thead>
<tr>
<th>Range</th>
<th>higher</th>
<th>lower</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color of object</td>
<td>white</td>
<td>black</td>
</tr>
<tr>
<td>Angle to object</td>
<td>vertical</td>
<td>acute</td>
</tr>
<tr>
<td>Size of object</td>
<td>large</td>
<td>small</td>
</tr>
<tr>
<td>General brightness</td>
<td>low</td>
<td>high</td>
</tr>
<tr>
<td>Atmospheric conditions</td>
<td>clear</td>
<td>hazy</td>
</tr>
<tr>
<td>Object structure</td>
<td>e.g. building wall</td>
<td>e.g. bush, tree</td>
</tr>
</tbody>
</table>

With sunshine and good visibility, the ranges and accuracies are as follows:

- **Measuring range**: 20m/yds up to 1500m/1600 yds
- **Accuracy**: ±1m/yard up to 350m/380yds
  - ±2m/yds up to 700m/763yds
  - ±0,5% above 700m/763yds
Distance measuring

Set button (4)
The range can be displayed either in metres or in yards, as desired. After pressing the button for distance measuring (3) a 'm' for meter or 'y' for yards is displayed next to the target marker.
To change the setting, use the SET button (4):
An extended press of the button for over 3 seconds will cause the display to start to flash and the setting to then change every time the SET button is pressed.
All settings preset for the 'm' represent range displays in metres; all settings preset for the 'y' represent range displays in yards. The selection of setting 'm' (display in metres) or 'y' (display in yards) is preferable for the basic use. After 5 seconds without pressing the SET button the respective setting is saved automatically.

Button for distance measuring (3)
To measure the distance to an object, you must lock onto it precisely. To do this, activate the target mark by pressing the button for distance measuring (3) once. Release the button to start the measurement and the estimated range is shown on the display.
The illumination of the target will go off shortly during the measurement.
You can start a new measurement at any time by pressing the button for distance measuring (3) again.
If the object distance is less than 20 meters/yards or if the range is exceeded or the object does not reflect sufficient light, the display shows '----'.
When the display goes out, the distance meter is automatically deactivated.

Notes: Depending on the angle of the optical systems to each other, i.e. the set interpupillary distance, the displays may appear slightly slanted.
Scan mode
The STEINER Military 10x50 Laser rangefinder binocular can also be used to measure in constant operation (scan mode). The scan mode is particularly helpful for measuring small or moving targets.

If the button for measuring distance (3) is pressed for longer than approx. 3 seconds, the binocular switches to scan mode and then takes measurements continuously. This can then be identified from the range display which emits new measuring values approx. every 1.5 seconds.

Notes:  Scan mode consumes more power than individual metering due to the constant metering.
Scan mode switches off automatically after approx. 20 seconds in order to save the battery in case the button is pressed accidentally.
Technical specifications*

Magnification ................................................. 10 - fold
Entrance pupil ............................................ 50 mm
Exit pupil .................................................. 5,00 mm
Eye relief .................................................. 15,8 mm
Twilight factor ............................................ 22,4
Luminosity .................................................. 25,0
Field of view at 1.000 m .................................. ≥ 106 m
  angular .................................................. 5,7°
Dioptric range ................................................ ± 5 dpt
Resolving power ............................................ ≤ 6”
Interpupillary distance ................................... 56 - 74 mm
Operating temperature ................................. -20° / +60°C
Storage temperature ...................................... -40° / +80°C
Pressure resistance ...................................... 0,5 bar

Ocular individual adjustment

Weight (approx.)
  Binocular .................................................. 1.270 g
  Carrying strap ............................................ 55 g
  Objective caps .......................................... 42 g
  Eyepiece cover .......................................... 17 g

Dimensions (approx.)*
  Height ...................................................... 137 mm
  Width ....................................................... 207 mm
  Depth ....................................................... 100 mm

Measuring range ......................................... 20m/yds - 1.500m/1.600yds
Accuracy ..................................................... ±1m/yd up to 350m/380yds
  ±2m/yds up to 700m/763yds
  ±0,5% above 700m/763yds

Laser .......................................................... eyesafe invisible laser according to
  EN and FDA class 1

* Figures correspond to an ocular adjustment of 0 dpt. and an interpupillary distance of 65 mm.
Specifications are subject to change without prior notice as a result of ongoing technical development.
All images for illustration purposes only. Subject to change without notice.
STEINER-OPTIK GmbH
Dr.-Hans-Frisch-Straße 9
95448 Bayreuth

Phone: +49-921-7879 0
Fax: +49-921-787988

Email: military@steiner.de
http://www.steiner-military.com