

Macroscope 25

PRODUCT MANUAL

Item # 2851



Spectrum[®]
Technologies, Inc.

MACROSCOPE

PORTABLE MICROSCOPES

Thank you for purchasing a MACROSCOPE 25.

MACROSCOPE portable microscopes are designed to fill the need for superior image quality in simple, cost effective configurations for application in research, production, quality control or wherever superior image quality is essential. MACROSCOPE portable microscopes represent a significant departure from current day trends towards more sophistication and more elaborate features. Instead, they offer a simple, basic design and an ease of use not found in today's laboratory microscopes but without compromising optical or mechanical quality. MACROSCOPE 25X and the MACROSCOPE 45X Power Unit. Both units produce images superior to most laboratory instruments in resolution, contrast, brightness and field of view but at only a fraction of the cost.

MACROSCOPE 25 is a fixed magnification unit that provides 25X magnification over a field of view measuring approximately 8mm (5/16"). It incorporates a double calibrated interchangeable measuring reticle providing precise measurements in both English and Metric systems. By detaching the base and close-up lens MACROSCOPE 25 can be used for 8x distance viewing, and with formulas included, make distance or height approximations. The 25X Macroscope is ideal for insect identification in turfgrass environments.

A by-product of the simpler mechanical design is portability. This unit can be used not only in the field but also for in-place observation of specific portions of large or immovable objects such as, a bridge girder, an aircraft wing or cement structure, etc., without the need for destructive sampling for laboratory analysis.

Applications for this unit are diversified and numerous. Archeology, botany, entomology, forensics, geology, horticulture, numismatics and philately, quality control, and textiles are just a few of the disciplines that can benefit from the use of this MACROSCOPE portable microscope.

FOCUSING INSTRUCTIONS

The assembled MACROSCOPE 25 has two knurled focus adjustment knobs—one located at the top (eyepiece) and the other located on the close-up attachment. The focusing procedure is as follows:

1. Adjust the eyepiece focus knob (Top of Macroscope) until the reticle is as sharp as possible disregarding the image of the object.
2. After the reticle is sharp adjust the close-up focus knob (Bottom of Macroscope) until the image of the object is sharp.

Estimating Distances

To estimate the distance of an object it is necessary to know its approximate size. The procedure is simple using either of the following formula:

Metric:

Distance (meters) =	Size of object (M) / scale reading (mm)	X 80
---------------------	---	------

English units:

Distance (feet) =	Size of object (ft) / scale reading (sixteenth)	X 80
-------------------	---	------

For instance—a person is the distance approximately 6 feet tall (2 meters) provides a scale reading of 2.5 sixteenths (4 mm).

The calculations are as follows:

Metric:

0(Meters)	2(Meters) / 4(mm)	X 80
-----------	-------------------	------

Answer = 40 meters

English:

0(feet)	6 (ft) / 2.5 (sixteenth)	X 80
---------	--------------------------	------

Answer = 192 feet

For customer support, or to place an order, call Spectrum Technologies at (800)248-8873 or (815)436-4440 between 7:30 a.m. and 5:30 p.m. CST, FAX at (815)436-4460, or E-mail at info@specmeters.com.

WARRANTY

This product is warranted to be free from defects in material or workmanship for one year from the date of purchase. During the warranty period Spectrum will, at its option, either repair or replace products that prove to be defective. This warranty does not cover damage due to improper installation or use, lightning, negligence, accident, or unauthorized modifications, or to incidental or consequential damages beyond the Spectrum product. Before returning a failed unit, you must obtain a Returned Materials Authorization (RMA) from Spectrum. Spectrum is not responsible for any package that is returned without a valid RMA number or for the loss of the package by any shipping company.

Spectrum[®]
Technologies, Inc.

12360 S. Industrial Dr. E
Plainfield IL 60585
(800) 248-8873 or (815) 436-4440
Fax (815) 436-4460
E-Mail: info@specmeters.com
www.specmeters.com