PRODUCT SPECIFICATIONS

Product name	SCOPEMAN MSX-500Di
Camera	1/1.8" interline CCD image sensor, 2.11 megapixel total
Number of effective pixels	2.01 megapixel
Scanning method	Interlace
Magnification	∞ to 500× calculated with *14" monitor magnification
Light source	27 high luminance white LEDs; Light up switch/light adjustment function
LCD monitor	3.5" TFT color LCD (LED backlight)
Interface	USB Ver1.1 Mass storage/based on USB Video Class *Compatible with Windows®XP SP2 or higher (Recommended PC/CPU: Pentium 4 or higher, memory: 512 MB or higher)
Recordable media	SD card
Recordable formats	BMP/JPEG (still image)
Software	Measurements between 2 points; angle; area (all manual measurements)
Temperature range	5°C to 40°C
Power	AC Adapter; AC100 – 250V; DC12V; 3A
Optional	Lithium ion battery; Light permeation unit; External freeze switch
Unit size (mm)	164.20mm (width) × 220.72mm (height) × 181mm (depth)
Weight	Approximately 2.1kg (including AC adapter)
Accessories	SD card; USB cable; Video cord; AC adapter; Software CD-ROM; User manual

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FIGURE
(mm)

MAGNIFICATION OF EXTERNAL OUTPUT

Magnification is as follows if a monitor other than a 14" monitor is used.

13"	14"	20"
0.93	1	1.43
9.29	10	14.3
18.6	20	28.6
46.4	50	71.4
92.9	100	143
186	200	286
279	300	429
371	400	571
464	500	714

WD/FIELD OF VIEW

Magnification	WD (mm)	Field of View (mm)
1×	460.1	284.059 × 213.921
10×	53.5	28.406 × 21.392
20×	30.9	14.203 × 10.696
50×	17.3	5.681 × 4.278
100×	12.8	2.841 × 2.139
200×	10.6	1.420 × 1.070
300×	9.8	0.947 × 0.713
400×	9.4	0.710 × 0.535
500×	9.2	0.568 × 0.428

OPTIONAL

● DC 7.2V Lithium ion battery pack
● Light permeation unit
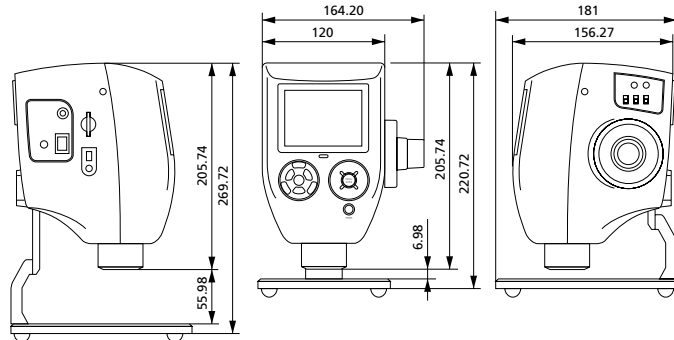● External freeze switch

IMAGE MEASUREMENT SOFTWARE

Distance between 2 points — Wafer circuit
Vertical distance — Board through hole
Angle — Beads — 133.64 [degree]
Radius between 2 points — Board — 0.7036 [mm]
Area — LCD — 6735

Intermediate point
Angle between 2 straight lines
Radius between 3 points
Measurement results

Specifications and design may be improved or changed without notice.

■ Please direct inquiries to the contacts stated below.

An integrated unit with a small, lightweight, 2.11 megapixel digital CCD microscope.

MSX-500Di

3.5 inch TFT

2 Megapixel CCD

It's NEW

An integrated design featuring a 2.11 megapixel CCD camera and 3.5″ TFT color LCD monitor.
A standalone unit that allows for viewing and saving images.

MORITEX CORPORATION

All your imaging requirements in a single, compact body.

**A small, lightweight, 2.11 megapixel digital CCD microscope**

MSX-500Di

The MSX-500Di digital microscope, with its 2 megapixel CCD camera, features an integrated 3.5" LCD monitor and is a stand alone unit for inspection and saving images. The USB connection allows for image previews as well as camera control and file transfers (for mass storage) with a PC.Lens magnification is ∞ to 500× like the INF-500 Series (magnification calculated on a 14" monitor). Illumination for the unit is in the form of 27 LEDs, which are separated into 7 blocks that can be switched as desired. This allows for optimum lighting for the subject.

2megapixel CCD

● **Features a 2 megapixel CCD camera**

Features a high performance 2.11 megapixel CCD camera. Even the finest of details can be imaged clearly.

TFT LCD monitor

● **Features an integrated 3.5" LCD monitor**

The 3.5" LCD monitor is integrated within the unit to allow standalone imaging and saving of images.

Camera control

● **The camera can be controlled from a computer**

The camera can be controlled (preview function) via the USB connection as well as for file transfers (mass storage function) (available only with Windows XP SP2).

Easy operation

● **Operation is so simple**

Menu button

- Screen that instantly displays the current settings
- Digital display of magnification information and auto-scaling.
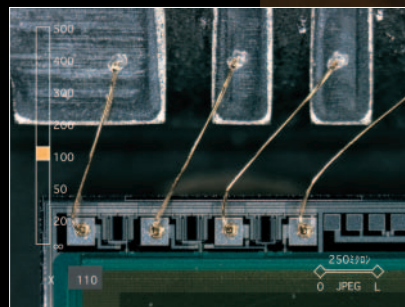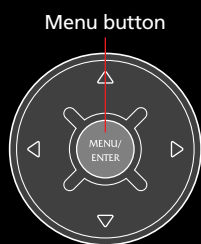
Picture view

● **Playback of recorded images**

Play / Play
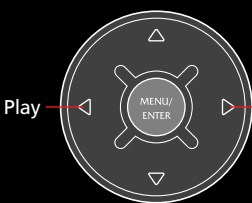
Recorded images can be shown on the display. Each push of the ▷ button will display the next new image, while each push of the ◁ button will display the next old image.

LED Illumination
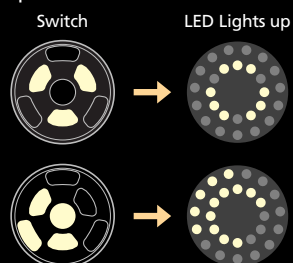
● **Free control of illumination**

LED illumination can be turned ON/OFF for each block as desired.

Illumination for the unit is in the form of 27 LED lights, which provides the most optimum lighting for each piece of work. Illumination is separated into 7 blocks and can be switched as desired, allowing clear observation of the work.
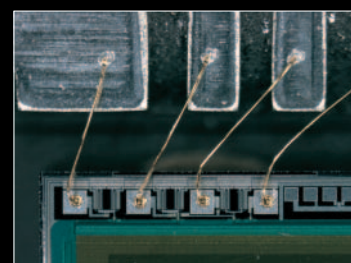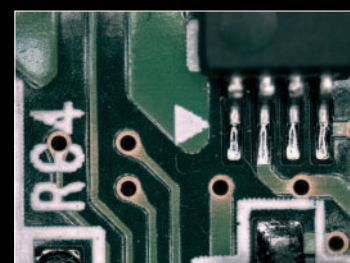
LED illumination switch

The switch lights up the corresponding section of the LED.

Example

Switch — LED Lights up

Illumination adjustment volume knob

Coarse movement

Fine movement

Magnification knob

FREEZE button
Switch between still image and video

AE volume knob

Adjustment switch

Video output terminal

SD card slot

Mini USB terminal

Power switch

External FREEZE input terminal (optional)

Flash memory slot

● **SD card slot available as standard**

Highly accurate images can be saved using the SD card slot within the unit. (BMP/JPEG)

Storage size for each image

Symbol	SD card	JPEG	BMP
S	640 × 480	Approx. 130KB	Approx. 900KB
M1	800 × 600	Approx. 190KB	Approx. 1400KB
M2	1280 × 960	Approx. 440KB	Approx. 3600KB
L	1600 × 1200	Approx. 730KB	Approx. 5600KB

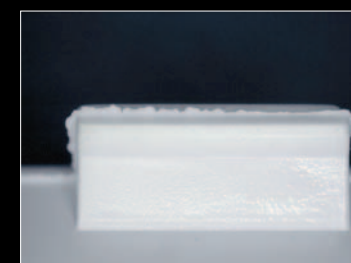The size differs slightly for each image.

Example of photography

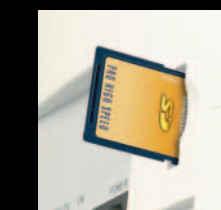■ CCD camera bonding   ■ Circuit board   ■ Welds on a molded item   ■ Granulated sugar   ■ Plants   ■ Capillary vessels in the finger