NOTE
Follow local governing regulations and recycling plans regarding disposal of wrapping of device components.

CAUTION
Do not store liquids above unit.

CAUTION
Refer to instruction manual for proper cleaning instructions. Do not service the product.

CAUTION
Refer to instruction manual for proper cleaning instructions. Do not remove the cover of equipment. Refer all servicing to qualified personnel.

WARNING
The electrical installation of the receiver (option must comply with the applicable EEC, CE, and NEC requirements.

Read the entire instruction manual before assigning or locking up the camera system.

WARNING
Read the instruction manual thoroughly and be familiar with the contents prior to using this equipment.

WARNING
The symbol on an exclamation mark within a triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the product's accompanying documents.

NOTE
A NOTE indicates special information to improve the ease of maintaining the product or to convey important information.

CAUTION
A CAUTION indicates that improper service procedures or precautions must be followed to avoid possible damage to the product.

WARNING
A WARNING indicates that personal safety of the user may be involved.

WARNING
A WARNING indicates that personal injury to the user may be involved.

WARNING
A WARNING indicates that personal injury to the user may be involved.

When using this manual, it should be clearly noted that the words WARNING, CAUTION, and NOTE convey special meanings.

Warnings and Cautions
Operating elements, displays, connections and their uses

1. Power supply
2. Camera head cable connector receptacle
3. Connector receptacle
4. IEEE 1394 high speed serial bus cable
5. Mains supply cord receptacle
6. Power switch
7. Power supply
**Basic equipment**

- Operating software
- Instruction manual
- IEEE 1394 high speed serial bus cable
- Power cord
- Camera cable
- Power supply
- Camera lens

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**Unpacking the instrument**

Installation and operating instructions
Plug camera head connector into receptacle © and secure with integral fasteners.

Connected power cord. Insert power cord into receptacle © as far as it will go.

Before plugging in the equipment, make sure that the voltage on the nameplate corresponds to the voltage of the local power line.

Make sure there is sufficient distance on all sides from other equipment and objects where specified.

Set the power supply on a flat surface.

Installing the Magnatite SP
Connect the camera head to the computer. This connection can be made using the IEEE 1394 high speed serial bus cable.

Align the camera head to the microscope. Tightening clockwise until hand-tight.
All camera functions are controlled from the application software. Refer to User Guide 1M-70-1-64-X.

Plug power cord into AC outlet. Switch on the power supply ② and the computer ⑥, insert software per instructions on disc.

Attach 25-pin camera cable ③ to the power supply ⑤ to the camera ①. Be sure to tighten down screws.

Installation and Operating Instructions
Test the power supply for proper operation.
Reconnect the power cord.
Replace and tighten the caps of the fuse holder (2).

Power Fuses
2 x T400mA / 250V

Caution: Only use fuses of the correct type and rating.
Insert new fuse of the appropriate type and rating.

Remove the power fuse holder (3) with a screwdriver or other tool.

Caution: Use only fuses approved to EC 177 Serial 1. Type T for replacement.
Switch off the power supply (1) and remove the power plug from the electrical outlet and power cord receptacle (2).

Fuse Replacement

Description of the Instrument
1. Check leakage current from chassis ≤ 50 μA.
2. Check ground impedance ≥ 0.1 ohms.
3. Check power consumption ≤ rated power.

**WARNING:** To ensure safe operation of the camera, you should perform the following procedures every 12 months:
- Information on maintenance conditions can be obtained from the manufacturer.

**Maintenance Operations**

**CAUTION:** Do not store the camera in direct sunlight or excessive heat.

1. Clean the power supply with a dry cloth.
2. Dry thoroughly with a soft towel.
3. Replace the power supply into its box.

**Cleaning and Storage after Use**

1. Clean the camera head with a damp cloth.
2. Dry thoroughly with a soft towel.
3. Replace the camera head into its box. Do not store the camera outside humidity.
Information and Technical Service

If the equipment is used in a manner not specified by Olympus, the protection provided by the equipment may be impaired. Personal and used in accordance with the Operating Manual instructions. Olympus is responsible for the yours or safety, reliability, and maintenance of the equipment only if it was provided by authorized service personnel. It is recommended that the malfunction is due to misuse of abuse, warranty service personnel.

If the customer must return the unit to Olympus to obtain a return authorization number. Olympus will repair the unit and return.

Should a malfunction occur, the unit must be returned to Olympus or to the authorized representative. Before returning the unit, contact a local Olympus representative or distributor for assistance.

Warranty

AND VIOLATION OF WARRANTY!

Refer all servicing and adjustments to qualified service personnel. DO NOT open camera head or power supply as this will result in damage.
Troubleshooting

Technical description
<table>
<thead>
<tr>
<th>Problem</th>
<th>Cause</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>No image on screen</td>
<td>All lens covers on camera head</td>
<td>Check the camera head and lens cover placement</td>
</tr>
<tr>
<td>No image on screen</td>
<td>No power supply</td>
<td>Check power supply and supply connections</td>
</tr>
<tr>
<td>No image on screen</td>
<td>Damaged camera head</td>
<td>Replace or repair camera head</td>
</tr>
<tr>
<td>No image on screen</td>
<td>Broken lens covers</td>
<td>Replace or repair camera head</td>
</tr>
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<td>No image on screen</td>
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</tbody>
</table>

**Technical Description**

- No image on screen: Check the camera head and lens cover placement.
- No power supply: Check power supply and supply connections.
- Damaged camera head: Replace or repair camera head.
- Broken lens covers: Replace or repair camera head.
- Damaged camera head: Replace or repair camera head.
- Damaged lens covers: Replace or repair camera head.
Technical documentation

Instruments are manufactured and labeled in accordance with UL 3101, CSA 22.2 NO. 101.1.

Equipment test certificates

Polynomial degree: 2
Installation overcharge category II
Means of supply: Voltage fluctuation: ±10%
Laboratory classification

Mode of operation: Continuous
Type of protection against electric shocks: Protection Class I
Type of protection against moisture: Company

General classification

Technical description

Olympus
Technical Data for Magnafire SP Model S99810