Scope Unit

Each interchangeable scope unit consists of the handheld control unit and insertion tube. Scope unit attaches to the base unit with two secure latches. Available in NTSC or PAL format models (region specific).

<table>
<thead>
<tr>
<th>Model Number</th>
<th>Dimensions</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>IV8420</td>
<td>9.8 in x 6.3 in x 11.2 in (250 mm x 160 mm x 285 mm)</td>
<td>6.8 lb (3.1 kg)</td>
</tr>
<tr>
<td>IV8435</td>
<td>9.8 in x 6.3 in x 11.2 in (250 mm x 160 mm x 285 mm)</td>
<td>5.7 lb (2.6 kg)</td>
</tr>
<tr>
<td>IV8620</td>
<td>9.8 in x 6.3 in x 11.2 in (250 mm x 160 mm x 285 mm)</td>
<td>3.7 lb (1.7 kg)</td>
</tr>
<tr>
<td>IV8635</td>
<td>9.8 in x 6.3 in x 11.2 in (250 mm x 160 mm x 285 mm)</td>
<td>4.2 lb (1.9 kg)</td>
</tr>
<tr>
<td>IV8635X1</td>
<td>9.8 in x 6.3 in x 11.2 in (250 mm x 160 mm x 285 mm)</td>
<td>3.7 lb (1.7 kg)</td>
</tr>
<tr>
<td>IV8650</td>
<td>9.8 in x 6.3 in x 11.2 in (250 mm x 160 mm x 285 mm)</td>
<td>4.4 lb (2.0 kg)</td>
</tr>
<tr>
<td>IV8675</td>
<td>9.8 in x 6.3 in x 11.2 in (250 mm x 160 mm x 285 mm)</td>
<td>4.9 lb (2.2 kg)</td>
</tr>
</tbody>
</table>

Handheld Control Unit

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>11.2 in x 7.4 in x 11.2 in (285 mm x 188 mm x 285 mm)</td>
<td>7.2 lbs (3.2 kg)</td>
</tr>
</tbody>
</table>

Software Controls

Image Controls:
- In digital zones, allows fine adjustments to image and/or exposure.
- Auto mode provides automatic exposure and contrast to balance image.

Adjustable Gain Control:
- Auto mode: gains adjusted with exclusive IVSDE® technology.

Noise Reduction:
- Allows untitled, selectable gain control.

Color Enhancement:
- Allows untitled, selectable gain control.

Exposure Control:
- Allows untitled, selectable gain control.

Recording Management Functions

Still Image Recording:
- Single Image or Still Image, PictBridge®
- Internal memory: 32 MB standard, 1 GB optional
- Image Management Functions: 500 ms* fixed minimum exposure time for stereo measurement mode.

Measurement Functions

Ruler Measurement:
- Distance between two points based on a known measurement in the same image plane.

Hemangioma Measurement:
- Distance between two points.

Area/Lines Measurement:
- Perpendicular distance between a point and a user-defined line.

Scalar Measurement:
- Distance between two points. Point-to-Line measurement with a parallel line passing at a measurement point.

Recording Management Functions

Still Image Recording:
- Single Image or Still Image, PictBridge®
- Internal memory: 32 MB standard, 1 GB optional

Video Recording:
- Single Image or Still Image, PictBridge®
- Internal memory: 32 MB standard, 1 GB optional

Audio Overlay:
- Optional selectable before recording.

Measurement Functions

Ruler Measurement:
- Distance between two points.

Hemangioma Measurement:
- Distance between two points.

Area/Lines Measurement:
- Perpendicular distance between a point and a user-defined line.

Scalar Measurement:
- Distance between two points.

Software Controls

Image Controls:
- In digital zones, allows fine adjustments to image and/or exposure.
- Auto mode provides automatic exposure and contrast to balance image.

Adjustable Gain Control:
- Auto mode: gains adjusted with exclusive IVSDE® technology.

Noise Reduction:
- Allows untitled, selectable gain control.

Color Enhancement:
- Allows untitled, selectable gain control.

Exposure Control:
- Allows untitled, selectable gain control.

Recording Management Functions

Still Image Recording:
- Single Image or Still Image, PictBridge®
- Internal memory: 32 MB standard, 1 GB optional
- Image Management Functions: 500 ms* fixed minimum exposure time for stereo measurement mode.

Measurement Functions

Ruler Measurement:
- Distance between two points based on a known measurement in the same image plane.

Hemangioma Measurement:
- Distance between two points.

Area/Lines Measurement:
- Perpendicular distance between a point and a user-defined line.

Scalar Measurement:
- Distance between two points.

Recording Management Functions

Still Image Recording:
- Single Image or Still Image, PictBridge®
- Internal memory: 32 MB standard, 1 GB optional

Video Recording:
- Single Image or Still Image, PictBridge®
- Internal memory: 32 MB standard, 1 GB optional

Audio Overlay:
- Optional selectable before recording.

Measurement Functions

Ruler Measurement:
- Distance between two points.

Hemangioma Measurement:
- Distance between two points.

Area/Lines Measurement:
- Perpendicular distance between a point and a user-defined line.

Scalar Measurement:
- Distance between two points.
Tip Adapter Optical Specifications

<table>
<thead>
<tr>
<th>Insertion Tube</th>
<th>Stereo Tip Adapters (4.0 mm, 6.0 mm and 6.2 mm)</th>
<th>Stereo Tip Adapters (4.0 mm, 6.0 mm and 6.2 mm)</th>
<th>4.0 mm and 6.0 mm Insertion Tip Adapters</th>
<th>Liquid Resistance</th>
<th>Relative Humidity</th>
<th>Pressure</th>
<th>Fno.</th>
<th>Depth of field</th>
<th>Field of View</th>
<th>Character Color</th>
<th>Product Abbreviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distal end</td>
<td>25.0 mm</td>
<td>28.8 mm</td>
<td>25.9 mm</td>
<td>32.2 mm</td>
<td>4 to ∞ mm</td>
<td>5 to ∞ mm</td>
<td>4 mm</td>
<td>25 to ∞ mm</td>
<td>40º</td>
<td>Black</td>
<td>AT40D/IV86</td>
</tr>
<tr>
<td>Outer diameter</td>
<td>ø4.0 mm</td>
<td>ø4.0 mm</td>
<td>ø6.0 mm</td>
<td>ø6.0 mm</td>
<td>18 to ∞ mm</td>
<td>1 to 25 mm</td>
<td>5 mm</td>
<td>6 to ∞ mm</td>
<td>80º</td>
<td>Red</td>
<td>AT80D/FF-IV86</td>
</tr>
<tr>
<td>Fno.</td>
<td>2.4</td>
<td>3.1</td>
<td>3.3</td>
<td>4.0</td>
<td>200 to ∞ mm</td>
<td>18 to ∞ mm</td>
<td>2.4</td>
<td>35 to ∞ mm</td>
<td>120º</td>
<td>Black</td>
<td>AT120D/NF-IV86</td>
</tr>
<tr>
<td>Field of View</td>
<td>40º</td>
<td>80º</td>
<td>80º</td>
<td>120º</td>
<td>25 to ∞ mm</td>
<td>18 to ∞ mm</td>
<td>2.4</td>
<td>35 to ∞ mm</td>
<td>120º</td>
<td>Red</td>
<td>AT120D/FF-IV86</td>
</tr>
<tr>
<td>Character Color</td>
<td>Black</td>
<td>Red</td>
<td>Green</td>
<td>Red</td>
<td>1 to 25 mm</td>
<td>18 to ∞ mm</td>
<td>2.4</td>
<td>35 to ∞ mm</td>
<td>120º</td>
<td>Black</td>
<td>AT120S/NF-IV86</td>
</tr>
<tr>
<td>Product Abbreviation</td>
<td>120DN V86X1</td>
<td>120DF V86X1</td>
<td>120SN V86X1</td>
<td>120SF V86X1</td>
<td>1 to 25 mm</td>
<td>18 to ∞ mm</td>
<td>2.4</td>
<td>35 to ∞ mm</td>
<td>120º</td>
<td>Black</td>
<td>AT120S/FF-IV86</td>
</tr>
</tbody>
</table>

Tip Adapter General Specifications

Locking Mechanism: Double Threaded Attachment, with O-ring seal.

External Application Standards

Low Voltage Directive: In accordance with European Directive 2006/95/EC on Low Voltage Electric and Electronic Equipment, this device complies with the requirements of EN 60601-1, EN 60601-1-2 and EN 60601-2-28 concerning electrical equipment designed for use under certain voltage levels.

FCC Information: This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: 1) this device may not cause harmful interference, and 2) this device must accept any interference received, including interference that may cause undesired operation.

WEEE Directive: In accordance with European Directive 2002/96/EC on Waste Electrical and Electronic Equipment, this symbol indicates that the product must be disposed of as unsorted municipal waste, but should be collected separately. Refer to your local Olympus distributor (or waste collection systems available in your country).

RoHS Directive: RoHS compliance model.

Tip Adapter Optical Specifications

Tip Adapter Optical Specifications

Operating Environment

Inlet Tube

- Operating Temperature: In air: -17º to 31ºC (–30º to 85ºF)
- Relative Humidity: 20% to 90% (maximum 5 – 97%)
- Liquid Resistance: Observation under control with viewing tip adapters
- Water proofing: Operable in blowing rain conditions

All Other System Parts (Base Unit, Hand Control Unit)

- Operating Temperature: In air: –20º to 40ºC (–4º to 104ºF)
- Relative Humidity: 20% to 90% (maximum 5 – 97%)
- Liquid Resistance: Observation under control with viewing tip adapters
- Water proofing: Operable in blowing rain conditions

Note: Angulation to a large angle may become difficult at low temperatures.
IPLEX Viewer
USB Keyboard
AC Adapter
Carrying Case
Optical Tip Adapter
Guide Tube
MAJ-1825-50/-75/-120/-180
(for 5.0 m/7.5 m/12.0 m/18.0 m length insertion tube)
4.0 mm (0.236 inch) and
6.0 mm (0.157 inch) Scope Unit
MAJ-1737
(5.0 m/7.5 m insertion tube, Outer diameter ø5.9 mm)
MAJ-1253
(2.0 m/3.0 m insertion, 2 mm insertion tube, Outer diameter ø2.9 mm)
Right Sleeve
MAJ-1354 (Alligator)  MAJ-1357 (Magnet)
MAJ-1356 (Grasper)
MAJ-1355 (Basket)
MAJ-1353 (Snare)
MAJ-1253
(6.0 mm/6.2 mm insertion tube, Outer diameter ø7.5 mm)
6.2 mm (0.244 inch) Working Channel Scope Unit
Right Sleeve (for Working Channel Scope Unit)
MAJ-1354 (Alligator)
MAJ-1357 (Magnet)
MAJ-1356 (Grasper)
MAJ-1355 (Basket)
MAJ-1353 (Snare)
MAJ-1253 (Hook Assembly)
Scope Unit
MAJ-1737
(5.0 m/7.5 m insertion tube, Outer diameter ø5.9 mm)
MAJ-1253
(2.0 m/3.0 m insertion, 2 mm insertion tube, Outer diameter ø2.9 mm)
Guide Tube
MAJ-1905-580/750-220/510
(for 3.0 m/5.0 m/12.0 m/18.0 m length insertion tube)
Right Sleeve (for Working Channel Scope Unit)
MAJ-1354 (Alligator)
MAJ-1357 (Magnet)
MAJ-1356 (Grasper)
MAJ-1355 (Basket)
MAJ-1353 (Snare)
MAJ-1253 (Hook Assembly)