Real-time, 3D visualization of the scope inside the colon.

ScopeGuide®

EVIS EXERA III
The world’s only technology providing a real-time 3D representation of the shape and position of the colonoscope inside the body, ScopeGuide is designed to improve procedural efficiency and increase patient comfort during a colonoscopy.

ScopeGuide’s real-time visualization is made possible through built-in electromagnetic coils in the colonoscope that generate a pulsed, low-frequency magnetic field. These pulses are transmitted to an external receiver dish, refreshed 15fps, and then relayed to the processor to generate a 3D representation of the colonoscope alongside the endoscopic image. This image provides the endoscopist with the precise positioning and orientation of the colonoscope during the procedure.

### Technology

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### Specifications

#### UPD-3

| Dimension | 370 x 35 x 17 mm (W) x 462 mm (D) x 81 mm (H) |
| Weight | 9 kg |
| Output magnetic field strength | Complies with IEEE C95.12005+A1 :2010 |
| Video signal output | XGAx1, Y/Cx1, SD-SDIx1 |
| Rated voltage | 100-240 V AC |
| Rated input | 110 VA |
| Rated frequency | 50/60 Hz |

#### Remote Control (MAJ-1890)

This device not available in all markets.

| Dimension | 76 mm (W) x 140 mm (D) x 23 mm (H) |
| Weight | 280 g |
| Length of cord | 2900 mm |

#### Positioning Detecting Probe (MAJ-1878)

This device not available in all markets.

| Maximum insertion portion diameter | 2.55 mm |
| Total length | 3500 mm |
| Detection length | 940 mm |

#### Hand Coil (MAJ-1859)

| Dimension | 76 mm (W) x 140 mm (D) x 23 mm (H) |
| Weight | 280 g |
| Length of cord | 2900 mm |

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### Procedural Efficiency

- Physicians identify and mitigate loops.
- Assistants apply abdominal pressure to the correct location.
- Nurses document precise locations for biopsies and samples.
- Anesthesiologists gauge procedure timing and administer proper sedation.
- Physicians document procedures with endoscopic and ScopeGuide images.
- Fellows train with visual anatomy cues to help them become proficient.
- Patients experience a more comfortable colonoscopy.
ScopeGuide is designed to provide a real-time 3D image of the shape and configuration of the colonoscope inside the body.

**Pre-Procedure Checklist**

1. Connect the receiver dish to the UPD-3 via the receiver dish cable (MAJ-1875).
2. Use the ScopeGuide-enabled CF-HQ190L colonoscope or connect the MAJ-1878 probe to the UPD cable (MAJ-1881) for use with a non-ScopeGuide enabled colonoscope.
3. Connect the hand coil (MAJ-1859) to the UPD-3.
4. Use the arrow keys or the remote control to change the orientation of the scope image to correspond with the positioning of the patient after the system is powered on.
5. Position the receiver dish (MAJ-1868) next to the stretcher and up and over the bed rail, then align the right edge of the receiver dish with the patient’s anus.
6. Set the starting position by holding the endoscope tip and the hand coil close to the anus. Then press the scope position button.

**ScopeGuide Functions**

1. **Menu**
   Press to display or exit the menu list.
2. **Rotate**
   Press rotate to change the orientation of the patient image if the patient’s position on the stretcher changes.
3. **Zoom**
   Press to magnify and reduce the endoscope model display if the image size on the screen is not optimal. Zoom is also helpful if capturing images for procedure reports. Magnify the ScopeGuide image to ensure it is visible in small report images.
4. **Bookmark**
   Press to mark an area of interest or polyp on the insertion length of the scope for reference. Note that actual locations of bookmarked areas may vary if loops are reduced while maneuvering to reach the cecum.
5. **Split screen**
   Press to alternate between split-screen and single-screen display.
6. **Scope position**
   Press to set or release the endoscope start position. This enables the processor to measure the length of the scope within the patient.
7. **Reset**
   Press to return to default ScopeGuide settings.
ScopeGuide is designed to provide a real-time 3D image of the shape and configuration of the colonoscope inside the body.

**Loop Identification**

**Alpha Loop**
Reduce with a clockwise twist.

**Reverse Alpha Loop**
Reduce with a counterclockwise twist.

**N Loop**
Advance carefully and reduce with a clockwise twist if there is a spiral component.

**Spiral Sigmoid Loop**
Reduce with a clockwise twist.
Recommended system and user settings

- Linking the ScopeGuide processor to the CV-190 to ensure menu settings save and display properly:
  - On the ScopeGuide processor select:
    - Menu>System Settings>System>Remote>Connection>Link-in
  - For a 180 demo, this setting should be CV Remote

- Eliminate PIP overlapping the endoscopic image:
  - The CV-190 is in 16:10 aspect ratio, and needs to be in 16:9:
    - Menu>Advanced Settings>System Setup>System>Output Format>Aspect Ratio>16:9
  - If already in 16:9 and the PIP still overlaps, change the size of the PIP image:
    - Menu>User Settings>Basic Setup>PIP/POP/Sub Screen>Small

- Changing the recommended black background color:
  - Menu>User Settings>Edit>UPD>Screen>Background L>Black>Background R>Black>Save>Select

- Display the patient model image:
  - Menu>User Settings>Edit>UPD>View>Vantage Point Model>Model Type>Patient>Save>Select

- Turn on ruler, bookmark, and display length:
  - Menu>User Settings>Edit>UPD>Model>Bookmark, Ruler, Display Length>On>Save>Select

FAQs

- Part of the scope image is gray and part of it is yellow?
  - Magnetic coils run through the CF-HQ190L/I scope, and the receiver dish is trying to pick up a signal from every single point. When the scope is yellow, the receiver is searching for more magnetic signals. There are enough signals to form an accurate image, but the ScopeGuide processor is always trying to receive ALL of the signals.

- Can you program ScopeGuide so it will show up on the picture?
  - Menu>User Settings>Edit>Input>Basic>Observation 2>Image Release Settings>Sub Screen Off>Save>Select
  - The Sub Screen Image (PIP) must be visible on the physician's monitor when the image is released for it to appear on the captured image. There is no configuration required on the ScopeGuide.

- The ScopeGuide signal is jumpy "like a wild snake!"
  - Make sure the receiver dish is up and over the bed rail. Line the right corner of the receiver dish parallel to the patient's rectum.
Colonoscopy Performance: Looping and Pain Reduction


**Training**


**Unsedated Colonoscopy**


**Pediatrics**


**General/Miscellaneous**


For more information on ScopeGuide or EVIS EXERA III, contact your sales representative.

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