

# EVIS EUS

# ENDOSCOPIC ULTRASOUND CENTER OLYMPUS EU-ME3 Flow Mode / PW Mode

# **Flow Mode Operations**

This function performs Doppler processing in the ROI and displays in color the location where the blood flow was detected.







1. Press the F key on the keyboard.





# COLOR FLOW

This mode displays the direction and velocity of the blood flow in color.



2. Pressing the mode selector buttons on the FLOW MAIN tab will switch the

# POWER FLOW

This mode displays the strength of the blood flow in color.



# H-FLOW

This mode displays directions and strength of blood flow in color. Resolution is higher than in the POWER FLOW mode.









ROI LOCATION/SIZE button

**3.** Adjusting the location/size of the area displaying the blood flow (ROI).

Press the ROI LOCATION/SIZE button in the TRACKPAD section.

The ROI LOCATION/SIZE button changes to blue, and "ROI LOCATION/SIZE" appears in the TRACKPAD ASSIGNMENT DISPLAY. Swiping the trackpad moves the ROI in the swiped direction / changes the ROI size.

\* The ROI location/size can also be moved by pressing ROI adjust buttons, which are default off but can be turned on via system settings.

# Display



Press the DISPLAY selector button (DUAL button or SINGLE button) to switch to dual-screen display or singlescreen display.







When DUAL is selected

# Adjusting



Adjusting the quality of the FLOW mode image

- **FLOW LINE DENSITY:** Increasing the FLOW scan line density will improve the resolution of the FLOW mode image, and reducing the scan line density will improve the frame rate.
- Adjusting the blood flow detection sensitivity in FLOW mode **VEL RANGE:** The blood flow detection range
  - FLOW GAIN: The detection sensitivity of the blood flow

### **PW Mode Operations**

# This function displays the change in velocity of blood flow (Pulsed Wave Doppler waveform) for a specified ROI in a graph.



Pressing the PW key on the keyboard starts acquisition of the Pulsed Wave Doppler waveform.

# Adjusting the position for acquiring the Pulsed Wave Doppler waveform



#### **PW CURSOR**

When the trackpad is swiped, the PW CURSOR and SAMPLE VOLUME are moved in the swipe direction.

### SAMPLE VOLUME

Press the SAMPLE VOL button in the TRACKPAD section to assign the sample volume to the trackpad gestures. Use the trackpad to adjust the sample volume width.

# Adjusting the blood flow detection sensitivity in PW mode





### Adjusting the display in PW mode



#### PW INVERT



## **ANGLE ADJUST**

If the blood flow is not parallel to the PW cursor but is significantly tilted, the detection angle of the blood flow can be corrected.

#### PW VEL RANGE

Sets range of blood flow velocity detected (maximum value of Pulsed Wave Doppler waveform on the vertical axis). To adjust the PW flow velocity range, press the [+] and [-] keys for Adjust key 2.

### PW GAIN

Sets brightness of Pulsed Wave Doppler waveform. Press the [+] and [–] keys for adjust key 1 to adjust the PW gain.

# BASELINE

Press the BASELINE button in the TRACKPAD section to assign baseline adjustment to the trackpad gestures.

Above the baseline indicates blood flow moving toward the ultrasound transducer, and below the baseline indicates blood flow moving away from the ultrasound transducer.

## **PW INVERT**

Pressing the PW INVERT button on the PW MAIN tab will flip the Pulsed Wave Doppler waveform so that it is displayed upside-down.

#### SWEEP SPEED

The time that the Pulsed Wave Doppler waveform is displayed on a single screen (sweep speed) can be adjusted.

#### WALL FILTER

The processing level for removing noise due to the movement of biological tissue can be adjusted.

#### Disclaimer

This sheet is for quick reference only. Please refer to the relevant User's Manual(s) for instructions, warnings and cautions. Nothing in this presentation is meant to supersede or replace the instructions for use applicable to each specific device, or the processes and procedures in place at your facility. Quick Reference Guide is only for trained health care professionals.

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