# Edwards Vigilance VGSV or CEDV Monitor

Continuous Cardiac Output (CCO), Mixed Venous Oxygen
Saturation (SvO₂) and Continuous End Diastolic Volume (CEDV)

## CCOmbo V Catheter
Model: **774F75, 774HF75**
Length: **110 cm**
Size: **7.5F**
Recommended Introducer Size: **8.5F – 9.0F**

## CCOmbo V VIP Catheter
Model: **777F8, 777HF8**
Length: **110 cm**
Size: **8F**
Recommended Introducer Size: **9.0F**
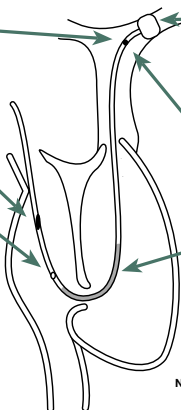
**Balloon Inflation Volume**
- Appropriate inflation volume is 1.25 – 1.5 cc

**VIP Port 777F8, 777HF8**
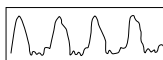- 30 cm from tip
- Located in RA/SVC

**Proximal Injectate Port**
- 26 cm from tip
- Located in RA or SVC
- If incorrectly positioned in introducer sheath, Bolus CO measurement will be erroneously high due to reflux of injectate within introducer
- Transduce Proximal Injectate Lumen – proper waveform is RA or SVC

**PA Distal Port**
- Transduce distal lumen – proper waveform is PA

**Thermistor**
- 4 cm from tip
- In main body of PA

**Thermal Filament**
- 14 – 25 cm from tip
- Rests between RA and RV
- Should be free floating and avoid endocardial surface
- Erroneous CCO measurements may result if beyond pulmonic valve

**Note:** Assess patient physiology. Atypical physiology and heart size may require special handling.

## Computation Constants required for Bolus Cardiac Output only
### For use with bath temperature probes

| CATHETER MODELS | | | 774F75, 774HF75 | 777F8, 777HF8 |
|---|---|---|---|---|
| INJECTATE TEMP | INJECTATE VOLUME (ML) | COMPUTATION CONSTANT (CC) | | |
| 0 – 5° C | 10 | | 0.564 | 0.550 |
| | 5 | | 0.257 | 0.256 |
| 19 – 22° C | 10 | | 0.582 | 0.585 |
| | 5 | | 0.277 | 0.282 |
| 23 – 25° C | 10 | | 0.594 | 0.600 |
| | 5 | | 0.283 | 0.292 |
| **Computation Constants for CO-Set+ Delivery System** | | | | |
| 6 – 12° C | 10 | | 0.574 | 0.559 |
| 8 – 16° C | 5 | | 0.287 | 0.263 |
| 18 – 25° C | 10 | | 0.595 | 0.602 |
| | 5 | | 0.298 | 0.295 |

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# Troubleshooting for Edwards Vigilance VGSV or CEDV Monitor

| PROBLEM OR DISPLAYED MESSAGE | POSSIBLE CAUSE | SUGGESTED ACTION |
|---|---|---|
| **"Alert CEDV:  Signal Adapting – Continuing" message** | • Patient's respiratory pattern may have changed<br>• Use of some types of Sequential Compression Devices (SCDs) | • Allow more time for the monitor to measure and display EDV<br>• Turn SCD cooling system off temporarily |
| **"Alert CEDV:  Heart Rate Signal Loss" message** | • Average patient's heart rate is out-of-range (HR < 40 bpm or HR > 170 bpm [or 150 bpm for software ver. 6.0])<br>• No Heart rate detected<br>• Loose slave cable connection | • Wait until average heart rate is within range<br>• Verify slave cable connections between Vigilance monitor and bedside monitor |
| **"Alert CEDV: Exceeding HR Threshold Limit" message (software ver. ≥ 6.2)** | • Patient's time-averaged heart rate is greater than 150 bpm but less than or equal to 170 bpm | • Verify average HR values<br>• Follow standard hospital protocol for reducing patient's HR below 150 bpm |
| **"Alert CEDV:  Irregular ECG Pattern" message (Software ver. ≥ 6.2)** | • Physiologic change in patient's status<br>• Unsecured leads / connections of the ECG Signal<br>• Double sensing due to atrial or atrial-ventricular (AV) pacing | • Follow standard hospital protocol<br>• Re-position leads or reconnect ECG slave cable if necessary<br>• Re-position reference lead to minimize atrial spike sensing.<br>• Select appropriate lead configuration to maximize HR triggers and minimize atrial spike sensing<br>• Assess appropriateness of milliamperage (mA) pacing levels |
| **No CEDV value with Heart Rate (HR) slaved and CCO displayed** | • Non-CEDV catheter being used<br>• Incorrect ECG slave cable | • Verify Edwards CEDV catheter is being used<br>• Verify correct ECG slave cable is being used |
| **Vigilance Monitor Heart Rate (HR) does not match bedside monitor** | • Heart rate is averaged when CCO is on | • Temporarily turn off CCO, wait a minimum of 10 seconds and verify HR correlates with bedside monitor |
| **CEDV not trending on graph** | • CEDV graph not enabled | • Enable CEDV on graph:<br> - Press TREND<br> - Press SELECT GRAPH<br> - Press Graph 1, 2 or 3 to turn on EDV |
| **EF, EDV, EDVI, ESV and ESVI on Patient Data screen are blank when CALC is pressed** | • Manual heart rate data entry overrides auto calculation (denoted by asterisk next to HR on Patient Data screen) | • Clear manual heart rate data:<br> - Press EDIT<br> - CURSOR to asterisked Heart Rate data<br> - Press CLEAR<br> - Press CALC |

**If problem persists, call Edwards Technical Support at 1.800.822.9837 (US and Canada) or 949.250.2222**

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**Certified according to European MDD**

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