

## Anesthesia Device Connections Troubleshooting Guide: St. Paul and Minneapolis

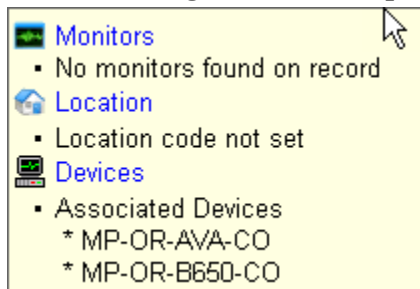
### Troubleshooting Data Flow

1. Verify the correct devices are associated to the record.

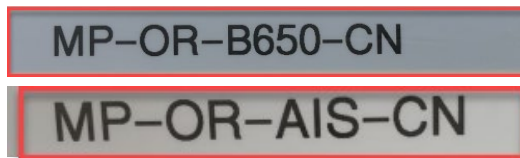
- Monitors display in the Demographics Bar of SaAnesthesia



- An X will display if there are no associated monitors
- Hover on the green dot to display associated devices

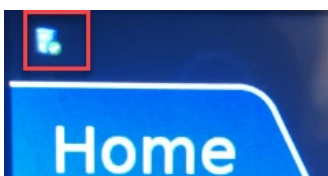


- Labels for the associated devices are located on the patient monitor, anesthesia machine, Cerebral Oxi & Cybernet  
Label examples:

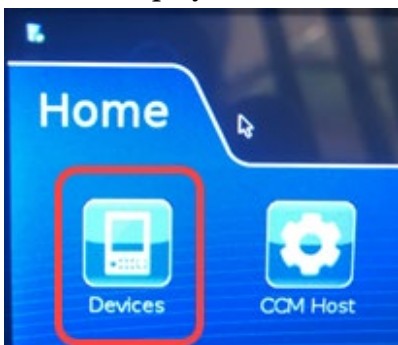


2. Verify the following:

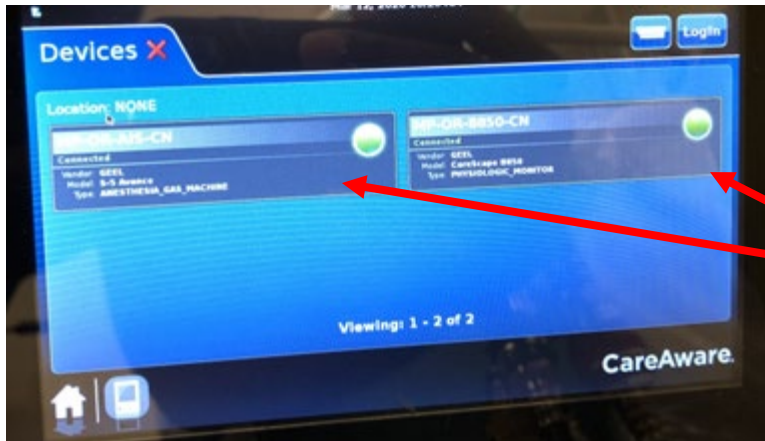
- Green Checkmark is visible on the upper left-hand corner of the Cerner Connectivity Engine (CCE).  
**Note:** A red X indicates that the CCE is not connected to the LAN or WLAN.



- Devices display in the **Devices** applet.



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The two panels display the connected devices: Patient Monitor, Anesthesia Machine, and/or Cerebral Oximetry.

3. Verify all connections (see [Connections](#) on page 4)
  - CCE
  - Device Adapters (DA)
    - + If Main OR, there will be two DAs
      - ❖ Anesthesia Machine: Avance, Asisy, or Aestiva
      - ❖ Patient Monitor: B450, B650, B840, INVO
    - + If CVOR, there will be two – three DAs
      - ❖ Anesthesia Machine: Avance, Asisy, or Aestiva
      - ❖ Patient Monitor: B450, B650, B840, INVO
      - ❖ Cerebral oximetry: SOM

**Anesthesia Device Connections Troubleshooting Guide**

**Anesthesia Monitor**



**Label Colors Key:**

1. **Blue** = Anesthesia Guide
2. **Green** = Patient Monitor

**Patient Monitor**



4. Verify the date/time on the CCE or INVO Expression monitor.
  - Vitals will not chart on the anesthesia record if the clinical date/time and the acquired date/time are not in sync within a 60/sec margin of error
  - BioMed updates the time during Daylight Saving Time
  - Reboot the CCE if the time is inaccurate (See Reboot Guide)

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Connections

Patient Monitor Connections

GE B450 | B650 | B850

Connection Points:

USA Type A, 9-pin Serial, DA, USB Type A/B, CCE, Ethernet

**Connection Description:** Blue tip USB A plugs into the patient monitor and the blue tip 9-pin male adapter plugs into the brown 9-pin female Digi cable. The Digi cable plugs into the DA and converted into USB, which connects to the CCE.



Invivo Expression

Connection Points:

9-pin Serial, DA, USB Type A/B, CCE, Ethernet

**Connection Description:** The 9-pin Digi cable plugs into the patient monitor, DA and converted into USB, which connects to the CCE.



Anesthesia Machines Connections

Avance/Asisy/Aestiva

Connection Points:

RS-232, 15-pin Serial, DA, USB Type A/B, CCE, Ethernet

**Connection Description:** The 15-pin Digi cable plugs into the anesthesia machine monitor, DA and converted into USB, which connects to the CCE.



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**Cerebral Oximetry**

**INVOS Somantic**

Connection Points:

9-pin Serial, DA, USA Type A/B, CCE, Ethernet

**Connections Description:** The 9-pin female Digi cable plugs into the cerebral monitor, DA and converted into USB, which connects to the CCE.



**INVOS IP5 Expression | Direct Connect**

These monitors are directly connected to the network. If the device does not send data, there is an issue with the Ethernet cable, LAN or iBus.

**SpaceLabs | Gateway**

Monitors are connected via Space Labs Gateway. Consult SE Team for troubleshooting details.