CRIT-LINE® IV MONITOR QUICKSTART GUIDE

Crit-Line IV Monitor
QUICKSTART GUIDE

The Crit-Line IV monitor must always be used in conjunction with the clinical assessment and the patient's existing medical history before altering a dialysis treatment.

1. Keep the Crit-Line IV monitor plugged in at all times; power switch **OFF** when not in use.
2. Inspect the blood chamber and its sterile package prior to use. Refer to the blood chamber package label to ensure that the blood chamber sterilization has not expired.
3. Remove the blood chamber from its sterile package and using aseptic technique attach the red connector to the arterial port of the dialyzer. Make certain the connection is tight.
4. Connect the arterial bloodline to the blood chamber. Be careful to not cross-thread the connection. Continue bloodline set-up per manufacturer's instructions.
5. Prime the system per unit procedure.
6. Turn power switch **ON**.
7. Inspect the Crit-Line blood chamber to ensure it is fully primed with flowing blood and is absent of leakage and/or air bubbles.
8. Attach sensor clip to the blood chamber.

   NOTE: Make sure the sensor clip is properly in place PRIOR to initiating the treatment.
9. Check for proper blood flow in the extracorporeal circuit, including the Crit-Line blood chamber, before starting the patient treatment with the Crit-Line IV monitor.
10. Select **Patient Run**. Wait 3–5 minutes with the blood pump at ≥150 ml/min to ensure blood is flowing in circuit.
11. Select **Start Run**.
12. If **Auto Run** has been selected, simply attach the sensor clip onto the Crit-Line blood chamber and the monitor will start taking measurements once blood is sensed.
13. If the monitor loses power during treatment, restore power and resume treatment.

    NOTE: Make certain that no air is in the blood chamber after priming. Any air present in the chamber will cause the hematocrit reading to be inaccurate.

Helpful Hints

1. ALWAYS treat the patient first; then utilize the Crit-Line IV monitor.
2. Intervene as necessary to optimize treatment.
3. Use the Markers feature (intervention or symptom) to mark events/changes in treatment (every ten minutes as needed).
4. Perform a plasma refill check as needed or at treatment end; reduce UF rate to 300 ml/hr for ten minutes and assess plasma refill.
5. If no printing or data retrieval is available, consider charting information from the main screen, such as Hct (initial), Hb (initial), Sat (min), Hct (max), and ending BV Change %.
6. Select **End Run** before saline rinse-back procedure.

CRIT-LINE® IV

Where Therapy and Diagnostics Meet

Messages

Message	Purpose of Message
-ΔBV% greater than 8%/hr	The current blood volume percentage rate of change is greater than -8% per hour. This is activated independent of the BV Alert setting.
BV Alert Level	The current blood volume percentage or hematocrit has dropped below the BV Alert Level set.
Change Clip	The screen will appear as part of the verification of accuracy failure process.
Check sensor clip (CLiC) placement. To monitor blood, ensure sensor clip is on the patient's blood chamber and press **Start Run.**	To inform the operator that a patient treatment monitoring session is about to start with the sensor clip attached to the verification filter instead of the blood chamber.
CLiC not communicating. Check the CLiC USB connection	The Crit-Line IV monitor has not received data from the sensor clip.
Crit-Line Clip change detected	The screen will appear when the Crit-Line IV monitor detects a different sensor clip.
Downloading print data	Informs the operator that data is being transmitted to the Crit-Line Printer Software
Hct Change Detected abnormal change in Hct. Press **Restart** to start over or press **Continue** to continue.	The Hct changed by more than 5 in the first 10 minutes. This is an indication that there has been a transition from saline to blood.

Message	Purpose of Message
No Blood	The sensor clip no longer senses blood in the blood chamber.
No wireless USB device. Ensure wireless USB device is connected then turn monitor **OFF** and back **ON**.	To inform the operator that the ZigBee radio is not connected to a USB port on the bottom of the Crit-Line IV or is not communicating with the ZigBee radio when an attempt was made to print using the ZigBee radio.
O_2 Alert Level	The current Oxygen Saturation has dropped below the O_2 Alert Level set on the Patient Treatment Monitoring screen.
Patient monitoring was interrupted unexpectedly. Continue patient monitoring?	To inform the operator that an active patient treatment monitoring session was unexpectedly terminated. This is typically due to a power cycle during a treatment monitoring session.
Print error	The patient treatment data was not printed. This message is displayed if the printer countdown timer (see "Waiting to Print" below) reaches zero, indicating that permission to print from the Crit-Line Printer Software was not received by the Crit-Line IV monitor in the allowable time.
Sensor Obstruction	Something is blocking the sensor clip's optical sensor.
Verification Filter Detected Select **End Run** to end session	The Crit-Line IV monitor detected a transition from blood to the verification filter during a patient treatment monitoring session.
Verify Failed	The verification of accuracy test shows that the sensor clip is not ready for use during treatment.

For additional troubleshooting, contact Technical Support at 800-227-2572

Indications for Use: The Crit-Line IV monitor is used to non-invasively measure hematocrit, oxygen saturation and percent change in blood volume. The sensor clip measures hematocrit, percent change in blood volume and oxygen saturation in real time for application in the treatment of dialysis patients with the intended purpose of providing a more effective treatment for both the dialysis patient and the clinician. Based on the data that the monitor provides, the clinician/nurse, under physician direction, intervenes (i.e. increases or decreases the rate at which fluid is removed from the blood) in order to remove the maximum amount of fluid from the dialysis patient without the patient experiencing the common complications of dialysis which include nausea, cramping and vomiting. The Crit-Line blood chamber is a sterile, single use, disposable, optical cuvette designed for use with the Crit-Line sensor clip during acute and chronic hemodialysis therapy to non-invasively measure hematocrit, percent change in blood volume and oxygen saturation. The blood chamber is connected between the arterial bloodline and the dialyzer within the extracorporeal circuit during the hemodialysis treatment.

Caution: Federal (US) law restricts this device to sale by or on the order of a physician.

Note: Read the Instructions for Use for safe and proper use of this device. For a complete description of hazards, contraindications, side effects and precautions, see full package labeling at www.fmcna.com.

FRESENIUS MEDICAL CARE
RENAL TECHNOLOGIES

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