






Dialog+® Hemodialysis System

Troubleshooting & Quick Reference Guide




Refer to product labeling for complete instructions for use.

Automatic Blood Pressure Module:







ALARM	CAUSE	REMEDIAL ACTION
"ABPM check alarm limits" message	Safe alarm limit parameters have not been set for the patient	 Set the alarm limits by selecting the arm icon  Then select the limits icon on the B/P page to set alarm limits
"DIA or SYS pressure limit" message	Pts. diastolic or systolic B/P is out of set safety parameters	Assess patient and reset limits; follow protocol for hypotension
No automatic B/P recorded	The B/P cyclor has not been turned on	 Start the B/P cycle intervals by selecting the arm icon  Then select the B/P cyclor icon and set interval if applicable
Module failure please switch off/on	The safety CPU of the ABPM module detects a failure condition	a. Press AQ button  on front panel of machine twice b. Switch machine off/on, if alarm persists contact technical service
ABPM: Body Movement	Motion artifact is detected by ABPM module	a. Ask the patient not to move during the measurement b. Repeat measurement






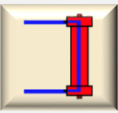

NOTE: When the "ABPM set alarm limits" is displayed in the bottom right message field, other alarms cannot be displayed. By allowing the "ABPM set alarm limits" message to remain, the operator may not observe additional important messages in the display field, due to messages overlapping one another. The operator should always turn on the B/P cyclor at the start of treatment and set the alarm limits once the B/P has taken. This will alleviate any alarm messages overlapping.




Setup Errors:

ERROR	CAUSE	REMEDIAL ACTION
Saline bag expanding	Blood pump segment in backwards	Reinsert blood pump segment, assure arterial pressure pod is on the left
Blood in saline bag	Saline line left open	Clamp saline line
No alarms activated	Patient connected in preparation mode	 Select the green man icon to change to hemodialysis therapy mode
"Coupling on rinse bridge? message	Couplers were connected too soon, or message requires couplers to be returned before disinfection	Return couplers to rinse bridge until prompted to connect
Saline bag runs empty	Lines not connected for recirculation	Connect lines, replace saline and clear air
Blood detected in preparation/disinfection mode	Venous red detector shows blood either in Preparation or Disinfection Mode	Press AQ button  twice, change therapy to hemodialysis mode by selecting the green man icon, disconnect patient from machine if in disinfection mode, or "green man" icon is not visible 
Connect disposable to recirculation	Predetermined prime volume has been obtained	Connect blood lines together and press start
Acknowledge data before connecting patient	"Start Therapy" button is selectable, because filling, testing and rinsing procedure is complete	Check data and confirm

Miscellaneous Troubleshooting:

ALARM	CAUSE	REMEDIAL ACTION
Arterial pressure-lower limit (SUP)	Arterial pressure is lower than the limit	Press AQ button  twice, check blood line for kinking, check the correct position of needle or catheter, check blood line for disconnection and leakages, reduce blood pump speed
Bicarbonate mixing ratio (SUP)	The deviation of the calculated bicarbonate mixing ratio from the TSM setting is too high or Bic pump 1 running in acetate mode	Press AQ button  twice, check bicarbonate solution, check correct mode (bic/acetate) If unclearable, contact technical service
Blood leak (SUP)	TSM setting: standard limit (0.5 mL/min at Hct 0.45), Sensor value or measured blood flow is out of limits	Press AQ button  twice, check dialyzer and dialyzer tubes for blood, If blood is visible - change dialyzer If alarm remains contact technical service
Blood leak test not ok	Self-test failed	a. Follow direction on screen b. If warning persists, call technician
Coupling on dialyzer?	One or both couplings are on the rinse-bridge but must be on dialyzer	Connect couplings to the dialyzer
During reinfusion Blood Pump does not stop automatically when rinse is clear	The change to end of therapy mode icon has not been selected 	Select the change to end of therapy mode icon to activate rinse sensor and auto blood pump off feature 
Final conductivity limit	Final conductivity value out of limits as set by user. The mean deviation value during a chamber cycle > +/- 5%	Check position of concentrate rods in the containers, check suction lines, check acetate or acid/bicarbonate supply, if alarm persists, contact technical service
Last disinfection with disturbance?	Alarm and warnings during the last disinfectant which can influence the effect of the disinfection	Press EQ  button, check disinfectant canister, REPEAT disinfection

ALARM	CAUSE	REMEDIAL ACTION
LF too low (check disinfectant)	Occurs when descaling is interrupted, if actual conductivity is less than set point for 15 seconds	a. Check disinfectant canister b. Contact technical service
Main phase change error (SUP)	TLC and LLS are not both in therapy phase, Occurs in End of Therapy	a. Press AQ button  twice, go to disinfect mode b. Contact technical service
Mainflow/bypass valves failure (SUP)	Therapy: VDE, VDA and VBP are opened at the same time End of Therapy: VDE and VDA are open Emptying dialyzer: VDE is open Venous/Arterial monitor lines are disconnected	a. Press AQ button  twice, occurs in End of Therapy, proceed to disinfect mode b. Contact technical service
Patient connected?	Blood detection for the first time in therapy	Press AQ button  twice, check if patient is connected properly, check if machine is in therapy mode, start blood pump.
Patient TX Time has not counted down	Dialysis bypass – no dialysate in dialyzer icon has not been selected 	  Select the Dialysis bypass – no dialysate in dialyzer icon to initiate dialysis Icon will change to the Dialysis on main connection – dialysate flows through dialyzer
S.A.D. (SUP)	Too much air in blood line detected	Press AQ button  twice, check blood line for air, check blood line for correct placement in the S.A.D., follow the instructions of the alarm window
Solution intake failed	If sensor LAFSU does not recognize conductivity after the intake phase	Check disinfectant canister, rinse out and retry to intake right amount of disinfectant
TMP out of alarm limit	TMP out of alarm window limits, but ≥ -100 mmHg for more than 5 seconds constantly	Readjust TMP alarm window by briefly altering readjust the blood pump speed

ALARM	CAUSE	REMEDIAL ACTION
VBICP test not ok	Self-test failed	If warning persists, call technician
Venous pressure lower limit-Check access	Venous pressure is lower than the lower limit	Press AQ button  twice, check patient's access for leak –free connection, restore connection, push back fluid column with syringe, adjust blood flow
Venous pressure upper limit (SUP)	Venous pressure greater than maximum (depending on blood pump speed and therapy sub phase)	Press AQ button  twice, check blood line for kinking, check the correct position of needle or catheter, check venous bubble catcher for clots, set new limits by reducing blood pump speed
Wrong direction of valves DFS (SUP)	The chamber valves are not set correctly for chamber mode and VDE or VDA is open. Occurs when in Sequential > 2.5 hours	<ul style="list-style-type: none"> a. Press AQ button  twice b. Briefly switching from Sequential to Hemodialysis mode will eliminate the warning c. Contact technical service