



**Aquarius™ System**

## **Quick Guide**

## AQUARIUS™ SYSTEM – QUICK GUIDE

*Note: The use of this quick guide for Aquarius™ System is not a substitute for the operating instructions provided by the manufacturer for Aquarius™ System.*

### TO SET PROGRAM (for first program, use steps 2 & 4-7 only)

1. Write down displayed “Total fluid loss” from Home screen
2. Go to programming
3. Select “Reset totals” - **Red Box**: Are you sure? – select “YES”
4. If no fluid loss required, set “Time” only. (Note: only set time when there is no fluid loss or fluid loss total entered)
5. Enter “Fluid loss rate ml/h”
6. Enter “Fluid loss total” and set programme goal i.e. multiply hourly fluid loss rate by cycle
7. Confirm number of bags, heparin rate and heater temperature settings match the patient prescription.
8. Select “Exit”
9. Press **flashing green light** on Treatment key

### TO PUT A PATIENT ON AN AQUARIUS AFTER PRIMING

(Recirculate for typically 15 minutes; Select “go to recirculation” then press Blood Pump key)

1. Select “Go to connection”- Patient weight may be selected in the 'Start Connection' screen.
2. Select “Double connection” - **Red Box**: Are you sure? - select “YES”
3. **Yellow Box** appears - follow steps:
  - a. Ensure your program is set and prepare your catheter for connection
  - b. Connect **access (RED)** and **return (BLUE)** lines and open all clamps
  - c. Select “Start blood pump”

NB: Blood will be pulled from the patient and the circuit is filled until the return line drip chamber is full of blood, at this point a **flashing green light** will appear on Treatment key (do not press yet)
4. Increase blood pump to desired level as patient tolerates, typically 2-5 minutes.
5. Press **flashing green light** on Treatment key when ready: Aquarius will display “balance initializing”, then treatment (and RCA) starts

### CHANGE BAGS

1. Await “Change\_\_\_ bag” message: if you wish to change substitution or filtrate bags before this message appears, press the Balance Pump key. During RCA, the blood pump will continue to run for one minute if the bag change is related to substitution or filtrate bags, the blood pump will stop if the bag change is related to anticoagulant fluids. If you wish to change the anticoagulant bags before they are empty, press the Blood Pump key.
2. Ensure there is a **flashing green light** on Treatment key or Blood Pump Key
3. If changing substitution/ filtrate bags, rotate the scale so the relevant bag is at the front.
4. Clamp relevant lines / bag/s
5. Change relevant bag/s
6. UNCLAMP relevant lines / bags / activate wings on Accusol Clampex
7. Rotate scale back to centre position
8. (repeat steps 3-7 if both bags due for change)
9. Press **flashing green light** on Treatment key or Blood Pump key when ready: Aquarius will display “balance initializing”, then treatment starts.

### CHANGE HEPARIN SYRINGE WHILST IN TREATMENT MODE

1. Select "Options"
2. Select "Change syringe"
3. **Red Box 1:** Clamp the heparin line - then select "YES"
4. **Red Box 2:** Remove the heparin syringe from the driver - then select "YES"
5. Set volume in new syringe
6. Insert new syringe
7. OPEN HEPARIN LINE CLAMP
8. Program heparin rate if required
9. **Red Box:** Heparin line not primed – if line has already been used just select "YES"

### END TREATMENT: WASH BLOOD BACK TO PATIENT

1. Select "Options"
2. Select "End Treatment"
3. **Red Box:** Are you sure? – select "YES"
4. **Yellow box** appears and blood pump stops – follow steps:
  - a. Disconnect **RED access** line from patient and connect to a bag of saline (250 ml bag) via spike and 3-way tap or y-connector
    - Start blood pump
    - Stop blood pump when return line is a rose colour or Aquarius alarms HIGH RETURN PRESSURE
5. Select "NEXT"
6. New **Yellow box** appears – follow steps:
  - a. Disconnect **BLUE return** line from patient and connect to the bag of saline via 3-way tap / y-connector
7. Select "NEXT"
8. **Red Box:** Disconnection complete? – select "YES"
9. **When "Aquarius OFF" appears, go to SAFE REMOVAL of LINES below**

### SAFE REMOVAL OF LINES - ALWAYS *Wear full Personal Protective Equipment*

1. Ensure **RED access** and **BLUE return** are connected to a bag of saline via a 3-way tap / y-connector with ALL clamps OPEN
2. Put saline bag into disposal/ waste container in area underneath Aquarius
3. Ensure there are NO **Red Box** alarm messages on screen - follow if required
  - a. If ACCESS pressure +/- 400 mmHg, use an Aquasafe or 50 ml luer lock syringe to aspirate the pre-infusion/ rescue port on the **RED Access** line until pressure below 100 mmHg.
  - b. If RETURN pressure +/- 400 mmHg, use an Aquasafe or 50 ml luer lock syringe to aspirate the **BLUE return** line drip chamber until pressure falls below 100 mmHg.
  - c. If TMP pressure +/- 200 mmHg or PRE-FILTER pressure +/- 400 mmHg, use an Aquasafe or 50 ml luer lock syringe to aspirate the pre-dilution line until pressure falls below 100 mmHg.
4. Remove **Blood pump** tubing and **Replacement Fluid pumps** tubing from the pumps BACKWARDS – i.e. pull tubing from the "top down". Remove **Filtrate pump** tubing from the pumps in direction of arrow, i.e. from the "bottom up". Remove the anticoagulant lines using the same process.
5. Now remove the rest of the line set and discard into yellow waste bag (**Filtrate** and surplus **Replacement Fluid** can be disposed of as usual)
6. Select "Aquarius OFF" ONLY after all tubing and bags are removed.