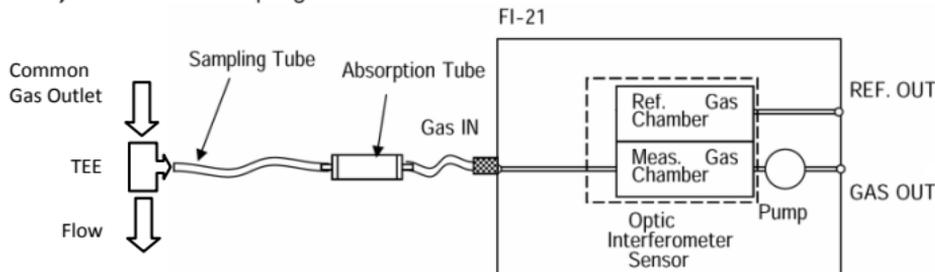


Quick Reference Guide for Riken Keiki model FI-21 for Anaesthetic Gases

1. Set up the Sampling TEE and Tube.

- Attach the sample tube/filter as per diagram.
- Find a connector that will mate with the Riken Keiki black sample TEE adaptor to the common gas outlet (eg. Endotube connectors), and plug it into the black TEE
- Attach a 22, 19 or 15mm exhaust tube to the other end of the sample TEE
- Connect the sampling tube to FI-21



2. Running the FI-21

- While holding down the [ENTER] button, press the [POWER] button. When you hear a BEEP stop pressing the buttons.
- You will be presented with a menu. Choose [SELECT GAS] by pressing [ENTER]. This puts you into the gas selection menu.
- Press the arrow button [▲UP] or [▼DOWN] to move to the desired target gas.
- Fix your gas selection by pressing [ENTER] twice. It returns to the main menu.
- Press [▼DOWN] four times until you reach [START MEAS.], and then press [ENTER]. Press [▼DOWN] to [START MEAS.], then press [ENTER] again.
- The unit will be in VOL% of the pre-selected gas and [CAUTION CHECK AIR CAL.] will be displayed.

3. Performing a Fresh Air Adjustment

- Temporarily disconnect the sample line and press the [PUMP] button to draw in fresh air. After 6 seconds, press the [PUMP] button again to stop it.
- Press and hold the [AIR CAL] button until you hear a BEEP, then release it.
- Reconnect the sample line to FI-21.

NOTE:- If [AIR] is selected as the base gas, the indication shows [0.00vol%] when [AIR CAL.] is pressed. However, if [O2] is selected as the base gas, the indication does not show 0.00vol%, but a value determined by the combination of measuring gas and base gas. This is because the sampled reference gas is not the target gas (in this case, it is air). Once the instrument samples the correct target gas, the correct reading will be displayed.

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4. Testing a Vaporizer

- a.) Select the factory recommended flow rate (example 4 or 5 litres per minute) and set flow meter to that rate.
- b.) Adjust vaporizer to your first setting as per manufacturer's instructions (eg. 1%).
- c.) Giving vaporizer time to stabilize (to manufacturers specification) turn on pump drawing into the FI-21 a sample of the vaporizers output (pump 20 seconds) then turn off pump and record the percent reading.
- d.) Repeat numbers 2 and 3 testing different vaporizer percent settings and recording them.

5. Common Mistakes

- a.) Leaving the pump on when taking your readings. The pump is used *ONLY TO DRAW IN A SAMPLE TO THE FI-21. ONCE THE SAMPLE IS IN THE FI-21, TURN OFF THE PUMP, THEN TAKE THE READING.*
- b.) The FI-21 needs a reference/constant, it uses air. So when it goes into set air cal. – **USE AIR (SEE POINT 3. PERFORMING A FRESH AIR ADJUSTMENT).**
- c.) With the FI-21 you can measure one known anaesthetic gas. You can program it for oxygen or air as a carrier gas only. Do not use a mixture or other carrier gas and expect to get correct readings.
- d.) You hold down the power button and nothing happens. Replace the batteries.
- e.) You draw your samples from the common gas outlet flow via the **SAMPLE TEE ADAPTOR – DO NOT BLOW UP THE FI-21 BY PLUGGING THE COMMON GAS OUTLET DIRECTLY INTO THE FI-21.**

Consult the operator's manual for further information.



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