SAS-3 (Smart Anesthesia System) 
User Instructions 
Part Number: 07-0809689 

FIGURE 1
FIGURE 2

SAS-3 STAND ALONE (TABLE TOP) SET UP WITH TUBING ACCESSORIES, AND PASSIVE WAG MGMT.

There are 3 common platforms for the SAS-3: Stand Alone (Table Top), Wall Mount, and Pole Mount.
IN THE BOX-

Getting Started:

CAUTION: CHECK ALL CONNECTIONS TO EQUIPMENT TO MAKE SURE THEY ARE SECURE BEFORE STARTING ANY PROCEDURES. OF PARTICULAR NOTE ARE THE CARRIER GAS CONNECTIONS AND THE VAPORIZER FILLER CAPS AS PRESSURES ARE PRESENT IN THESE AREAS.

CAUTION: THIS SYSTEM CAN WEIGH UP TO 35 KG, DEPENDING ON CONFIGURATION. EXTREME CARE SHOULD BE TAKEN WHEN SETTING UP THE SYSTEM AND/OR MOVING TO A DIFFERENT LOCATION. IT IS RECOMMENDED THAT ANY MOVEMENT OF THE SYSTEM BE PERFORMED BY 2 PEOPLE LIFTING FROM OPPOSITE ENDS OF THE SYSTEM.

CAUTION: THE SAFETY OF THE INSTALLATION OF THIS EQUIPMENT INTO ANY SYSTEM IS THE RESPONSIBILITY OF THE ASSEMBLER OF THE SYSTEM.

THIS SYSTEM SHOULD BE SET UP IN A CLEAN AND STABLE ENVIRONMENT ONTO A TABLE OR WORK SURFACE CAPABLE OF SAFELY HOLDING THE WEIGHT OF THE SYSTEM AND ALLOWING ACCESS TO ALL OF THE INCLUDED ACCESSORIES FOR US. NO SPECIFIC MOUNTING REQUIREMENTS ARE GIVEN. AN ADEQUATE SPACE AROUND THE PERIMETER OF THE SYSTEM OF APPROXIMATELY 5 CM SHOULD BE ALLOWED FOR PROPER VENTILATION.

THIS SYSTEM SHOULD BE ROUTINELY CLEANED TO MAINTAIN THE SYSTEM IN PROPER OPERATIONAL ORDER. ALL SURFACES AND ACCESSORIES CAN BE WIPED WITH COMMON CLEANERS OR DISINFECTANTS. PATTERSON RECOMMENDS THAT ACCEL TB DISINFECTANT BE USED. THIS DISINFECTANT IS AVAILABLE FROM PATTERSON AS PART NUMBER 07-8826321.
1. Attach the (carrier gas) hose (not supplied) to the SAS-3 by screwing the end of the hose without the regulator into the inlet on the left side (when facing) of the SAS-3 unit (See FIGURE 1).
   a. Connect the opposite end of the (carrier gas) hose to your (carrier gas) supply.
   CAUTION: MAKE SURE GAS SUPPLY IS “OFF,” AND DO NOT TURN (CARRIER GAS) SUPPLY “ON” UNTIL ALL START UP PROCEDURES ARE COMPLETE.

2. Connect the red color coded tubing to the red color coded common outlet on the front of the SAS-3 (See FIGURE 2).
   a. Connect all other color coded tubing to appropriate color coded common outlets.

3. Connect opposite ends of color coded tubing to appropriate accessories: Red is for Induction Chamber, Orange is for 2nd accessory, Yellow is for 3rd accessory.

4. Fill vaporizer with anesthetic gas using vaporizer fill device.
   PLEASE NOTE: WHEN FILLING THE VAPORIZER SUBSEQUENT TO THE FIRST FILLING, REFER TO AND FOLLOW THE INSTRUCTIONS ON THE CARD ATTACHED TO THE VAPORIZER. THE SAS-3 OPERATES WITH 6 PSI PRESSURE IN THE SYSTEM – INCLUDING THE VAPORIZER. IT IS IMPORTANT TO SAFELY RELEASE PRESSURE IN THE SYSTEM BEFORE FILLING THE VAPORIZER. SEE BELOW:

   Wear safety goggles or safety glasses.

   Turn System “ON / OFF” Toggle Switch to “OFF”.

   With vaporizer in “ON” position (1% concentration), drain gas from line by turning “ON” Induction Chamber Flow Control Toggle Switch (be sure to have EVAC for the induction chamber connected and/or “ON”).

   When gas stops flowing (flow indicator will drop to zero and Systems Pressure Gauge will drop to zero), turn Induction Chamber Flow Control Toggle Switch to the “OFF” position.

   Fill vaporizer with liquid anesthetic.

   Turn vaporizer dial to “OFF” position.

   Turn System “ON / OFF” Toggle Switch to the “ON” position.
Using the SAS-3:

PLEASE NOTE: The flow rate of each common outlet has been pre-set to your specifications before delivery. There is no further adjustment necessary. Common outlets are labeled with: “A”: For induction chamber, “B”: For 2nd Accessory, “C”: For 3rd Accessory. In addition to the outlets being color coded, there is a label to the left of the common outlets with the flow rate indicated for each outlet.

Flow rates for common accessories:

Induction chamber: 2 LPM

Standard Single Nosecone: 0.5 - 1 LPM

Five Nosecone Manifold: 1 - 2 LPM

Stereotaxic Nosecone: 0.5 - 1 LPM

Imaging Chamber: 1 – 2 LPM

1. Open regulator and/or connect appropriate hose to carrier gas source: O2 or Air
   a. If a Regulator is used, the pressure gauge (@ tank/source) should read approximately 50 psi.

2. Before turning System “ON / OFF” Toggle Switch to “ON,” ensure that all WAG tubing is connected to each accessory, and the WAG management system of choice is in place and/or in the “ON” position.

3. Turn System “ON / OFF” Toggle Switch on the SAS-3 under System Pressure Gauge to “ON” position (See FIGURE 1).
   a. System Pressure Gauge should read approximately 6 psi.

3. Use dial on vaporizer to select desired (anesthetic) concentration (see FIGURE 1).

4. Use Flow Control Toggle Switches located above each individual common outlet to turn “ON” each individual anesthesia station as needed (see FIGURE 1).
   a. Make sure Flow Control Toggle Switches not in use are in the “OFF” position.
5. When finished with procedure:
   a. With the System “ON /OFF” Toggle remaining in the “ON” position, turn off carrier gas
      regulator and/or disconnect carrier gas hose.
   b. Turn vaporizer dial to 1%.
   c. Turn Flow Control Toggle Switch for the Induction Chamber to “ON.” The pressurized
      gas in the system will then drain into the Induction Chamber. Ensure that WAG tubing
      and management devices are in place on the Induction Chamber.
   d. As Pressure in the system is drained, System Pressure Gauge will drop to 0 and Flow
      Indicator will drop to bottom.
   e. Turn System “ON / OFF” Toggle Switch “OFF” position.
   f. Turn vaporizer to “OFF” position.

If you have additional questions and/or concerns, please visit Patterson’s
website: www.pattersonscientific.com or call 800-877-8989
Specifications:

System Specifications:
Operating Temperature Range 15° - 35° C
Operating Humidity Range 5% - 60% RH non-condensing
Operating Altitude Sea Level to 3000m ASL