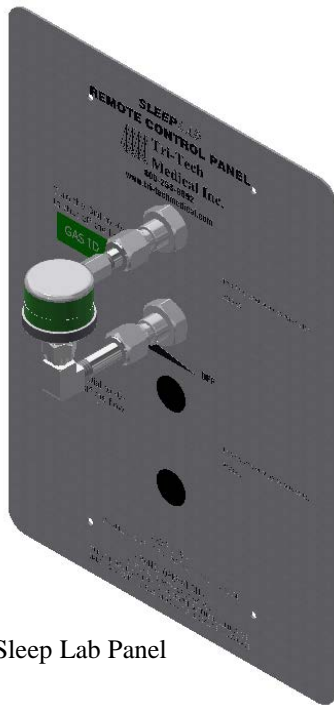
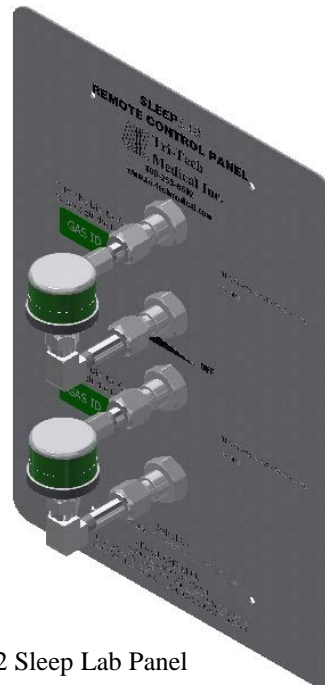


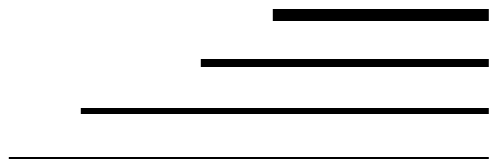
***Installation, Operating & Maintenance Instructions
For
Tri-Tech Medical Sleep Lab Panel Series***

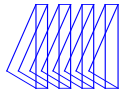


SLP-1 Sleep Lab Panel



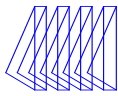
SLP-2 Sleep Lab Panel





Features & Benefits

- **Five year parts and one year labor warranty**
- Provides 50 psi (3.4 bar) – Oxygen Source
- Check Valve Risers – allow easy service
- Sleep Lab Panels meet or comply with NFPA 99 Standards
– simplifying connections and reducing cost
- Easy to service layout/design
- Flowmeter control panel incorporates dial adjustment
- Ease of maintenance
- DISS gas specific connections
- Single flowmeter panel
- Dual flowmeter panels



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Sleep Lab Panel Installation-----	5		
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Operating Instruction -----	7	Phone	800-253-8692
Cleaning / Maintenance-----	7		or 440-937-6244

Phone **800-253-8692**
 or 440-937-6244

Fax **440-937-5060**

E-mail **sales@tri-techmedical.com**

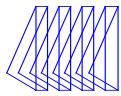
Introduction

Tri-Tech Medical Sleep Lab Panel components are cleaned for use with oxygen. Each inlet and outlet DISS assembly is tested for leakage. Each unit is designed and built in accordance with the National Fire Protection Association and Compressed Gas Association guidelines.

The installation and maintenance should be conducted in accordance with the following standards:
NFPA 99 or CSA Z7396.1

Warranty

Effective for shipments made 4/1/2015 and after, the Seller warrants the products described herein to be free from defects in material and workmanship for sixty (60) months from date of shipment with the exception of any components which are recommended to be replaced in less than sixty months in our Installation/Operation manuals. Within said period Tri-Tech Medical Inc. will repair or replace any part or component which is proven to be defective in either material or workmanship. Effective for shipments made 9/1/2015 & after, the seller warrants labor necessary to replace defective component (s) in accordance with seller re-imbusement program. This warranty is valid only when the product has been properly installed according to Tri-Tech Medical Inc. specifications, used in a normal manner and serviced according to factory recommendations. This warranty does not cover failures due to damage which occurs in shipment or failures which result from accidents, misuse, abuse, neglect, mishandling, alteration, misapplication or damage due to acts of nature. Seller makes no warranty with respect to products manufactured by others and furnished hereunder; provided however, Seller shall extend to Buyer any warranties which it receives from such vendors.



Installation of Inlet and Outlet DISS Assemblies

Inlet and outlet DISS assemblies must be installed in accordance with NFPA99 or CSAZ7396.1. An internal nitrogen purge must be used during the brazing operation. **The purge gas should flow away from the DISS body.** Brazing alloys per appropriate standards must be used. Before brazing, wet rags must be wrapped around the tube extensions next to the DISS body to prevent overheating and possible damage to the DISS O ring seals. Direct the flame away from the DISS body. The DISS body temperature must not exceed 300 degrees F to prevent damaging the O ring seals.

The system must be tested (per appropriate standards) to ensure that no cross-connections have been made.

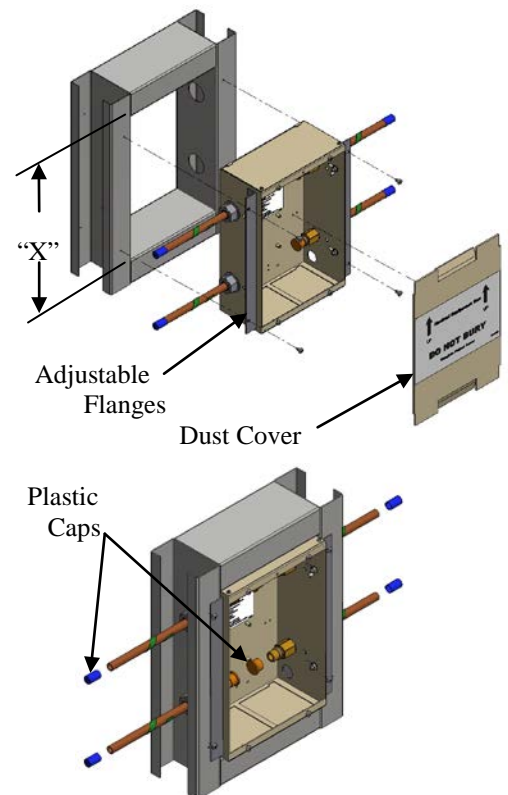
The system must be tested (per appropriate standards) for leaks.

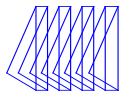
Note: Pressure in the system will increase or decrease with temperature rise or fall.

WARNING: Miss-connection of the gases could lead to serious or fatal injury to patients. Following installation, DISS connections must be tested for cross-connection (per appropriate standards) to ensure that the intended services are correctly connected to the appropriate service lines.

Sleep Lab Panel Installation

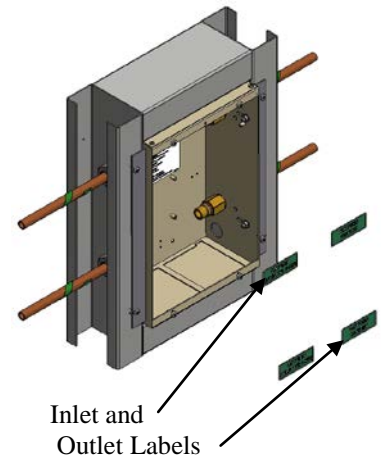
1. **Tri-Tech Medical Sleep Lab Panels may be plumbed in either direction – with the patient (use) side on the left or the right. This saves the plumber time and money.**
2. The rough-in (back box) is shipped with a cardboard dust cover installed. You will need to remove the dust cover to install the rough-in and perform the pressure test. The dust cover should be re-installed after the pressure test to protect the DISS connections until the wall covering (drywall, paint etc.) is complete.
3. The DISS risers are shipped loose and must be installed in the back box.
4. Adjustable depth mounting flanges (top & bottom) should be utilized to align front edge of box to be flush with the drywall surface.
5. The center of the rough-in box should be 60” in height above the finished floor. Fasten the back box to horizontal braces installed between the studs so that the front edge of the rough in box will be flush or slightly recessed with the finished wall covering.
6. Before brazing, remove the plastic tube caps from the DISS assembly (risers) copper extensions. DISS assemblies must be installed in accordance with “Installation of Inlet and Outlet DISS Assemblies” above.
7. The system must be tested (per appropriate standards) to ensure that no cross-connections have been made. The system must be tested (per appropriate standards) for leaks. Note: Pressure in the system will increase or decrease with temperature rise or fall.



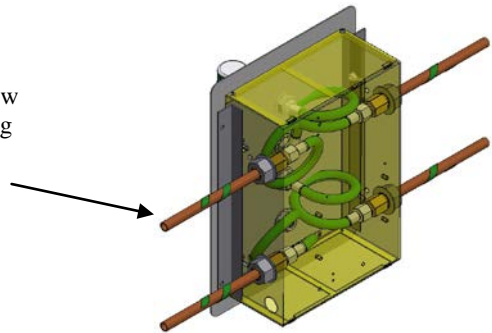


Sleep Lab Panel Installation (Continued)

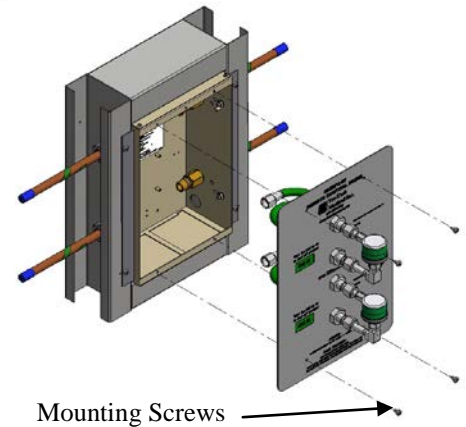
- 5. After the system passes the leak test, install the labels provided in the back box paying careful attention to the direction of the gas flow (left to right, or right to left). The direction of flow affects where you place Inlet and Outlet Labels in the back box.
- 6. After the wall covering is complete, the dust cover may be removed from the rough-in box and the hose assemblies and front panel may be installed.



- 7. Make sure the hose assemblies are attached to the appropriate inlet/flow meter connection point, and outlet/flow meter connection point. Failing to do so may affect the patient and the sleep lab test results.
Note: Sleep Lab Panels me be plumbed in either direction – with the patient (use) side on left or the right.



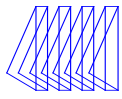
- 8. When all connections are complete and leak tested with an oxygen compatible leak test solution, fasten the sleep lab front panel to the back box with the four #8-32 x 3/4” screws provided.



- 9. On the front panel, label each flowmeter in the space provided with the sleep room it controls (label not provided). See Appendix A

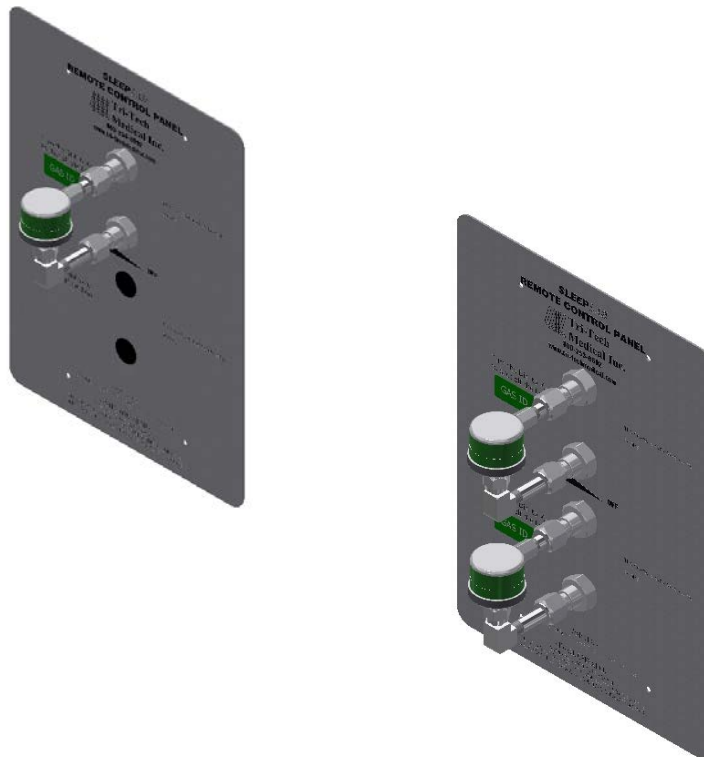
WARNING: Mis-connection of the gases could lead to serious or fatal injury to patients. Following installation, medical gas lines must be tested for cross-connection (per appropriate standards) to ensure that the intended services are correctly connected to the appropriate service lines.

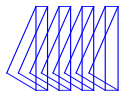
WARNING: Make certain the labeling coincides with the gas service, and areas controlled by the Sleep Lab Panel and that it is easily read.



Maintenance

1. Clean the exterior of the stainless steel Sleep Lab Panel with a glass cleaner. Strong solvents will damage the etched screened printing on the sleep lab panel.
2. Never use glass cleaner on the flowmeters.
3. If it is necessary to clean the flowmeters wipe them clean with a cloth dampened with water
4. Wipe dry with a clean dry cloth.





Flowmeters

Accuracy:	± 10% of the indicated flow.
Operating Temperature:	69°F (20.6°C) to 71°F (21.6° C)
Storage Temperature:	-40°F (40°C) to 140°F (60° C)
Max Humidity:	95 %

Note: Storage / Transport outside the specified range may cause damage to the flow meter.
Specifications are subject to change without notice.

Operating Instructions

Note: Tri-Tech Medical, Inc. recommends the use of kink proof patient tubing.

1. Be sure Dial Flowmeter is in the “OFF” position.
2. Connect the Dial Flowmeter to a 50 psi (3.4 bar) Oxygen Source.
3. Set the flow by aligning the Indicating Pointer ▼ to the desired flow.

Note: The accuracy of flow will be adversely affected by any variation of inlet pressure, ambient temperature or outlet resistance from rated values.

L WARNING

- Read this user manual before installing or operating the Dial Flowmeter.
- There is NO FLOW between settings. The Indicating Pointer ▼ must point to a specific number on the dial to obtain flow.

Caution

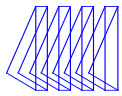
ONLY use appropriate indexed fittings to connect the Dial Flowmeter to appropriate source. Use **Oxygen** connections for oxygen flowmeters and use **Air** connections for **Air** flowmeters.

Cleaning / Maintenance

1. Disconnect all connections before cleaning.
2. Clean exterior surfaces of the Dial Flowmeter with a cloth dampened with water.
3. Wipe dry with a clean cloth.
4. Store the Dial Flowmeter in a clean area free from grease, oil and other sources of contamination.

Caution

- **DO NOT** immerse the Dial Flowmeter in any kind of liquid. This will cause damage to the Dial Flowmeter and will void the warranty.
- This Dial Flowmeter is not field serviceable.



Trouble Shooting

If the Dial Flowmeter fails to function, consult the Trouble Shooting Guide below. If the problem cannot be solved, consult your provider.

Problem	Probable Cause	Remedy
No Flow	<ul style="list-style-type: none"> ° Flowmeter set in OFF position. ° Dial set between settings. ° Internal failure. ° Hoses are not properly connected between the DISS inlet and Flowmeter 	<ul style="list-style-type: none"> ° Turn to desired setting ° Move Dial to flow setting ° Return to Tri-Tech Medical, Inc. ° Remove Front Panels and check connections
Dial will not turn / Hard to turn	°Dial seized	°Return to Tri-Tech Medical, Inc.
Will not shut off	°Flowmeter not in OFF position.	°Turn Dial to the OFF position.

L WARNING

To prevent risk of burns, fire, or injury to person(s):

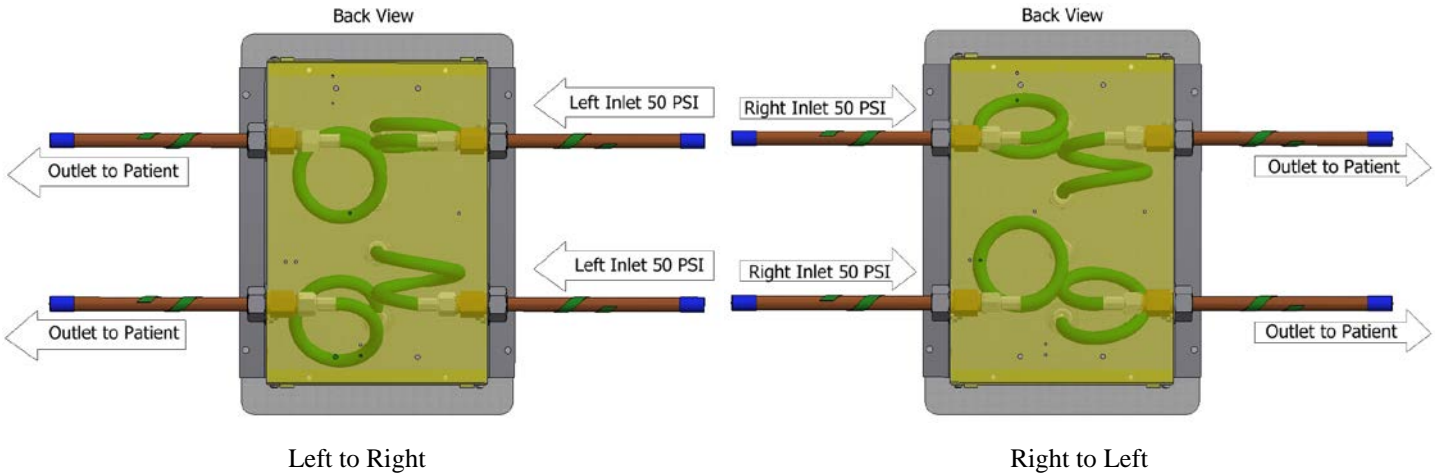
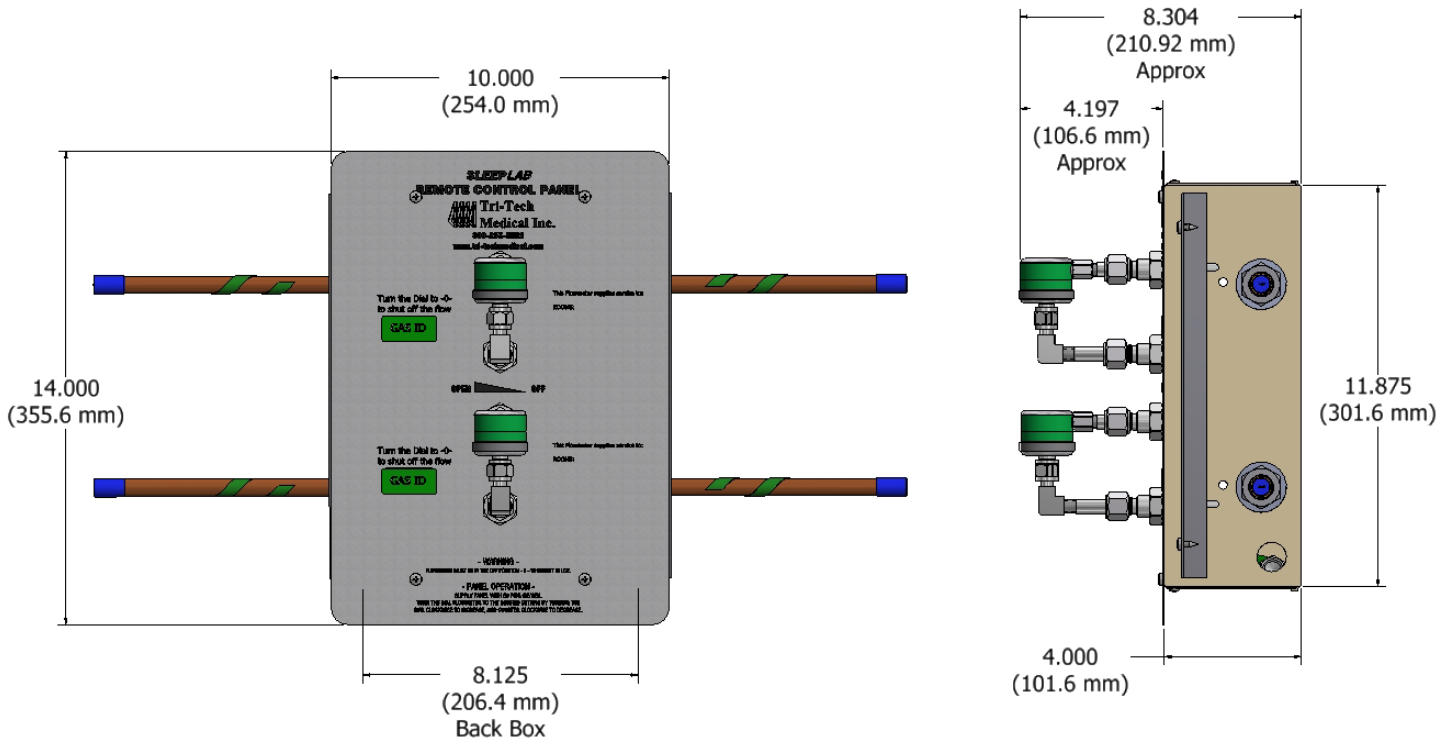
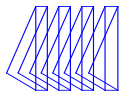
- ° **ALWAYS** confirm prescribed flow before administering to patient and monitor flow on a frequent basis.
- ° Always follow ANSI and CGA standards for Medical Gas Products and Flowmeters and Oxygen Handling.
- ° **DO NOT** use oils, greases, organic lubricants or any combustible materials on or near this Dial Flowmeter.
- ° **DO NOT** use near any type of flame or flammable/explosive substances, vapors or atmosphere.
- ° **DO NOT** smoke in an area where oxygen is being administered.
- ° This Dial Flowmeter contains magnetic, ferrous material that may affect the results of an MRI.
- ° **NO FLOW** is delivered when the Indicating Pointer ▼ is pointing to OFF.
- ° Flow is available only at the listed increments. There is **NO FLOW** between increments.

L CAUTION

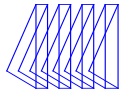
- ° Only personnel instructed and trained in its use should operate this Dial Flowmeter.
- ° Be sure all connections are tight and leak free.
- ° Only use oxygen-safe leak detector to test for leaks.
- ° **DO NOT** autoclave.
- ° **DO NOT** gas sterilize with (EtO) Ethylene Oxide.
- ° **DO NOT** clean with aromatic hydrocarbons.
- ° **DO NOT** immerse Dial Flowmeter in any kind of liquid. This will void the warranty.
- ° **DO NOT** attempt to repair the Dial Flowmeter.
- ° Store the Dial Flowmeter in a clean area when not in use.

NOTE:

The medical oxygen outlet you are connecting to in the patient room must be labeled “Not For Use With A Flowmeter”. Flow regulation is controlled by the Dial Flowmeter that is on the Sleep Lab Panel.

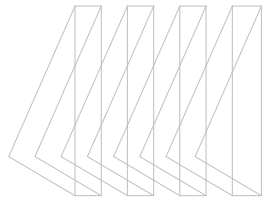


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**Tri-Tech
Medical Inc.**

*Manufacturer of Medical
Gas Pipeline Equipment*



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