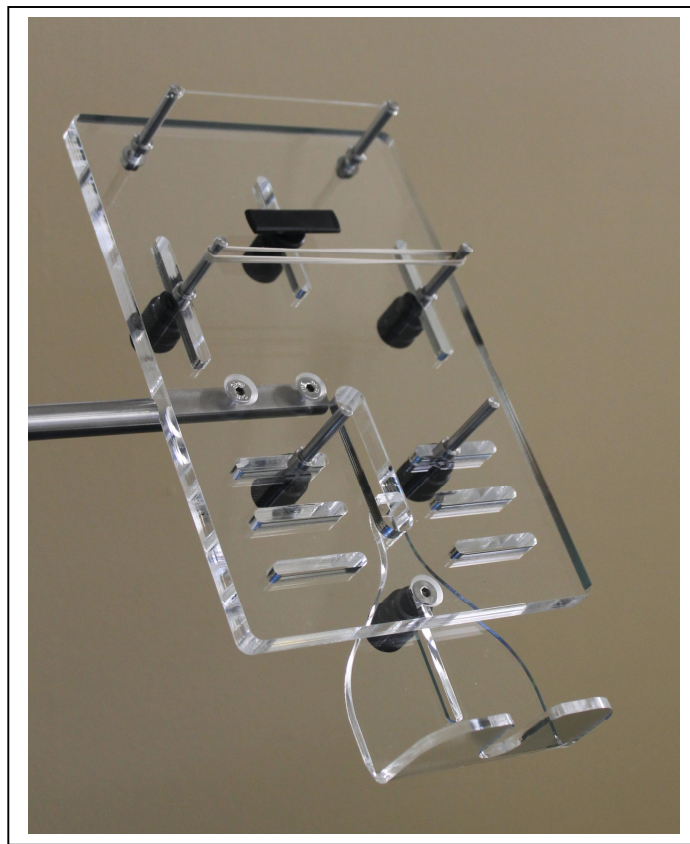


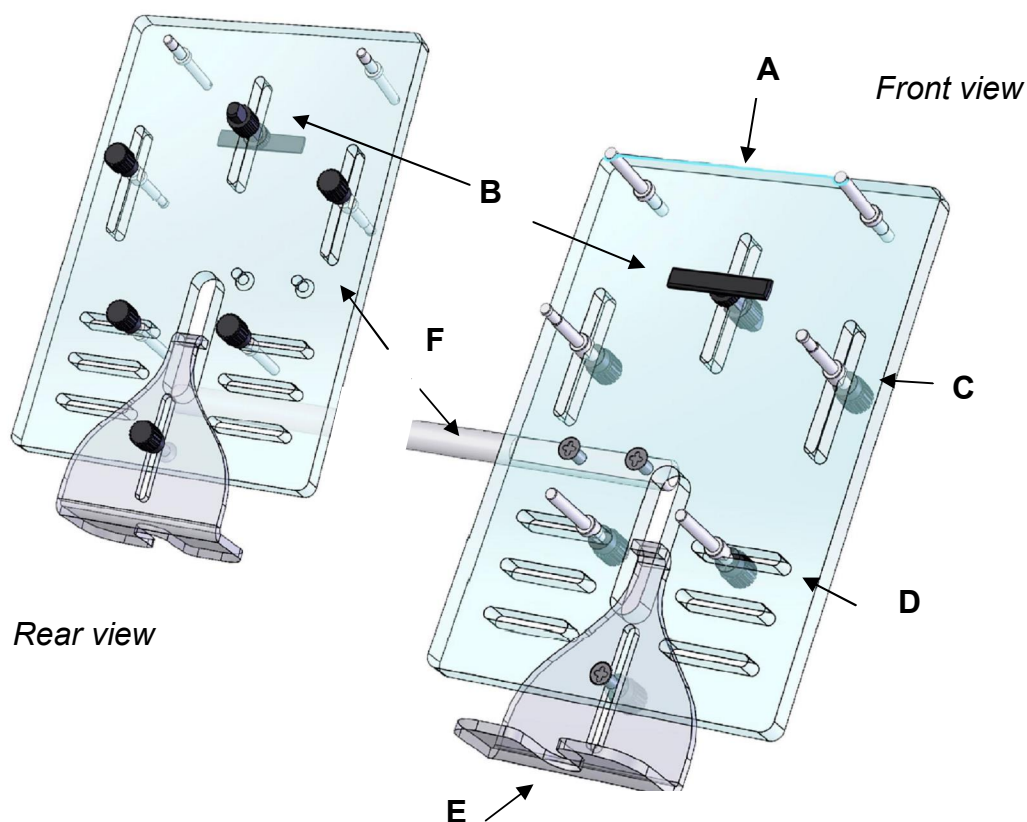
## Intubation Platform for Rat – Model IPR Instructions for Use



### Description

Intratracheal intubation in anesthetized rats can pose challenges due to variation in the animal's size and weight as they age and the difficulty of visualizing the epiglottis. The **Intubation Platform for Rat (IPR)** by Penn-Century is a simple, durable, easy-to-use system. It is designed to support an anesthetized rat securely during intratracheal aerosol delivery or intubation procedures. Our solid, sturdy platform adjusts easily as animals grow and is ideal for heavier animals. The platform can be attached to any standard laboratory clamp stand (not provided). Users can freely adjust the platform's angle and height to optimize it to their own experimental needs

## Intubation Platform for Rat - Features



**A:** Upper stainless steel posts with nylon wire (provided) for suspending anesthetized animal by incisors

**B:** Adjustable Delrin® Neck Support

**C:** Middle stainless steel guide posts move up and down. Attach the rubber band provided to the posts to secure animal across the chest.

**D:** Lower stainless steel side posts hold the animal securely in place and prevent lateral movement. Posts can be adjusted from side to side or repositioned in one of three slots for animals of varying heights and weights

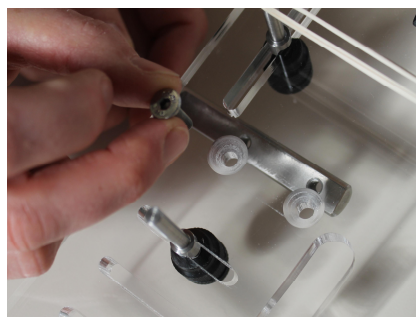
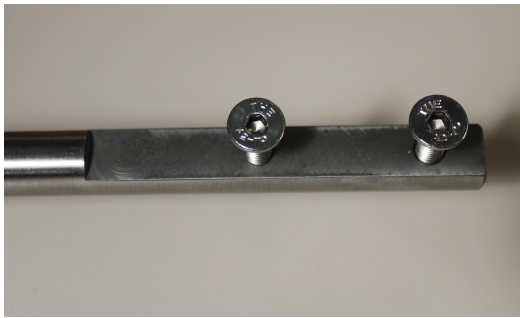
**E:** Adjustable sliding bottom support can be raised or lowered to better support anesthetized rats of different sizes

**F:** The steel side support bar attaches firmly underneath the platform. It can then be clamped to any standard laboratory clamp stand. (NOTE: Clamp stand not included with the platform.)

## Specifications

- **Platform:** Solid Plexiglass®/Perspex® with stainless steel posts and Delrin® fittings
- **Platform dimensions:** 5 7/8" x 9 5/8" x 3/8" (15 x 22 x 1 cm)
- **Stainless steel support rod:** 8" (20 cm)
- **Height of steel posts:** 1 3/16" (32mm)
- **Weight:** 1 lb. (1.5 lbs with support rod), 482 grams (646 grams with support bar)
- **Accessories:** Accessories include additional replacement nylon wire for suspending the animal, hex wrench, rubber bands, one additional hex bolt, washer and hex nut.
- **Cleaning:** May be cleaned with ethanol or Clorox® /Clidox®

## How to assemble Intubation Platform for Rat (IPR)



*Detach hex bolts from support arm rod, align holes under platform holes, and insert hex bolts to attach support arm to platform*

1. Locate the heavy stainless steel side arm bar. Unscrew the hex type screws attached to the end of the steel support bar (F) using the small hex wrench provided.
2. Position the plexiglass platform above the flat end of the steel support bar. Align the two round holes in the platform with the two holes at the end of the support bar. With your fingers, insert the hex head screws through the platform base into the steel bar and tighten each one loosely.
3. Using the hex wrench tool provided, tighten the two screws firmly until the top of the screw is below the surface of the platform. **CAUTION! Do not overtighten screws.**



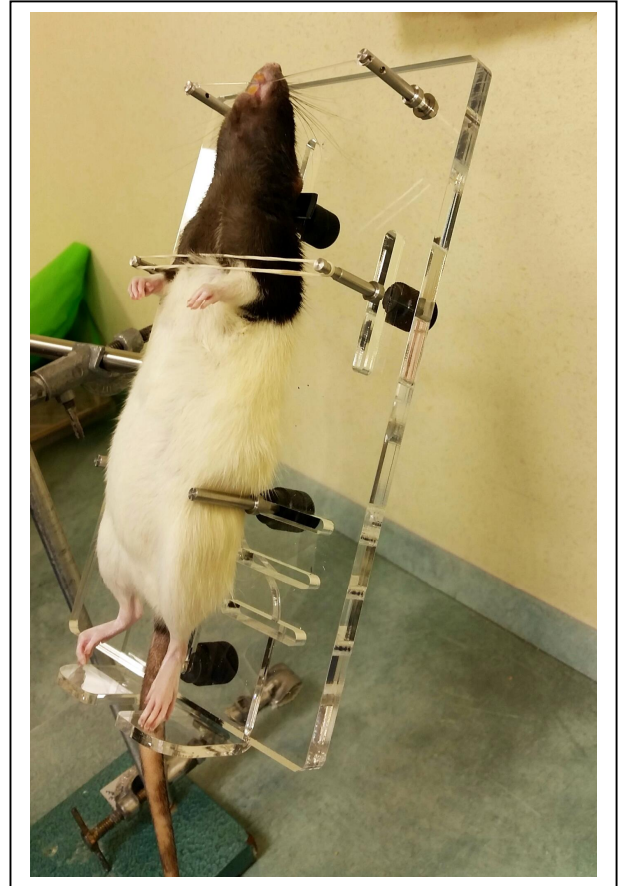
4. The platform is designed to be attached to a standard laboratory clamp setup (not provided).
5. Clamp the side support bar of the platform firmly to your lab clamp stand. Position the platform so that it is directly above the base of the clamp stand for greatest stability.
6. **Choose a clamp stand that has a base that will be sufficiently heavy and wide to remain stable during use.**

7. Test the stability of the clamp stand prior to use to assure that the base does not wobble or tip over when weight is resting on the platform. If needs be, secure the base of the clamp stand to the table surface with tape to maintain stability during experimental procedures.
8. Adjust the platform to the height and angle of your preference.



### For intubation procedures:

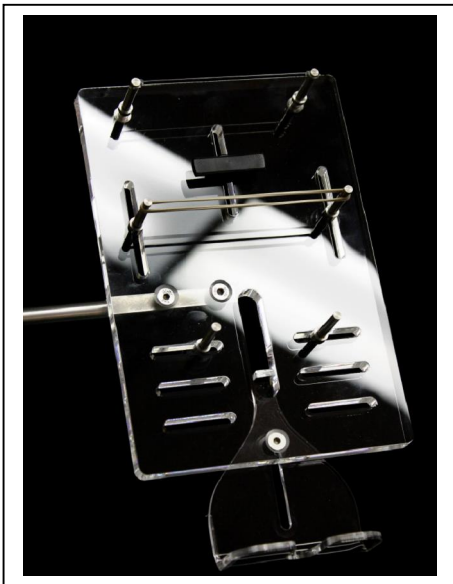
1. Position the anesthetized rat so that it is suspended from its front incisors on the nylon wire provided (B). This wire can be sterilized after each use. Additional replacement wire is provided.
2. To adjust the rectangular neck support (B), reach behind the platform and loosen the black Delrin® knob that holds the neck support in place.
3. Slide the neck support (B) up or down or swivel it to angle it to the desired position for straightening the neck of the animal. Retighten the knob.
4. If the animal is especially large, you may remove the neck support completely by unscrewing the knob below all the way until it comes off of the post to which it is attached.
5. The two middle steel posts (C) are intended to secure the animal across the chest with a rubber band. Several extra rubber bands are provided. Simply attach one end of the rubber band in the groove at the top of one post, pull it across the rat's chest and attach it to the groove in the opposite post. Adjust as needed.
6. The two lower steel posts (D) are designed to hold the rat securely facing forward and to prevent lateral movement while anesthetized. Each post may be adjusted from right to left, or pulled out and repositioned in one of three pairs of slots on each side, for rats of varying length and size. Loosen the black knob below each post to slide it from right to left so both posts fits alongside the animal and support it **without applying pressure on it**. For longer animals, the posts can be removed and reinserted into the lower slots provided. Note each post has a narrow tip that fits into the slot. Insert the post, and hold in place with one hand while tightening the knob from below with the other.
7. Once the anesthetized rat is suspended from its incisors, loosen knob that holds the sliding bottom support in place and adjust it to provide additional support from below, if needed and avoid undue stretching of the trachea. When the desired position is achieved, tighten the knob that holds it in place from below the platform.
8. A curved slot in the center of the bottom support is provided to position the tail of the rat out of the way during the procedure.



*This device is for laboratory use only; not for human in vivo use.*

### **Cleaning instructions:**

1. The entire Plexiglass®/Perspex® base and all the fittings maybe cleaned with ethanol or a dilute solution of (e.g. Clorox® /Clidox®). The device may be immersed in the solution and/or it may be applied generously with a paper towel, sponge or soft cloth. Do not use abrasive pads, or common glass or window cleaners that contain alcohol or ammonia – such as Windex™ which may dull or harm the surface of plexiglass products. Do not autoclave the device or subject it to high heat as this will cause it to warp.
2. The nylon “wire” can be cleaned and re-used. Additional wire is provided. The stainless steel posts and the Delrin® fittings can be wiped clean with a damp cloth, using ethanol or (e.g. Clorox® / Clidox®).
3. Dry the platform with a soft, lint-free clean cloth.



**Questions? Contact Penn-Century, Inc. at**  
**[info@penncentury.com](mailto:info@penncentury.com) or (215) 753-6540**