

AVH/AVIH Unboxing & Implant Instructions

Updated Nov 01, 2022

Read this manual carefully before planning your surgery.

This manual applies the following packages:

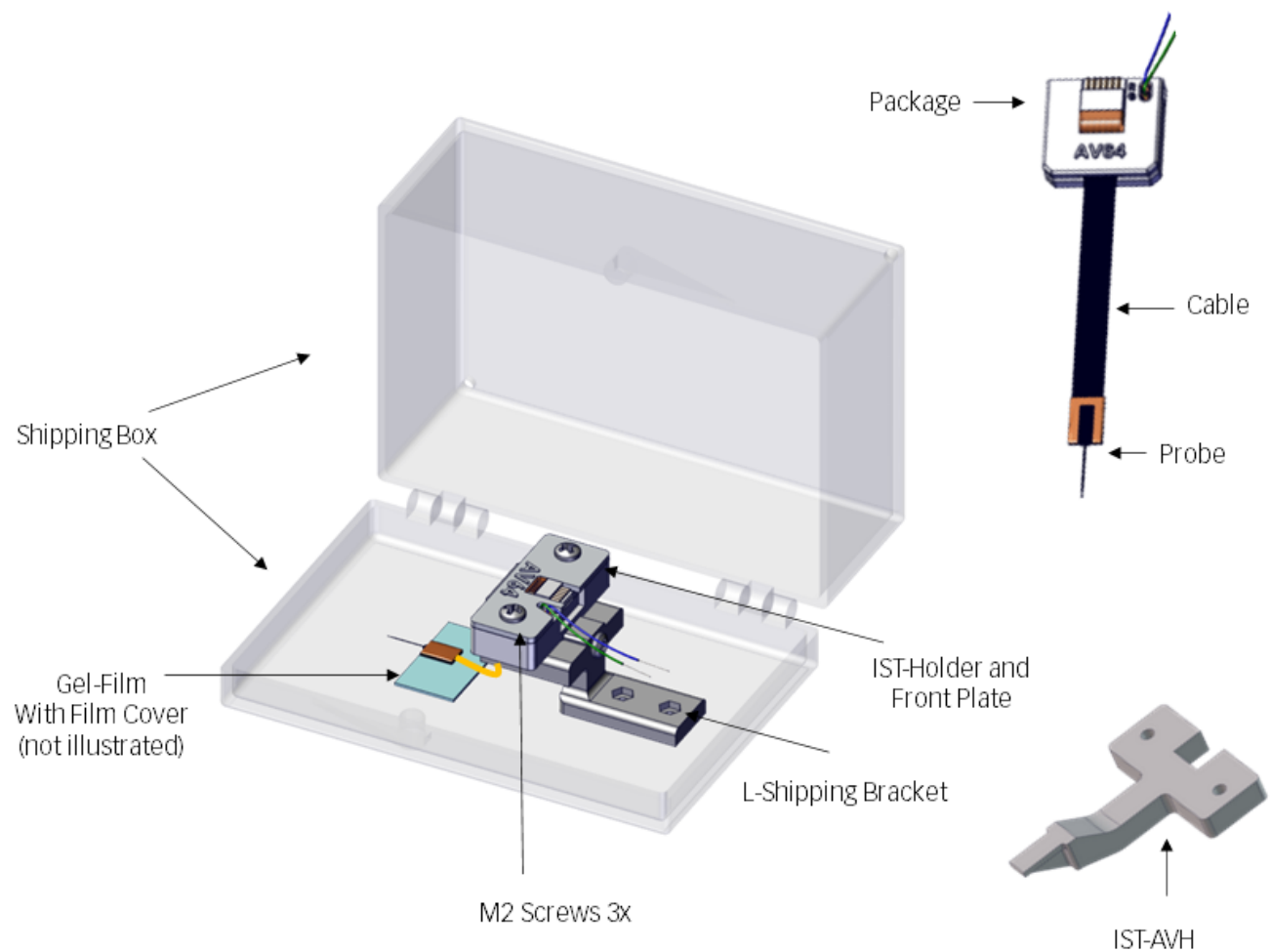
AVH64, AVIH64, AVH128, AVIH128, AVH256 and AVIH256

- Examine the probe before opening the box.
- Make sure the probe hasn't broken free from the gel-film, or the package hasn't freed itself from the shipping holder.
- **Note:** Any damage one might see that has occurred before the box has been opened.
- If there is visual damage, please document it with photos. Then reach out to your account manager to see about replacement.

General surgical guidelines and craniotomy instructions can be found here:

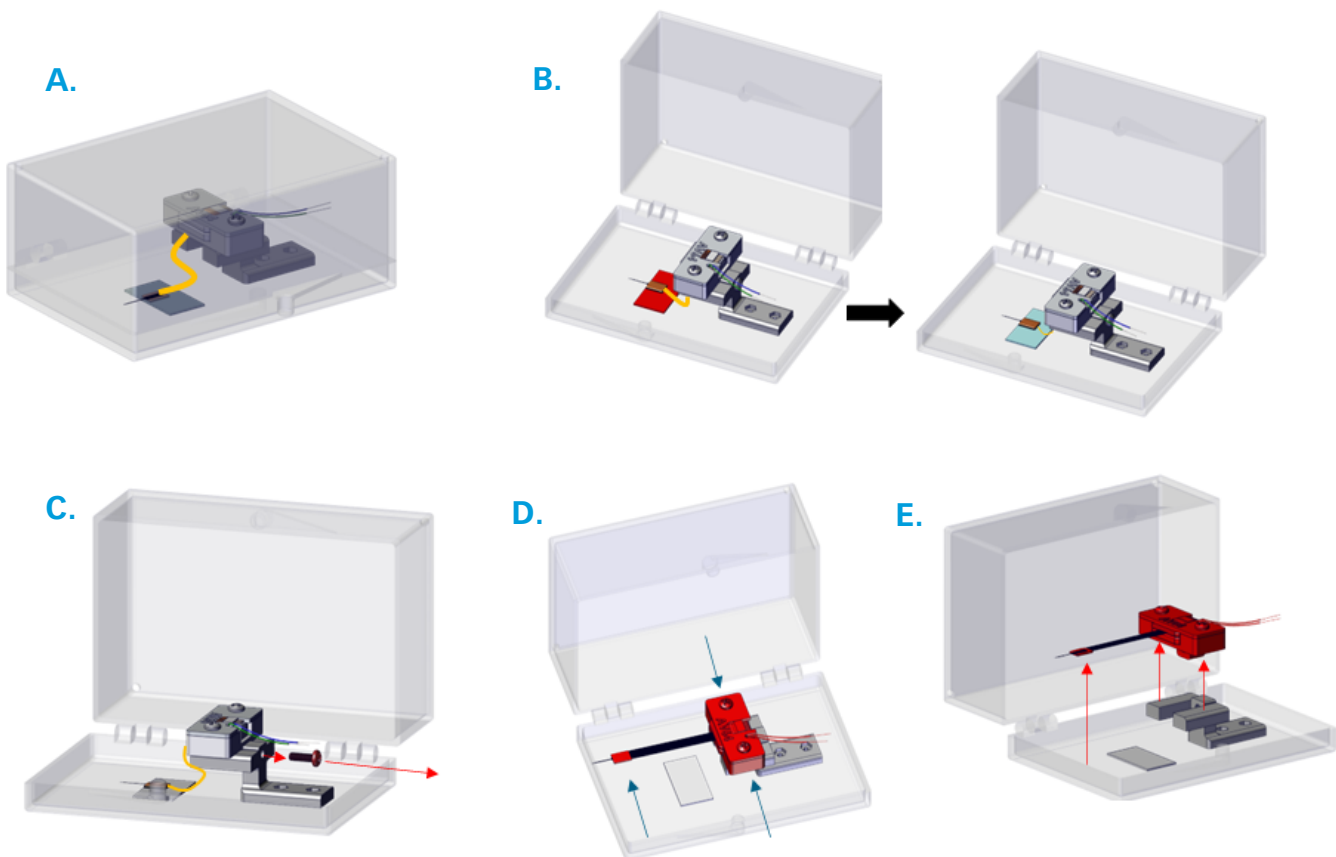
<https://www.neuronexus.com/files/technicalsupportdocuments/General-Surgery-Guidlines.pdf>

AVH/AVIH Box Overview



1 Remove AVH/AVIH Package From Shipping Box.

- A. Carefully remove any tape outside the box. **NOTE:** It is wise to discard the tape to prevent it accidentally sticking to the polyimide cable.
- B. Open the box **slowly**. **Before removing** the probe, remove the film over the green gel-film (**highlighted red**) holding the probe in place. **Do not remove** the probe until the film has been removed.
- C. Remove the M2 screw holding the package in the L-shipping bracket. **Do not** leave the screw in the bottom of the box as this could lead to damaging the probe. Before removing the package from the box, using a flat tweezer, **carefully** pry the probe so it is free from the gel-film. **Be mindful** of the probe so it **doesn't crash** into the side of the box.
- D. Grip the sides of the package (see blue arrows) and with flat tweezers hold the cable just above the probe (see blue arrow).
- E. **Slowly lift** the package and array up out of the holder and box. **Be always mindful** of the probe.

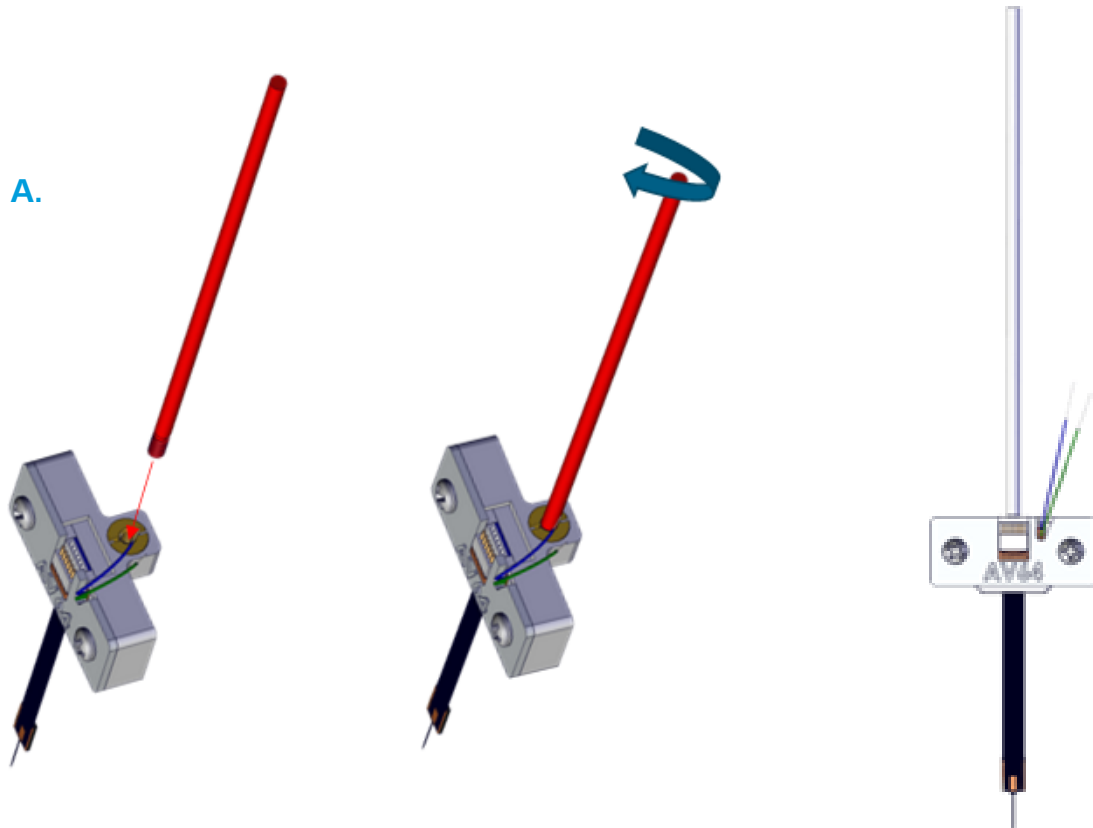


2 Attach Package IST-2mm Rod.

- A. Still holding the sides of the package, take the provided IST-2mm rod, thread it into the IST-Holder.

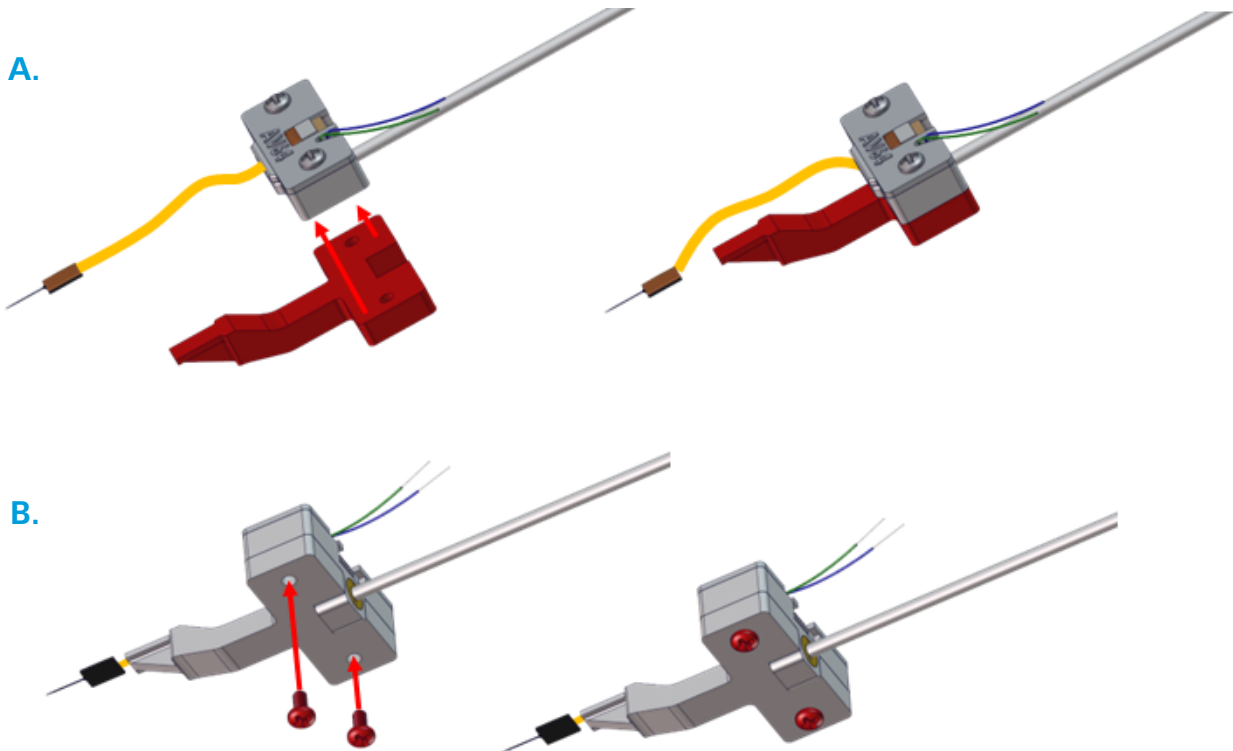
Next steps if not using AVH/AVIH-IST probe inserter mount:

- B. Attach the IST-2mm rod to a stereotaxic arm.
C. Once secure, one may now lower the array down, so it can be implanted.



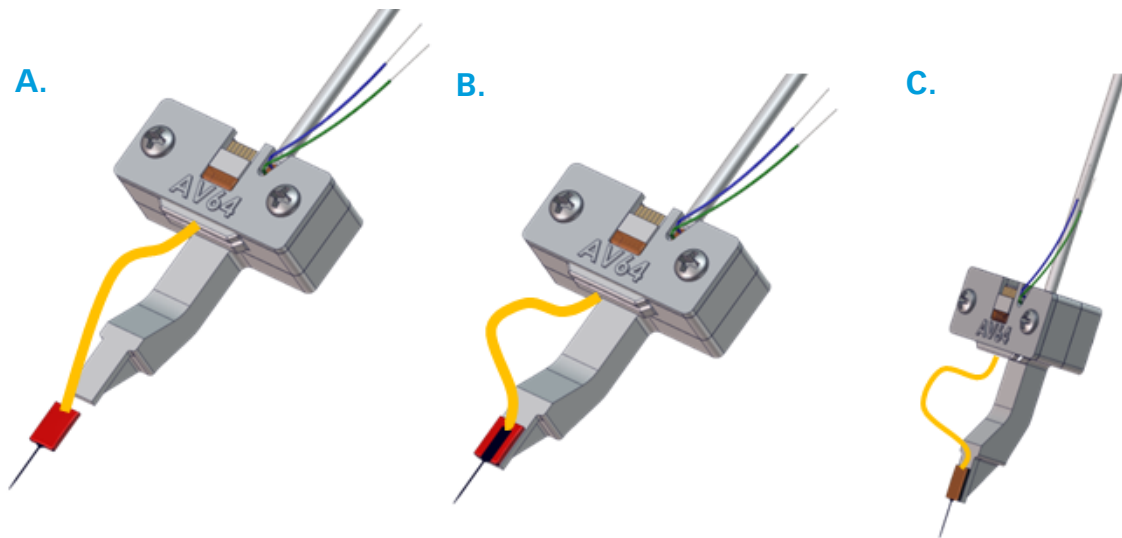
3 Attach IST-AVH/AVIH.

- A. Place IST-AVH/AVIH on back side of IST Holder
- B. Thread the two pieces together with two M2x4mm pan head Phillips screws. NOTE: **Be always mindful** of the probe at **all times**, lessening the chance of it getting damaged.



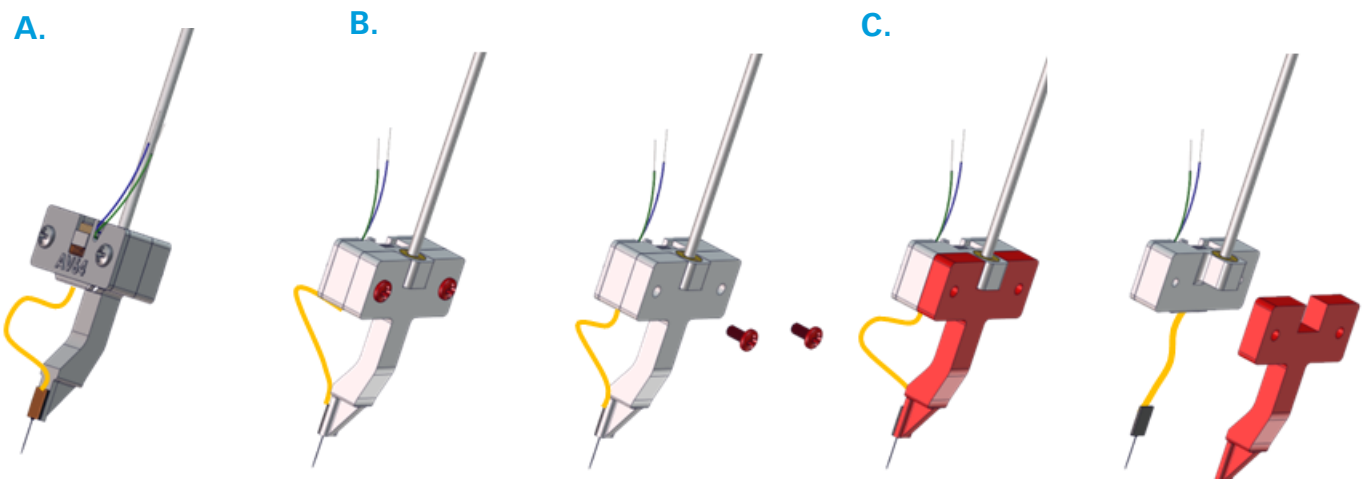
4 Mounting Probe to IST-AVH/AVIH.

- A. Following the PEG procedure, slide the probe on to the probe platform area.
- B. There, one will hold in place the probe until PEG hardens securing the probe to the IST-AVH/AVIH.
- C. When probe is securely in place, one can attach the IST-2mm rod to stereotaxic frame. Now probe is ready for insertion. **NOTE: Be always mindful** of the shanks of the probe at **all times**, lessening the chance of it getting damaged.



5 Remove IST-AVH/AVIH.

- A. Release the probe from the AVH/AVIH-IST probe insertion mount, by following the PEG procedure.
- B. Remove the two backside M2 pan head screw holding the IST-AVH/AVIH to IST holder.
- C. Once screws are moved, carefully remove the IST-AVH/AVIH. **Make sure** the probe is completely detached. **NOTE: Be always mindful** of the probe at **all times**, lessening the chance of it getting damaged.



6

Remove IST-Holder.

- A. If one must remove the package from the stereotaxic frame and would like to secure the package to the skull with dental cement, the IST-holder can be removed.
- B. Remove the two M2 screws holding the front plate on.
- C. Once those are removed then the front plate can be removed. **Make sure** that package **doesn't** fall out. Also **make sure** you have a good handle on the front plate as you don't want to drop it and have it crash into your implanted probe.
- D. Holding the package, press on the IST-Holder **carefully** so that it pops out and away from the package. Now, the package can be secured to the skull using whatever approved in-house method.

