



### **How to Determine the Braid Recess (“Gain”) Depth**

When routing a slot car track, one of the questions our customers frequently ask is, “How deep should I route the braid recess (sometimes referred to as the gain)?”

Here is the procedure we recommend. Note the initial router bit depth is based on the thickness of the braid we sell (roughly .026” to .028”).

- 1) Initially set the router bit depth to .040”.
- 2) Using a scrap piece of MDF, route a test slot that is roughly 12” long.
- 3) Using our SCC Special Router bit, use the test slot routed in Step 2 to route a test gain that is the same length.
- 4) Cut a short length (6 – 8”) of braid from your roll of track braid.
- 5) If you are using pre-taped braid, remove the backing from the tape. Then remove the tape from the braid – as you remove it, it will form a small “ball” that makes it easier to remove the remaining tape. Removing the tape makes it easier to test the gain depth – particularly if adjusting the router bit depth and retesting is required.
- 6) Place the short length of braid into the test gain and hold it in place. If the braid is “proud” or flush in relation to the MDF surface (i.e. the racing surface), the gain needs to be a little deeper. Adjust your router bit depth and repeat steps 3 – 6 (you can reuse the same test slot and test gain).
- 7) If your braid is SLIGHTLY recessed (.010” - .020”) below the MDF surface, you are ready to route your slots/gains on the actual track pieces. Double-check the collet holding the router bit is tight.

### **2-Sided Tape Adhesion**

The 2-sided tape used to secure the track braid to the track braid recess (“gain”) is very thin – roughly the thickness of plastic food wrap. The smoother and cleaner the surface of the gains, the better the 2-sided tape will adhere to it. Once the gains are routed, follow these steps to get the best possible adhesion from the 2-sided tape.

- 1) Use a 3/4” wide emery board (available in beauty/personal care section of Walmart, Target, etc.) to remove the “fuzz” leftover after routing the gain. You can also use a thin piece of 3/4” wide wood or plastic wrapped with 400 grit sandpaper. Do NOT sand using a back and forth motion. Instead, flex one end of the emery board under your forefinger, apply moderate pressure and run the emery board around the entire length of each gain in one direction. Repeat 2 - 3 times for each gain.
- 2) Be anal about removing ALL MDF dust and micro-dust as from the slots and gains. Carefully run a finish nail around the inside of each slot to loosen any “caked” MDF. Then brush, vacuum, brush again, vacuum again and use a tack cloth to get up ALL of the dust.



- 3) Seal the gain by applying a thin coat of latex paint (your choice of color). Do NOT use oil-based paints as they can “bleed” which will affect tape adhesion. Let the paint dry VERY THOROUGHLY.
- 4) You are now ready to apply 2-sided tape or pre-taped braid.

### **2-Sided Tape**

- a) When installing the 2-sided tape (i.e. you are installing the 2-sided tape and braid separately), DO NOT stretch or tension the tape! Pay particular attention to this when installing the tape or pre-taped in corners.
- b) Once you press the 2-sided tape in place, DO NOT LIFT IT BACK UP TO ADJUST IT!! The 2-sided tape will not tolerate this and you will make a big mess. If you find yourself in this situation, you will have to splice a new piece of tape in place. Steps involved in splicing a new piece of 2-sided tape in place are beyond the scope of this document. Contact us for assistance.
- c) When installing the 2-sided tape in corners, DO NOT try to install it in a smooth arc with no creases/wrinkles. If you do this, you will almost certainly stretch or tension it and adhesion may be compromised. Instead, install the tape in a series of short, straight “segments” – depending on how tight the corner is, segments may only be about ½ - ¾ inch long. There will be a crease between segments as you work to approximate the curve by slightly redirecting each segment as you work your way around the curve.

### **Braid and Pre-taped Braid**

- a) A helper, while not required, makes it much easier to install track braid. The helper can remove the protective backing from the tape and ensure the braid coming off the roll does not come in contact with the 2-sided tape (if you are installing tape and braid separately) or track recess/gain (if you are installing pre-taped braid) until you want it to.
- b) DO NOT stretch or tension the braid or pre-taped braid. Pay particular attention to this when installing braid or pre-taped braid in the corners. Always keep the braid and pre-taped braid “relaxed” just like it comes off the spool.
- c) When installing the braid or pre-taped braid, ensure one edge of the braid is butted up against the “back” of the recess/gain.
- d) Once you press the braid or pre-taped braid in place, DO NOT LIFT IT BACK UP TO ADJUST IT!! The 2-sided tape will not tolerate this and you will make a big mess. If you find yourself in this situation, you will have to splice a new piece of tape in place. Steps involved in splicing a



new piece of 2-sided tape in place are beyond the scope of this document. Contact us for assistance.

- e) Unlike applying 2-sided tape, braid or pre-taped braid is inherently flexible and can be installed in a smooth, continuous arc that matches each track corner perfectly.
- 5) Once the track braid has been installed, use a braid roller to ensure the braid is firmly seated in the braid recess ("gain"). Rolling the braid will ensure the 2-sided tape adheres to the braid recess (i.e. the MDF) and the underside of the braid. Rolling the braid will also help ensure a smooth, uniform braid surface. Rolling the braid periodically should become part of your ongoing track maintenance.