



Please note that these instructions are guidelines only and in no way supersede any construction or installation standards. Local building and electrical codes should be consulted before installation.

ATTENTION

- There is potential danger of electrical shock when operating electrical components.
- Make sure power is turned off before installation.
- Allow for heat dissipation and adequate ventilation.

After initially determining star field light source location(s) and fiber optic whip lengths, one can begin to the installation process. Required is access to both sides of ceiling board

Cable management:

The fiber optic whips are made in a collection of 10 fiber optic points, that are grouped to make a 50 pt. lengths, and these 50 point lengths are further wrapped together to make up to a 200 pt. whip. The 200 star points is the maximum number to fill a single light source that uses a standard M-20 bushing gland. Masking tape divides these sections, so that the 50 point lengths are easily stripped back and divided so that the whips can be separated to work in sections. On a standard 4 pt./sq. ft. ceiling, each of the 10 point sections would do up to a 2.5 sq. ft. area. Every bundled 50 point lengths can do up to 12 sq. ft., or 48 sq. ft. in a 200 point bundle.

For best showing, the density of points may increase towards the center of viewing area with less density around perimeter or along sheet rock tape lines. Two or more fiber optic points can share a common hole to make brighter star points or to distinguish constellation points. Vary spacing of star points, grouping them in some areas while sparse in others will best replicate the night sky.

Work from the farthest outside edge back in semi-circles to prevent painting oneself into a corner.

Tools required:

- Drill with numbered drill bits #68 to #66, or a 1/32" drill bit.
- Non-solvent glue, such as No-More-Nails or Silicone adhesive (solvents make the fiber brittle).
- 2" wide or less, masking tape (for maintaining whip management, also for taping fibers down between joist if necessary).
- Tape measure.
- Scissors.



Installation:

Route fiber to location of star points, making sure that the length will lead easily back to the light source.

Drill hole and working from above ceiling tile set fiber through this hole a minimum of 6 inches (pushing longer fibers further through can help with fiber management). Set with non-solvent glue, if desired.

Constellations can be located with negative imprint and marking with protruding wire or by artistic expression. Set a couple points minimum to make the constellation points stick out from the field

When working with drop down ceiling, remove adjacent tiles to work across, then back towards illuminator position. For drywall readied for placing, drill holes while set on a saw horses, staggering strands near edges leaving room for later taping. Make sure that fibers will reach the light source when set into position.

All jobs may be slightly different depending on over-head space and obstacles. Determine if it is best to thread bundles over, through or beneath joists. One may also find situations where spurring strips may be employed to advantage.

The cable strands can withstand the pressure of pinching between the drywall and joist, but are unlikely to survive contacting a nail nor screw. To prevent this, start at the perimeter section and measure where joist are located. Develop the star location plan and load the sheet rock with careful consideration of avoiding locating points where the drywall meets the joist. Use the 2" masking tape to hold down across the joist. Take caution to pre-drill any screw holes to miss hitting the fiber strands.

When taping and mudding the drywall, care must be taken to not cover over fiber points. One may feather the fibers in by applying the mud to a fiber bent at right angles to the mud line and then letting fall. Sponge afterwards to clean divot of the fiber. Continue this process for any additional fibers.

Trim down the star points protruding through the ceiling ~ 3/8".

Spray paint the ceiling. Often dark colors of blue, purple or black are used to increase contrast in theater situations, but light color ceilings are more the normal for living spaces.

Re-trim the star field down to 1/4" to 1/8" height, allows for later painting while giving more depth to the overall effect of the finished night sky

