

24V Installation and Design Guidelines

- Elite Star 24, Solar Star 24, Ultima Star 24, Aqua Star 24, Rainbow Star 24, Rainbow Aqua Star 24 and Color Flex Star 24 can be field cut every 4". Once the tape is cut you CANNOT add a power connector or rejoin to start section.
- Polarity must be maintained. Each tape has + positive pin. Connectors are marked with + symbol. Positive polarity must be maintained or a section will not light. It is recommended to install all sections and power up to make sure polarity is correct before adhering to surface.
- Use the 4-Pin 4-Way Connector or 6-Pin 4-Way Connector to get to 90 degree angles and turns. Connector Cords and the 6-Pin 90 degree Connector can also be used for corners and around obstacles. IT IS NOT RECOMMENDED TO BEND TAPE MORE THAN 45 DEGREES.
- 4-Pin 4-Way Connector or 6-Pin 4-Way Connector can also be used to power branched runs up to the maximum. Positioning of the driver is critical to limit the amount of drivers required for each installation.
- Connector Cords can be used between the driver and the first tape section, driver and controller/amplifier, controller/amplifier and first tape section, between sections, to go around corners and to extend runs.
- Channel can be used to install on irregular surfaces and also areas where tape will be visible and needs to be concealed.
- End Caps should be used at every termination whether tape is cut or not.
- 24V RGB Controller is necessary for every Rainbow Star 24 and Rainbow Channel Star 24 installation and is installed after the driver and before the first section of Rainbow Star 24 tape or Rainbow Channel Star 24. 24V RGB Controller will only work on Rainbow Star 24 or Rainbow Channel Star 24.
- 24V Weatherproof RGB Controller is necessary for every Rainbow Aqua 24 installation and is installed after the driver and before the first section of Rainbow Aqua 24 tape. 24V Weatherproof RGB Controller will only work on StarStrand Rainbow Aqua 24.
- 24V Color Flex Controller is necessary for every Color Flex Star 24 installation and is installed after the driver and before the first section of Color Flex 24 tape. 24V Weatherproof RGB Controller will only work on Color Flex Star 24.
- 24V Dimming Controller will work on Elite Star 24, Ultima Star 24 and Channel Star 24. 24V Dimming Controller is installed after the driver and before the first section of tape or channel.
- 24V 96w Direct Wire Driver, 24V 60w Dimmable Direct Wire Driver, 24V 100w Dimmable Direct Wire Driver, 24V 100w Weatherproof Dimmable Direct Wire Driver, 24V 60w Weatherproof Driver, and 24V 150w Weatherproof Driver are Class II drivers.
- 4-Pin Connector Cords, input cords and output cords are made from 22 gauge wire. 6-Pin Connector Cords, input cords and output cords are made from 20 gauge wire.
- Connector Cords are not CL2/CL3 rated. This means that the Connector Cords are not fire rated for in-wall installations.
- In order to do an in-wall installation for StarStrand, the customer will need to purchase the 4-Pin Rough In Terminal Block, 6-Pin Rough In Terminal Block or 4-Pin RGB Rough In Terminal Block and place the blocks on each side of CL2/CL3 rated low voltage wire. A sample installation would be Romex/Line > Driver > Driver Output Cord > Rough In Terminal Block > Wall > CL2/CL3 rated low voltage wire > Wall > Rough in Terminal Block > Tape
- If splicing connector cords is required, when splicing the 4-Pin connecting cords, the Red/Blue wire are Negative, the Black/Green wire are Positive. When splicing the 6-Pin connecting cords, the Blue wire is Negative, the Brown wire is Positive.
- The maximum amount of cord (driver output cord, connecting cord, controller/amplifier input cord, controller/amplifier output cord) that can be used in any StarStrand 12V or StarStrand 24V run is 24 total feet before any voltage drop will occur. Connecting cords can also be used to increase the distance between the driver and tape, driver and controller/amplifier, controller/amplifier and tape, not to exceed 24 total feet.
- StarStrand LED tape can operate in an environment between 14°F and 122°F.
- The Aqua 24 IP68 connectors are roughly .75" thick.
- Use aftermarket industrial grade silicone that meets the requirements of the climate when installing Aqua Star 24 or Rainbow Aqua Star 24