



# ATG Electronics® QColor™ 310-PE Signal Amplifiers

## USER GUIDE

**Part Number** HCD-00310-000000-PE



**NOTE:**

This user guide is to explain the steps necessary to use the specified and assure peak performance. Its intended use is for reference only, by a fully qualified electrician or technician. This document should never be considered a substitute for any provision of a regulation or state and/or local code.

Please read this entire manual to fully understand and safely use this product.

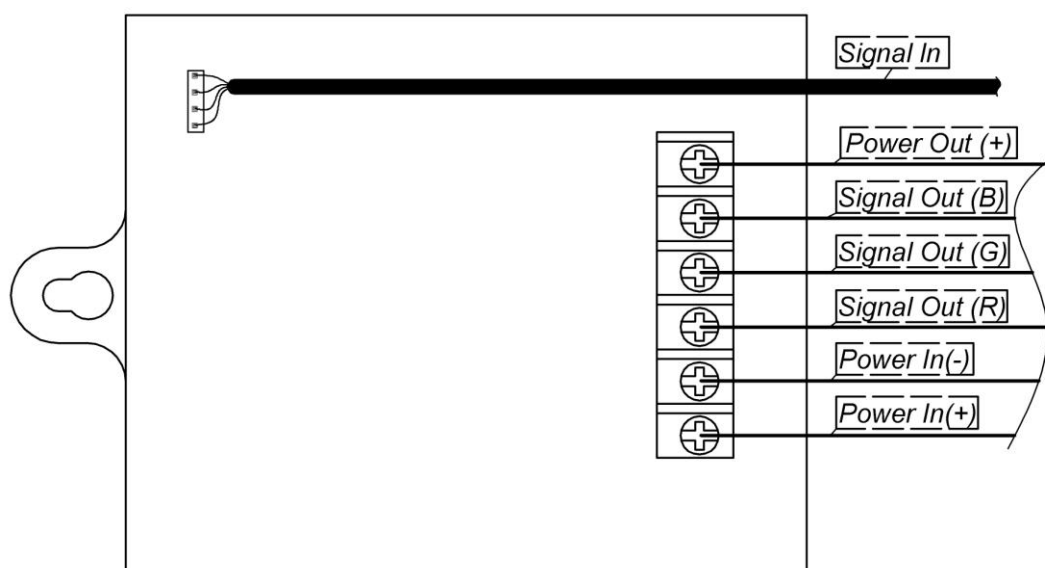
Specifications are subject to change without notice. Please visit [www.atgelectronics.com](http://www.atgelectronics.com) for most recent user guide versions.

### GETTING STARTED

ATG Electronics® QColor™ 310-PE Signal Amplifier is a simple and affordable solution for synchronizing multiple low voltage RGB LED Lighting Fixtures, such as iSignage™ 36T, iLinear™ R60T, eCove™ T30T and WP27T, oSignage™ WP6T simultaneously. It shall be jointly used with DynColor™ 300-FS, QColor™ 310-FS, QColor™ 020-FS RGB Controllers.

This guide contains important information about installing and operating your new QColor™ 310-PE safely and accurately.

### Physical Dimensions



**Included in this Box**

QColor™ 310-PE Signal Amplifier, 1 PCs  
User Guide, 1 Set

**Unpacking**

- 1) Unpack and carefully examine the product.
- 2) Report any damage and save all packing materials if any part is damaged during transport.
- 3) Do not attempt to use this apparatus if it is damaged.

**Warnings**

- 1) Risk of electric shock. Ensure that the power supply is off when wiring or soldering the sections of the device.
- 2) The device shall be installed and operated by a qualified electrician or technician in accordance relevant local codes.

**Precautions**

- 1) Please avoid installing the device in lightening, intense magnetic and high-voltage fields.
- 2) The device should be installed indoors. Otherwise, please arrange rain shielding.
- 3) Make sure the wires are connected correctly and avoid short cut and burnt out the fuse.

**User Responsibilities**

The responsibility of complying with all state and local laws, ordinances, and regulations in regards to the installation, maintenance, and operation of the device lies with the buyer and handler of the device. These parties may include, but are not limited to the contractor, installer, purchaser, owner, and user of the product.

Note:

The instructions and precautions set forth in this user guide are not necessarily all-inclusive, all conceivable, or relevant to all applications as ATG Electronics cannot anticipate all conceivable or unique situations.

**PLANNING THE INSTALLATION**

This device installation requires planning to ensure timely, successful installation with minimal complications and down time.

**Planning Suggestions**

Consult an Electrical Inspector to review all wiring plans.  
Create a Layout Plan drawing, per a Lighting Designer's or Architect's recommendation.  
Consult ATG Electronics Application Engineering Services as needed.

**Installation Considerations**

When creating your installation plan, consider the following:

- 1) Location of the signal amplifier  
ATG Electronics recommends that the signal amplifier is placed in dry environment.

2) Selection of soldering tools

Ensure that the tool selected is appropriate for the soldering surface.

3) Maximum Driving Quantity

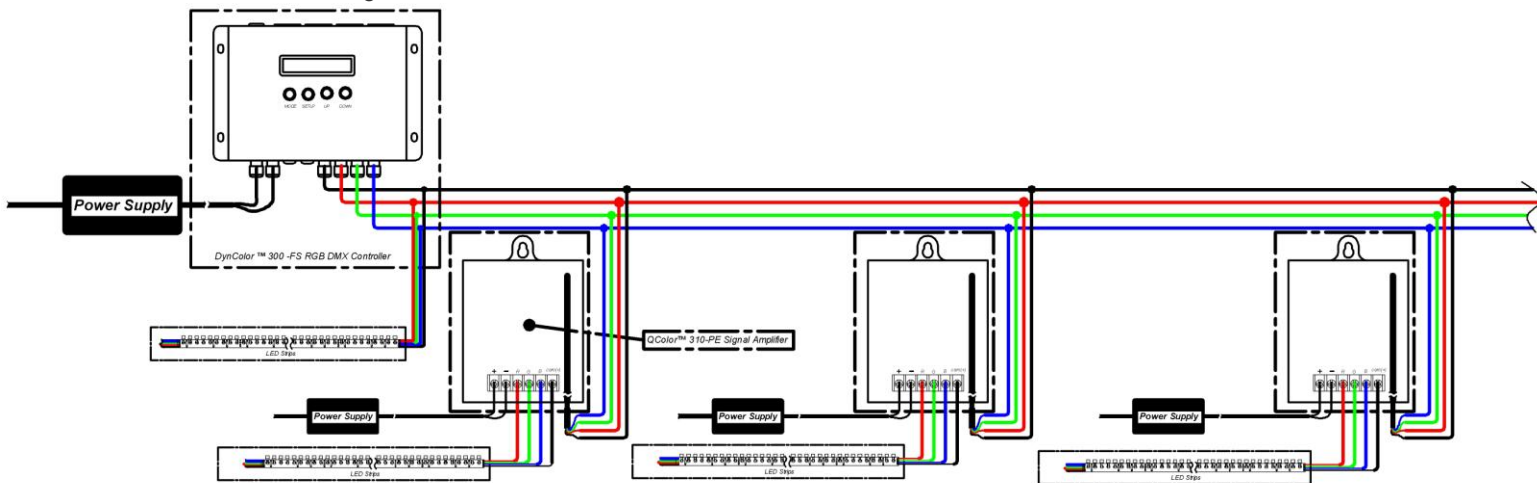
Product	Driving Quantity per series-wound (Max.)	Total Driving Quantity (Max.)	Output Power of Power Supply (Min.)
iLinear™ R60T RGB LED Ribbon Strips	1 roll	4 roll	200W
iSignage™ 36T RGB LED Flex Strips	15 pcs	60 pcs	200W
eCove™ WP27T RGB LED Rigid Strips	20 pcs	80 pcs	200W
eCove™ T30T RGB LED Rigid Strips (24VDC)	10 pcs	50 pcs	400W
oSignage™ WP6T RGB LED Modules	60 pcs	240 pcs	200W

QColor™ 310-PE Signal Amplifiers can be connected with DynColor™ 300-FS RGB DMX Controllers, QColor™ 310-FS RGB Mini Controllers, QColor™ 020-FS RGB Remote Controllers.

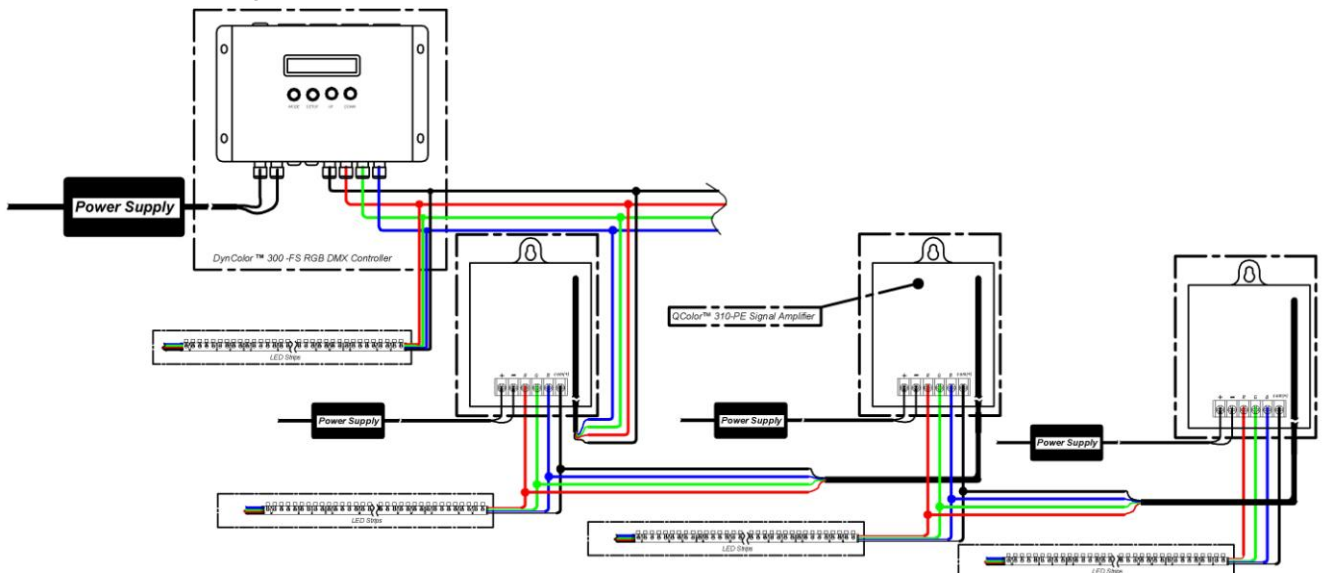
You can choose one of the three connecting methods from below wiring diagrams, when quantity of RGB products, like strips and modules, need to work together. (Here we only illustrate DynColor™ 300-FS RGB DMX Controller as example)

Wiring Diagram

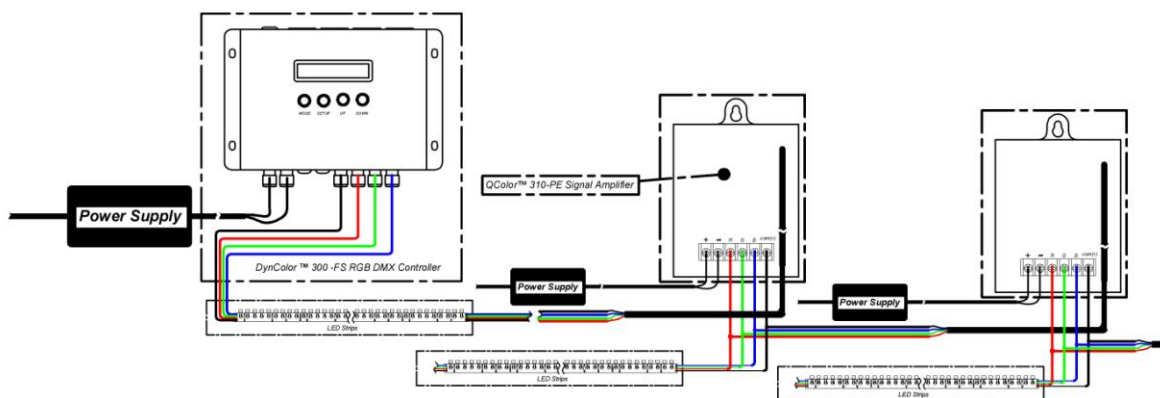
1st Connecting Method:



2nd Connecting Method:



3rd Connecting Method:



### Technical Specifications

#### 1) Physical Specifications

Dimension: L175\*W75\*H44 mm (L6.89\*W2.95\*H1.73 inch)

Weight: 250g

Working Environment: dry environment

#### 2) Electrical Specifications

Input Voltage: 12VDC or 24VDC

Output Load Current: 6A per line, 3 lines

Output Power: 200W(12VDC), 400W(24VDC)

Operation Temperature: -10°C~50°C (14°F~122°F)

### QUALITY WARRANTY

This product is sold pursuant to ATG Electronics Standard Terms and Conditions which can be found at [www.atgelectronics.com/warranty](http://www.atgelectronics.com/warranty) and which contain important provisions, including, among others, the Quality Warranty, exclusions and limitations on ATG Electronics liability for damages, and restrictions on available remedial actions.

For any after-sales assistance, please contact our Customer Service Team at [service@atgelectronics.com](mailto:service@atgelectronics.com). All your concerns and requests will be handled within 12 hours.

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Color your life!