

Custom Cable Assembly Reference Guide

Guardian Glow Power & Equipment Connection Solutions

AVR Global Technologies offers standard and custom cable assemblies to simplify installation of Guardian Glow safety lighting across forklifts, construction equipment, fleet vehicles, and other mobile equipment. Cable assemblies can be configured around the equipment power source, installation distance, connector requirements, and lighting configuration.

Example configuration: A typical Guardian Glow power cable may use PVC 18 AWG x 2 conductor cable with red and black conductors and a 2-position sealed connector. Cable construction, connector selection, and termination can be adapted to the installation requirements.

Standard Cable Length Options

6 ft	Short equipment-side runs or nearby power connection
12 ft	General equipment installations
25 ft	Longer routing paths on larger equipment or vehicles
50 ft	Extended routing requirements
Custom	Application-specific length based on equipment and installation requirements

Typical Cable Construction

Cable	PVC 18 AWG x 2 conductor (example configuration)
Conductors	Red / Black
Connector	2-position sealed connector; alternate/custom connector options available
Lengths	6 ft / 12 ft / 25 ft / 50 ft / custom

Typical Cable Assembly Path



Available Customization

Cable Length

Choose 6 ft, 12 ft, 25 ft, or 50 ft, or specify a custom length based on the equipment routing path.

Equipment-Side Connection

Assemblies can be developed around the required equipment power connection or connector interface.

Guardian Glow Connection

Connector selection can be configured to interface with the applicable Guardian Glow light or system.

Multi-Light Configurations

Application-specific branching or splitter configurations can support installations using multiple Guardian Glow lights.

Cable Protection

Protective sleeving, loom, abrasion protection, and other cable-management options can be evaluated based on the operating environment.

Identification

Labeling and identification can be incorporated for installation, service, or fleet standardization.

Custom Packaging / Kitting

Cable assemblies can be supplied as part of an installation kit with components for a defined Guardian Glow application.

How to Specify Your Cable Assembly

Information that helps our engineering team configure the correct solution

- Equipment manufacturer and model
- Equipment/battery voltage
- Guardian Glow light or system being installed
- Number of lights per piece of equipment
- Desired cable length or approximate routing distance
- Preferred equipment-side power connection or connector
- Photos of the battery/power connection and proposed cable route, when available
- Environmental or routing concerns such as abrasion, vibration, heat, weather exposure, or moving components
- Any labeling, kitting, or fleet-standardization requirements

Application Examples

Forklifts

Direct equipment power connection with a cable length selected to route safely from the battery/power source to the Guardian Glow light.

Construction Equipment

Custom routing lengths and protection options for loaders, excavators, skid steers, dozers, telehandlers, and other mobile machinery.

Fleet / Specialty Vehicles

Equipment-specific cable assemblies designed around vehicle power, connector interfaces, installation location, and Guardian Glow configuration.

OEM / Installer Programs

Repeatable cable assemblies, labeling, and kits can be developed for standardized installations across multiple units.

Cable Selection Notes

- Measure the intended routing path rather than straight-line distance between the light and power source.
- Allow sufficient service slack at connection points without leaving unsupported cable near moving components.
- Select routing that avoids heat, sharp edges, pinch points, hydraulic movement, steering components, forks, tracks, tires, and other moving equipment.
- Electrical protection, wire size, connector selection, and termination method should be confirmed for the specific application.

Need a different connection?

AVR Global Technologies can develop a custom cable assembly around your equipment and Guardian Glow installation requirements. Send us the equipment information, desired cable length, power requirements, and connector details or photos, and our engineering team can help identify the appropriate solution.

Important: Cable examples shown are general reference configurations. Final cable construction and electrical requirements may vary by application and should be confirmed for the equipment and Guardian Glow system being installed.