



Redflex Student Guardian Installation Guidelines

UPDATE

Models Affected: All School Bus Models

SPECIAL NOTE:

The information contained in this guide has been prepared for use by persons installing the Student Guardian System in Blue Bird Buses. It has been prepared in accordance with current engineering principles and generally accepted practices, using the best information available at the time of publication. These guidelines are intended to supplement, but not to be used in place of, detailed instructions for such installations which are the sole responsibility of the manufacturer of the Student Guardian system. Since it is not possible to cover all possible installations of the equipment, Blue Bird Body Company cannot be held responsible for incidental or consequential damages arising from the use of the information contained herein. In addition, the way in which they are installed may affect the vehicle operations such as the performance of the engine and driver information, entertainment and electrical charging systems. Expenses incurred to protect the vehicle systems from any adverse effect of any such installations are not the responsibility of Blue Bird Body Company.

INSTALLATION GUIDELINES

- Aftermarket power and ground connections should be made in the body electrical center located to the left of the driver. Blue Bird offers and recommends the following assemblies: Service part number 10010594, which provides four additional ignition fuse positions (up to 20 amps each). This must be connected to body solenoid # 1 on the switched ignition contact. For battery power, Blue Bird recommends 10010595, which provides 4 additional battery fuse positions (up to 20 amps each). Both assemblies are pre-wired auxiliary fuse blocks. Insulate all unused circuits. Refer to the applicable standard equipment wiring diagram. Contact your Blue Bird Dealer for installation.
- The antenna should be mounted on the roof area of the bus, with a minimum of 24" separation from any other antenna.
- Special care should be taken on buses equipped with Air Conditioning systems. These systems draw considerable current and produce large magnetic fields that can introduce electromagnetic interference (EMI) into nearby circuits. Blue Bird recommends a minimum of 6" separation between the air-conditioning power cables, the Redflex Antenna, and power supply. If 6" cannot be made available, other routing areas should be considered.
- Do not route the antenna cable in parallel with bus wiring.
- Antenna cable should contain at least 95% shield coverage, and kept as short as possible while reaching the devices.
- Twist the positive and negative power leads to the Redflex CCU together to enhance noise immunity.

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S E R V I C E U P D A T E

- Before using fasteners to mount the equipment, be sure to check for bus wiring under or behind mounting location which could be pinched, cut, or otherwise damaged.
- Use caution when routing power leads and antenna cable to avoid chafing or pinching wires. Use grommets over any exposed sharp edges and strain reliefs to keep wires in place.
- Route and secure wiring away from any mechanical hazards and moving parts such as steering shaft, fans, etc.
- Camera installation location must not interfere with any FMVSS regulations
- Any aftermarket equipment/devices installed into a Blue Bird Bus should only be done by a qualified technician familiar with FMVSS and SAE standards.
- Refer to the manufacturer's instructions or other technical bulletins for installation.
- Contact Redflex at www.RedflexStudentGuardian.com (866) 703-8097 or (855) 435-7662

ADDITIONAL INFORMATION

Should EMI interaction develop following installation, the source of the problem should be identified prior to further operation of the vehicle. Most interaction problems can be eliminated by following these guidelines.

Possible causes of bus EMI interaction include:

- Antenna location (move antenna to another location)
- Antenna cable routing (locate as far as possible from bus electronics and wiring)
- Inadequate shielding or loose/corroded connectors associated with the antenna cable