

GateArms.com A/C Signal Converter



Description:

The GateArms.com A/C Signal Converter is used to convert A/C signals into D/C signals that are usable by the GateArms.com LED Controller device. Users can allow a combination of A/C and D/C signals through configuring the DIP switches on the Signal Converter.

Warning: Connecting A/C signals to the LED Controller without using this Signal Converter will damage the LED Controller and possibly damage the A/C transformer supplying signal power.

Instructions – Open / Close signals:

- 1. Turn LED Controller to OFF position.
- 2. Disconnect the A/C Signal Converter board if connected
- 3. Remove any live signal wires / headers if attached.
- 4. Connect a jumper wire between the Signal Header's OPEN pin and the Main LED Header's BLUE pin. This sets the "A/C signal converter mode".
- 5. Hold the MODE button and, while it's being held down, turn on the Controller.
- 6. If done correctly, the status LED will flash rapidly for a few seconds, then turn off. If this didn't happen, repeat step 5.
- 7. Remove the jumper wire.
- 8. Turn LED Controller to OFF position.



- 9. Push the A/C Signal Converter onto the LED Controller's Signal pins (Gnd, Close, Open, Aux).
 - a. Position the Converter's DIP switch panel and text to be facing up.
 - b. Ensure that the Converter board is directly above LED Controller, not hanging off the side.



- 10.Ensure all DIP switches are set to A/C (down). This ensures that all 3 signal lines are ready for A/C signals.
- 11. Slide a DIP switch to DC if that signal line is only using D/C voltage. Do not use this Converter if no A/C signals are in use.
- 12. Turn LED Controller to ON position. The status LED on top will be flashing slowly.



13.DSK/TRLK: Hold down the programming button for at least 3 seconds. This tells the LED Controller to expect voltage instead of ground. The status LED on top of the Controller will flash more rapidly.

GATE ARMS: Use the programming software to create a new profile:

Use A/C Signal Converter with Gate Operators		
Open	Idles On	No Connection
	Triggers On	Voltage
	Triggers When	Entering
Close	Idles On	No Connection
	Triggers On	Voltage
	Triggers When	Entering
Aux	Enabled	No

14. Connect the operator's signal wire cable to the signal header on the top of the A/C Signal Converter.



Instructions – Safety Eye signals:

- 1. Determine if Safety Eye signals are A/C or D/C. Voltage greater than 30V will damage the AC Signal Converter.
- 2. Determine whether the safety eye is outputting voltage or ground (when triggered). Most offer both options.
 - a. If Voltage, the LED Controller is ready for the signal.
 - i. ensure the DIP switch for AUX is set to A/C
 - ii. connect the AUX pin on the AC Signal Converter to the same port as the safety eye is using on the door operator (triggers voltage when activated).
 - b. If Ground, you must program the LED Controller to expect a mixture of voltage and ground signals.
 - Ensure the A/C Signal Converter is connected to the LED Controller.
 - ii. Remove any signal wires from the A/C Signal Converter.
 - iii. Set the DIP switch for AUX on the Signal Converter to D/C
 - iv. Connect a jumper wire between the AUX port and the Neutral port on the A/C Signal Converter.
 - v. Power up the LED Controller
 - vi. Hold the programming button down for at least 3 seconds. The status LED will begin to flash 3 times, pause then 3 times again, repeating. This is the "Special Programming" mode.
 - vii. Reinstall the signal wires on the A/C Signal Converter.
- 3. Test the system