



M42701Y-A / YCL-A / WCL-A Installation Manual

Maxxima **M42701-A** Series is a 4" Round LED Light with Combination Turn, Park, Backup and Flashing Warning. These lights feature 5 selectable priority modes for multiple configurations.

- 1) 4" Round 24 Bright LEDs
- 2) Turn Signal and Park Light. *DOT FMVSS108 compliant.*
- 3) 28 Selectable Flash Patterns. *SAE Class 1 or Class 2 Compliant*
- 4) Light features a Backwards Compatibility mode to work with older models of this unit(non -A models)
- 5) Amber version complies with SAE I7 (2.5x brightness of standard Turn) when using Pattern 1 of the warning wire. Light can be mounted less than 100mm away from headlamp.



Specifications:

LEDs	24
Voltage	12/24 VDC
Max Amp Draw	Park - 0.09A/0.06A, Turn - 0.25A/0.13A, WCL Model - 0.18A/0.10A
Dimensions	4.2" D x 1.6" W
Mounting	4" Round Grommet
Connector	Standard PL-3 Connector

IMPORTANT: The wire colors below are indicated in the diagram to the right. White refers to GND, Black refers to Park and Red refers to Turn. Please change accordingly if your wire colors are different.

Wiring Designations:- Normal * Represents WCL-A Version

White	Ground (-)
Red	Turn(+VDC), ALT, Mode 2(-), Backup(+VDC)*
Black	Park (+VDC), Backup(+VDC)*
Green	Flashing Warning (+VDC)
Yellow	Programming (+VDC), Sync

Wiring Designations - Backwards Compatibility Mode:

White	Ground (-)
Red	Flashing Warning (+VDC)
Black	Programming(+VDC), Sync
Green	Park(+VDC), Backup(+VDC)*
Yellow	Turn(+VDC), Backup(+VDC)*, ALT

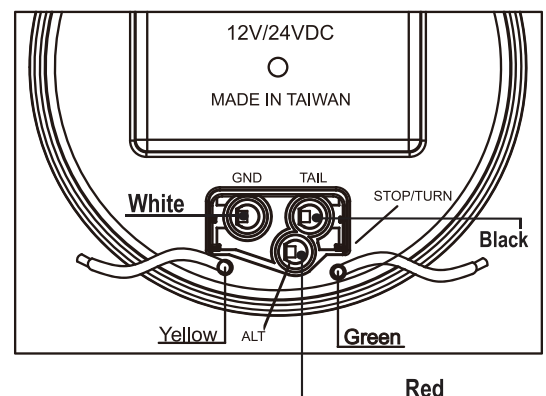


Figure 1: represents Normal Mode(default)

Wiring Instructions - Normal Mode

- Step 1** Connect **White** wire to vehicle Ground (- Negative)
- Step 2** Connect **Black** wire to vehicle Park Light (+12/24V)
- Step 3** Connect **Red** wire to vehicle Turn Signal (+12/24V)
- Step 4** Connect **Green** wire "Flashing Warning Circuit" via a user-supplied switch (+12/24V)
- Step 5** Program Warning to the desired pattern with **Yellow** wire

While the Green wire is connected to +12/24V, Hold Yellow wire to +12/24V for 1 second to scroll to the next flash pattern(See Table 1). To reset to Pattern #1, Hold Yellow wire to +12/24V for 7+ seconds.

While the Black wire is connected to +12/24V, Hold Yellow wire to +12/24V for 1 second to scroll to the next priority mode(See Table 3).

Wiring Instructions - Backwards Compatibility Mode

To enter backwards compatibility mode, hold green and yellow wires together while unit is not powered. Energize the red wire, & after 3 sec., the light should blink once to indicate that it is in backwards compatibility. Power cycle the device after entering this mode. To return to normal mode, repeat the steps, light will blink 3 times to indicate success.

- Step 1** Connect **White** wire to vehicle Ground (- Negative)
- Step 2** Connect **Green** wire to vehicle Park Light (+12/24V)
- Step 3** Connect **Yellow** wire to vehicle Turn Signal (+12/24V)
- Step 4** Connect **Red** wire "Flashing Warning Circuit" via a user-supplied switch (+12V)
- Step 5** Program Warning to the desired pattern with **Black** wire

While the Red wire is connected to +12/24V, Hold Black wire to +12/24V for 1 second to scroll to the next flash pattern(See Table 2). To reset to Pattern #1, Hold Yellow wire to +12/24V for 7+ seconds.

WCL			Y / YCL		
0	Random	(split)	0	Random	(split)
1	Steady*	(all)	1	FRONT TURN (2.5x SAE I7)**	(all)
2	Single-Quick	(split)	2	Single-Quick	(split)
3	Single	(split)	3	Single	(split)
4	Double	(split)	4	Double	(split)
5	steady2 California	(split)	5	steady2 California	(split)
6	Quad	(split)	6	Quad	(split)
7	Ultra	(split)	7	Ultra	(split)
8	Mega*	(split)	8	Mega*	(split)
9	Single-quad	(split)	9	Single-quad	(split)
10	Single H/L	(split)	10	Single H/L	(split)
11	Single 2 (A/B)	(split)	11	Single 2 (A/B)	(split)
12	Double 2 (A/B)	(split)	12	Double 2 (A/B)	(split)
13	Quad 2 (A/B)	(split)	13	Quad 2 (A/B)	(split)
14	Quint	(split)	14	Quint	(split)
15	Mega-Separated ¹	(split)	15	Mega-Separated ¹	(split)
16	Single Pulse ¹	(split)	16	Single Pulse ¹	(split)
17	Dual Color Single-Quad	(split)	17	Dual Color Single-Quad	(split)
18	Single	(all)	18	Single	(all)
19	Double	(all)	19	Double	(all)
20	Triple	(all)	20	Triple	(all)
21	Quad	(all)	21	Quad	(all)
22	Ultra	(all)	22	Ultra	(all)
23	Quint	(all)	23	Quint	(all)
24	Mega*	(all)	24	Mega*	(all)
25	Single-Quad	(all)	25	Single-Quad	(all)
26	Single H/L	(all)	26	Single H/L	(all)
27	Single Pulse*	(all)	27	Single Pulse*	(all)
28	Double Pulse*	(all)	28	Double Pulse*	(all)

TABLE 1: 28 Flash Patterns

Note:** The Y and YCL models are SAE I7 compliant. This means the lights are over 2.5x brighter than the minimum requirement for front turn signals and can be mounted less than 100mm from the headlights. In order to use these models for front turn signals, you will need to use the warning wire instead of the normal Stop/Turn wire and set your warning flash pattern to Pattern #1 "TURN FLASH".

Backward-Compatible Mode		
1	Single	(all)
2	Mega	(all)
3	Quad	(all)
4	Triple	(all)
5	Mega-Quad	(all)
6	Single-Single	(all)
7	Split Flash	(split)
8	Steady On	(all)

TABLE 2: Backwards Compatibility Flash Patterns

Setting	Warning (Green Wire)	Turn (Red Wire)	Park (Black Wire)	Park Overlap Warning	Low Priority Returns when High Priority is de-energized
1	High Priority	Low Priority	Low Priority*	Yes	No* (except when Park is energized)
2	High Priority	Low Priority	Low Priority	No	No* (except when Park is energized)
3	Low Priority	High Priority	Low Priority*	Yes	Yes
4	Low Priority	High Priority	Low Priority*	Yes	Yes*(after 1.5sec) Sync turns other light OFF
5	Low Priority	High Priority	High Priority	No	Yes*(after 1.5sec) Sync turns other light OFF

Note: ALT only works in modes 1&2. For modes 4&5, when turn is energized on one light, the sync wire turns off the connected light

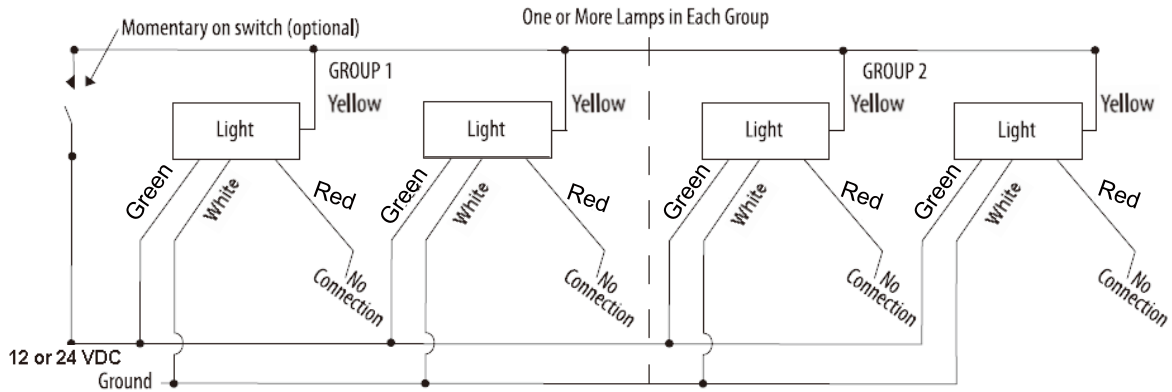
Setting (Continued)	Description
1	Warning prioritized over Turn. Park replaces OFF state of Warning when Park is energized with warning. When warning, turn, & park are all energized and warning is removed, park comes back on. Turn does not come back on until power cycled.
2	Warning prioritized over Turn & Park. When warning, turn, & park are all energized and warning is removed, Turn light comes back on and if turn is removed, park comes back on. When only warning and turn are energized and warning is removed, turn does not come back on until power cycled.
3	Turn prioritized over Warning. Park replaces OFF state of Warning when Park is energized with warning. Warning comes back immediately when Turn wire is removed.
4	Turn prioritized over Warning. Park replaces OFF state of Warning when Park is energized with warning. Warning comes back when Turn wire is removed after 1.5sec. Sync wire sends signal to turn off warning on connected light until warning comes back on first light (after 1.5sec)
5	Turn and Park prioritized over Warning. Warning comes back when Turn and/or Park wires are removed after 1.5sec. Sync wire sends signal to turn off warning on connected light until warning comes back on first light (after 1.5sec)

TABLE 3: Priority Modes

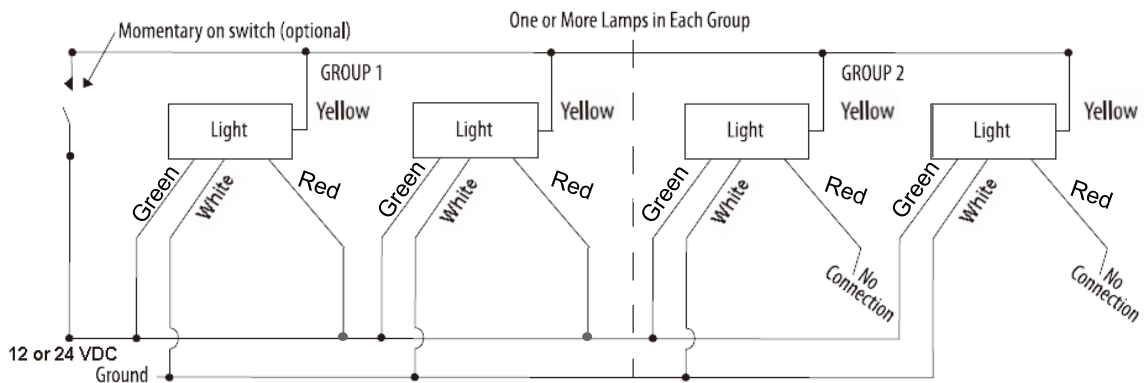
Wiring Instructions (continued)

Step 6 “Simultaneous Flash” – or – “Alternate Flash” (Assume wire color legend from Figure 1)

Simultaneous Flash



Alternate Flash



To flash all lamps synchronously, join all yellow wires together. This allows the lights to communicate with each other.

To use alternate or “wig-wag” flash, identify lamps in “Group 1” and “Group 2”; Connect the Red wires in “Group 1” to +12V.

NOTE: Optional Amber Turn Signal is disabled when Flashing Warning light is on.

NOTE: Activating the Back-up will disable the Warning light.

NOTE: For backwards compatibility mode, use Black wire for Sync and Yellow for alternate

To access Secondary Mode, or second flash pattern, Connect Green to +V and Red to (-)Ground. While in Mode 2, use Yellow wire (+12V) to program the desired flash pattern (step 5)

Mode 1: Leave the switch open and select your first pattern.

Mode 2: Close the switch and select your second flash pattern.

You can toggle between the two selected flash patterns by changing the switch position.

* A DPDT(double-pole, double-throw) switch is needed if you plan on using an alternate mode of operation in Primary mode (Mode 1). Connect Group 2 separately to the other pole switch (common side). The switch other 2 sides should be +12V (alt) and Ground (Mode 2).

**For additional configurations, visit www.maxxima.com/warning