

vectraLIGHT™



vectraLIGHT Controller
for LPB-24 and LPC-24



INSTALLATION GUIDE

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vectraLIGHT LED Arrays:

- ▶ super-bright AllnGaP dice for higher light output
- ▶ wider viewing angles ($\theta > 60^\circ$) and better flux performance
- ▶ pulse-width-modulated for intensity control

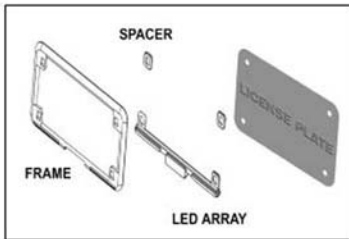
- Deceleration Brake flash built-in.**
- Programmable Running Light Option**

LPB-16:

- Sleek & streamlined die cast frame, powder coated finish for 4" x 7" plates
- Includes stainless hardware
- Super bright LEDs (8500 mCd) have a wide viewing angle of 180°
- (6) LED dual-row Red LED array for the brakes
- (5) LED array for the right & (5) LED array for the left turn signals
- All electronics sealed and encased in scratch resistant polycarbonate



INSTALLATION:



- 1 Position the license plate as shown
- 2 Use the spacers so that the plate sits flush with the frame
- 3 Use the hardware supplied to attach the assembly to the bike.
- 4 On cruiser models, the chrome backing plate can also be used.

vectraLIGHT has (5) insulated spade terminals at the end of the 4' long cable. They are inserted into the scotch-locks, as shown.



Next, you have to locate appropriate wires on your bike. Use a voltmeter to identify each wire, and chose an convenient location to snap the scotch-lock over the wire and then use pliers to squeeze it tight. The spade connector must be inserted fully into the slot of the scotch-lock.

(5) INPUTS & COLORS OF LPB-16	FUNCTIONS OF BIKE'S WIRING
BLUE - POWER INPUT	12-volt with ignition <u>ON</u>
YELLOW - LEFT TURN SIGNAL INPUT	12-volt flash signal (high-side of bulb)
GREEN - BRAKE INPUT	12-volt from brakes (ON with brakes)
RED - RIGHT TURN SIGNAL INPUT	12-volt flash signal (high-side of bulb)
BLACK - GROUND	Chassis ground connection

	Right Signal	Left Signal
Honda	Orange	Light Blue
BMW	Blue/Red	Blue/Black
Triumph	Green	Gray
Suzuki	Orange	Light Blue
Kawasaki	White	Black
Yamaha	Brown	Green
Colors shown are most common for the bikes listed. You should consult your own Manual or use a multi-meter or test light to		

Typical wire colors for most makes of bikes are shown here as a reference only. Be advised that color codes can change with models and years, so you should verify with a voltmeter or a test light.

PROGRAMMING: Turn Signal Lights as Marker Lights

- ▶ Hold Right Turn switch, apply & Hold brakes then turn the ignition on.
 - veetraLIGHT flashes (3) times to confirm the new setting
(this is a toggle function - you can keep going back-n-forth)

PROGRAMMING: Turn Signal Lights to flash as BRAKE LIGHTS

- ▶ Hold Left Turn switch, apply & Hold brakes then turn the ignition on.
 - veetraLIGHT flashes (5) times to confirm the new setting
(this is a toggle function - you can keep going back-n-forth)

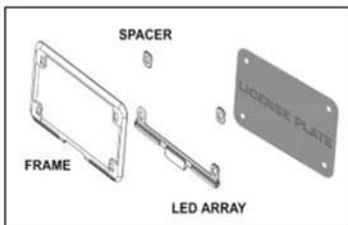
Above programming applies to the Left and Right turn signal LEDs only. Flashing all (16) LEDs as brakes is permitted as long as the turn signals are NOT active.

LPC-16:

- Sleek & streamlined style in chrome die cast for 4" x 7" plates
- Includes chrome plated back plate and stainless hardware
- Super bright LEDs (8500 mCd) have a wide viewing angle of 180°
- (6) LED dual-row Red LED array for the brakes
- (5) LED array for the right & (5) LED array for the left turn signals
- All electronics sealed and encased in scratch resistant polycarbonate



INSTALLATION:



- 1 Position the license plate as shown
- 2 Use the spacers so that the plate sits flush with the frame
- 3 Use the hardware supplied to attach the assembly to the bike.
- 4 On cruiser models, the chrome backing plate can also be used.

vectraLIGHT has (5) insulated spade terminals at the end of the 4' long cable. They are inserted into the scotch-locks, as shown.



Next, you have to locate appropriate wires on your bike. Use a voltmeter to identify each wire, and chose an convenient location to snap the scotch-lock over the wire and then use pliers to squeeze it tight. The spade connector must be inserted fully into the slot of the scotch-lock.

(5) INPUTS & COLORS OF LPC-16	FUNCTIONS OF BIKE'S WIRING
BLUE - POWER INPUT	12-volt with ignition ON
YELLOW - LEFT TURN SIGNAL INPUT	12-volt flash signal (high-side of bulb)
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PROGRAMMING: Turn Signal Lights as Marker Lights

- ▶ Hold Right Turn switch, apply & Hold brakes then turn the ignition on.
 - **vetraLIGHT** flashes (3) times to confirm the new setting
(this is a toggle function - you can keep going back-n-forth)

PROGRAMMING: Turn Signal Lights to flash as BRAKE LIGHTS

- ▶ Hold Left Turn switch, apply & Hold brakes then turn the ignition on.
 - **vetraLIGHT** flashes (5) times to confirm the new setting
(this is a toggle function - you can keep going back-n-forth)

Above programming applies to the Left and Right turn signal LEDs only. Flashing all (16) LEDs as brakes is permitted as long as the turn signals are NOT active.

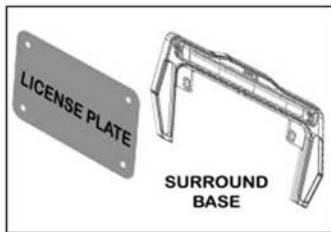
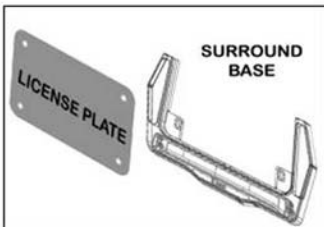
LP-24:

- Complete License plate surround – turn signal arrows and LED light-bar for brakes.
- Super bright COB LED panels have a wide viewing angle
- High strength ABS surround housing
- Light-bar can be mounted on TOP or BOTTOM



Complement the sleek look and style of your bike without any other bolt-on light fixtures. vectraLIGHT offers convenience of an integrated accessory with superb brightness for extra visibility.

INSTALLATION:



- 1 Place license plate over the surround base
- 2 Top or Bottom holes should line-up
- 3 Use the hardware supplied to attach the assembly to the bike.

vectraLIGHT has (4) insulated spade terminals at the end of the 4' long cable. They are inserted into the scotch-locks, as shown.

The Ground wire has a ring terminal. It must be attached to a good, clean chassis ground.



Next, you have to locate appropriate wires on your bike. Use a voltmeter to identify each wire, and chose an convenient location to snap the scotch-lock over the wire and then use pliers to squeeze it tight. The spade connector must be inserted fully into the slot of the scotch-lock.

(5) INPUTS & COLORS OF LPB-16	FUNCTIONS OF BIKE'S WIRING
BLUE - POWER INPUT	12-volt with ignition <u>ON</u>
YELLOW - LEFT TURN SIGNAL INPUT	12-volt flash signal (high-side of bulb)
GREEN - BRAKE INPUT	12-volt from brakes (ON with brakes)
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THIS IS A NON-PROGRAMMABLE VERSION

LPB-24:

■ Complete License plate surround – turn signal arrows and LED light-bar for brakes.

■ Super bright COB LED panels have a wide viewing angle

■ **Run-Turn-Brake all in one** with Programmable deceleration flash

■ Full length COB panel for brakes

■ Includes die cast metal frame, powder coated finish for 4" x 7" plates

■ Light-bar can be mounted on TOP or BOTTOM



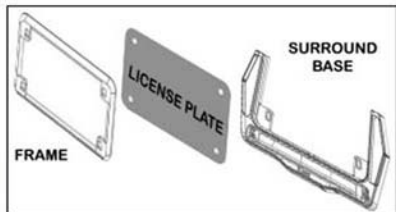
Complement the sleek look and style of your machine without any other bolt-on light fixtures. vectraLIGHT offers convenience of an integrated accessory with superb brightness for extra visibility.

INSTALLATION:

① Make sure the cable with 4-pin mini-plug is fully plugged – back of the base.

② Insert the license plate and place the frame over it so that the mounting holes are aligned

③ Use the hardware supplied to attach the assembly to the bike.



- 4 Mount the Controller under the seat away from direct water spray



- 5 Route the 4-pin cable from the vectraLIGHT and connect with the controller

- 6 Plug the 6-pin input cable for final connections.

Next, you have to locate appropriate wires on your bike. Use a voltmeter to identify each wire, and chose an convenient location to snap the scotch-lock over the wire and then use pliers to squeeze it tight. The spade connector must be inserted fully into the slot of the scotch-lock.



(5) INPUTS & COLORS OF LPB-24	FUNCTIONS OF BIKE'S WIRING
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BLACK - LEFT TURN SIGNAL INPUT	12-volt flash signal (high-side of bulb)
YELLOW - BRAKE INPUT	12-volt from brakes (ON with brakes)
WHITE - RIGHT TURN SIGNAL INPUT	12-volt flash signal (high-side of bulb)
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Built-in DIAGNOSTICS



■ Power LED will light-up with proper ignition-ON power and correct ground connections. It should go Off with ignition key turned off.

■ Signal LED will light-up for each of the Right turn, Left turn and Brake inputs when connected properly.

■ Remember that Right & Left inputs are interchangeable for mounting the vectraLIGHT with light-bar on top.

PROGRAMMING: Turn Signal Lights as Marker Lights

- ▶ Hold Right Turn switch, apply & Hold brakes then turn the ignition on.
 - vectraLIGHT flashes (3) times to confirm the new setting (this is a toggle function - you can keep going back-n-forth)

Note! Some States do not allow amber turn signals as marker lights. So if you have chosen the Amber color option for the Turn Signal lenses, please check the regulations.

PROGRAMMING: Turn Signal Lights to flash as BRAKE LIGHTS

- ▶ Hold Left Turn switch, apply & Hold brakes then turn the ignition on.
 - vectraLIGHT flashes (5) times to confirm the new setting (this is a toggle function - you can keep going back-n-forth)

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LPC-24:

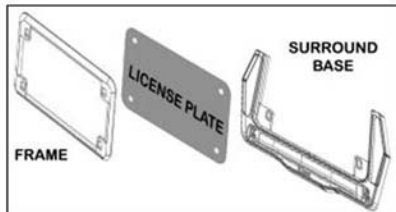
- Complete License plate surround – turn signal arrows and LED light-bar for brakes.
- Super bright COB LED panels have a wide viewing angle
- Dual element turn signal arrows
- Full length COB panel for brakes
- Includes die cast metal frame, powder coated finish for 4" x 7" plates
- Light-bar can be mounted on TOP or BOTTOM



Complement the sleek look and style of your machine without any other bolt-on light fixtures. [vectraLIGHT](#) offers convenience of an integrated accessory with superb brightness for extra visibility.

INSTALLATION:

- 1 Make sure the cable with 4-pin mini-plug is fully plugged – back of the base.
- 2 Insert the license plate and place the frame over it so that the mounting holes are aligned
- 3 Use the hardware supplied to attach the assembly to the bike.



4 Mount the Controller under the seat away from direct water spray



5 Route the 4-pin cable from the vectraLIGHT and connect with the controller

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Next, you have to locate appropriate wires on your bike. Use a voltmeter to identify each wire, and chose an convenient location to snap the

scotch-lock over the wire and then use pliers to squeeze it tight. The spade connector must be inserted fully into the slot of the scotch-lock.



(5) INPUTS & COLORS OF LPC-24	FUNCTIONS OF BIKE'S WIRING
RED - POWER INPUT	12-volt with ignition <u>ON</u>
BLACK - LEFT TURN SIGNAL INPUT	12-volt flash signal (high-side of bulb)
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- Signal LED will light-up for each of the Right, Left turn and Brake inputs when connected properly.
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Note! Some States do not allow amber turn signals as marker lights. So if you have chosen the Amber color option for the Turn Signal lenses, please check the regulations.

PROGRAMMING: Turn Signal Lights to flash as BRAKE LIGHTS

- ▶ Hold Left Turn switch, apply & Hold brakes then turn the ignition on.
 - vectraLIGHT flashes (5) times to confirm the new setting (this is a toggle function - you can keep going back-n-forth)

Above programming applies to the Left and Right turn signal LEDs only. Flashing all LEDs as brakes is permitted as long as the turn signals are NOT active.

FAQ:

Q: I am attempting to mount the LP-16 on my license plate and the mounting holes do not line-up. What do I have to do install?

A: All license plate vectraLIGHT products are designed for the harmonized standard adopted in the US. Many European and Canadian plates are different shapes. Since the mounting tabs are hidden behind the license plate, you can either screw-in the LED array directly on the bike or use a spacer plate.

Q: I ordered the matt black finish LPB-16 for my bike. I did not get the backing plate shown in the brochure.

A: The chrome backing plate is supplied with the LPC-16 product, since it is required for most cruiser style motorcycles. You can request one and we will ship it at no charge.

Q: I plan to remove the turn signal lamps and the taillight housing for a smooth, sleek look. Can I use just the LPC-16 for the rear of my bike since it's a run-turn-brake combination accessory?

A: We do not recommend the exclusive use of License Plate vectraLIGHTs as the taillight accessory. It is designed as auxiliary lighting equipment.

The DOT requirements for the primary lighting for your bike specifies many factors such as: minimum distance between the right and left turn signal lamps, minimum light output per lamp, the license plate illumination requirement etc.

License Plate vectraLIGHTs were not designed to incorporate such requirements and we make no such statements to that effect. They are auxiliary lighting accessory to enhance your visibility in traffic.

Q: I have your signalMinder on my bike and I just purchased VL-10 vectraLIGHTs. After I plug them in, nothing happens.

A: All signalMinder, except the SM-5, SM-5 and SM-3R models, must have the Running Light option hooked-up to power the VL-10 via the RJ-11 ports. Similarly the Brake Override option must also be hooked-up to activate the VL-10 brake feature.

VL-10 is designed as a remote unit, driven by the host signalMinder. It will inherit all of the settings you select for the signalMinder, such as the running light intensity and time-out.

VL-20 is a stand-alone unit and does not depend on the signalMinder hook-ups.

Q: I have hooked-up VL-20 on my bike. The Running Lights work properly with the ignition key On, but the turn signals do not sequence. They all come on at once.

A: Most common error in hooking up the VL-20 is that the Power Input (red wire) is connected to the low intensity wire of the turn signals. For most single turn signal switch equipped bikes, this wire has power only when the switch is in neutral. As soon as you activate right or left turn, the high intensity wire gets the power and the low intensity wire loses the power.

You should find another source of constant power with ignition key On.

Q: I have hooked-up my VL-20 and everything works as advertised. But I do not like the brake LEDs at night. They are too bright and the glare is distracting. Can I program them On/Off?

A: That feature is not programmable. You can reposition the array such that it's more forward and the LEDs are barely visible to you as you sit on the bike thus shielding your eyes. If that's not possible, then you can disconnect the brake input (black wire).

Q: I am not sure what color is the brake wire on my bike.

A: Below is a table for most common wire colors for a few bike models.

TYPICAL BRAKE WIRE COLORS	
BMW	Grey w/Yellow
Harley	Red
Honda	Green w/Yellow
Kawasaki	Black w/White
Suzuki	Yellow
Triumph	Blue
Yamaha	Yellow

Wire colors for most makes of bikes are shown here as a reference only. Be advised that color codes can change with models and years, so you should verify with a voltmeter or a test light.

Q: I have CAN-bus bike. Will I get WARNINGS if I tap into Brake and turn signal wires?

A: We have tested the vectraLIGHT on many different bikes and not found that to be a problem. The current draw of the LP series LED is small and as such does not trigger any warnings.

Q: The input harness is too long. The cable from the vectraLIGHT is long enough to reach under the seat. Can I cut the wires short?

A: It's better if you can coil the excess length of wires and zip-tie it. If you do cut the wires, make sure you use shrouded male tab connectors to plug into the Scotch lock taps.

LIMITED WARRANTY

Kisan warrants this product to be free of manufacturing defects for a 1-year period after the original date of consumer purchase. A purchase receipt or other proof of original retail purchase will be required. This warranty does not include damage to the product resulting from accident, misuse, improper installation or operation or unauthorized repair or alteration. If the product should become defective within the warranty period, we will elect to repair or replace it free of charge at our option. Parts and/or replacement product supplied under the warranty may be new or rebuilt.

The consumer's sole remedy shall be such repair or replacement as is expressly provided above, and **Kisan** shall in no event be liable for any incidental or consequential damages arising out of the use of; or inability to use this product for any purpose whatsoever.

Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. This warranty gives you specific legal rights. You may have other rights, which vary from state to state.

If you have to return the product for warranty service, please contact our service department to obtain a R.M.A. (Return Merchandise Authorization) number and instructions on how to pack and ship the product to us.

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