# signalMinder™

## AUTOMATIC CANCELATION


***Built-in Features:***

***Running Light Conversion***
***Brake Override***
***4-Way Emergency Flash***
***Brake Flash***

## INSTALLATION GUIDE

Kisan ELECTRONICS

TECHNOLOGY for SAFETY

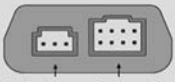
SM-1234

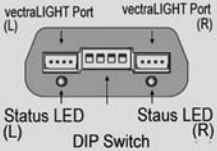
# For **SINGLE** handlebar switch

**CONTROLLER**

**FRONT PANEL**

**REAR PANEL**




## Installation Overview

### 1

Locate the stock turn signal relay and replace it with *signalMinder* using matching adapter. Attach ground wire if required.

This basic step will provide cancellation with 3 selectable timeouts - 10, 20 or 30 sec.

### 2

Locate right & left turn signal wires of the bike and tap into them with Scotchlok T-Taps. Same for the brake wire.

This OPTIONAL step enables:

- Marker Lights - front & rear
- 4-Way emergency flash
- Brake override feature
- Brake activated flash

### 3

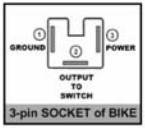
Unclamp the turn signal switch from the handlebar and install return springs or foam plugs.

This OPTIONAL step alters: the handlebar switch to make it NOT LATCH-UP.

Transforming the turn signals of your bike into a fully automatic cancellation system.

# Table of Contents


**SM-1234 CONTROLLER**


- Hella
- Wehrle
- Warner

- Many European motorcycles - older BMW and Honda models


**SM-1 Adapter**

**Running light harness**

1

First step is to replace the stock Turn Signal relay with ***signalMinder*** – use appropriate adapter.

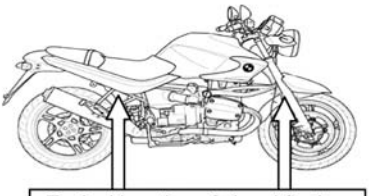
Default time-out is 10 seconds or 10 flashes. You can select longer time-out with DIP-switch settings.


**NOTES!**

❶ Some of the Japanese motorcycles have similar 3-pin plug with Nippon Denso turn signal flasher. Since polarity of the pins is different, use SM-3M ***signalMinder*** for those applications.

❷ If you replace incandescent bulbs with LED clusters, refer to the notes in Options Hook-ups section.

# SM-1 INSTALLATION:



Typical location of signal flasher

On most models, access to the turn signal flasher is possible simply by removing the seat and locating it. Most common stock turn signal relay pictures are shown on previous page.

Possible locations are:

- Next to fuse block
- Inside the front fairing
- Inside the headlight bucket

You may be able to locate it by the clicking sound. Otherwise refer to your bike's Manual, or the Wiring Diagram to find its location.

**TO INCREASE TIME**, after which the ***signalMinder*** will stop flashing:

❶ Make sure the power is turned OFF.

❷ Set the time-out by appropriate selection of the DIP switch

| POSITION ➡ | # 1 | # 2 | # 3 | # 4 |
|---|---|---|---|---|
| DIP SWITCH | Running Lights | Time-out | Time-out | SM-3R only |
| OFF / ON (1 2 3 4) | OFF | Keep Off for default 10 flashes | | Dual dash lights |
| | ON | 20 Flashes or Seconds | 30 Flashes or Seconds | Single dash light |
| Default is ON | | Times are approximate | | |

By completing this first step you have selectable time-outs. Now to activate all other optional features, Step-2 is required. Please refer to:

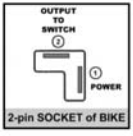
- Optional Hook-ups section – pg20
- Special Features and Functions – pg28
- VL-10 ***vectraLIGHT*** plug-in ports

*Enhance your visibility!* – Use all available features.


SM-1234 CONTROLLER


Main Plug

Options plug




- Hella
- Denso
- Warner

- Many European motorcycles and older Japanese models


**SM-2 Adapter**

**Running light harness**

First step is to replace the stock Turn Signal relay with ***signalMinder*** – use appropriate adapter.

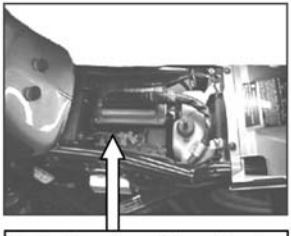
Default time-out is 10 seconds or 10 flashes. You can select longer time-out with DIP-switch settings.


**NOTES!**

❶ The attached Ground wire MUST BE secured to a good chassis ground. If necessary slit open the ring and spread it out as a lug connector for larger bolts.

❷ On some bikes, the 2-pin plug may not be wired with correct polarity as shown above. If SM-2 does not flash, swap the female pins of your bike's socket to match the correct pin-out.

# SM-2 INSTALLATION:



Typical location of signal flasher

On most models, access to the turn signal flasher is possible simply by removing the seat and locating it. Most common stock turn signal relay pictures are shown on previous page.

Possible locations are:

- Next to fuse block
- Inside the front fairing
- Inside the headlight bucket

You may be able to locate it by the clicking sound. Otherwise refer to your bike's Manual, or the Wiring Diagram to find its location.

**TO INCREASE TIME**, after which the ***signalMinder*** will stop flashing:

❶ Make sure the power is turned OFF.

❷ Set the time-out by appropriate selection of the DIP switch

| POSITION ➡ | # 1 | # 2 | # 3 | # 4 |
|---|---|---|---|---|
| DIP SWITCH | Running Lights | Time-out | Time-out | SM-3R only |
| OFF ⇕ ON (1 2 3 4) | OFF | Keep Off for default 10 flashes | | Dual dash lights |
| | ON | 20 Flashes or Seconds | 30 Flashes or Seconds | Single dash light |
| Default is ON | | Times are approximate | | |

By completing this first step you have selectable time-outs. Now to activate all other optional features, Step-2 is required. Please refer to:

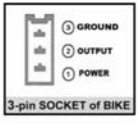
- Optional Hook-ups section – pg20
- Special Features and Functions – pg28
- VL-10 ***vectraLIGHT*** plug-in ports

*Enhance your visibility!* – Use all available features.

Plug-in replacement for Denso FE246

Plug-in replacement for Denso FB249


**SM-1234 CONTROLLER**


- Mitsuba
- Denso

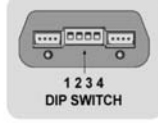
- Most Honda models and newer Japanese & Euro models


**SM-3 Adapter**

**Running light harness**

First step is to replace the stock Turn Signal relay with ***signalMinder*** – use appropriate adapter.

Default time-out is 10 seconds or 10 flashes. You can select longer time-out with DIP-switch settings.

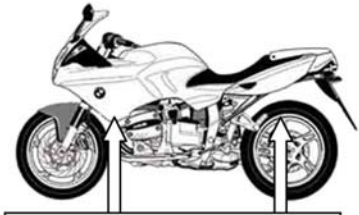




**NOTES!**

The On some of the motorcycles, the 3rd receptacle of the 3-pin socket may be unpopulated. Use the enclosed ground wire and insert the receptacle in 3rd position, then attach it to a good chassis ground.

# SM-3 INSTALLATION:



Typical location of signal flasher

On most models, access to the turn signal flasher is possible simply by removing the seat and locating it. Most common stock turn signal relay pictures are shown on previous page.

Possible locations are:

- Next to fuse block
- Inside the front fairing
- Inside the headlight bucket

You may be able to locate it by the clicking sound. Otherwise refer to your bike's Manual, or the Wiring Diagram to find its location.

**TO INCREASE TIME**, after which the ***signalMinder*** will stop flashing:

❶ Make sure the power is turned OFF.

❷ Set the time-out by appropriate selection of the DIP switch

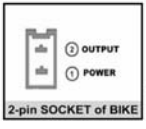
| POSITION ➡ | # 1 | # 2 | # 3 | # 4 |
|---|---|---|---|---|
| DIP SWITCH | Running Lights | Time-out | Time-out | SM-3R only |
| OFF / ON (1 2 3 4) | OFF | Keep Off for default 10 flashes | | Dual dash lights |
| | ON | 20 Flashes or Seconds | 30 Flashes or Seconds | Single dash light |
| | Default is ON | Times are approximate | | |

By completing this first step you have selectable time-outs. Now to activate all other optional features, Step-2 is required. Please refer to:

- Optional Hook-ups section – pg20
- Special Features and Functions – pg28
- VL-10 ***vectraLIGHT*** plug-in ports

*Enhance your visibility!* – Use all available features.


**SM-1234 CONTROLLER**


■ Denso
■ Mitsuba

■ Many European and Japanese motorcycles


**SM-3S Adapter**

**Running light harness**

First step is to replace the stock Turn Signal relay with ***signalMinder*** – use appropriate adapter.

Default time-out is 10 seconds or 10 flashes. You can select longer time-out with DIP-switch settings.


**NOTES!**

❶ The attached Ground wire MUST BE secured to a good chassis ground. If necessary slit open the ring and spread it out as a lug connector for larger bolts.

❷ If you replace incandescent bulbs with LED clusters, refer to the notes in Options Hook-ups section.

# SM-3S INSTALLATION:


Typical location of signal flasher

On most models, access to the turn signal flasher is possible simply by removing the seat and locating it. Most common stock turn signal relay pictures are shown on previous page.

Possible locations are:

- Next to fuse block
- Inside the front fairing
- Inside the headlight bucket

You may be able to locate it by the clicking sound. Otherwise refer to your bike's Manual, or the Wiring Diagram to find its location.

**TO INCREASE TIME**, after which the ***signalMinder*** will stop flashing:

❶ Make sure the power is turned OFF.

❷ Set the time-out by appropriate selection of the DIP switch

| POSITION ➡ | # 1 | # 2 | # 3 | # 4 |
|---|---|---|---|---|
| DIP SWITCH | Running Lights | Time-out | Time-out | SM-3R only |
| OFF / ON, 1 2 3 4 | OFF | Keep Off for default 10 flashes | | Dual dash lights |
| | ON | 20 Flashes or Seconds | 30 Flashes or Seconds | Single dash light |
| | Default is ON | Times are approximate | | |

By completing this first step you have selectable time-outs. Now to activate all other optional features, Step-2 is required. Please refer to:

- Optional Hook-ups section – pg20
- Special Features and Functions – pg28
- VL-10 ***vectraLIGHT*** plug-in ports

*Enhance your visibility!* – Use all available features.

Fuse Box & Turn Signal Relay


Denso FE249JR

SM-1234 CONTROLLER


Main Plug

Options plug

8-pin Socket of the Relay


■ Most Suzuki models and Universal applications

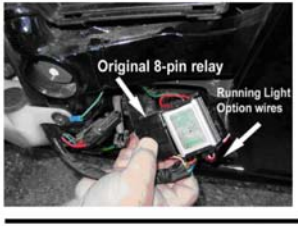

SM-3SV Adapter

Running light harness

1

First step is to replace the stock Turn Signal relay with ***signalMinder*** – use appropriate adapter.

Default time-out is 10 seconds or 10 flashes. You can select longer time-out with DIP-switch settings.


**NOTES!**

The 8-pin Kickstand Interlock & Flasher Relay REMAINS IN PLACE.

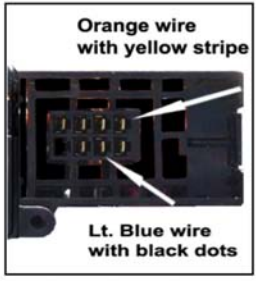
Only the wire that supplies the power to the handlebar switch needs to be cut and spliced.

# SM-3SV INSTALLATION:

**INSTRUCTIONS FOR MANY SUZUKI MODELS:**

Remove the seat and locate the fuse box. The 8-pin replay is usually right next to it.

❶ Cut the **LT. BLUE** wire and crimp-on the bullet of OUTPUT to the cut end - the one that goes toward the turn signal switch. Leave other cut end alone.
❷ Install the Scotch-lock on the **ORANGE** wire – it has 12v with ignition ON. Plug red wire in for power.
❸ Attach the ground wire with the large ring, to a suitable location.




**UNIVERSAL APPLICATION – *signalMinder* WIRES:**

**OUTPUT** = Black wire with crimp-on bullet connector (Flashing Output)
**POWER** = Red wire with small ring connector (12v w/ignition On)
**GROUND** = Green wire with large ring lug (chassis ground)

**TO INCREASE TIME**, after which the ***signalMinder*** will stop flashing:

❶ Make sure the power is turned OFF.

❷ Set the time-out by appropriate selection of the DIP switch

| POSITION ➡ | # 1 | # 2 | # 3 | # 4 |
|---|---|---|---|---|
| DIP SWITCH | Running Lights | Time-out | Time-out | SM-3R only |
| 1 2 3 4 OFF ON | OFF | Keep Off for default 10 flashes | | Dual dash lights |
| | ON | 20 Flashes or Seconds | 30 Flashes or Seconds | Single dash light |
| | Default is ON | Times are approximate | | |

By completing this first step you have selectable time-outs. Now to activate all other optional features, Step-2 is required. Please refer to:

- Optional Hook-ups section – pg20
- Special Features and Functions – pg28
- VL-10 ***vectraLIGHT*** plug-in ports

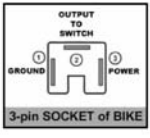
*Enhance your visibility!* – Use all available features.


REPLACE

SM-1234 CONTROLLER


Main Plug

Options plug




- Denso
- Warner

- Many European motorcycles and older Japanese models

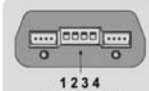

**SM-3M Adapter**

**Running light harness**

1

First step is to replace the stock Turn Signal relay with ***signalMinder*** – use appropriate adapter.

Default time-out is 10 seconds or 10 flashes. You can select longer time-out with DIP-switch settings.

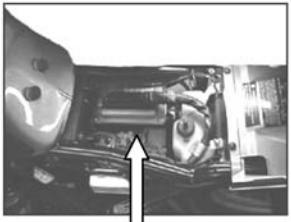



**NOTES!**

❶ This is modified 3-pin plug for a Nippon Denso turn signal flasher. DO NOT use it on European bikes.

❷ If you replace incandescent bulbs with LED clusters, refer to the notes in Options Hook-ups section.

# SM-3M INSTALLATION:



Typical location of signal flasher

On most models, access to the turn signal flasher is possible simply by removing the seat and locating it. Most common stock turn signal relay pictures are shown on previous page.

Possible locations are:

- Next to fuse block
- Inside the front fairing
- Inside the headlight bucket

You may be able to locate it by the clicking sound. Otherwise refer to your bike's Manual, or the Wiring Diagram to find its location.

**TO INCREASE TIME**, after which the ***signalMinder*** will stop flashing:

❶ Make sure the power is turned OFF.

❷ Set the time-out by appropriate selection of the DIP switch

| POSITION ➡ | # 1 | # 2 | # 3 | # 4 |
|---|---|---|---|---|
| DIP SWITCH (1 2 3 4, OFF ⇕ ON) | Running Lights | Time-out | Time-out | SM-3R only |
| | OFF | Keep Off for default 10 flashes | | Dual dash lights |
| | ON | 20 Flashes or Seconds | 30 Flashes or Seconds | Single dash light |
| | Default is ON | Times are approximate | | |

By completing this first step you have selectable time-outs. Now to activate all other optional features, Step-2 is required. Please refer to:

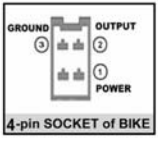
- Optional Hook-ups section – pg20
- Special Features and Functions – pg28
- VL-10 ***vectraLIGHT*** plug-in ports

*Enhance your visibility!* – Use all available features.


**SM-1234 CONTROLLER**


Main Plug

Options plug




■ Mitsuba

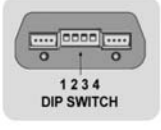
■ Mostly Honda models and Yamaha also


**SM-3N Adapter**

**Running light harness**

First step is to replace the stock Turn Signal relay with ***signalMinder*** – use appropriate adapter.

Default time-out is 10 seconds or 10 flashes. You can select longer time-out with DIP-switch settings.




**NOTES!**

❶ This is a 4-pin plug for Mitsuba turn signal flasher. 4th pin is not populated.

❷ If you replace incandescent bulbs with LED clusters, refer to the notes in Options Hook-ups section.

# SM-3N INSTALLATION:


On most models, access to the turn signal flasher is possible simply by removing the seat and locating it. Most common stock turn signal relay pictures are shown on previous page.

Possible locations are:

- Next to fuse block
- Inside the front fairing
- Shown here is: below the seat, in the rear

You may be able to locate it by the clicking sound. Otherwise refer to your bike's Manual, or the Wiring Diagram to find its location.

**TO INCREASE TIME**, after which the ***signalMinder*** will stop flashing:

❶ Make sure the power is turned OFF.

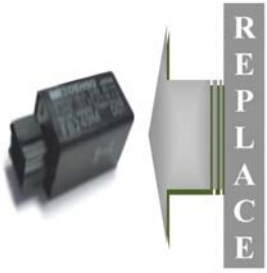
❷ Set the time-out by appropriate selection of the DIP switch

| POSITION ➡ | # 1 | # 2 | # 3 | # 4 |
|---|---|---|---|---|
| **DIP SWITCH** | **Running Lights** | **Time-out** | **Time-out** | **SM-3R only** |
| 1 2 3 4 OFF ON | **OFF** | **Keep Off for default 10 flashes** | | **Dual dash lights** |
| | **ON** | **20 Flashes or Seconds** | **30 Flashes or Seconds** | **Single dash light** |
| | **Default is ON** | **Times are approximate** | | |

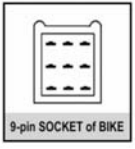
By completing this first step you have selectable time-outs. Now to activate all other optional features, Step-2 is required. Please refer to:

- Optional Hook-ups section – pg20
- Special Features and Functions – pg28
- VL-10 ***vectraLIGHT*** plug-in ports

*Enhance your visibility!* – Use all available features.




**SM-1234 CONTROLLER**


■ Denso

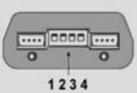
■ Mostly Honda models

**SM-3R ADAPTER**
**Option harness pre-wired**

1

First step is to replace the stock Turn Signal relay with ***signalMinder*** – use appropriate adapter.

Default time-out is 10 seconds or 10 flashes. You can select longer time-out with DIP switch settings.




**NOTES!**

❶ This is a 9-pin plug for Denso turn signal flasher – only 8-pins are populated. Running light option harness is pre-wired for this unit.

❷ If you have dual or single dash indicators, use DIP switch #4 selection shown on the next page.

# SM-3R INSTALLATION:

On most models, access to the turn signal flasher is possible simply by removing the seat and locating it. Most common stock turn signal relay pictures are shown on previous page.

Possible locations are:

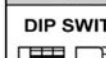
- Behind right engine cover – VTX models
- Shown here is: behind left engine cover for Rune models

You may be able to locate it by the clicking sound. Otherwise refer to your bike's Manual, or the Wiring Diagram to find its location.

**TO INCREASE TIME**, after which the ***signalMinder*** will stop flashing:

❶ Make sure the power is turned OFF.

❷ Set the time-out by appropriate selection of the DIP switch

| POSITION ➡ | # 1 | # 2 | # 3 | # 4 |
|---|---|---|---|---|
| DIP SWITCH | Running Lights | Time-out | Time-out | SM-3R only |
|   | OFF | Keep Off for default 10 flashes | | Dual dash lights |
| | ON | 20 Flashes or Seconds | 30 Flashes or Seconds | Single dash light |
| | Default is ON | Times are approximate | | |

By completing this first step you have selectable time-outs. Now to activate all other optional features, Step-2 is required. Please refer to:

- Special Features and Functions – pg27
- VL-10 ***vectraLIGHT*** plug-in ports

*Enhance your visibility!* – Use all available features.

Plug-in replacement for Denso FB257H


**SM-1234 CONTROLLER**


Main Plug

Options plug


■ Denso

■ Mostly Yamaha
- newer Kawasaki also

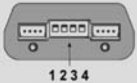

**SM-4 Adapter**

**Running light harness**

1

First step is to replace the stock Turn Signal relay with ***signalMinder*** – use appropriate adapter.

Default time-out is 10 seconds or 10 flashes. You can select longer time-out with DIP switch settings.




**NOTES!**

❶ This is a 5-pin plug for Denso turn signal flasher – only 3-pins are populated.

❷ If you replace incandescent bulbs with LED clusters, refer to the notes in Options Hook-ups section.

# SM-4 INSTALLATION:

Typical location of signal flasher

On most models, access to the turn signal flasher is possible simply by removing the seat and locating it. Most common stock turn signal relay pictures are shown on previous page.

Possible locations are:

- Next to fuse block
- Inside the front fairing
- Shown here is: below the seat, in the rear

You may be able to locate it by the clicking sound. Otherwise refer to your bike's Manual, or the Wiring Diagram to find its location.

**TO INCREASE TIME**, after which the ***signalMinder*** will stop flashing:

❶ Make sure the power is turned OFF.

❷ Set the time-out by appropriate selection of the DIP switch

| POSITION ➡ | # 1 | # 2 | # 3 | # 4 |
|---|---|---|---|---|
| **DIP SWITCH** | Running Lights | Time-out | Time-out | SM-3R only |
| OFF / ON, 1 2 3 4 | OFF | Keep Off for default 10 flashes | | Dual dash lights |
| | ON | 20 Flashes or Seconds | 30 Flashes or Seconds | Single dash light |
| Default is ON | | Times are approximate | | |

By completing this first step you have selectable time-outs. Now to activate all other optional features, Step-2 is required. Please refer to:

- Optional Hook-ups section – pg20
- Special Features and Functions – pg28
- VL-10 ***vectraLIGHT*** plug-in ports

*Enhance your visibility!* – Use all available features.

# RUNNING LIGHT OPTION:

A single handlebar switch latches to the right or to the left. The actuating mechanical lever may come back to the center, but the electrical switch remains latched and connected to complete the circuit.

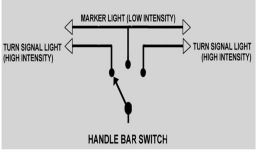

That's why you have to **push-to-reset** or **push-to-cancel.**

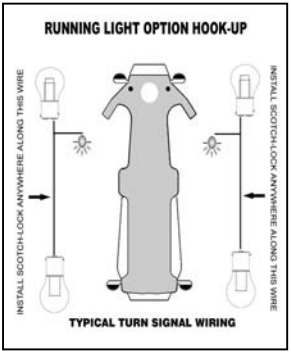
Moreover, they are dual-pole type switches. So whenever you activate right or left signal: the marker light is disconnected and simultaneously the bright filament of the turn signals for that side is connected.

2

Hooking-up this option will establish two separate channels; allowing s***ignalMinder*** to continue flashing even after the handlebar switch is returned to neutral.

***signalMinder*** automatically detects two separate channels established by hooking up this option.




In this Step-2, Turn signal and Brake wires of the bike are connected to ***signalMinder,*** using the 8-pin Running Light Harness.

■ Turn signal wires run from the front to the rear of the bike. So you can tap into them at any convenient location.

■ Status LED s will confirm proper connections.

■ Brake wire should be connected towards the rear of the bike. It should have full voltage ONLY when the brakes are applied. And less than 1.2V when the brakes are released.

Use the Color Chart and a test light or voltmeter to identify and locate wires on your bike.

Locate turn signals and brake wires on your bike:

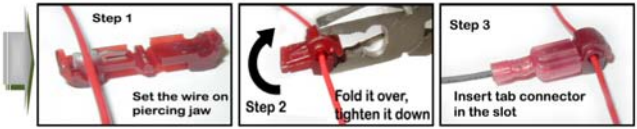
| WIRE | Left Signal | Right Signal | Brakes |
|---|---|---|---|
| Honda | Orange | Light Blue | Green/yellow |
| BMW | Blue/red | Blue/black | Gray/yellow |
| Triumph | Green | Gray | Blue |
| Suzuki | Black | Light green | Yellow |
| Kawasaki | White | Black | Black/white |
| Yamaha | Brown | Green | Yellow |

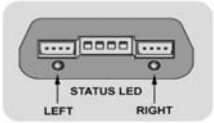
| ON THE BIKE | TEST FOR: | CONNECT WITH |
|---|---|---|
| Left Turn Signal | Flashing 12v | Black wire of Option harness |
| Right Turn Signal | Flashing 12v | White wire of Option harness |
| Brake Wire | 12v with Brakes on | Red wire of Option harness |

■ Install Scotchlok T-Tap on turn signal and brake wires as shown here.

■ Plug the insulated Tab connectors into appropriate T-Tap & plug the harness in.

**HOW TO INSTALL T-TAP**




■ With Right and Left turn signal wires connected, activate handlebar switch once for each side to check the STATUS LED & verify proper connections.


**NOTE!** The Dash Indicators will remain dimly lit all the time with this option connected since they are wired with the turn signals on the bike.

# BRAKE INPUT OPTION:

Next, verify the brake input hook-up. With ignition on, apply the brakes.

■ Time-out will be suspended while the brakes are applied, as soon as you release the brakes, the counter will resume.

■ All turn signals will flash as brakes for about 2.5 seconds, as long as the turn signals are not active.

■ Brake activated flash feature is ON by default. You can turn if OFF.

**PROGRAMMING BRAKE FLASH FEATURE:**

❶ Apply & Hold brakes first, then turn ignition on.

❷ Immediately begin pumping the brakes at least 6 to 8 times

This is a toggle function – it activates Brake Flash ON or OFF upon each execution.

**CAUTION!** If you hook-up the Brake Input only and not hook-up the Running Light wires, only the Brake Override feature will work. The Brake Flash Feature requires the Running Light option hook-up.

## SINGLE DASH INDICATOR:

In some cases, (1) dash indicator bulb may allow cross talk between the right left channels with the Running Light option hooked-up. To avoid that you can install a dual-diode kit for the dash indicator, or simply replace that instrument bulb with a 12V LED - available separately.

■ If you bike has LED clusters, in most cases you do not need to use Load Equalizer. ***signalMinder*** is a fully solid-state device and as such it is load independent. However, in some applications – especially with all four LED bulbs – you may have to hook-up the Running Light option, to flash correctly.

■ Many of the replacement LED clusters are available with 2-wire or 3-wire inputs. The extra input is for marker lights. With Running Light Option hooked-up, the 3rd wire input is not necessary. ***signalMinder*** can control the LED brightness with the simpler 2-wire input.

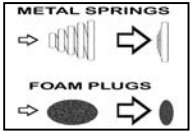
# HANDLEBAR SWITCH MODIFICATION:

***Running Light Option MUST BE hooked-up for this modification.***

3

Installation of the two opposing Return Springs modifies the handlebar switch for UN-LATCHED operation. ***signalMinder*** will automatically detect the momentary-On switch mode, and allow continued flashing.

Metal Springs are spiral wound. When you compress it, each turn nests inside the next larger turn. Verify that there's no interference by collapsing it fully. It should flatten out to height of one wire diameter.



■ Use Foam plugs as return springs, if you have to push too hard to activate the signals. We recommend cutting foam plug lengthwise and use (2) half-rounds.

■ Use Foam plugs if the switch cavity has open bottom and may cause a short with the metal springs inserted.

■ ***signalMinder*** is configured as dual channel device. When it detects that the Running Light connections are made, it diverts the current flow through those left and right channel connections. The handlebar switch merely acts as a trigger for the right or the left side.

## REMOVING TURN SIGNAL SWITCH FROM HANDELBAR:


TURN SIGNAL SWITCH ASSEMBLY

Typically the handlebar switch assembly is secured around the handlebar and has a split-housing.

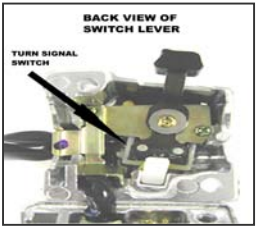
■ To remove the handlebar switch, loosen and remove the screws that clamp the assembly on to the handle bar.

■ After the switch assembly is removed from the handlebar, spread the two halves apart to gain access to the back of the electrical switch.

## Lever Activated Dual-Pole Switch

(Chrome Covered)

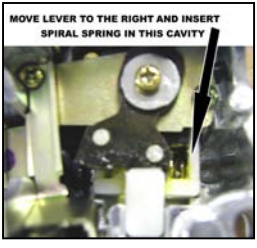
This is the most commonly found internal switch. It is applicable for most Japanese bikes.




■ When moved in either direction, one pole is disconnected while the other is connected.

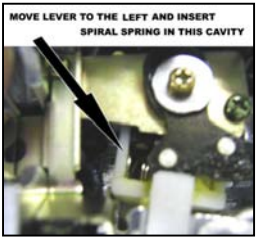
■ The lever returns to center but the electrical switch remains latched. The lever must be pushed-in to release the latch.

■ The internal switch and the lever mechanism do not have to be removed from the housing.




■ As you move the lever from side to side, note the motion of the white plastic slider. An empty cavity is created to allow insertion of the return springs.

■ Using small needle-nose pliers or tweezers, insert metal springs such that the larger base is towards the center of the switch, as shown here.




■ After inserting springs, make sure the switch has full motion and makes proper contact.

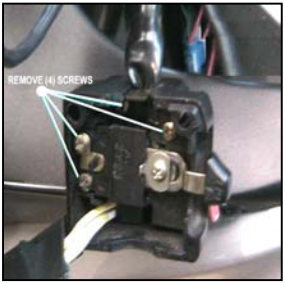
■ Verify that the turn signals are activated in both directions before reinstalling the housing back on the handlebar.

■ If the movement of the handlebar switch feels too hard, you can cut-off one turn of each of the springs to reduce the tension. Or, use the Foam Plugs instead.

## 3 Lever Activated Latched Switch:

(Plastic Case)

This type of switch is also found in many Japanese models. It typically has Hi-beam passing button.

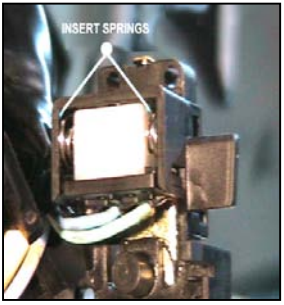



■ When moved in either direction, one pole is disconnected while the other is connected.

■ The lever slides freely to either side and returns to the center but the electrical switch remains latched. It must be pushed-in to release the latch.

■ The internal switch and the lever mechanism must be removed from the housing.

■ As you move the lever from side to side, note the motion of the white plastic slider. An empty cavity is created to allow insertion of the spiral spring.




■ Using small needle-nose pliers or tweezers, insert the springs such that the larger base is towards the center of the switch, as shown here.

■ After inserting springs, make sure the switch has full motion and makes proper contacts for right and left signals.

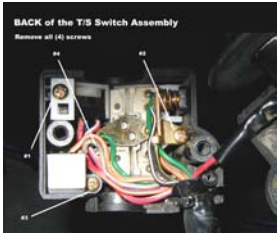
■ Verify that the turn signals are activated in both directions before reinstalling the housing back on the handlebar.

■ If the movement of the handlebar switch feels too hard, you can cut-off one turn of each of the springs to reduce the tension. Or, use the Foam Plugs instead.

## 3 **Slider Activated Latched Switch**:

(Plastic Case)

This type of switch is typically found in many Suzuki, Kawasaki and Triumph models. It may have Hi-beam passing button as well.

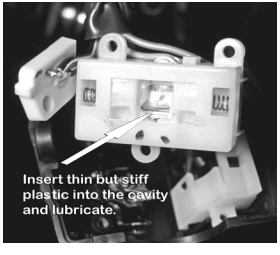



■ When moved in either direction, one pole is disconnected while the other is connected.

■ The slider moves freely to either side and returns to the center but the electrical switch remains latched. It must be pushed-in to release the latch.

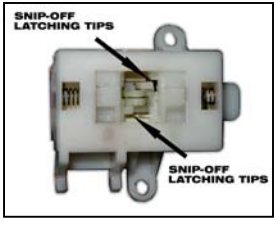
■ The internal switch and the slider mechanism must be removed from the housing.

■ This type of switch <u>does not require</u> return springs to be installed.




■ As you move the slider from side to side, note the motion of latching finger-like tabs in the plastic cavity.
They move up and down to latch the electrical contacts in place. The object is to keep the tabs from latching.

■ Cut a ¼" x ½" rectangular piece of stiff plastic, such as the clear plastic clamshell package of the ***signalMinder***.




Insert it over the up and down moving tabs to prevent them from latching. Lubricate it well to allow smooth movement of the slider.

■ Alternatively, you can snip the tips of the latching tabs. This will also prevent them from latching. However, this will be a permanent alteration of the handlebar switch.

## Lever Activated Latched Switch:

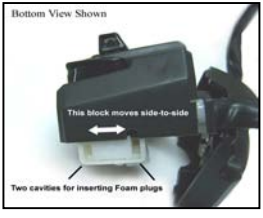
(Plastic Case)

This type of switch is also found in many Japanese models. It typically has Horn button below the turn signal switch lever.


■ When moved in either direction, one pole is disconnected while the other is connected.

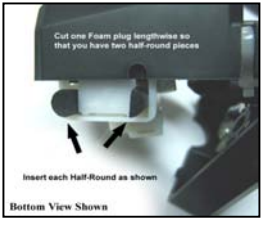
■ The lever slides freely to either side and returns to the center but the electrical switch remains latched. It must be pushed-in to release the latch.

■ The internal switch is exposed on the BOTTOM of the top housing as shown.




■ As you move the lever from side to side, note the motion of the white plastic slider. An empty cavity is created to allow insertion of half-round foam plugs.

■ Using small needle-nose pliers or tweezers, insert the foam plugs such that the flat part faces towards the center of the switch, as shown here.




■ After inserting foam plugs, make sure the switch has full motion and makes proper contacts for right and left signals.

■ Verify that the turn signals are activated in both directions before reinstalling the housing back on the handlebar.

■ If the movement of the handlebar switch feels too hard, you can trim the half-round foam plugs a bit more and make them thinner.

# SPECIAL FEATURES:

***Running Light Option MUST BE hooked-up to use the following options.***

**SAME-SIDE CANCEL FEATURE:**
**(Does not apply if the Return Springs are NOT INSTALLED)**

Once the flashing has begun on either side, returning the switch to the same side once more and holding it will cancel it in about ½ second.

**4-WAY EMERGENCY FLASH MODE:**
(After each right turn, push reset to center the switch, if the Return Springs are NOT INSTALLED)

❶ Flick the turn signal switch (4) times to the RIGHT- about once a second.

❷ To end 4-Way flash, move switch one more time to the RIGHT and hold.

**ESCORT FLASH MODE:**
(After each right turn, push reset to center the switch, if the Return Springs are NOT INSTALLED)

❶ Flick the turn signal switch (4) times to the LEFT – about once a second.

❷ To end flashing, move switch one more time to the LEFT and hold

**BRAKE FLASH FEATURE:**
**(Brake Input wire must be hooked-up)**

As long as the turn signals are active, applying the brakes will cause turn signal bulbs to flash as brakes. The flash pattern begins with fast flash rate, which slows down to solid ON after 2 ½ seconds.

■ This feature is active as a factory default. It is programmable feature. You can activate it or deactivate it.

# FREQUENTLY ASKED QUESTIONS:

**INSTALLATION:**

**Q:** Where is the turn signal relay on my bike? I can't find it.

**A:** Please refer to your Owner's Manual or the Wiring Diagram of your bike.

There are too many variations to cover. The relay could be integrated with kickstand interlock or the dash circuit board. It could be hidden under the gas tank or behind the dash. When possible, for more popular models, we have identified the location in this Guide.

**Q:** I have 3-pin socket on the bike but only two pins are used. Do I need to install the 3rd pin?

**A:** Yes, the 3rd pin with a ground wire is supplied in the **SM-3** package. It is required for the circuit to work properly. Install it on the 3rd pin of the socket of bike.

**Q:** I have installed the ***signalMinder*** but it won't flash, nothing comes on. What do I do?

**A:** If your signalMinder came with a ground wire, it must be attached firmly to a good ground location. Make sure the spot you have chosen is free of paint, doesn't have any plastic washers etc. It should be a clean metal surface of the chassis or the use the negative post of the battery.

**Q:** My ***signalMinder*** plugs in properly and I have attached the ground wire but it won't start the flashing. It's stuck ON. What's wrong?

**A:** The polarity of the socket on the bike may be reversed. Look at the diagram of the socket – top left corner of the page – and compare. If you have to switch them, use a jeweler's screwdriver to release the pins.

**Q:** ***signalMinder*** is different size and shape from the original flasher. How do I mount it?

**A:** You can leave the original flasher in its holder. Find a suitable location nearby and use the Velcro pad supplied to attach the unit.

**Q:** I have an 8-pin relay next to the fuses but I received a ***signalMinder*** without any matching plug. How do I hook it up?

**A:** The **SM-3SV** unit you received requires one wire splice. The original relay stays in place. Follow the instructions on page-13

**OPERATION:**

**Q:** I already have running lights in the front. Do I still have to hook-up the option?

**A:** You don't have to, but hooking it up will enable the other built-in features of the ***signalMInder***. Not only will you gain additional conspicuity in the back with two more lights, you will also have 4-Way flash and Escort mode flash capability.

**Q:** I have hooked up the Running Light option. And now the dash indicators are on all the time. What's wrong?

**A:** The dash indicator bulbs are wired together with the turn signal lamps on your bike, so they will also stay on dimly. While using the turn signals, they will indicate properly by flashing brightly.

If you do a lot of nighttime riding and the indicators glare bothers you, you can reduce the intensity by replacing dash indicator bulbs with low intensity 12V LED equivalents. Or you can turn off the running lights altogether.

**Q:** My turn signal switch comes back to center. Do I need to install the Return springs?

**A:** If you have already hooked up the Running Light option, installing the Return springs is the next logical step. As discussed on page-20, the handlebar switch is electrically latched inside. Just because the outside lever returns to center does not mean it is in neutral.

Installing the Return springs gives you the freedom of not having to push the lever in to cancel, which is the same as releasing the latch.

Even after the push-to-cancel action is defeated with the Return springs, you can still stop the flashing by going back to the same side once more. The same-side-cancel feature is available if the Running Light connections are made.

**Q:** I have installed the Return springs. But now the turn signals will flash only if I hold the switch down. As soon as I let go of the lever, they stop flashing. What's wrong?

**A:** You have not made the Running Light option connections. Without the Running Light option hooked up, as soon as the turn signal switch comes to neutral, there's no continuity. ***signalMinder*** needs alternate paths, so it can supply the current to the turn signal bulbs

**Q:** I have installed the Return springs. But the switch is too hard to push in both directions. I am afraid of breaking it. How do I fix it?

**A:** If too much force is required to push the lever in and activate the turn signals - either the spiral spring is not fully collapsing by nesting inside each turn or the tolerance of your switch is too tight. Try using the foam plugs instead of the metal springs.

**Q:** I have installed SM-3R. Since it is already pre-connected for the running lights, all I had to do was to hook-up the brake input. Do I still have to modify the handlebar switch?

**A:** You don't have to, but modifying it will make the entire turn signal system on your bike fully automatic. You will not have the hassle of canceling the switch at all.

**Q:** I have hooked-up the brake override wire on my SM-6. But it doesn't seem to extend the time-out even if the brakes are applied. There's only that option to connect, why doesn't it work?

**A:** The Brake Override has a high trigger voltage of 12.3V at the input. If you test it with the engine running, there should be sufficient voltage to trigger the override feature.

**Q:** I have installed SM-3S on my BMW F650 and have hooked-up all options. I am having difficulty with installing the return springs. Examples shown in the booklet do not match my handlebar switch.

**A:** Unfortunately the internal sliding block of the F650 switch rotates instead of moving linearly. This makes installing two opposing springs difficult. Using high-density foam has worked for some owners.

**Q:** I can't keep the coil springs from sliding down in the cavities of the handlebar switch. The cavities are open, they do not have plastic cap at the bottom. When the springs slide down, they cause a short and then the fuse blows. Can I use the foam plugs? Are they sturdy for the job?

**A:** On some of the Honda VTX models, the switch cavity does not have the bottom protective cap. Therefore if the metal springs falls toward the bottom, it can cause a short and blow the fuse. Please use the foam plugs. They are non-conductive and durable to suit this application.

**Q:** Every time I activate the 4-Way flash on my bike, the fuse blows. Is the ***signalMInder*** shorting out?

**A:** Many bikes do not have a 4-Way flash switch, so the turn signal fuse may be small, such as 5A. With all 4 bulbs flashing, the fuse should be increased to 7.5A or 10A.

**Q:** I like the Brake Flash idea but all four turn signals flash if I use it. I don't think the front turn signal should flash. Is there a way around this?

**A:** Unfortunately the front and rear turn signal bulbs for each side are wired together on the bike. So, ***signalMInder*** cannot selectively flash half of a connected circuit.

**Q:** I have everything hooked-up and every option seems to be working. Occasionally the left side flashes once or twice when I switch to the right. And then the right side starts. Also sometimes it gets into the 4-Way flash mode even though I only used the right turn switch. Does this unit have a mind of its own?

**A:** You most likely have a SINGLE dash indicator on your bike. It is acting like a bridge between the right and left channels. If you remove the instrument style bulb of the dash indicator, this interaction will go away. You can replace that incandescent bulb with a 12V LED equivalent.

**Q:** I have hooked up the SM-3R and everything works but only one dash indicator flashes. How can this be fixed?

**A:** Make sure that DIP Switch #4 is OFF since you have two separate dash indicators on your bike.

# LIMITED WARRANTY

***Kisan*** warrants this product to be free of manufacturing defects for a one-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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