Electronic Cruise Control for **INDIAN Scout - Throttle-By-Wire**



The following provides a brief description of the power consumption and component locations of the MotorCycle Setup electronic cruise control.

Installed weight of the cruise control is approximately 1.0kg.

Current draw is approximately 0.20 to 0.40 amp (2~4 watts).

By comparison, a head light bulb typically draws about 4 amps (55 Watts), and a taillight bulb (running light) draws about 0.4 amp (5 Watts).

Refer to the line drawing on the back of this sheet to identify the components from the numbers in the text.

Cruise Computer mounting options

This photo shows the frame mounted computer on the left side of the bike.

The bracket is attached to a threaded hole in the frame that is there for crash bar fitment.



The photo above shows this **computer mounting bracket (2a)** below, which positions the cruise computer against the frame.





There is also a **computer mounting bracket (2b)** available for bikes fitted with crash bars that still uses the threaded hole in the frame. This bracket positions the computer away from the frame to allow space for the crash bar mount.





The bracket has a slotted mounting hole to allow for various designs of crash bars. The slot allows the computer to be moved in or out further from the frame so it can clear the crash bar mount. The closest gap possible with this bracket is roughly 20mm or 3/4" (photo below left), the largest gap possible is roughly 35mm or 1 3/8" (photo below right). This range should allow the cruise computer to be fitted with most, if not all crash bar mount designs.





This photo shows a typical crash bar on a Scout, the mounting bracket above allows the cruise control computer to be fitted with this type of crash bar, using the same mounting bolt as the crash bar.

If the distance from the face of the frame to outside of the curve on the crash bar mount is less than 35mm or 1 3/8", then this mounting bracket should fit.

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You must select which of these two mounting methods you want for your cruise control, Frame mount without crash bars or Frame mount with crash bars.

Suitable mounting hardware, bolt &washer, for the chosen bracket is supplied in the kit.

Control Switch Options (next page).

The photo below left shows the current **Above Bar Mirror Stalk Mounted Control Switch (3)** mounted on the standard mounting bracket for this bike. The mounting bracket is mounted on top of the mirror mounting post. A bolt and washer are provided to mount the switch, or if a mirror is fitted the mirror is used to mount the bracket. This type of control switch will be available until late in 2020.

The other photos below show the **New Control Switch** which will replace the existing switch. The switch is the same size and fits on the same mounting brackets, but it is a new design to replace the existing switch. The button positions are the same as the previous switch, so the button with the circle is the SET/ACC button, the dot is the RES/DEC button and the third button is the ON-OFF-COAST button. The round 'button' on the right end is the indicator light.





The alternative **Above Bar Control Switch (4)**. This bracket fits into the clutch lever handlebar mounting clamp. This places the switch lower and closer to the bike's switch block compared to the mirror mount. This switch mounting does not use the mirror mount. This mounting will not be available until the new control switch is released.



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The New Slim Control Switch (6) mounts in the same way as the below bar switch shown above, but this switch is more compact and less obvious on the bike.

This switch is usually mounted vertically on the bike's handlebar, and the button with the circle is normally the SET/ACC button and the dot is the RES/DEC button for vertical mounting. It is not possible to mount the switch vertically on this bike.

For this type of mounting when the switch is horizontal, the programming of the cruise control computer is changed so the SET/ACC button is the first button with the dot, and the RES/DEC button is the second button with the circle.

All these switches have back lit buttons for night use, and an indicator light for power (ON-OFF) and engaged indication.

Switch wire length options.

The standard switch wire for the Scout is 90cm or 35" long from the back of the switch to the connector.

Use a piece of wire or string to measure the wire length you will need following the routing in the photos below.

The standard computer mounting on the frame leaves roughly 30cm to 40cm or 12" to 16" of wire available from the top of the upper triple clamp (triple tree) indicated by the left arrow to the back of the control switch shown by the right arrow, on top of the mirror mounting post on the clutch lever assembly.

If your measured length is less than 40cm, the standard 90cm switch wire will be enough for any of the switch options. If the bike has higher bars you will need the longer switch wire.

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The switch wire is routed up from the computer on the left side of the bike up to the bike's harness on the left side of the steering head, then up to the upper triple clamp (triple tree).

If the wire is routed behind the triple clamp (right arrow), there is roughly 40cm or 16" of wire left available from the top of the triple tree to the back of the control switch.

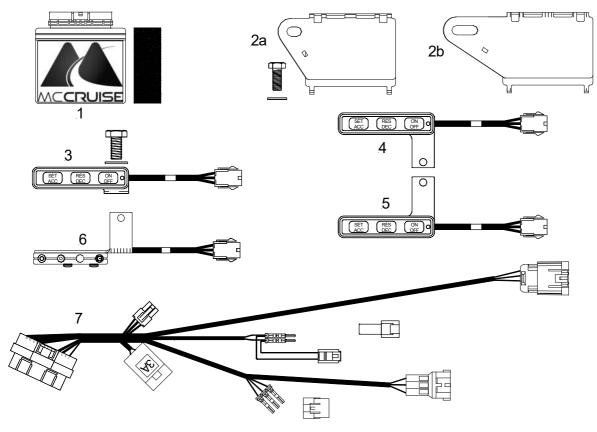
If the wire is routed around the front of the triple clamp (left arrow) there is only about 30cm (12") left to reach the control switch.

If your measured length is more than 40cm (16"), you will need to specify that you need the longer control switch wire (160cm, 63") in the notes section when you place your order.



The Wiring Harness (7) has the same type of plugs or terminals that are already used on the motorcycle. Power and CAN-BUS signals are sourced from the bike's CAN-BUS diagnostic plug. Brake sensing for the cruise control is sourced from the bike's front brake light switch connection. This connection is used to get a direct brake signal to the cruise control for safety purposes. Road speed signal, tach (engine speed) signal, front and rear brake signal and clutch operation signal are all sourced from the bike's CAN-BUS system. Tach signal is used to disengage the cruise if the engine revs vary from gear change or clutch slip. If the clutch is fully disengaged, the cruise detects this instantly. The cruise control connects the bike's Accelerator Position Sensor (APS). This connection is used to operate the bike's throttle. The connectors, terminals and seals used on this harness are the same type as used on the motorcycle's original connectors to ensure that an OE quality connection is maintained. There is no cutting or splicing of wires required anywhere in the installation of the cruise control kit.

NOTE: - If the bike is fitted with a fuel monitor or other type of CAN-BUS dongle, make sure you purchase the CAN-BUS dongle patch with the cruise control kit. This will allow connection of the cruise control AND the dongle to the bike's diagnostic plug. See over the page for more detail.



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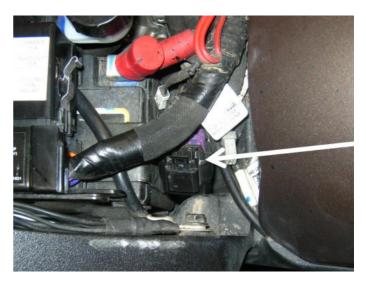
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How to determine if you need a CAN-BUS Dongle Patch.

Remove the rider's seat. To do this, pull up the front edge of the seat to disengage the post and grommet fastener, then pull the seat forward to release the tabs on the back of the seat.

The bike's diagnostic plug is in the left rear corner of the under-seat compartment (left photo below - arrowed). The photo below right shows the diagnostic plug. Lift the plug out of the cavity.





This shows the bike's diagnostic plug, fitted with a 'dummy cap'. There are only wires in one end of the plug, the opposite end has a blanking cap fitted.

If your bike has this blanking cap fitted OR nothing fitted to the plug (the cap has been lost), you do NOT need to purchase the CAN-BUS Dongle Patch with your cruise control kit.

If the diagnostic plug has another plug fitted to it with wires coming out as shown here, you MUST purchase the CAN-BUS Dongle Patch with your kit, so that the cruise control AND the other device can both be fitted and connected to the bike's diagnostic plug.





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