

# CANSHIFT Shifter Installation and Operating Instructions



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## Introduction:

Please read these instructions before beginning the installation and operating your vehicle with CANSHIFT.

CANSHIFT is uniquely programmed to work with specific vehicles. If your shifter does not appear to work properly after installation, or you have any questions, please email for assistance without attempting any modifications.

Note that CANSHIFT *only* sends a shift request to the vehicle ECU. The response to the shift request may not be immediate, and in some situations may not happen at all. CANSHIFT is not at fault in the event of a delay or no-shift. Vehicle speed, engine load and RPM are all inputs the ECU uses to determine if a requested shift is possible. Although there are numerous fail-safes built into the shifting logic, recommended shift points should be observed to prevent unwanted behavior or damage. The number of gears in your transmission will vary based on model. CANSHIFT will not request a gear higher than your vehicle supports.

**Important:** Not all transmissions support engine braking in lower gears (4r70/75 for example). If 1<sup>st</sup> or 2<sup>nd</sup> gear is requested, and there is no throttle applied, the engine rpm will drop as if the transmission is in neutral. This is normal operation. If this happens, gradually apply throttle until the engine speed matches the transmission speed.

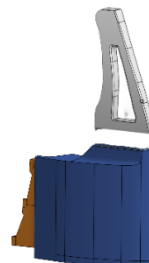
## What's Included:

- **Computing module** – To connect CANSHIFT, plug in the cable into the OBD-II port on your vehicle. Use the supplied adhesive to mount the module in an easy to see location. The display will constantly update with the status of the system and the current vehicle gear.



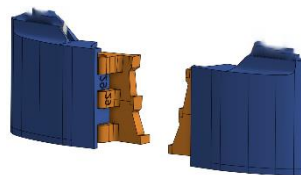
## ▪ Paddle Box Extensions (Paddles)

The kit comes with 2 colored paddles (shown in grey). They are designed to be easily removed or changed as different styles become available. To remove the paddle from the paddle box, carefully slide the paddle towards the hinge (Fig 4). Installation is the opposite.



## ▪ Wireless Paddle Assembly

Before applying the adhesive to the back of the paddle boxes, attempt to 'dry fit' them to the back of your steering wheel to find the best fit. The 3 "pegs" are used to align the boxes, and fit into the channel on the back of the steering wheel near the hub. We recommend (with the paddles snapped into the paddle box) installing the paddles so the tip of the paddle is just barely shown over the 9 and 3 positions on the steering wheel (see Figs 1-3). Press and hold the paddles on the steering wheel for 60 seconds to allow the adhesive to fully activate.



## Features:

- Designed to work in CAN-based Ford vehicles without any necessary modification to the factory powertrain
- Choice of 5 colors for the LED display
- 'On the fly' operation lets the user enable or disable the system with a single click of both paddles - allowing for complete manual control while retaining factory shift schedules
- Paddle shifters are designed to fit your specific vehicle, not a generic 'one size fits all'
- Wireless communication between paddle shifters and computing module
- Display will inform if up/down-shifts are successful
- Plug and play operation – no custom wiring or programming is required

## Operation:

1. When the ignition is turned to 'RUN', the display will scroll 'CANSHIFT' as the computing module initializes.
2. Immediately after initialization, the display will begin showing the current vehicle gear in the 4<sup>th</sup> digit.



3. The system can be enabled or disabled by pressing both paddles simultaneously until the current vehicle gear appears in the 1<sup>st</sup> digit. When this digit appears, CANSHIFT is enabled and the vehicle will stay in the current gear as long as it is deemed safe by the PCM, or an up/downshift is requested.



4. Once enabled, press the left paddle to request a downshift, and the right paddle to request an upshift. The 1<sup>st</sup> digit will update to the gear you have requested and the 4<sup>th</sup> digit will continue to display the current vehicle gear.
5. To disable, press both paddles simultaneously until the display starts the reset sequence. During the reset sequence, each segment will flash briefly. It takes about 5 seconds to return the ECU back to automatic mode. Once reset, the display will return to showing current vehicle gear in the 4<sup>th</sup> digit.

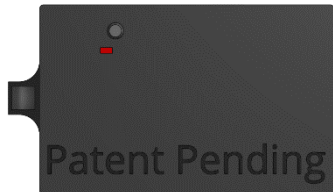
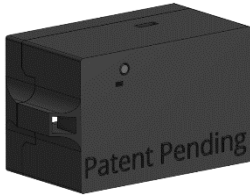
## Adjusting the Display Brightness

The display brightness can only be adjusted when the vehicle transmission is in park. With the ignition on, and the vehicle in park, press the upshift (right) paddle to increase the brightness, or the downshift (left) paddle to decrease the brightness. The brightness adjustment interval ranges from 0 to 7

## Pairing the Wireless Paddle Assemblies

The paddle assemblies come pre-paired and shouldn't require any pairing. If the paddles stop communicating with the computing module, follow these steps troubleshoot:

1. There is a small button and red LED on the back of the computing module. The red LED illuminates whenever it detects a paddle is pressed. If the LED does not illuminate when a paddle is pressed, first check that there is a new battery installed in the correct orientation. If the battery is new, proceed to Step 2.
2. To re-pair, press the button 8 times, making sure the red LED illuminates with each press. After the 8<sup>th</sup> press, the LED will flash 7 times and turn off.



3. After the LED flashes 7 times, wait 3 seconds and press the button one time and the LED will illuminate.
4. While the LED is illuminated, press one of the paddles one time.
5. The LED will flash 3 times and turn off signaling successful pairing.

## Installation Images

Figure 1.



Figure 2.



Figure 3.



Figure 4.

