

# Long Road Racing

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# 2019 ND2 Global MX-5 Cup Car Pit Lane Speed Installation and Operation Instruction

These instructions are valid for any 2019 spec ND2 build or ND2 conversion running the Bosch MS6 cup ECU.

#### **Required Parts:**

1. ND2 Pit Lane Speed Kit – Mazda P/N 0000-08-D233

## **Optional Parts:**

- 1. MPI Single External Button Holder: Mazda P/N 0000-10-5660-1B
- 2. MPI Dual External Button Holder: Mazda P/N 0000-10-5660-2B

#### Features:

- 1. Pit Speed Limit has 4 speed settings: 30mph, 35mph, 60kph, 45mph
- 2. AiM MXL2 Alarms can be set to show when pit speed is activated, and the speed activated.

### Installation:

#### Pit Speed Limiter:

- 1. Follow all safety standards and wear the appropriate safety gear.
- 2. Remove center console, and drill a 3/8" clearance hole next to the Parking Brake. Install rotary switch, take care to keep lock ring at position 4 during installation.





3. Run wires under center console, use zip ties to secure wire and provide strain relief.



- 4. Attach the On/Off button to the steering wheel using Max Papis Innovation Single or Dual External Button Holder.
- 5. Reinstall center console and connect 2 pin DTM connector from Pit Speed Harness to Pit Speed On-Off Button.
- 6. Connect 4 pin DTM connector from the Pit Speed Harness to the Pit Speed Inputs connector on the Bosch MS6 Cup Adaptor Harness. This connector is found under the right-side dash panel near the ECU connectors.



7. Secure excess wire as needed.

#### **Operation:**

To operate the pit speed selector select 1 of the 4 speed options: 1. 30 mph, 2. 35 mph, 3. 60 kph, 4.
45mph and then Click the On Button. All the way counter-clockwise is channel 1, and all the way clockwise is channel 4. If the AiM configuration has been updated with the LRR Base configuration there

will be an alarm to tell you that speed limit is set and which speed was selected. To change speeds simply adjust the rotary switch position. To disable, click the On/Off button.

- 2. Note that you will still have to decelerate to below the pit speed limit before engaging the limiter. If engaged while over the pit speed selected you will not be able to match rpms downshifting while slowing down because of the engine cuts happening to limit speed.
- 3. Be aware that if you are going downhill you may still be able to exceed the limit. The system is a driving aid, but it is still up to the driver to be aware of and control their speed.

#### Troubleshoot:

- Note that if the alarms in the Aim Dash are not corresponding to the pit speed toggling on and off, or the appropriate selection make sure that you are using the latest AiM configurations and Bosch ECU firmware from the Long Road Racing website. <u>https://longroadracing.com/race-cars/gmx5-nd2/nd2documentation/</u>
- 2. The AiM dash has no control over the pit speed, it is only an alarm to indicate when that it is or isn't engaged, so the alarms have to be set to match the Pit Speed settings in the ECU firmware. This has been preset in the standard configurations on the LRR website.
- 3. If the rotary switch is able to rotate to more than 4 positions, or less than 4 positions, the silver lock ring is out of place. Remove the rotary switch and replace ring as shown.



If you have any questions about this Technical Bulletin, please contact Glenn Long at: GLENN@LongRoadRacing.COM or 919-614-4797