

VBOX Mini Pit Lane Timer

(RLVBPITMINI)



Transform your pit stops with the VBOX Mini Pit Lane Timer!

This compact-pit lane timer is perfect for use in tight spaces, delivering instant driver feedback for optimized pit times and reduced risk of penalties.

Its high-brightness colour LEDs provides real-time guidance on speed, and time in the pit lane, showing you to speed up, slow down or leave the pit box.

A summary of all pit stops is saved to the SD card for analysis after each session.



Display Modes

VBOX Mini Pit Lane Timer has different display modes depending where you are on the track.

1:06

Stint Time

When you are out on the track, the Pit Lane Timer will show your time from pit stop to pit stop.

44

Live Speed

When you enter the pit lane, the Pit Lane Timer will show your live speed value.

+ 0:16.1

Countdown Time

When you come to a stop in your pit box, the Pit Lane Timer then displays a countdown to when you should leave your pit box.

Features

- Helps to avoid pit stop penalties.
- Minimises the time spent in the pits.
- Prompts when to leave the pit box and warns if you are likely to cross the line too early.
- Easy operation
- Low power consumption: 1.5 W
- Multiple Mounting methods including standard 1/4-20 UNC threaded hole.

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LED Modes

After the counter has reached 0.00 and the vehicle moves out of the pit box, the LED's will either be OFF, GREEN or RED.

Slow down!



Under +0.5 sec.

Maintain speed!



+0.5 sec to +1.5 sec

Speed up!



Over +1.5 sec

When the LEDs are RED, the Pit Lane Timer will also sound a continuous beep.

Connectors

GNSS Antenna Connector - SMA

| | PIN | I/O | Function |
|--|---------|-----|--------------------------------------|
| | Centre | I | RF Signal / Power for active antenna |
| | Chassis | I | Ground |

Can, Serial and Power - Hirose

| | PIN | I/O | Function |
|--|-----|-----|----------|
| | 1 | I | RX |
| | 2 | O | TX |
| | 3 | - | Ground |
| | 4 | I/O | CAN LOW |
| | 5 | I/O | CAN High |
| | 6 | - | Power |

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General Specification

| Environmental and Physical | |
|----------------------------|-----------------------------------------------------------------|
| Unit Connection | 1x HR30 6w socket (Power & Data), 1 x SMA socket (GNSS Antenna) |
| IP Rating | IP65 |
| Operating Temp | -20 to +70°C |
| Power | <1.5 W |
| Input Voltage | 7 – 30 V DC |
| Dimensions | 50 x 50 x 26.7 mm (exc. connectors) |
| Weight | 103 g (excluding cables and accessories) |



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GPS Specification

| Velocity | | Position | |
|-----------------------|-------------|--------------------------|-------|
| Accuracy ¹ | 0.18 km/h | 2D Position ² | 2.5 m |
| Units | Km/h or mph | Height | ±5 m |
| Update rate | 10 Hz | | |
| Maximum velocity | 1800 km/h | | |
| Minimum velocity | 0.1 km/h | | |
| Resolution | 0.01 km/h | | |

¹ 50% @ 30 m/s

² CEP (Circle of Error Probable), 50%, 24 hours static, -130 dBm, > 6 SVs

| Acceleration | | Heading | |
|--------------|--------|-----------------------|--------|
| Accuracy | 0.5 % | Resolution | 0.01° |
| Maximum | 4 G | Accuracy ¹ | ± 0.3° |
| Resolution | 0.01 G | | |

Software

| Windows software |
|---------------------------------------|
| Circuit Tools: Data analysis software |

Package Contents

| | Product Code |
|------------------------------------------------------|--------------|
| VBOX Mini Pit Lane Timer unit | VBLAPMINI-V1 |
| External GPS/GLONASS Low Profile Antenna | RLACS262 |
| Lightweight Suction Mount | RLACS287 |
| 6-Way Hirose to 12 V Cigar Lighter Power Cable (2 m) | RLCAB165 |
| 8 GB SD Ultima Pro Memory Card | RLACS313 |