# **VividCAN**

# **Low-Cost CAN Display with Customizable Touchscreen**

Intrepid's VividCAN is a versatile CAN tool with a customizable, full-color capacitive touchscreen. With the VividCAN you can create your own field service tool or driver's aid, or create a customized display tailored to engineers, managers or hobbyists.

# **Applications**

- Field service tool with a simple touchscreen
- Field diagnostics, such as factory resets, configurations and localizations
- Driver's aid for displaying drive profiles compared to actual values
- Management / executive display



# **Customizable Touchscreen**

The touchscreen can be customized by creating a Vehicle Spy Graphical Panel and downloading it into the VividCAN. The panel's controls will be visible on the VividCAN, and controls like buttons selectable via its touchscreen interface. You can also display live CAN signal values. Additional functions, such as diagnostics, message decoding, and message transmitting, can also be included. Each VividCAN device supports up to 16 Graphical Panels.



# **Key Features:**

- Highly responsive 60 FPS display
- Capacitive display technology for easy and reliable operation
- Simple to configure with Vehicle Spy software
- Very quick startup (under 500 ms) with auto wakeup and startup features
- Integrated IMU
- Less attractive to thieves than a tablet or laptop

# **Customizable Display Tool**

Use Vehicle Spy to create a custom display and interface for the VividCAN. The Log Data Function Block allows a list of strings to be displayed containing CAN message signal data. Choose from a subset of Graphical Panel controls: text boxes, LEDs, bar graphs, gauges, start/stop buttons, transmit buttons, and more. The Graphical Panel controls and layout will be reformatted to suit the VividCAN's smaller screen. Now you can bring your Vehicle Spy setup with you in the car, with the low-cost, fast-booting VividCAN!





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### **Using VividCAN**

The color display works with our customizable CoreMini scripting engine to run Graphical Panels and scripts standalone in the device, giving you access to Vehicle Spy's advanced operations when you take the VividCAN in the car with you. The VividCAN can also be used as a bench tool, enabling you to transmit and receive live on the CAN network without using a PC. The device includes CAN switch support, allowing it to be configured to use HS CAN, LSFT CAN or SW CAN.

The two main methods of displaying customized information on the touchscreen are:

- Log Data: CoreMini Function Block action
- Graphical Panels: Set up in Vehicle Spy

#### **Fast Boot!**

Because the VividCAN runs without an operating system, the device starts up in firmware and even loads a CoreMini in less than one second. No more waiting for an expensive tool to start up while your CAN network already has messages being sent!

# Ready to Work When You Are

The VividCAN has a large internal flash memory that stores device settings and applies them at boot time. Parameters such as LCD brightness, color theme and the last viewed page are saved automatically. The next time the VividCAN boots up, it will pick up right where you were when you last used the device.

#### **Features**

- Color display: 480x272, 16-bit color
- · Capacitive touchscreen with 5-point multi-touch
- Instant feedback and interactivity
- Up to 16 Graphical Panels, each with up to 64 controls (subject to change and limited to overall 64 kB CoreMini size)
- HS CAN, LSFT CAN, or SW CAN, selectable via CAN switch
- · Transmit and receive through Vehicle Spy or CoreMini
- · CAN termination toggle, set in software
- · DB-9 to OBD-II connector
- Micro-USB for PC connection to Vehicle Spy
- RAM mount compatible for in-car mounting
- Battery-backed real-time clock (RTC)
- · Audible feedback from a 5V buzzer

#### Features integrated with Vehicle Spy

- · Connect to Vehicle Spy over USB
- · Run CoreMini standalone on the device
- · Show real-time data from CoreMini Log Data function
- · Port Graphical Panels to your VividCAN
- · 4 on-screen switches for input to CoreMini
- 1 audio-buzzer configured as PWM Output 1

#### **Ordering Information**

Part Number	Description	
VIVIDCAN	VividCAN device	

Specifications subject to change; please contact Intrepid for the latest information. All trademarks are the property of their respective owners.

#### **Device Specifications**

- Low power consumption: 175-225 mA during general use, dependent on LCD screen brightness setting
- Power supply: 5-40V operation
- Temperature range: -40°C to +70°C (with display)
- · One-year limited warranty
- · Field-upgradeable flash firmware
- Microsoft-certified USB drivers

#### **Network Specifications**

- 1x HSCAN TJA1043 transceiver, speeds up to 1 Mb/s
- 1x LSFTCAN TJA1055 transceiver, speeds up to 125 kb/s
- 1x SWCAN MC33897 transceiver, low or high speed modes (33 kb/s or 83.33 kb/s)
- CAN switch multiplexer: software-controlled selection of 1 CAN network

#### 26-Pin Connector Pinout

Pin	Description	Pin	Description
1	SWCAN	6	GND
2	HSCAN L	7	HSCAN H
3	GND	8	LSFTCAN H
4	LSFTCAN L	9	VBATT
5	GND		

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