



BBX Version 3.2

General Description

BBX is a wireless GPS unit with AVL (Automatic Vehicle Location) capability. The unit has been designed for use with a Computer Aided Dispatch system to monitor fleet vehicles on the road. It can interface with several different RF Data Modems or a Conventional radio system. As well, the device has multiple vehicle inputs and can attach to several different peripheral devices via RS232 or USB communication.

- 16Mb of Flash (Expandable to 80 Mb)
- 8Mb of RAM
- Voltage output on RS232 (5V or Vswch)
- USB Device controller
- Built in odometer signal conditioner
- Software selectable pull up or pull down on VEH-I4 and VEH-I5
- 16 channel GPS receiver
- Optional internal wireless modem (Spread Spectrum, 1xRTT, Mobitex, Datatac, iDEN, 802.11b)
- J-1708 and J-1850 Capability

Compliance and Tested

- FCC part 15, Class A
- Tested for ISO 7637-1 Load Dump Transient (Test Pulse 5) - Class D at +85V

Standard Features

- 2 Analog Inputs
- 3 Biased Analog Inputs
- 4 Open Drain Digital Outputs
- 2 Additional I/O

Key Specifications

- Supply Voltage

| | |
|---------|------|
| Typical | 12 V |
| Min | 9 V |
| Max | 32 V |
- Current Consumption¹

| Input | Current Draw (mA) | | |
|-------|-------------------|--------|--------------|
| | Standby | No DSP | DSP Equipped |
| 9 | 2.5 | 108 | 165 |
| 18 | 5 | 57 | 90 |
| 32 | 10 | 36 | 60 |

Maximum² 2A

- Operating Temperature

| | |
|-----|--------|
| Min | -30 °C |
| Max | 65 °C |
- Storage Temperature

| | |
|-----|--------|
| Min | -40 °C |
| Max | 80 °C |

Optional Features

- Internal 16 Channel GPS receiver – Requires Active GPS Antenna
- Internal Wireless Data Modems
- 4800 – 9600 bps Modem

1. No modem option or peripheral devices are included in these numbers. Installing a modem and peripheral devices will increase current consumption considerably.
2. This is an absolute maximum which includes an installed modem and all peripheral devices

WARNING

MENTOR ENGINEERING INC. RESERVES THE RIGHT TO CHANGE CIRCUITRY AND SPECIFICATIONS WITHOUT NOTICE AT ANY TIME. PLEASE ENSURE YOU HAVE THE MOST RECENT REVISION OF THIS DOCUMENT.

NOTE

OPERATION AT TEMPERATURES OUTSIDE THE RECOMMENDED RANGES IS NOT RECOMMENDED.

NOTE

ONLY USE MENTOR ENGINEERING APPROVED CABLES FOR INSTALLATION PURPOSES. REFER TO THE HARDWARE INSTALLATION MANUAL FOR ADDITIONAL INFORMATION.
