Dogcatcher

User's Guide

For Better Automation

Quick Start

1) *Set your transmit unit to 9600 baud, 8 bits, no parity bits, 1 stop bit. Disable flow control, if necessary.*
2) *Plug dogcatcher into transmit unit. In general, use a straight cable, or see Pinout section for details.*
3) *Power the dogcatcher with the power supply included in the kit or with dc voltage between 8 and 30 volts.*
4) *Ensure green LED is blinking or on, which means power is good. If the LED is not blinking and you used your own power supply, ensure that you did not reverse power and ground.*
5) *Plug in memory stick.*
6) *Any time the red LED is not solid on, you may remove and / or replace the memory stick.*
7) *The data may be read from the stick by any computer with a USB port.*

Introduction

The dogcatcher is a serial data logger. It is designed to be easy to use without configuration. Data is stored on a standard memory stick. The serial port is set to industry standard 9600 baud, 8 bits per character, no parity, one stop bit. The Dogcatcher is designed for use where the a computer would be insecure, too expensive, too large or impractical.

Specifications

- Input voltage: 8VDC-30VDC
- Input current: Internally fused at 0.75A. Actual current draw depends on memory stick used.
- Communication settings: 9600 baud, 8 bits per character, no parity, 1 stop bit, no flow control. RS232 standard voltages.
- Writes data after 64 bytes received, or 7 second timeout between received bytes.
- Flash drive must be formatted for the FAT file system with a cluster size of 512 bytes. The majority of flash drives satisfy these requirements. Security enabled drives are not supported.

Output

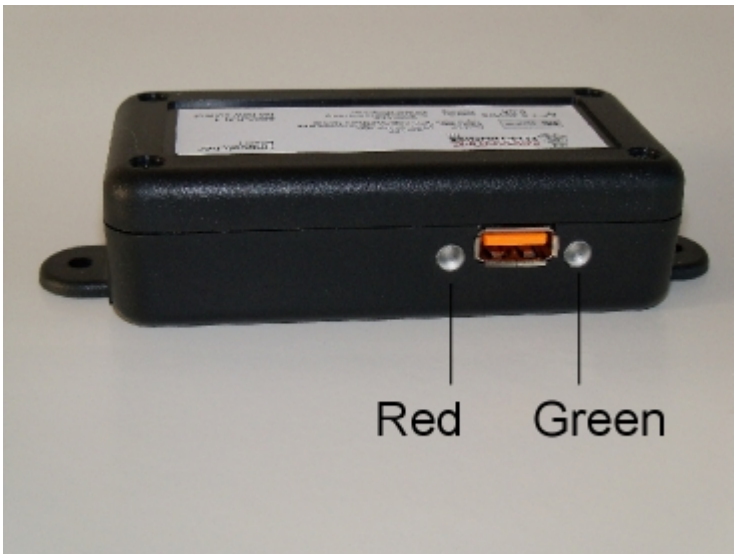
The Dogcatcher writes data to the USB stick exactly as it is received over the serial port. Tab delimited data remains tab delimited. Comma separated data remains comma separated. Images and other binary files will be uncorrupted. Because the Dogcatcher is not aware of the type of data passing through it, the user must rename the output file, CAPTURE.TXT to the type of file sent. Data is written to the file CAPTURE.TXT on flash drive, or if that file is present, data is appended to the end of the file.

Pinouts

RS-232 Pinout	
Dogcatcher	Computer, PLC or Controller
Pin 3 RX	Pin 3 TX
Pin 5 Ground	Pin 5 Ground

Power Cable Pinout	
Ground	Outer contact
Power, +8VDC to +30VDC	Inner contact

LED Blink Codes



Green LED	
Solid off	No Power
Slow blink	Unit powered on, no flash drive detected. Flash drive needs to be formatted for FAT filesystem with a cluster size of 512 bytes. The majority of flash drives satisfy these requirements off the shelf. Security enabled drives are

	not supported.
Solid on	Flash drive is detected. Dogcatcher is ready to log data.

Red LED	
Solid on	Data file on flash drive is currently open. DO NOT REMOVE FLASH DRIVE at this time or data loss is guaranteed and file system corruption is possible. Approximately 7 seconds after the Dogcatcher stops receiving data the file will be closed and you can remove the flash drive.
Rapidly blinking	Data has been sent and buffered, but there is no recognizable flash drive present. Data will continue to be buffered until a flash drive is inserted. If the 13kB buffer overflows, the oldest buffered data discarded in favor of newer data.
One blink and pause	Data buffer has been overrun. This could happen if there is something wrong with the flash drive, or the flash drive is badly fragmented. It is recommended that the flash drive is blank.
Two blinks and a pause	Flash drive is full.
Three blinks and a pause	Flash drive or CAPTURE.TXT is set to read only.
Five blinks and a pause	Communications error. Try replacing the serial cable from your equipment to the Dogcatcher. If necessary use a shielded cable. Also ensure you are set to 9600 baud, 8bit data, 1 stop bit and no parity
Six blinks and a pause	Please do not place the Dogcatcher too close to sources of electrical noise. If the unit is not close to any sources of electrical noise, please contact Brigantine Electronics for a replacement unit.
Seven blinks and a pause	Hardware error; power cycle the unit. If problem persists, contact Brigantine Electronics for a replacement unit.

FCC Compliance Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This

equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
Reorient or relocate the receiving antenna.
Increase the separation between the equipment and receiver.
Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
Consult the dealer or an experienced radio/TV technician for help