

# **DEV CIRCUITS DC-BLE-1 Covers Firmware Revision Owner's** Manual

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**DEV CIRCUITS** 

DC-BLE-1

Manual Revision: 2022-09-20 **Covers Firmware Revision:** DC-BLE-1: v1.20

Covers PCB Revision: C

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# **SPECIFICATIONS**

Test setup	
Chip	nRF52832 QFAAEO
Softdevice	s132 6.1.0
Voltage	10 V
Regulator	DCDC
BLE event details	
Interval	9005.00 ms
Len th	3.63 ms
Data transmission	
On air data rate	I Nibps

### **Current consumption**

BLE event total charge 8.78 PC LE clock calibration current 1.0 pA Idle current 2.4 pA Total average current 4.3 pA

### **GENERAL INFORMATION**

DevCircuits' DC-BLE-1 product will transmit a packet of data approximately every 9 seconds in the 2.4 GHz radio frequency band.

# PRODUCT PROGRAMMING

The DC-BLE-1 has no programmable parameters. Future features may be enabled/disabled by resistors R1 through R3 located on the component side of the printed circuit assembly.

## THEORY OF OPERATION

The DC-BLE-1 is comprised of a printed circuit assembly, several discrete components, a microcontroller, and a coin cell battery holder. It is powered by a 3V button cell CR-1025 battery. The PCB accepts power through a soldered Keystone battery holder located on one side of the device. The supply voltage can be in the range of 3.0 to 3.6 VDC. The main processing unit of DC-BLE-1 is the Nordic Semi nRF52832. It is a microcontroller with a 2.4GHz transceiver. Memory configuration is 192 Kbytes of Flash and 24 Kbytes of RAM. When the device is powered, it will begin to transmit a packet of data approximately every 9 seconds. Only soft device firmware provided by Nordic Semiconductor and firmware written by DevCircuits, LLC and its affiliates can be installed on the DC-BLE-1. The firmware for the DC-BLE-1 is solely controlled by DevCircuits, LLC., and is not distributed to end users. The DC-BLE-1 is housed in a weatherized, PCB/ABS hybrid enclosure and houses a tuned antenna inside.

## **FCC COMPLIANCE STATEMENT**

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

- 1. this device may not cause harmful interference, and
- 2. this device must accept any interference received, including interference that may cause undesired operation.

**CAUTION:** The grantee is not responsible for any changes or modifications not expressly approved by the party responsible for compliance. Such modifications could void the user's authority to operate the equipment.

**NOTE:** 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 the receiver.
- Connect the equipment to 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.

#### **FCC PACKAGE LABEL**

**GUNNY Gun Leash LLC** 

PRODUCT NAME: DC-BLE-1 PRODUCT MODEL: DC-BLE-1 This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

- 1. This device may not cause harmful interference, and
- 2. this device must accept any interference received, including interference that may cause undesired operation.

FCC ID: 2A8JQ-DCBLE1

## **CONTACT INFORMATION**

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## **Documents / Resources**

CIRCUIT'S DOME:

<u>DEV CIRCUITS DC-BLE-1 Covers Firmware Revision</u> [pdf] Owner's Manual DCBLE1, 2A8JQ-DCBLE1, 2A8JQDCBLE1, DC-BLE-1 Covers Firmware Revision, Covers Firmware Revision, Firmware Revision, Covers Revision, Revision, DC-BLE-1

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