# **Caveatron Hardware Version Code Description**

2019-11-06

Software Versions: 1.00 - 1.40

This is an 11 digit numeric code that defines the specific hardware components inside the Caveatron allowing for different hardware modules to be used with the same software. The table and list below describe what each digit of the code means and provides valid values for each parameter. Note that this list is only valid with the software versions listed above.

Character #	Value Range	Description
1	0-9	SD Card Data Storage
2	0-9	Display
3	0-9	Font/Graphics Storage
4	0-9	Laser Rangefinder
5	0-9	Compass
6	0-9	IMU/Gyro
7	0-9	Battery
8	0-9	Battery Gauge
9	0-9	Clock
10	0-9	Piezo Buzzer
11	0-9	Future Use

Example: 12221021110

## **SD Card Data Storage**

1 = SPI Mode SD Card on Arduino Due

## Display

- 1 = Original Coldtears 3.5" 480x320 LCD (With original Font IC. No longer produced legacy only)
- 2 = Updated Coldtears 3.5" 480x320 LCD (With new Font IC and using UTFT GHL library)
- 3 = Coldtears 4.0" 480x320 LCD (Uses UTFT\_CTE library)

## Font/Graphic Storage

- 1 = UTFT CTE font library
- 2 = UTFT\_GHL font library

## **Laser Rangefinder**

- 1 = Uni-T UT390B version with verbose output
- 2 = Uni-T UT390B version with normal version
- 3 = JRT 100 m Laser distance module

## Compass

1 = Pololu LSM303DLM, LSM303DLHC, LSM303D, AltIMU-10 v3, AltIMU-10 v4, or MinIMU-9 v3

#### IMU/Gyro

0 = None

# Battery

1 = 4400 mAh 3.7V Li-Ion

2 = 5200 mAh 3.7V Li-Ion

# **Battery Gauge**

1 = MAX17043 LiPo Fuel Gauge

2 = Sparkfun LiPo Battery Manager

## Clock

1 = DS3231 RTC

## Piezo Buzzer

1 = 1-3V directly driven Piezo Buzzer