Cansat Configuration - Canservationists

WARNING: Radio transmitter is connected to the hardware serial (pins 0, 1); so, before uploading a new software, radio has to be disconnected from pins (0,1). In addition, Serial monitor for the Arduino device is not possible (troubleshooting messages can be sent via the radio to the receiver).

1   CanSat Configuration

Sensor	Sensor Pin	Arduino Pin	Comment
GNSS	VCC	3.3V	
	GND	GND	
	TX	8	
	RX	9	
BMP280	VCC	3.3V	
	GND	GND	
	SCL	A5	
	SDI	A4	
	CS	-	
	SDO	-	
CCS811	RST	-	
	INT	-	
	WAK	-	
	SCL	A5	
	SDI	A4	
	VCC	3.3V	
	GND	GND	
APC220	GND	GND	
	VCC	5V	
	EN	-	
	RXD	1	Hardware Serial TX
	TXD	0	Hardware Serial RX
	AUX	-	
	SET	13	required only for configuration, not for operation
SD Card	GND	GND	
	VCC	5V	
	MISO	12	
	MOSI	11	
	SCK	13	
	CS	10	
Buzzer	+	3	(over a resistance)

2   Radio Receiver

APC220   **Arduino Uno**

VCC   5V

Radio Tx   pin 8

Radio Rx   pin 9

3   Set Up for Radio Configuration

APC220   **Arduino Uno**

VCC   5V

Radio Tx   pin 2

Radio Rx   pin 3

SET   Pin 13

Note the connection of SET to pin 13 for configuration purposes only.