

## USB/Bluetooth LoRa Serial Protocol

Notebook: daveakerman's notebook

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URL: <https://github.com/daveake/LoRaArduinoSerial/blob/master/LoRaArduinoSerial.ino>

### Commands ~<char><parameter>

Function	Command	Parameters	Response	LoRaArduinoSerial	LoRaBluetooth
Set Frequency	~F	Frequency in MHz	* Frequency=xxx	Yes	Yes
Set Mode	~M	Mode 0-7	* Mode=x	Yes	Yes
Set Bandwidth	~B	Bandwidth 7K8, 10K4, 15K6, 20K8, 33K25, 41K7, 62K5, 125K, 250K, 500K	*	Yes	Yes
Set Error Coding	~E	Error Coding 5-8	*	Yes	Yes
Set Spreading Factor	~S	Spreading Factor 6-12	*	Yes	Yes
Set Implicit/Explicit Mode	~I	Not-Zero = Implicit; 0=Explicit	*	Yes	Yes
Set Low Rate Optimisation	~L	Not-Zero = On; 0=Off	*	Yes	Yes
Get Device	~D		* Device=XXXX	V2.0	V2.0
Get Version	~V		* Version=XXXX	V2.0	V2.0
Transmit Text	~T	Text to Transmit	* Tx=ON Tx+OFF	V2.0	V2.0

### Transmissions <command> = <value>

Command	Parameters	When	LoRaArduinoSerial	LoRaBluetooth
Device	Device Name	~D	AVR LoRa USB Receiver	ESP32 LoRa

				BT/USB Receiver
Version	Version Number	~V	2.01	2.0
Tx	ON   OFF	~T	Yes	Yes
CurrentRSSI	RSSI integer	Periodic	Yes	Yes
CRC	OK   Fail	After Rx	Yes	Yes
Frequency	frequency	~F	Yes	Yes
Mode	mode	~M	Yes	Yes
FreqErr	float error in kHz	After Rx	Yes	Yes
PackertRSSI	RSSI integer	After Rx	Yes	Yes
PacketSNR	SNR integer	After Rx	Yes	Yes
Message	Received String	After Sentence Rx	Yes	Yes
Hex	Received binary as hex	After Binary Rx	Yes	Yes
GPS	hh:mm:ss,la,lom,alt,speed,direction,sats	Every 1s		TTGO T-Beam Only