

Repeater Serial Protocol

Notebook: daveakerman's notebook

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

Commands ~<char> <parameter> <char> Upper = Receive, Lower = Transmit

Function	Command	Parameters	Response	LoRaRepeater	LoRaRepeaterTTGO
Set Frequency	~F / ~f	Frequency in MHz	*	Yes	Yes
Set Bandwidth	~B / ~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 / ~s	Spreading Factor 6-12	*	Yes	Yes
Set Implicit/Explicit Mode	~I / ~i	Not-Zero = Implicit; 0=Explicit	*	Yes	Yes
Set Low Rate Optimisation	~L / ~l	Not-Zero = On; 0=Off	*	Yes	Yes
Set PPM	~P	PPM float	*	Yes	Yes
Set Repeating	~R	Non Zero = Enable Repeating	*	Yes	Yes
Store Settings	~!		*	Yes	Yes
Show Settings	~?		* One line per value (see values below)	Yes	Yes
Set Defaults	~*		As for Show	Yes	Yes

			Settings		
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Transmissions <command> = <value> (Some prefixed with Rx or Tx)

Command	Parameters	When	LoRaRepeater	LoRaRepeaterTTGO
CurrentRSSI	RSSI integer	Periodic	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
PPM	PPM float	After ShowSettings or Set Defaults	Yes	Yes
Rx/Tx Frequency	Frequency MHz	After ShowSettings or Set Defaults	Yes	Yes
Rx/Tx Implicit	Implicit=1 Explicit=0	After ShowSettings or Set Defaults	Yes	Yes
Rx/Tx ErrorCoding	Error Coding integer	After ShowSettings or Set Defaults	Yes	Yes
Rx/Tx Bandwidth	Bandwidth float	After ShowSettings or Set Defaults	Yes	Yes
Rx/Tx SpreadingFactor	Spreading Factor integer	After ShowSettings or Set Defaults	Yes	Yes
Rx/Tx LowDataRateOptimize	1=On, 0=Off	After ShowSettings or Set Defaults	Yes	Yes

EnableRepeater	1=Enabled	After ShowSettings or Set Defaults	Yes	Yes
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