ERASynth Micro: USB-Powered, Low-Priced, Open Source, RF Signal Generator

COMMAND LIST

ERASynth Micro Command List

- **COM Port Baud Rate: 9600 bps**
- **Connection must be made with RTS/CTS flow control.**
- **All commands have to be sent with carriage return.**

Command	Name	Details
>SF1	RF ON	
>SF0	RF OFF	
>F{0}	Frequency in Hz	{0} should be replaced by an integer number e.g. >F100000000 sets 100 MHz
>SA{0}	Amplitude in dBm	{0} should be replaced by a decimal number e.g. >A-15 sets -15 dBm. Resolution is 1 dB.
>SM1	Modulation ON	Turns modulation on
>SM0	Modulation OFF	Turns modulation off
>SMI0	Modulation Source: Internal	Sets modulation source as Internal
>SMI1	Modulation Source: External	Sets modulation source as External
>SMI2	Modulation Source: Microphone	Sets modulation source as Microphone
>SMT0	Modulation Type: AM	Sets modulation type as AM
>SMT1	Modulation Type: FM	Sets modulation type as FM
>SMT2	Modulation Type: Pulse	Sets modulation type as Pulse
>SMW0	Wave Type: Sine wave	Sets internal modulation wave type as Sine
>SMW1	Wave Type: Ramp wave	Sets internal modulation wave type as Ramp
>SMW2	Wave Type: Square wave	Sets internal modulation wave type as Square
>SMW3	Wave Type: Triangle wave	Sets internal modulation wave type as Triangle
>SMF{0}	Internal Mod. Freq. in Hertz	{0} should be replaced by an integer number e.g >SMF1000 sets 1 kHz
>SMA{0}	AM Depth	{0} should be replaced by an integer number e.g. >SMA20 sets 20% AM depth
>SMFD{0}	FM Deviation in Hertz	{0} should be replaced by an integer number e.g. >SMFD1000 sets 1 kHz FM deviation
>SMPP{0}	Pulse Period in us	{0} should be replaced by an integer number e.g. >SMPP1000 sets 1ms Pulse period
>SMPW{0}	Pulse Width in us	{0} should be replaced by an integer number e.g. >SMPW2000 sets 2ms Pulse width
>SS5	Sweep On	Starts sweep
>SS6	Sweep Off	Stops sweep
>SS70	Sweep Trigger: Freerun	Sets sweep trigger as Free run
>SS71	Sweep Trigger: External	Sets sweep trigger as External

>SS1{0}	Sweep Start Freq. in Hertz	{0} should be replaced by an integer number e.g. >SS1100000000 sets 100 MHz
>SS2{0}	Sweep Stop Freq. in Hertz	{0} should be replaced by an integer number e.g. >SS2200000000 sets 200 MHz
>SS3{0}	Sweep Step Freq. in Hertz	{0} should be replaced by an integer number e.g. >SS31000000 sets 1 MHz
>SS4{0}	Sweep Dwell Time in us	{0} should be replaced by an integer number e.g. >SS41000 sets 1ms
>SR0	Reference Source: Internal	Sets reference source as internal
>SR1	Reference Source: External	Sets reference source as external
>SES	EEPROM Save	Saves current settings to EEPROM.
>SEL	EEPROM Load	Loads the saved settings to the device.
>SEL1	Remember Last States ON	
>SEL0	Remember Last States OFF	
>SV0	Vibration OFF	
>SV1	Vibration ON	
>RT	Read Temperature in Celcius	Reads temperature of the ERASynth Micro
>RC	Read Current in Amper	Reads the current value drawn by the device.
Advanced Commands		
>GV	Vibrate the device for 30 ms.	
>GH	Updates LCD Home Page	*
>GR	Updates LCD Reference Page	*
>GD	Updates LCD Diagnostic Page	*
>GS	Updates LCD Sweep Page	*
>GM0	Updates LCD Modulation Page	*
>GM1	Updates LCD AM Modulation Page	*
>GM2	Updates LCD FM Modulation Page	*
>GM3	Updates LCD Pulse Modulation Page	*
>GE	Updates LCD Settings Page	*
>X	Puts ERASynth Micro into LCD Update mode.	This mode is transparent serial mode. ERASynth Micro acts as a bridge between host and LCD.
>SEA{0}	Sets current EEPROM address pointer.	{0} should be replaced by an integer number (16bit, Max 65535) e.g. >SEA15963 sets address to 15963. Index
>SER	Read from EEPROM with pointed address.	

>SEW{0}	Writes to EEPROM with pointed address.	First go to address. {0} should be replaced by an integer number (8bit, Max 255) e.g. >SEW186 sets 186 to the selected address

***Send these commands according to current page on LCD. Different page commands will cause abnormal behavior.**

EEPROM Allocation table is available at GitHub (erasynth-micro-eeprom repository)