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

# COMMAND LIST

# ERASynth Command List

- **COM Port Baud Rate: 9600 bps**
- **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 >M31000 sets 1 kHz |
| >SMA{0} | AM Depth | {0} should be replaced by an integer number e.g. >M520 sets 20% AM depth |
| >SMFD{0} | FM Deviation in Hertz | {0} should be replaced by an integer number e.g. >M41000 sets 1 kHz FM deviation |
| >SMPP{0} | Pulse Period in us | {0} should be replaced by an integer number e.g. >M61000 sets 1ms Pulse period |
| >SMPW{0} | Pulse Width in us | {0} should be replaced by an integer number e.g. >M72000 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 |
| | | |

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| >SS1{0} | Sweep Start Freq. in Hertz | {0} should be replaced by an integer number e.g. >S1100000000 sets 100 MHz |
|---|---|---|
| >SS2{0} | Sweep Stop Freq. in Hertz | {0} should be replaced by an integer number e.g. >S2200000000 sets 200 MHz |
| >SS3{0} | Sweep Step Freq. in Hertz | {0} should be replaced by an integer number e.g. >S31000000 sets 1 MHz |
| >SS4{0} | Sweep Dwell Time in us | {0} should be replaced by an integer number e.g. >S41000 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. |