

# MySondy Go API v2.3 (03/04/2021)

<http://mysondy.altervista.org/mysondygo.php>

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These protocols are valid for the Serial Port (9600,N,8,1) and the Serial over Bluetooth **from firmware version 2.3**

Connections can work simultaneously or singly.

[ ] Possible values

( ) Default value

## OUTPUT:

0/TYPE/FREQ/SIGN/BAT%/BATV/BUZMUTE/VER/o

1/TYPE/FREQ/NAME/LAT/LON/ALT/VEL/SIGN/BAT%/AFC/BK/BKTIME/BATV/BUZMUTE/RESER/RESER/RESER/VER/o

2/TYPE/FREQ/NAME/SIGN/BAT%/AFC/BATV/BUZMUTE/VER/o

(Bluetooth) 3/TYPE/FREQ/OLED-SDA/OLED-SCL/OLED-RST/LED-PIN/RS41-BAND/M20-BAND/M10-BAND/PILOT-BAND/DFM-BAND/MYCALL/FREQ-OFS/BAT-PIN/BAT-MIN/BAT-MAX/BAT-TYPE/LCD-TYPE/NAME-TYPE/BUZ-PIN/VER/o

(Serial) 3/TYPE/FREQ/OLED-SDA/OLED-SCL/OLED-RST/LED-PIN/RS41-BAND/M20-BAND/M10-BAND/PILOT-BAND/DFM-BAND/MYCALL/FREQ-OFS/BAT-PIN/BAT-MIN/BAT-MAX/BAT-TYPE/LCD-TYPE/NAME-TYPE/BUZ-PIN/VER/LCDON/BLUON/COM/BAUD/o

N° -> Identify string type [Appendix 1](0)

TYPE -> Type of probe [RS41,M20,M10,PILOT,DFM](RS41)

FREQ -> Active frequency [137.200 to 524.800](404.600)

NAME -> Probe name: Serial or APRS depend on NAME-TYPE, only if DFM -> DFMtype-name, ex. DFM6-12345678

SIGN -> Reception signal dBm

BAT% -> Battery charge level %

BATV -> Battery voltage mV

BUZMUTE -> Buzzer temporarily silenced [-1,0,1] (-1) -1: not installed depend on BUZ-PIN , 0:unmute, 1:mute

LAT -> Latitude X.XXXXX°

LON -> Longitude X.XXXXX°

ALT -> Altitude m

VEL -> Horizontal speed Km/h

AFC -> Automatic Frequency Correction value hz

BK -> Only for the RS41 burst killer status [0,1] 0:Off, 1:On

BKTIME -> Only for the RS41 burst killer timer in seconds

OLED-SDA -> SDA Oled Pin (21)

OLED-SCL -> SCL Oled Pin (22)

OLED-RST -> RST Oled Pin (16)

LED-PIN -> On board Led Pin (25)

RS41-BAND -> RS41 Rx Bandwidth [Appendix 2](1)

M20-BAND -> M20 Rx Bandwidth [Appendix 2](7)

M10-BAND -> M10 Rx Bandwidth [Appendix 2](7)

PILOT-BAND -> PILOT Rx Bandwidth [Appendix 2](7)

DFM-BAND -> DFM Rx Bandwidth [Appendix 2](6)  
MYCALL -> Call shown on the display [Max 8 characters](MYCALL) empty if hidden  
FREQ-OFS -> Frequency correction (0)  
BAT-PIN -> Battery measurement Pin (35) 0:no battery, icon hidden  
BAT-MIN -> Low battery value (2950) mV  
BAT-MAX -> Battery full value (4180) mV  
BAT-TYPE -> Battery discharge type [0,1,2](1) 0:Linear, 1:Sigmoidal, 2:Asigmoidal  
LCD-TYPE -> Display type [0,1](0) 0:SSD1306\_128X64, 1:SH1106\_128X64  
NAME-TYPE -> Displays the Serial or APRS name [0,1](0) 0:Serial, 1:APRS NAME  
BUZ-PIN -> Buzzer Pin (0) 0:No buzzer installed, else the Pin  
RESER -> Reserved for future use  
VER -> Firmware version  
LCDON -> LCD On or Off [0,1](1) 0:Off, 1:On  
BLUON -> Bluetooth On or Off [0,1](1) 0:Off, 1:On  
COM -> Serial Port [0,1](0) 0:tx pin 1 – rx pin 3 – USB, 1: tx pin 12 – rx pin 2  
BAUD -> Serial Port Baud Rate [0 to 5](1) 0:4800, 1:9600, 2:19200, 3:38400, 4:57600, 5:115200  
o -> End of string

## **INPUT:**

All commands are contained within two delimiters:

o{.....}o ("o" is the lowercase o character).

If the string does not begin with "o{" and does not end with "}o" the command is ignored.

Some commands can be sent simultaneously separated by "/".

### **Commands that can be sent simultaneously or singly:**

lcd -> Set LCD driver [0,1](0) 0:SSD1306\_128X64, 1:SH1106\_128X64 -reboot-

lcdOn -> Set LCD on or off [0,1](1) 0:Off, 1:On -reboot-

blu -> Turn bluetooth on or off [0:1](1) 0:off, 1:on -reboot-

baud -> Set the Serial Baud Rate [0 to 5](1) 0:4800, 1:9600, 2:19200, 3:38400, 4:57600, 5:115200 -reboot-

com -> Set Serial Port [0,1](0) 0:tx pin 1 – rx pin 3 – USB, 1: tx pin 12 – rx pin 2 -reboot- (3.3V logic)

oled\_sda -> Set SDA Oled Pin (21) -reboot-

oled\_scl -> Set SCL Oled Pin (22) -reboot-

oled\_rst -> Set RST Oled Pin (16) -reboot-

led\_pout -> Set on board Led Pin (25) set 0 to switch off -reboot-

buz\_pin -> Set buzzer Pin (0) 0:No buzzer installed, else specify the Pin, you can use Pin 4 -reboot-

rs41.rxbw -> RS41 Rx Bandwidth [Appendix 2](1)

m20.rxbw -> M20 Rx Bandwidth [Appendix 2](7)

m10.rxbw -> M10 Rx Bandwidth [Appendix 2](7)

pilot.rxbw -> PILOT Rx Bandwidth [Appendix 2](7)

dfm.rxbw -> DFM Rx Bandwidth [Appendix 2](6)

aprsName -> Set the Serial or APRS name [0,1](0) 0:Serial, 1:APRS NAME

freqofs -> Set frequency correction (0)

battery -> Set battery measurement Pin (35) 0:no battery, icon hidden -reboot-

vBatMin -> Set low battery value (2950) mV

vBatMax -> Set battery full value (4180) mV

vBatType -> Set battery discharge type [0,1,2](1) 0:Linear, 1:Sigmoidal, 2:Asigmoidal

myCall -> Set call shown on the display [Max 8 characters](MYCALL) set empty to hide: o{myCall=}o

ex. o{lcdOn=0}o turns off the display to save energy.

ex. o{lcdOn=0/blu=0/buz\_pin=0}o turns off the display, the bluetooth and the buzzer, the order of the commands is not important.

### **These commands can be sent singly or in pair:**

f -> Set frequency [137.200 to 524.800](404.600)

tipo -> Set type of probe [1 to 5](1) 1:RS41, 2:M20, 3:M10, 4:PILOT, 5:DFM

ex. o{f=404.2}o set the frequency to 404.2MHz

ex. o{tipo=2}o set the M20 probe

ex. o{f=404.35/tipo=1}o set the frequency to 404.350MHz and RS41 probe. Always first the frequency then the type.

**These commands MUST be executed singly:**

? -> Request for settings, the system will reply with the string starting with "3", note that the answer is different between Bluetooth and Serial.

Re -> Request for reset to default settings -reboot-

re -> Request for reboot -reboot-

mute -> Temporarily disable the buzzer [0,1](0) 0:unmute, 1:mute, has no effect if buz\_pin is set to 0

sleep -> Turn off the device with minimal power consumption [0 to ..] 0:It sleeps forever, physical reboot required, otherwise specify in seconds the time to wakeup

ex. o{Re}o reset all settings then reboot

ex. o{?}o request settings

ex. o{sleep=0}o Sleep forever, physical reboot required

ex. o{sleep}o Like sleep=0

ex. o{sleep=3600}o Sleep and wakeup after one hour

**NOTE:**

MySondy Go does not check the correctness of the parameters received, validate the parameters before sending them.

If MySondy Go receives incorrect parameters in rare cases it may stop responding.

To solve the problem you will need to reflash the firmware.

**Appendix 1**

0 -> No probe received

1 -> Probe receiving

2 -> Probe receiving (name only, coordinates are not available)

3 -> Settings, answer to the command "?"

## Appendix 2

0 -> 2.6 kHz

1 -> 3.1 kHz

2 -> 3.9 kHz

3 -> 5.2 kHz

4 -> 6.3 kHz

5 -> 7.8 kHz

6 -> 10.4 kHz

7 -> 12.5 kHz

8 -> 15.6 kHz

9 -> 20.8 kHz

10 -> 25.0 kHz

11 -> 31.3 kHz

12 -> 41.7 kHz

13 -> 50.0 kHz

14 -> 62.5 kHz

15 -> 83.3 kHz

16 -> 100.0 kHz

17 -> 125.0 kHz

18 -> 166.7 kHz

19 -> 200.0 kHz