## DIYDrones.com

## CheckSum calculator:

http://www.hhhh.org/wiml/proj/nmeaxor.html

-Change unit refresh rate:

```
$PMTK220,100*2F //Will set the GPS to 10hz (or updates every 100 milliseconds) 
$PMTK220,250*29 //Will set the GPS to 4hz (or updates every 250 milliseconds) 
$PMTK220,1000*1F //Will set the GPS to 1hz (updates every 1000 milliseconds)
```

You can set the GPS to any desired refresh rate, you change the value inside the string and generate a new check sum here: <a href="http://www.hhhh.org/wiml/proj/nmeaxor.html">http://www.hhhh.org/wiml/proj/nmeaxor.html</a>

```
-To change the baud rates:
```

```
$PMTK251,4800*14
$PMTK251,9600*17
$PMTK251,19200*22
$PMTK251,38400*27
```

You can also set the GPS to any desired baud rate speed by changing the value inside the string and generate a new checksum here: <a href="http://www.hhhh.org/wiml/proj/nmeaxor.html">http://www.hhhh.org/wiml/proj/nmeaxor.html</a>

-Enabling the custom binary protocol: \$PGCMD,16,0,0,0,0,0\*6A

**Customize Command Format** 

<sup>-</sup>To use NMEA and enable or disable string please refer to this table:

Customize Command Format			1 able 2	
Name	Example	Units	Description	
Message ID	\$PGCMD		Customize command header	
Command Number	16		This number represents which command is used	
Parameter 1:RMC	1		Period of RMC, 0~5. 0 mean to disable output	
Parameter 2:VTG	1		Period of VTG, 0~5. 0 mean to disable output	
Parameter 3:GSA	1		Period of GSA, 0~5. 0 mean to disable output	
Parameter 4:GSV	1		Period of GSV, 0~5. 0 mean to disable output	
Parameter 5:GGA	1		Period of GGA, 0~5. 0 mean to disable output	
Checksum <cr> <lf></lf></cr>	*6B		End of message termination	

Table 2

Example that will enable all the messages: \$PGCMD,16,1,1,1,1,1\*6B

<sup>-</sup>Note:

When using arduino environment you must add " $\r$ " at the end command each line, for example if you want to send the message "\$PMTK220,250\*29" to the GPS unit, it will be:

Serial.print("\$PMTK220,250\*29\r\n"); //This is correct

Serial.print("\$PMTK220,250\*29"); //INCORRECT!

For deeper information and more command examples please read the <u>official MTK</u> <u>command manual here</u>.