



Document Number		UGT3-0004	
Title		GPS Wiring for GT3 Cup cars	
Approved By			
Revision	Date	Prepared By	Change History
1.0	04/04/2013	Chris Brown	Initial release.

Introduction

The instructions herein are to detail the wiring modifications required for fitting a GPS unit into Porsche GT3 Cup race cars. Installation will vary with the model year of the Cup car,

Note: The ADL2 must have it's passwords cleared by PMNA in order to install and setup GPS modules.

There are three different GPS modules which you might have. Each one is pictured below. The dash setup is similar between all of them, but the wiring specifics will be different. Please follow this document closely.

Table of contents:

Pg 2 - Connecting the **M GPS L10**

Pg 3 - Connecting the **M GPS BL**

Pg 4 - Connecting the **RG GPS**, via RS-232 or CAN

Pg 5 - Configuring the Dash - **Part 1** - Adding in the GPS communications template

Pg 6 - Configuring the Dash - **Part 2** - Adding GPS channels into logging

Pg 7 - Configuring the Dash - **Part 3 OPTIONAL** - Setting up GPS Lap Timing beacons

Part Numbers for GPS modules

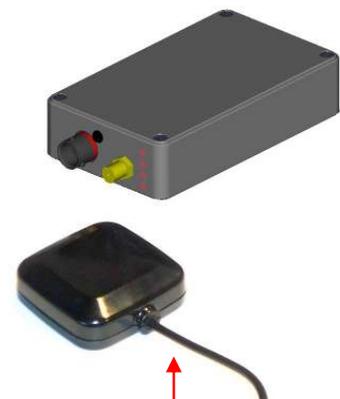
M GPS L10 10 Hz GPS
M GPS BL RaceGrade GPS
RG GPS RaceGrade GPS ver. 2



M GPS L10



M GPS BL



RG GPS



Connecting the M GPS L10

This GPS module provides excellent speed and heading data, but low accuracy positional data. The module is powered from a 5 volt supply. Please follow the instructions below for you model year.

2010-2013 GT3 Cup

1. Purchase wiring adapter, part # **M H GT3 GPS L10 #1**
2. Connect both the 6 way and 12 way black AMP connectors to their respective mating sides near the passenger foot well area.
3. Follow instructions below on configuring the dash.

2008-2009 GT3 Cup with TS Data connector

1. Purchase wiring adapter, part # **M H GT3 GPS L10 #1**
2. Connect the wiring adapter to both the 6 way and 12 way black AMP connectors near the passenger foot well area.
3. Follow instructions below on configuring the dash.

2008-2009 GT3 Cup without TS Data connector

1. Purchase wiring adapter, part # **M H GT3 GPS L10 #2**
2. Remove dash board panel out of the car.
3. Connect the wiring adapter to the 12 way black AMP connector located behind the dash.
4. Follow instructions below on configuring the dash.

2006-2007 GT3 Cup

1. Purchase wiring adapter, part # **M H GT3 GPS L10 #3**
2. Remove dash board panel out of the car.
3. Unplug the main Autosport connector off the ADL2.
4. Extract pin 37 (AT4) and insert into pin 79 (RS232 Rx)
5. Re-connect main Autosport connector.
6. Connect the wiring adapter to the 12 way black AMP connector near the passenger foot area.
7. Follow instructions below on configuring the dash.



Connecting the M GPS BL

This GPS module provides excellent speed, heading and positional data. The module is powered from a 12v volt supply. Please follow the instructions below for you model year:

2010-2013 GT3 Cup

1. Purchase wiring adapter, part # **M H GT3 GPS BL #1**
2. Connect the wiring adapter to the 12 way black AMP connector near the passenger foot area.
3. Follow instructions below on configuring the dash.

2008-2009 GT3 Cup with TS Data connector

1. Purchase wiring adapter, part # **M H GT3 GPS BL #1**
2. Connect the wiring adapter to the 12 way black AMP connector near the passenger foot area.
3. Follow instructions below on configuring the dash.

2008-2009 GT3 Cup without TS Data connector

1. Purchase wiring adapter, part # **M H GT3 GPS BL #2**
2. Remove dash board panel out of the car.
3. Unplug the backlight module (8 way DTM connector).
4. Connect the adapter harness in-line to the backlight module.
5. Connect the wiring adapter to the 12 way black AMP connector behind dash.
6. Follow instructions below on configuring the dash.

2006-2007 GT3 Cup

1. Purchase wiring adapter, part # **M H GT3 GPS BL #3**
2. Remove dash board panel out of the car.
3. Unplug the backlight module (8 way DTM connector)
4. Connect the adapter harness in-line to the backlight module.
5. Unplug the main Autosport connector off the ADL2.
6. Insert the white/green wire into pin 79 (RS232 Rx).
7. Re-connect main Autosport connector to the ADL2.
8. Follow instructions below on configuring the dash.



Connecting the RG GPS

This GPS module provides excellent speed, heading and positional data. The module is powered from a 12v volt supply. Please follow the instructions below for you model year.

Connecting via RS232 serial

2010-2013 GT3 Cup

1. Purchase wiring adapter, part # **M H GT3 GPS RG RS232**
2. Connect the wiring adapter to the 12 way black AMP connector near the passenger foot area.
3. Follow instructions below on configuring the dash.

2008-2009 GT3 Cup with TS Data connector

1. Purchase wiring adapter, part # **M H GT3 GPS RG RS232**
2. Connect the wiring adapter to the 12 way black AMP connector near the passenger foot area.
3. Follow instructions below on configuring the dash.

2008-2009 GT3 Cup without TS Data connector

1. Remove dash board panel out of the car
2. Send entire dashboard panel with harness to MoTeC USA for modification.
3. Follow instructions below on configuring the dash.

2006-2007 GT3 Cup

1. Remove dash board panel out of the car
2. Send entire dashboard panel with harness to MoTeC USA for modification.
3. Follow instructions below on configuring the dash.

Connecting via CAN keeping BR2 beacon receiver

all 2006-2013 GT3 Cup

1. Purchase wiring adapter, part # **M H GT3 GPS RG CAN**
2. Connect the wiring adapter harness to the black mini Autosport near the Bosch ECU.
3. Follow instructions below on configuring the dash for CAN based communication templates.

Connecting via CAN removing BR2 beacon receiver (no adapter needed)

all 2006-2013 GT3 Cup

1. Unplug BR2 beacon receiver and connect directly to GPS unit.
2. Follow instructions below on configuring the dash for CAN based communication templates.

Configuring the Dash - Part 1 - Adding in the GPS communications template

Open your configuration file. If you don't have your configuration file on the computer then do a "Get Configuration" from the "Online" pull down menu. Then follow these steps:

Step 1: Click the "Inputs" pull down menu and select "Communications".

Step 2: Click on the "RS232" empty line and it will highlight in blue.

Note: if using the CAN version of RG GPS then select the "CAN 7" empty line.

Step 3: Click the "Select" button.

Step 4: Click "GPS -Standard RMC GGA" option followed by the "OK" button.

Note: if using the CAN version of RG GPS then choose "GPS Async"

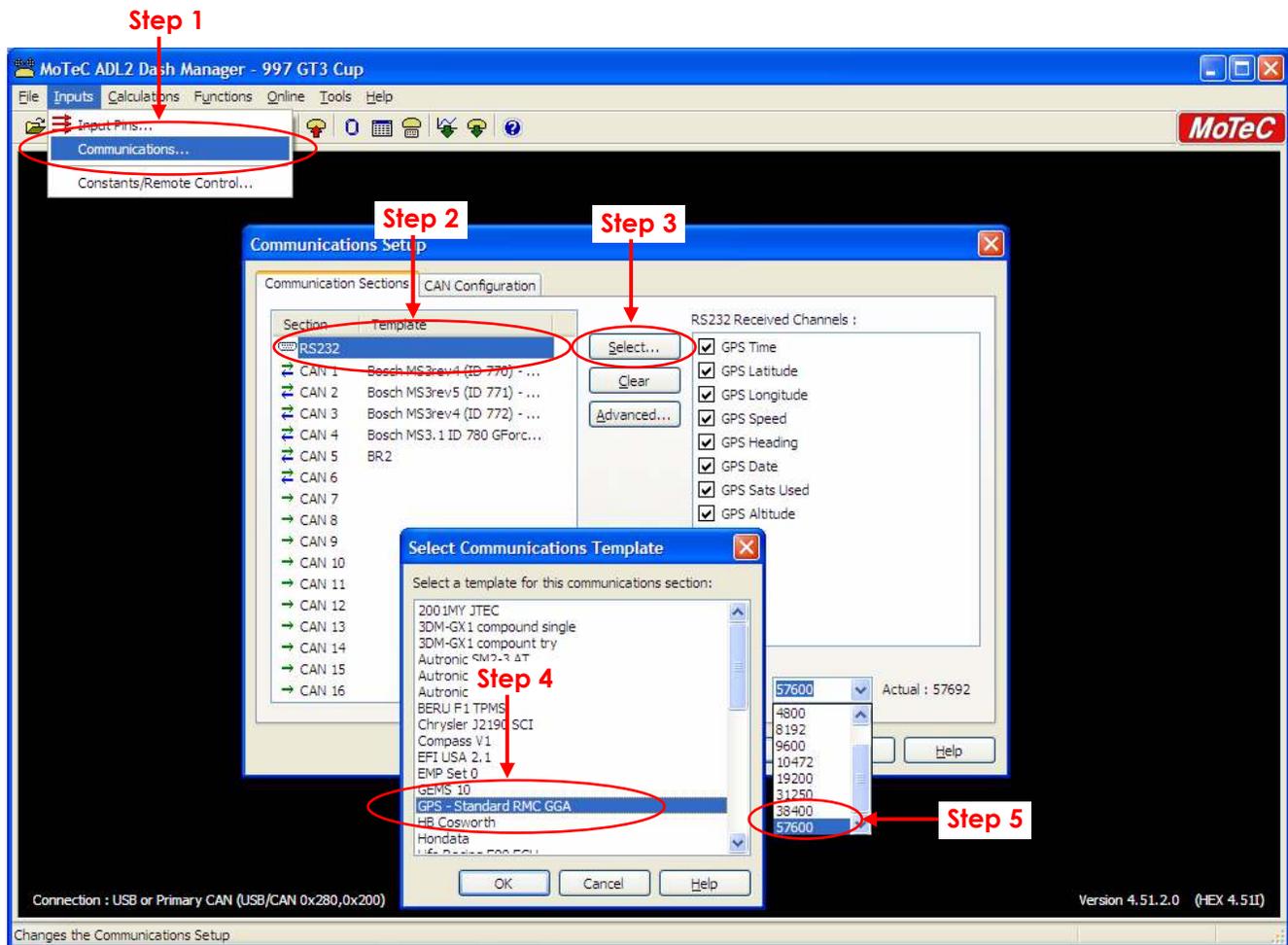
Step 5: Use the pull down menu to select the correct baud rate for the GPS you have.

M GPS L10 = 38400

M GPS BL = 57600

RG GPS = not needed for CAN based communication

Step 6: Click the "OK" button when finished.



Configuring the Dash - Part 2 - Adding GPS channels into logging

It is now time to add these new GPS channels into the logging list.

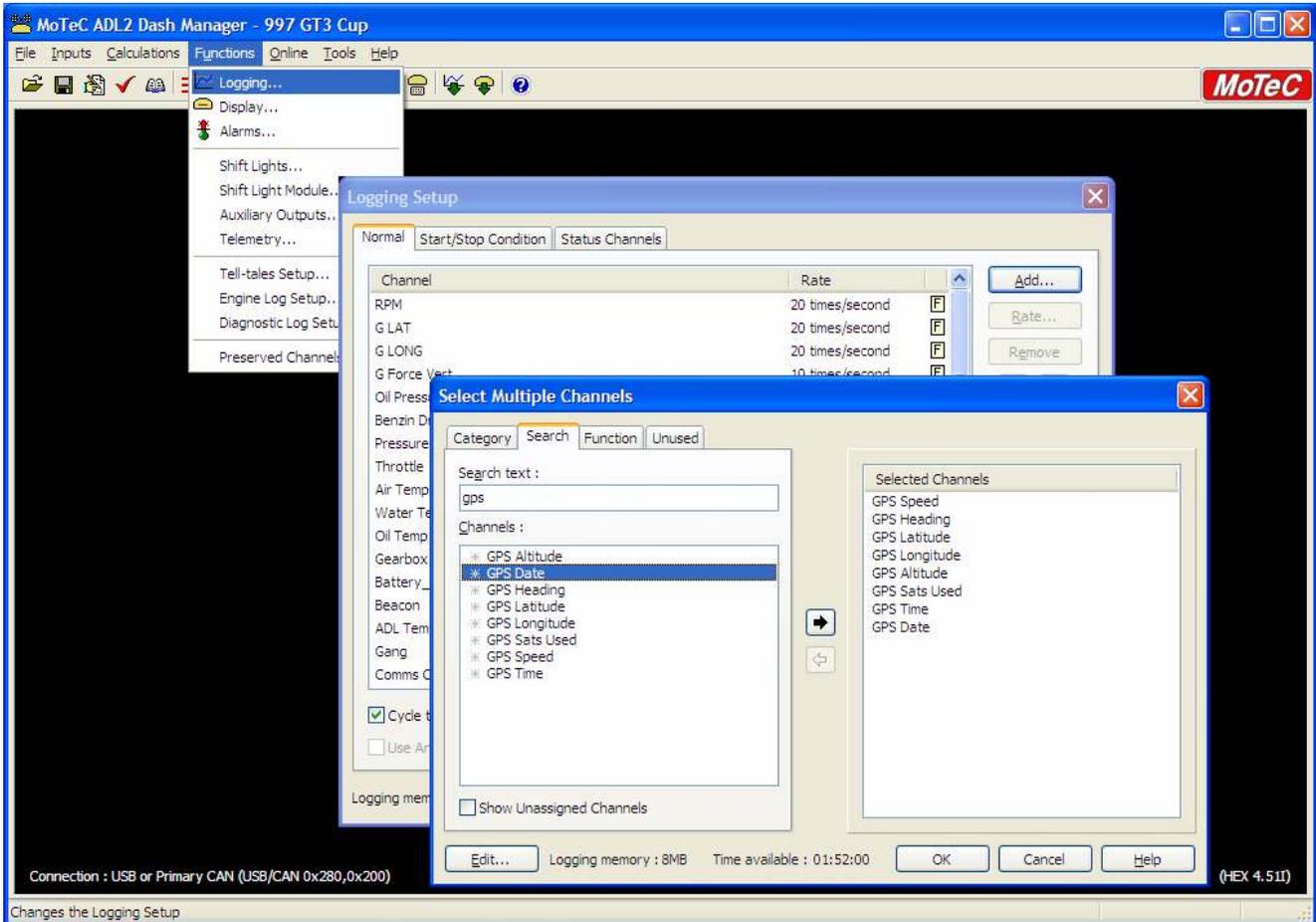
Step 1: Click the “Functions” pull down menu and select “Logging”.

Step 2: Click on the “Add” button.

Step 3: Click the “Search” tab and type in “GPS”.

Step 4: Move all GPS channels to the right hand column, either by double clicking each one or clicking one and clicking the right arrow button.

Step 5: Click the “OK” button to add these channels.



Step 6: Use the vertical scroll bar and scroll all the way down to the bottom of your logging list. Change the logging rates as follows in the picture below:

GPS Sats Used	10 times/second
GPS Altitude	5 times/second
GPS Latitude	20 times/second
GPS Longitude	20 times/second
GPS Heading	20 times/second
GPS Time	10 times/second
GPS Date	once/second
GPS Speed	20 times/second

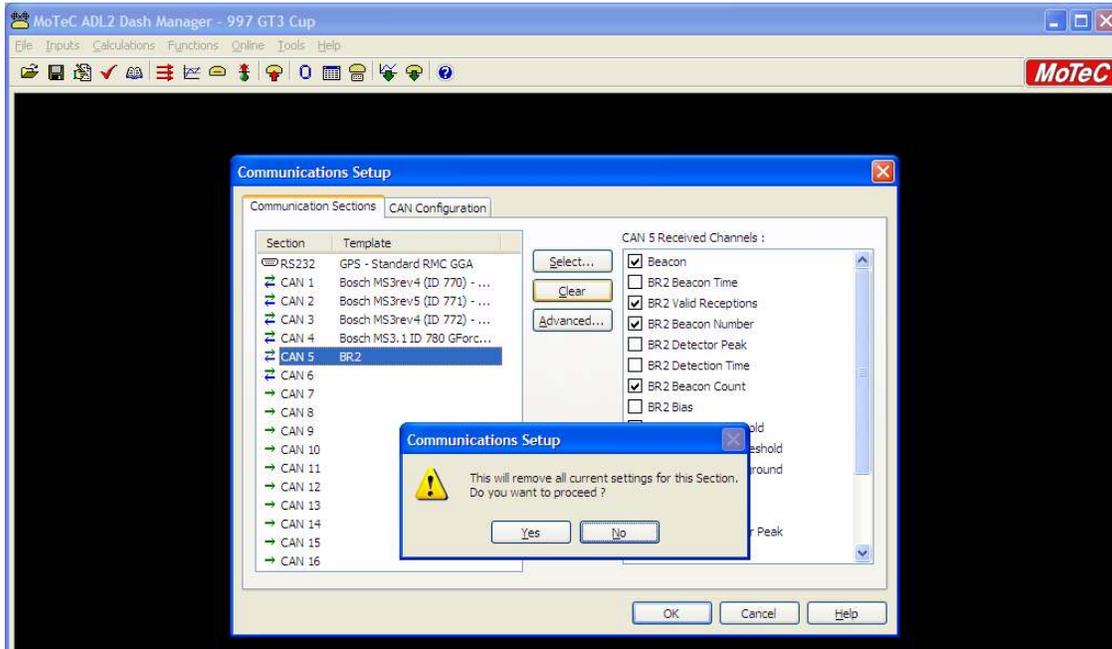
Configuring the Dash - **Part 3 OPTIONAL** - Setting up GPS Lap Timing beacons

If you wish to use the GPS for lap timing instead of your existing IR beacon, then follow these steps.

Step 1: Click the "Inputs" pull down menu and select "Communications".

Step 2: Click on the "BR2" line and it will highlight in blue.

Step 3: Click the "Clear" button.



Step 4: Click the "Calculations" pull down menu and select "Lap Time and Number".

Step 5: Choose "GPS" under the Beacon Type pull down menu.

Step 6: Choose "metre (m)" in the pull down list for Detection Radius and enter 20 in the box.

Step 7: Click "Edit" coordinates and enter the coordinates you want to use for each track.

