

The following description walks you through the installation and the basic set-up process for your special application of a **GT** or **GL** Rubidium module:

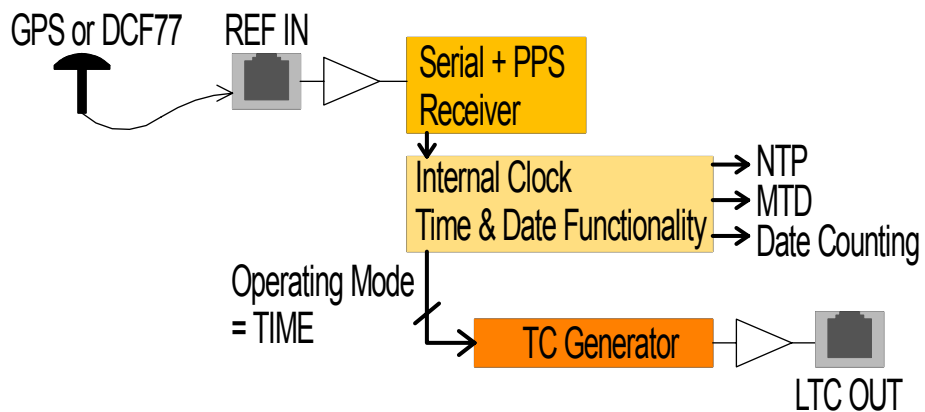
GPS/DCF77 and LTC Reference

Time & Date of an External Reference: GPS/DCF77 or LTC

For most of the applications and for full functionality, the RUBIDIUM GT or GL modules need a time & date reference.

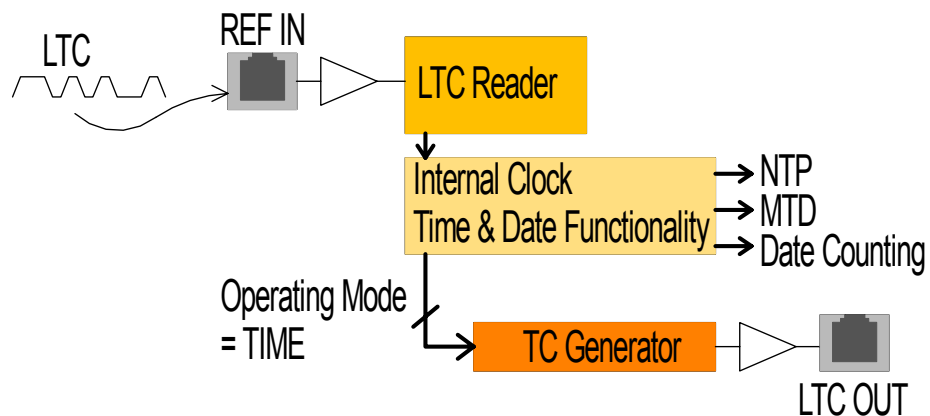
The standard version will be connected to an external GPS or DCF77 receiver. The GT/GL modules then work as a “Master Time Code Generator“, main operation mode = TIME.

Standard Module GT/GL:



If an external LTC should be taken as a time & date reference instead of GPS/DCF77, the GT or GL module has to be ordered with Option L. Please notice the „RUBIDIUM GT/GL with Reference LTC Input“ manual which refers to this application.

GT/GL Module + Option L:

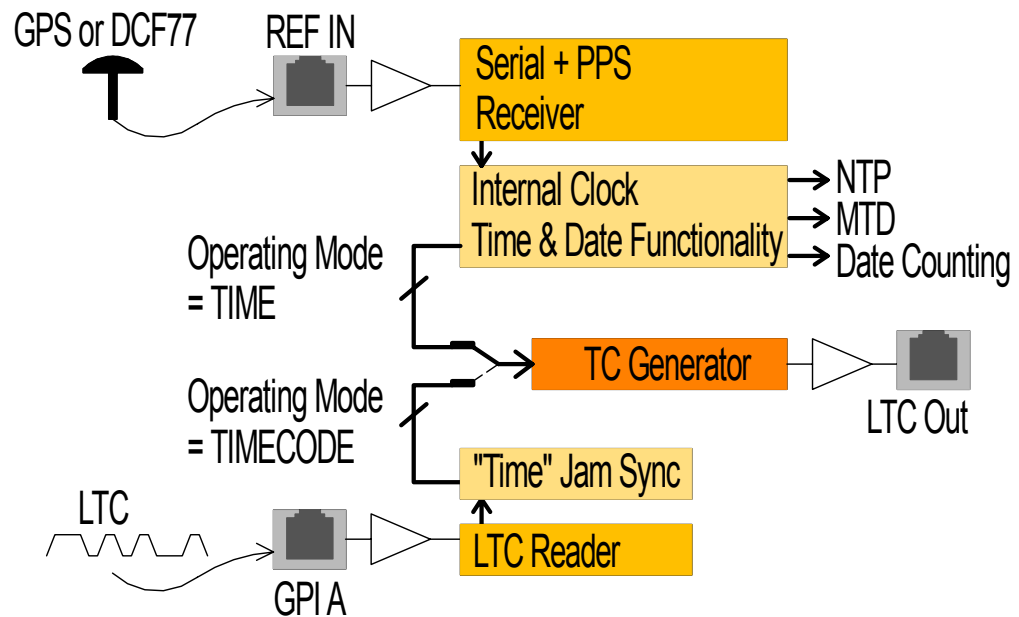


It is not possible to switch between LTC and GPS/DCF77 regarding the time & date reference.

GPS/DCF77 Real-Time Reference but Synchronization to an External LTC

Some applications use the GT/GL modules as “Master Time Code Generator” with GPS/DCF77 as the time & date reference, but it also is required to use an external LTC as reference in between. For example the GT module has to be synchronised to an external LTC coming from a **VTR** or a second **OB van**.

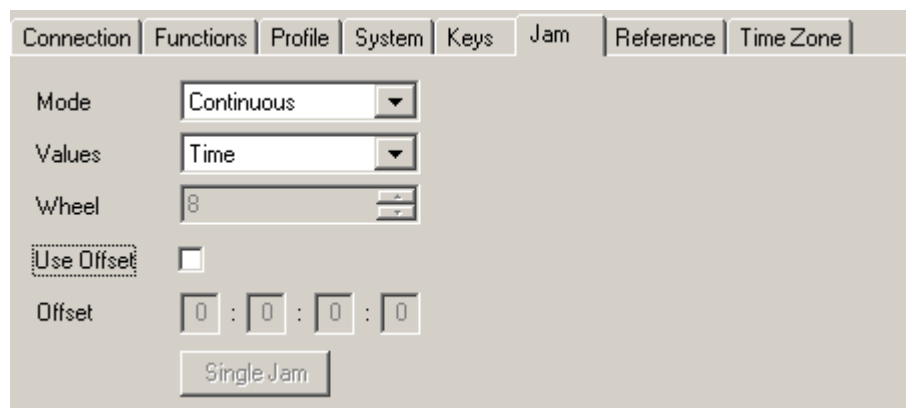
This can be achieved using the standard GT/GL module without option L by switching between the main operating modes **TIME** and **TIMECODE**.



In this case, the GPS/DCF77 still remains the “real time” reference; however the GT/GL module synchronizes the time addresses of the outgoing time code with the time of the external LTC. Both LTCs are in the same time line. The whole “real time” functionality of the GT/GL module will still be available, as there are for example NTP, date in the binary groups of the time code, MTD timer system, etc.

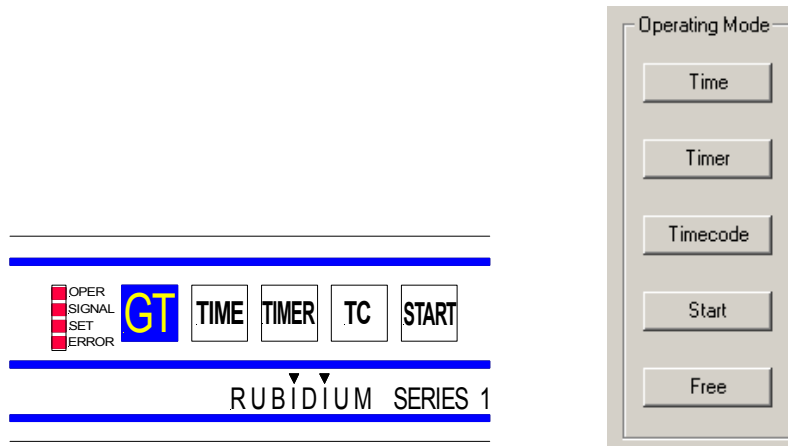
This operating mode requires the **Jam Sync** function. We recommend the following configuration:

Activate the **Jam** function and select “Mode = Continuous” and “Values = Time”:

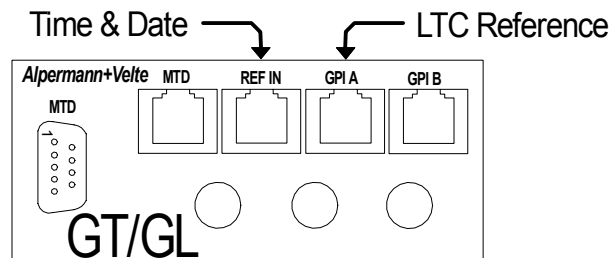


Switching between the main operating modes can be achieved by pressing the **TIME** and **TC** button respectively at the front of the module, or by a click on the **Time** and **Timecode** button respectively at the “Generate” function of one of our RUBIDIUM configuration tools.

During TIME mode the Jam Sync will be ignored.



Connect the external LTC to one of the GPI connectors, signals **REF_IN_A** and **REF_IN_B** (balanced LTC input):



GPI A / GPI B RJ45	1: GPI_1 2: GPI_2 3: REF_IN_A 6: REF_IN_B 4: GND 5: VCC24B_IN 7: 8:
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