

Time & Date Reference

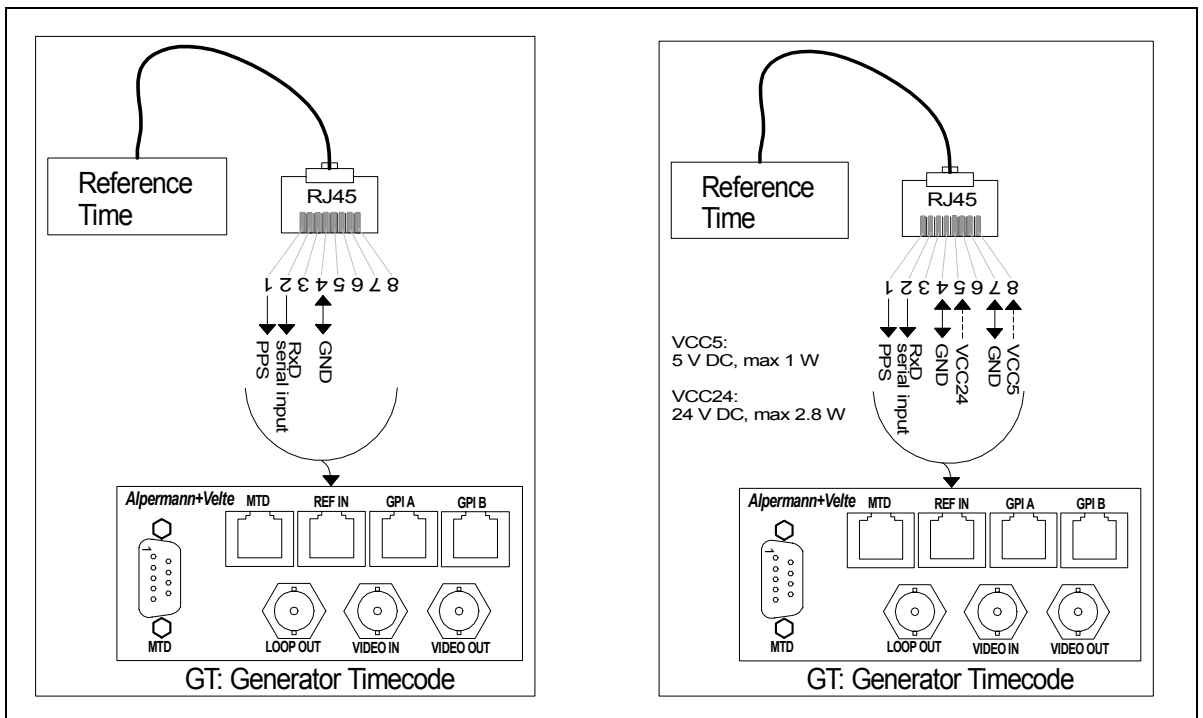
For most of the applications and for full functionality the RUBIDIUM GT module needs a time & date reference.

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

In case the GT module will be added to a system with an already existing Master LTC, the GT module equipped with “**Option L**“ will be able to accept this external LTC as a time & date reference.

Please notice the „RUBIDIUM GT with Reference LTC Input“ manual which refers to this application. It is not possible to switch between LTC and GPS/DCF77 regarding the time & date reference.

Standard application: receiving PPS and time & date by serial interface. External reference as a stand-alone unit or external reference receives power from the GT module.

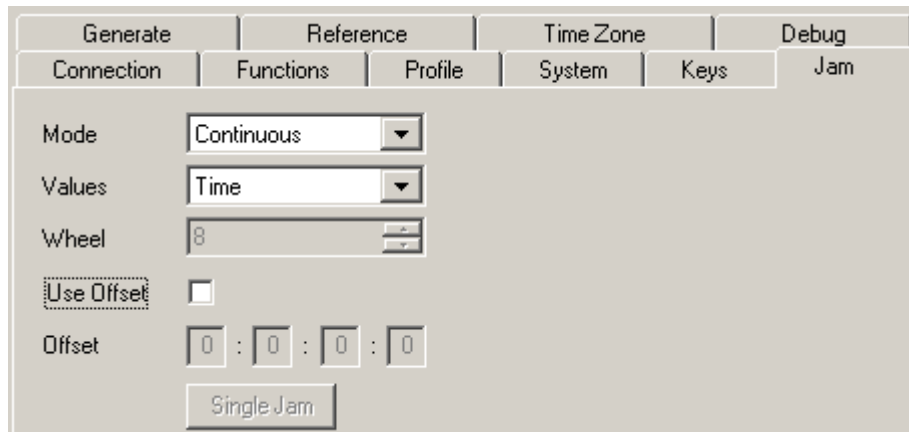


GPS/DCF77 + LTC Reference

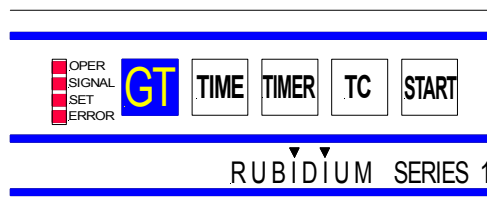
Some applications use the GT module as “Master Time Code Generator“ with GPS/DCF77 as the time & date reference, but it also is required to use an external LTC as reference in between. For example the GT module has to be synchronised to an external LTC coming from a VTR or a second OB van.

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

In this case the GPS/DCF77 still remains the “real time” reference, however the GT module synchronises the time information of the outgoing time code to the time of the external LTC. Both LTC’s are in the same time line. The whole “real time” functionality of the GT 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“:



Press the **TIME** and **TC** button respectively to switch between the main operating modes. During TIME mode the Jam Sync will be ignored.



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

