Revision: 2 / May 05, 2011

The following description walks you through the installation and the basic set-up process for your special application of an **AT/AV** or **DT/DV** or **HT/HV** or **XT/XV** Rubidium module:

Read and Insert MTD Timer

Select the module:

- According to the video standard you are using:

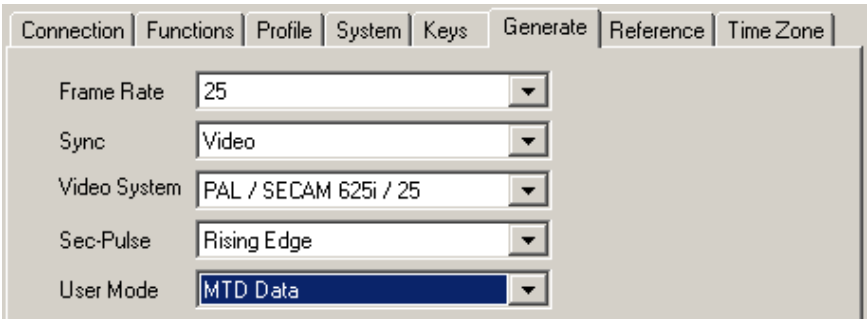
AT/AV:	Analogue video (CVBS).
DT/DV:	SD digital video.
HT/HV:	HD or SD digital video.
XT/XV:	3G or HD or SD digital video.

- According to the time code format you are using:

AT/DT/HT/XT:	LTC time code involved.
AV/DV/HV/XV:	No LTC time code involved - only video time codes.

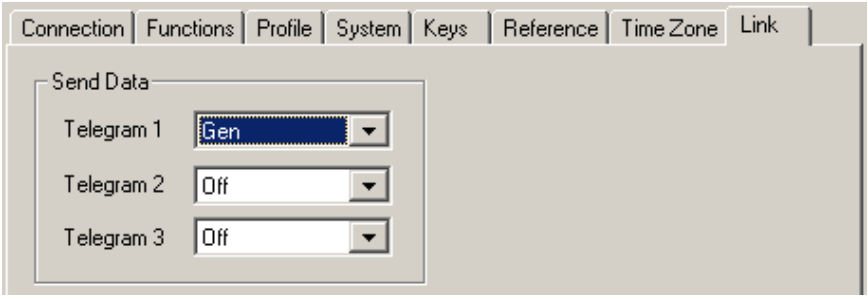
Generating MTD Timer Data

RUB GT or RUB GL Time Code Generators insert MTD timer information in the binary groups (user bits) of the time code if the “User Mode” has been set to “MTD Data”:



Other *Alpermann+Velte* units are able to decode these data either reading **LTC** time code or reading a **Telegram** of the Rubidium internal interface “TC_link”.

The **Telegram** can be used from units located in the same housing as GT/GL or connected via RLC to it. GT/GL must be configured to send this telegram:

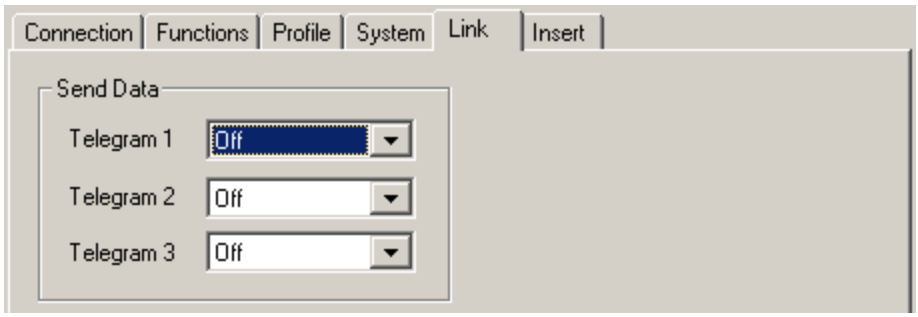


It is not important which “Telegram” is selected. One “Telegram” is sufficient, it makes no sense to choose more than one “Telegram” to send the same data.

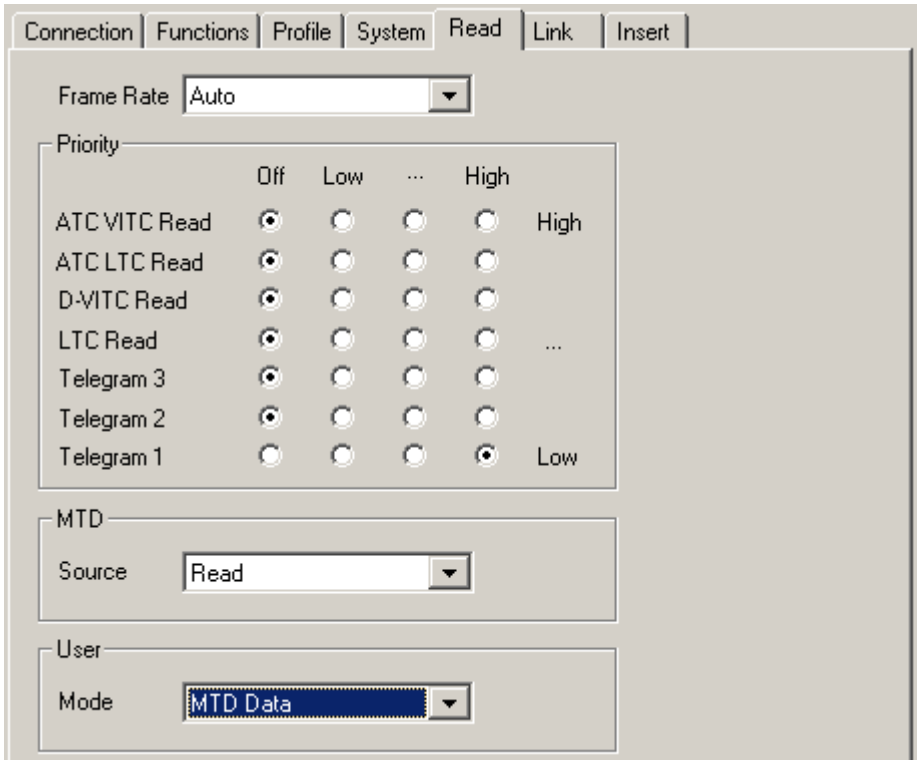
AV/DV/HV/XV Modules: Reading MTD Timer Data

These modules have no LTC input, so they have to read the “Telegram”.

1. Enable the **Link** function, but “Send Data” has to be switched off for that channel which is used from GT/GL to send the data.



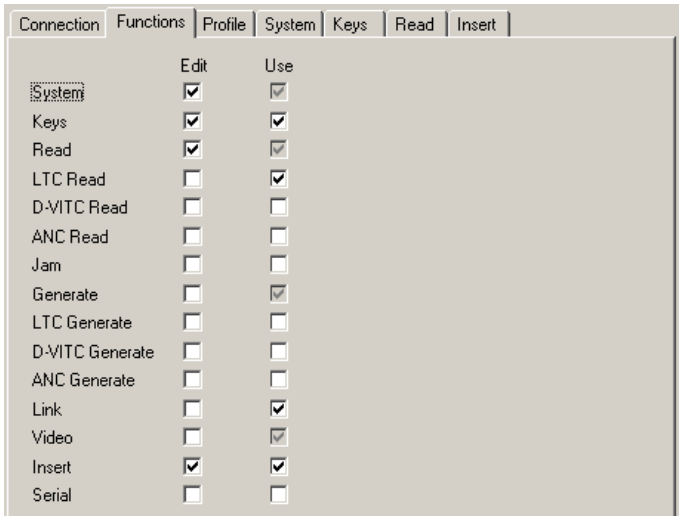
2. Enable the **Read** function and select a “High” priority for that “Telegram” which transmits the data. Select “Off” for the other reader inputs.
   Select “MTD Source = READ”.
   Select “User Mode = MTD Data”.



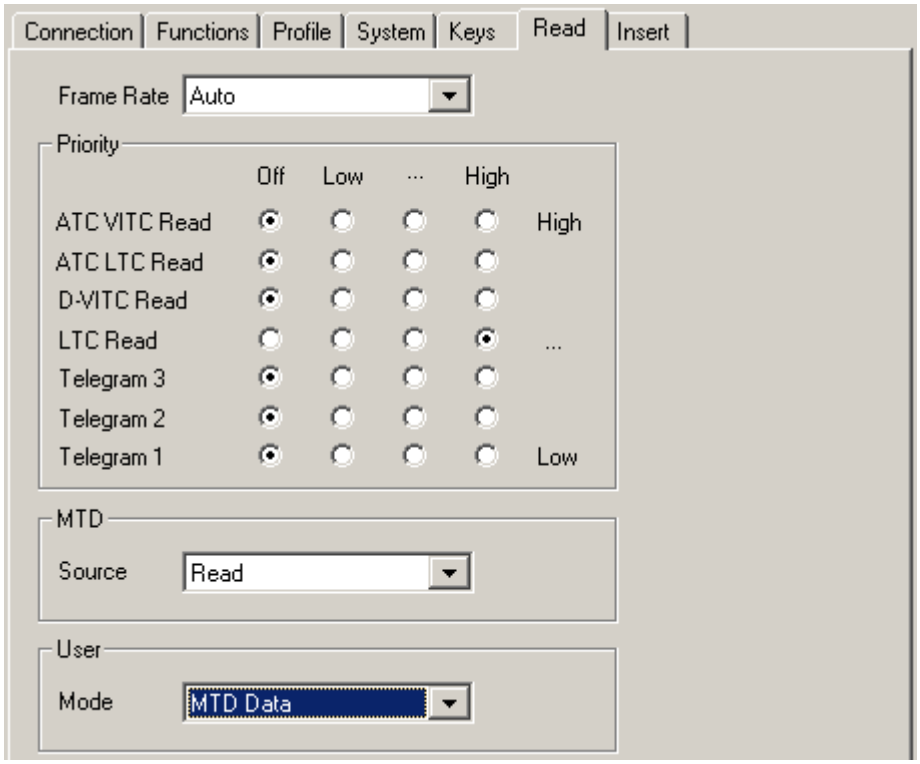
AT/DT/HT/XT Modules: Reading MTD Timer Data

These modules can either use the “Telegram” reader or the LTC input. Please refer to the preceding chapter if you want to use the “Telegram” reader. Using the LTC input please follow these steps:

1. Enable the LTC reader: Check the “Use” checkbox at “LTC Read” and the “Edit” checkbox at “Read”:



2. Open the “Read” tab and select a “High” priority of “LTC Read”, select “Off” for the other reader inputs.
   Select “MTD Source = READ”.
   Select “User Mode = MTD Data”.



AT/AV or DT/DV or HT/HV or XT/XV Modules: Inserting MTD Timer

MTD timer can visibly be inserted onto a video monitor.

Open the “Insert” tab of your configuration tool.

Select “Source = Read”.
Select “Format = MTD Time A” or any other MTD timer.

You are free to set any of the other parameters as you like.