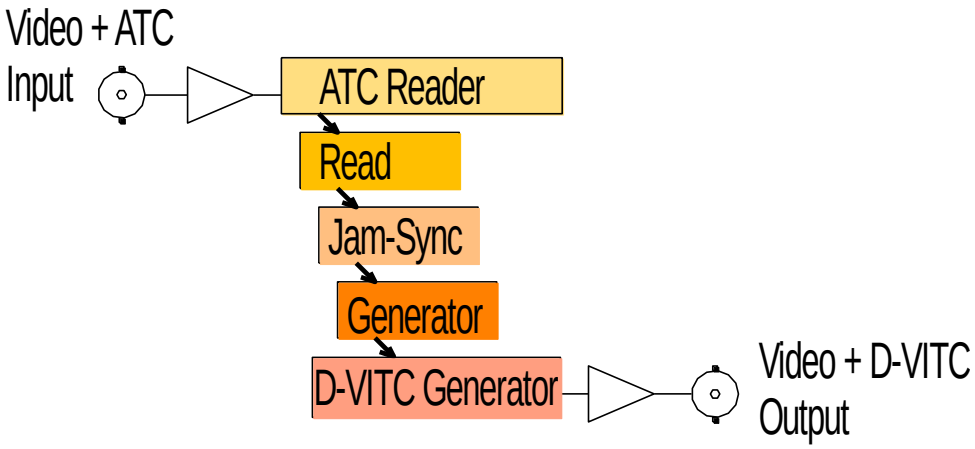
plura
TIMING SOLUTIONS

Rubidium Series
TCC70XS Series
Standalone Systems

ATC to D-VITC Converter

Rubidium XT/XV and TCC70XS Application Note
Revision: 2.3
February 7, 2024

The following description walks you through the installation and the basic set-up process for your special application of an **XT/XV** Rubidium module.



Select the module according to the video standard you are using:

XT: 3G or HD or SD digital video.
XV: 3G or HD or SD digital video.

Please remember that D-VITC is specified for SD digital video only!

Step 1:

Load Factory Settings: Preset a Basic Configuration

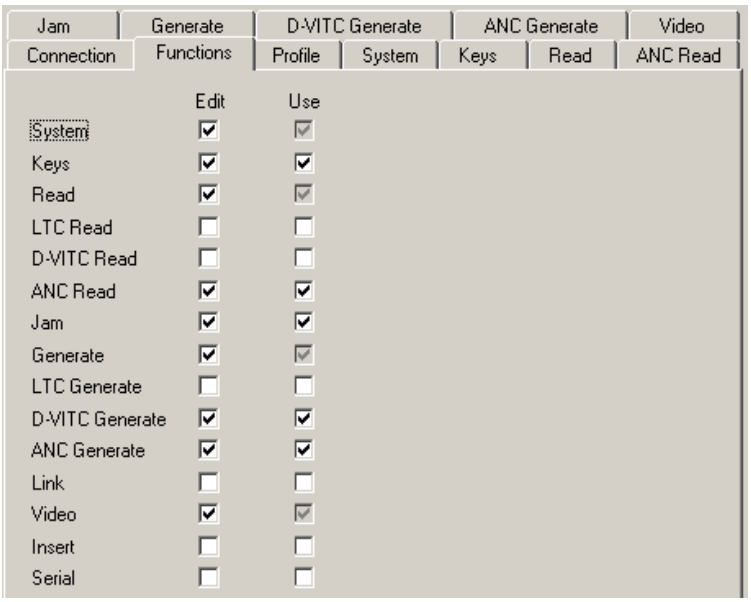
Activate the **Profile** page and select: Profile: **Factory Settings**

Click on the **OK** button.

Step 2:

Activate/Deactivate Functions

Activate the **Functions** page and activate/deactivate as shown:



- We suggest that you deactivate the **Use** check-boxes of all functions you are presently not using.
- We suggest that you deactivate the **Edit** check-boxes of all functions after the installation process. That avoids unintentional operating and malfunctions.

Step 3:

ATC Time Code Reader Configuration

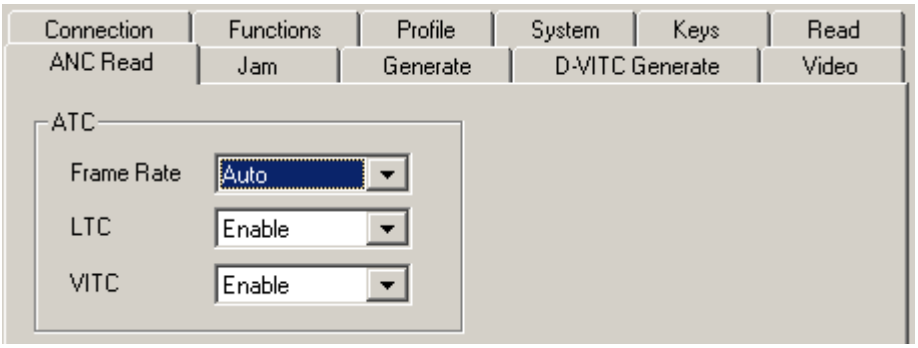
Activate the **ANC Read** page and select:

ATC

Frame Rate: If you have always the same frame rate at the input, please fix it accordingly. Frame rate of time code input should be equal to the frame rate of time code output and equal to the picture rate of the video signal. If you are working with different video formats (NTSC, PAL), select "Auto", in this case the frame rate of the incoming ATC will be detected automatically.

LTC: "Enable", if ATC_LTC should be converted to D-VITC; else "disable".

VITC: "Enable", if ATC_VITC should be converted to D-VITC; else "disable".



Step 4:

Time Code Reader Configuration

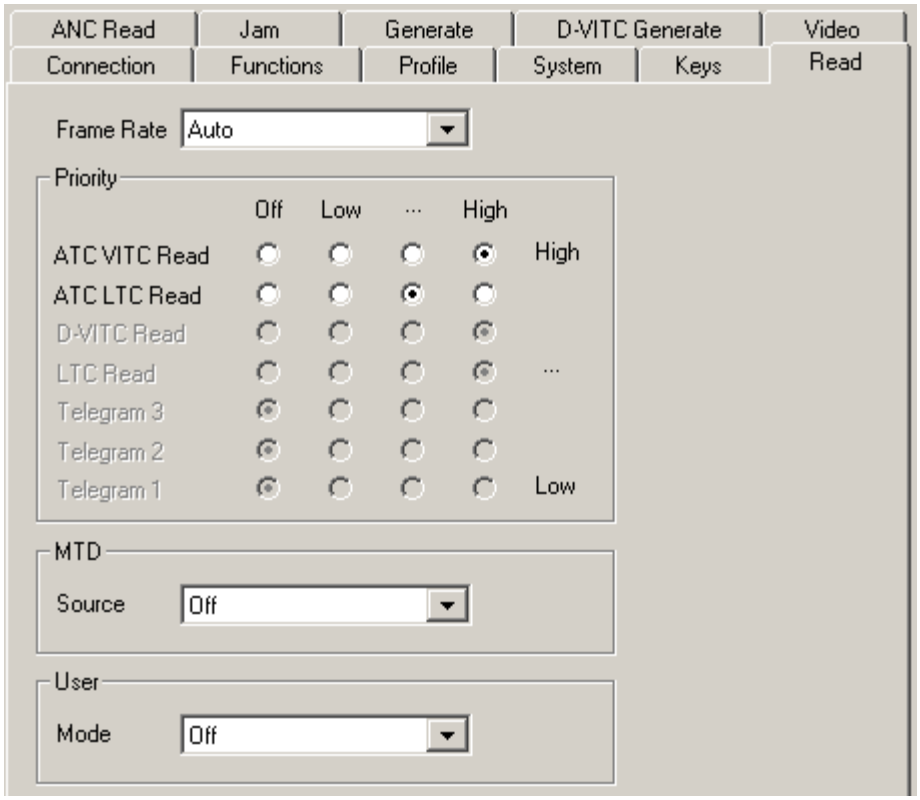
Activate the **Read** page and select:

Frame Rate: If you have always the same frame rate at the input (24/25/30/30 drop), please fix it accordingly. Frame rate of time code input should be equal to the frame rate of time code output and equal to the picture rate of the video signal. If you are working with different video formats (NTSC, PAL), select "Auto", in this case the frame rate of the incoming time code will be detected automatically.

Priority: All "Off" except **ATC VITC Read** or **ATC LTC Read** with highest priority. If both time code will be selected the priority may be different.

MTD: "Source = Off".

User: "Mode = Off".



Step 5:

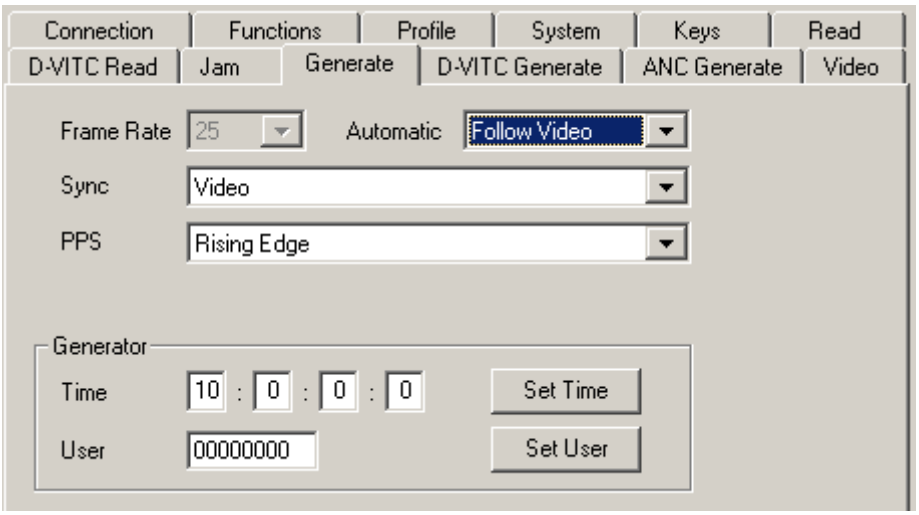
Set Sync Mode and Frame Rate of the Time Code Generator

Activate the **Generate** page and select:

Frame Rate: If you are working with one frame rate only, please fix it accordingly. Frame rate of time code output should be equal to the picture rate of the video signal.

If you are working with different video formats, select "Follow Video"; in this case the frame rate of the time code output will follow the picture rate of the video.

Sync: "Video".



Step 6:

Activate the Jam-Sync Mode

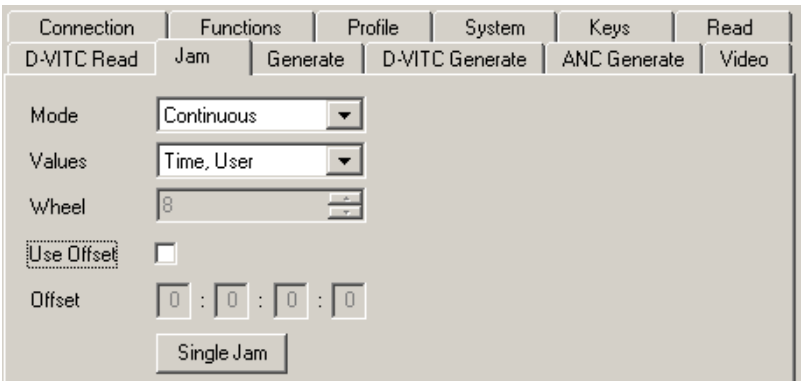
Activate the **Jam** page and select:

Mode: "Continuous" - if the time addresses of the D-VITC output should continuously be generated in an up-counting manner.

"Cont. 1 Frame" or "Cont. Wheel" - if the D-VITC time should stop in case of an ATC failure or in case of a "still" time code input.

Values: "Time, User".

Use Offset: Not activated – unless you explicitly have to do an offset correction.



Step 7:

D-VITC Generator Configuration

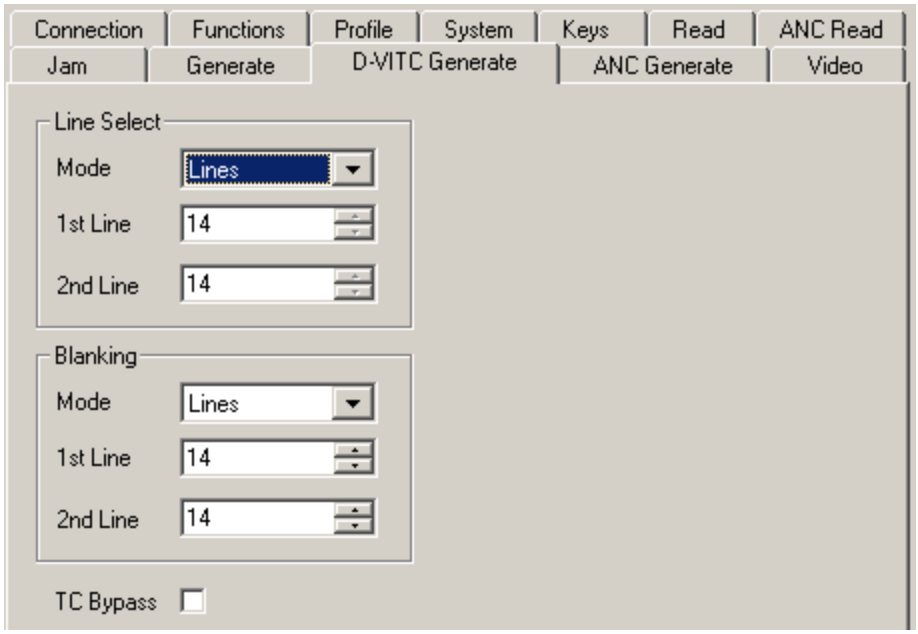
Activate the **D-VITC Generate** page and select:

Line Select

Mode: Select the lines in which D-VITC should be generated.

Blanking

Selected lines can be blanked, this removes a D-VITC from the video signal. Lines which are selected for blanking and for D-VITC (see "Line Select" above) will be blanked before the D-VITC will be generated.



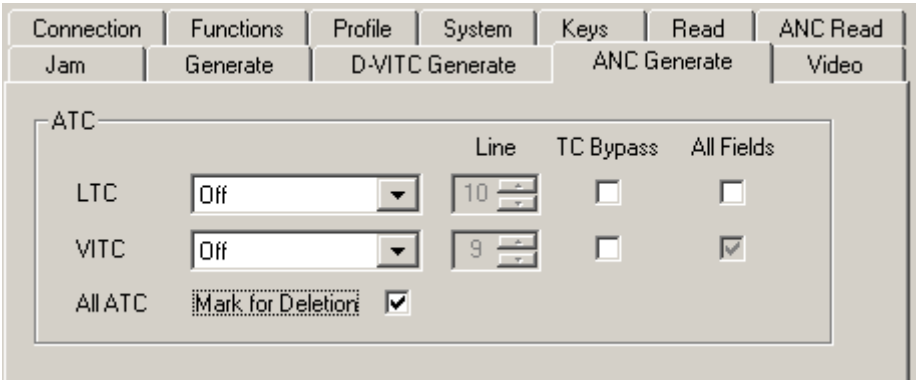
TC Bypass

Enable the following automatic mode: Only in case that there is no D-VITC present in the incoming video, the D-VITC generator will be enabled. If there is already a D-VITC, then no new D-VITC will be inserted. For this feature, the D-VITC reader has to be enabled.

Step 8:

Optionally: Remove D-VITC out of the Video Channel

Activate the **ANC Generate** page and select:



Mark for Deletion:

Checking this box will mark all ATC data packets for deletion. The data packets are still present and at the same location, but the data content will not be evaluated anymore.

Step 9:

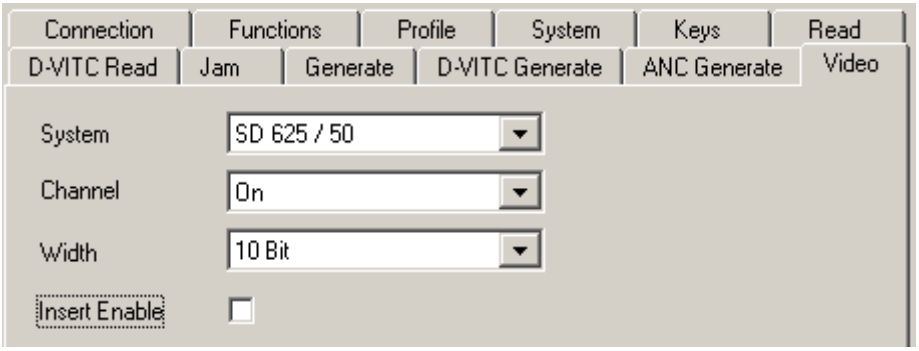
Configuration of the Video Channel

Activate the **Video** page and select:

System: Fix it according to your application.

If you are working with different video formats, select "Auto".

Insert Enable: Check this box only in case you want to have a visible window inserted onto the video screen.



Step 10:

Optionally: Select LED Functions to Watch Status Information

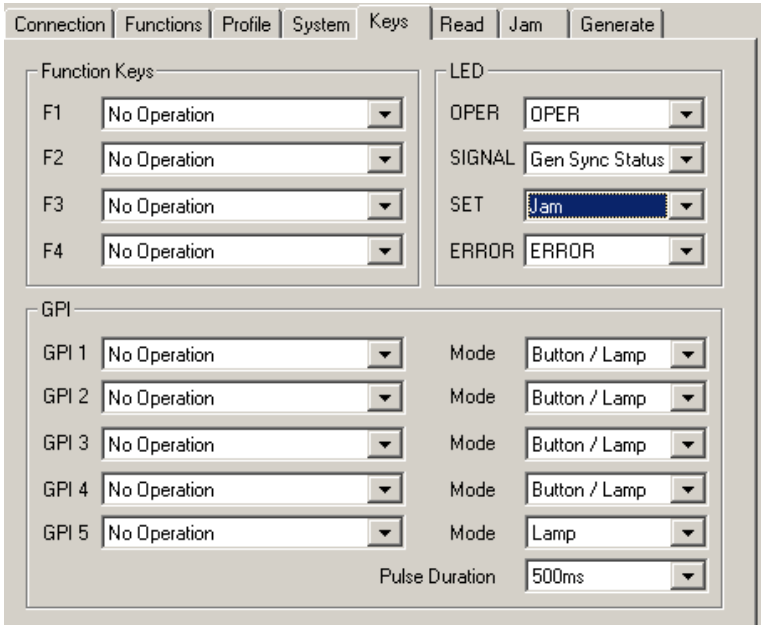
Activate the **Keys** page and select:

LED SIGNAL: "Gen Sync Status" indicates the status of the video synchronization:

LED lights up during video lock.
LED flashes slowly during the fine trim procedure.
LED flashes fast if video synchronization is lost.

LED SET: "Jam" indicates the status of the Jam-Sync mode:

LED lights up = Generator accepts reader input time code.
LED flashes = Generator does not accept or receive the reader time code.



Contact Us

plura®

Corporate Offices:
Plura Broadcast, Inc.
Ph: +1-602-944-1044
Sales@plurainc.com

Plura Europe GmbH
Ph: +49-6725-918006-70
Sales@plurainc.com

Plura MEA
Ph: +971-50-715-9625
Sales@plurainc.com

Plura Asia
Ph: +82-10-6688-8826
Sales@plurainc.com