

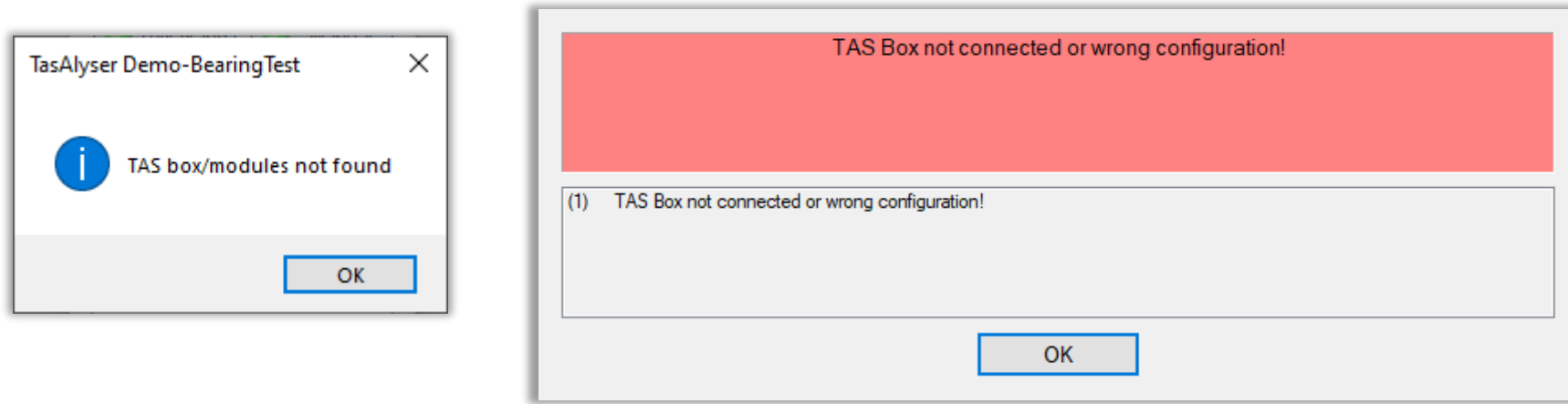
Tas Box Settings Transfer

What to do when moving to a new Tas Box

Problem Description

When you connect a Tas Box front end of a different type to a measurement PC (for example, switching from TAS28 to TAS28A or to TAS48 – you can read Tas Box type and serial number on the label next to the power supply plug), the Tas Box settings are not automatically migrated.

When you start TasAlyser with the new Tas Box, you will see messages like this:



The background of these messages is that TasAlyser cannot connect to the same type of Tas Box as before and therefore reports it as “missing”.

In these cases, it is necessary to manually transfer the Tas Box settings and in some cases calibration factors.

You need to start TasAlyser with the old Tas Box first to get a copy of these settings!

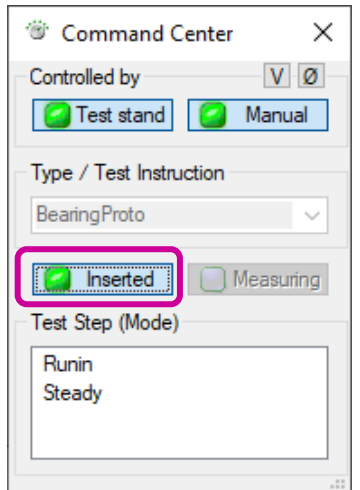
If the old Tas Box is no longer available, there is another method to look up the settings directly in the file where they are stored. This is explained at the end of this documentation.

Reading out Tas Box Settings: Start Test Run

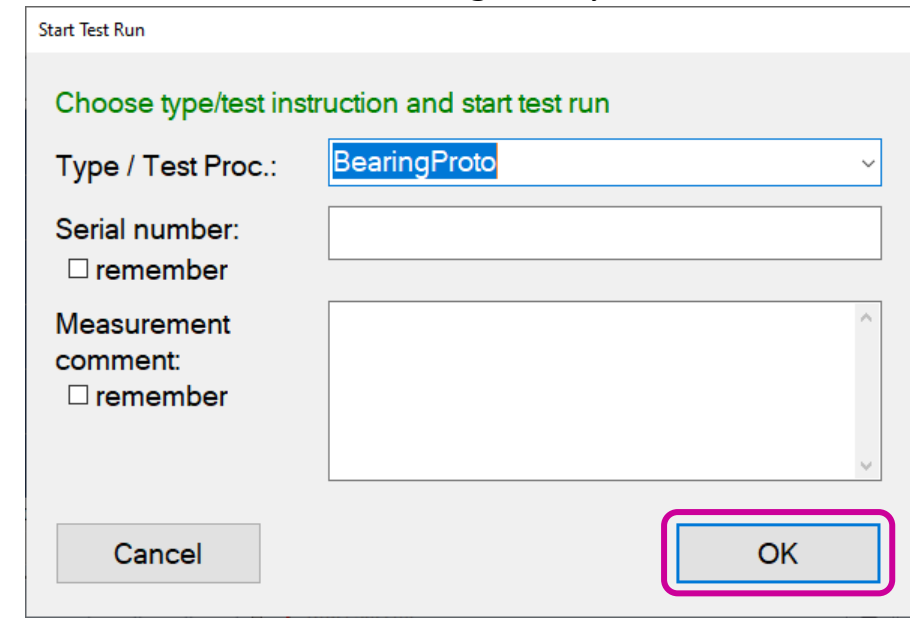
Have the old Tas Box connected to the measurement PC and TasAlyser running.

The Tas Box settings are only loaded after a test run has been initiated at least once. If you have just started TasAlyser, manually begin a test run by clicking the [Inserted] button in Command Center window or by pressing F5 on the keyboard.

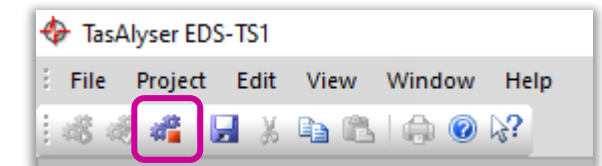
Manual test run start in Command Center Window:



Manual test run start using F5 key:

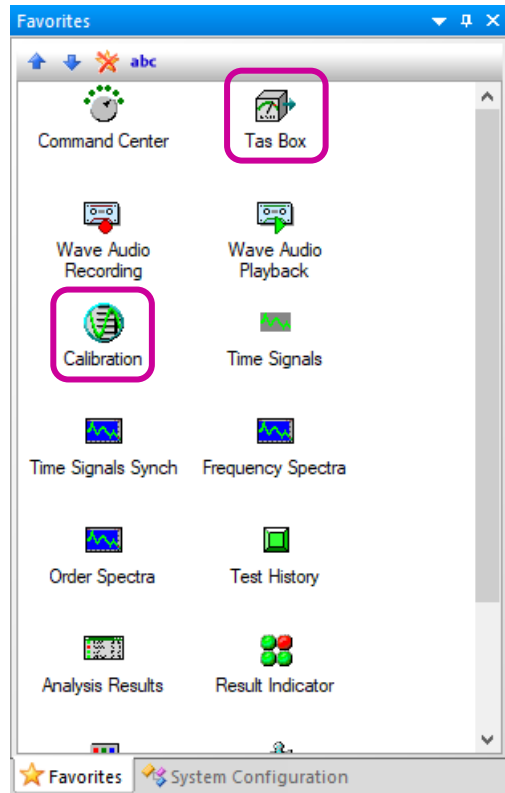


After reading the settings, you can cancel this manual test run by clicking on the according button in TasAlyser's toolbar or by pressing key F9.

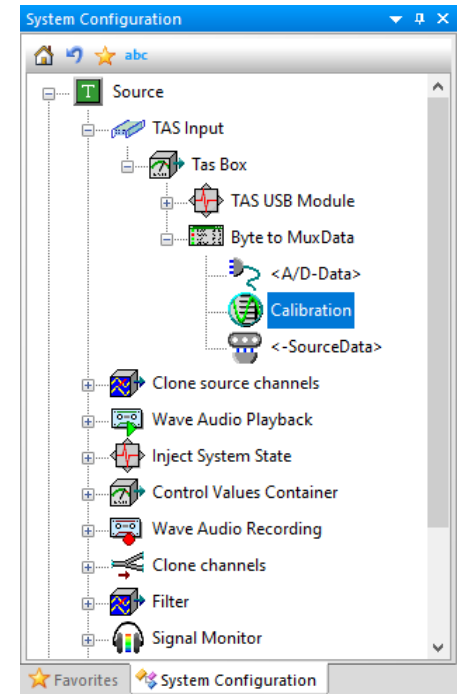
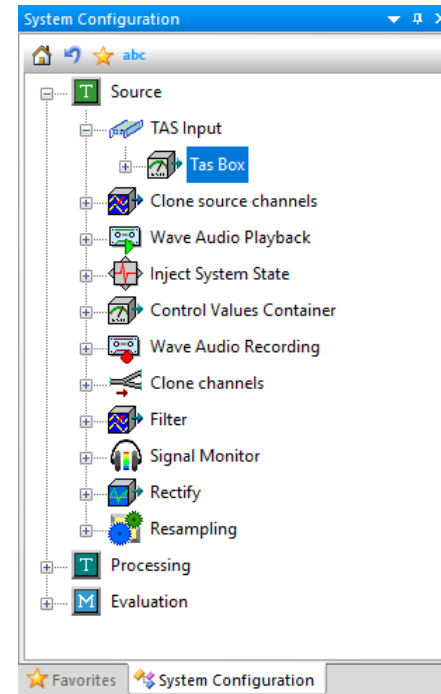


Opening Tas Box Settings Window

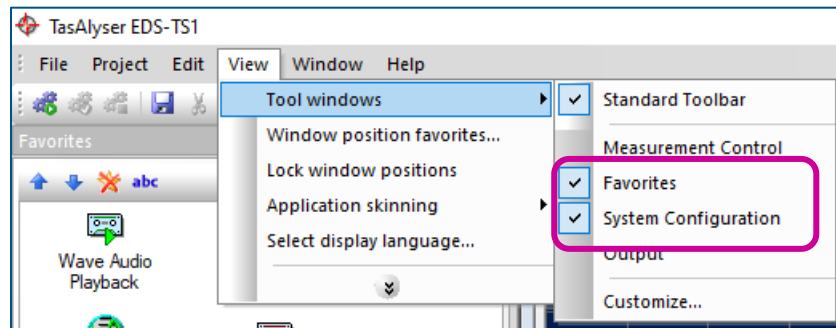
In the Favorites window (usually docked to the left edge of TasAlyser main window), locate the “Tas Box” module and double-click it to open the settings (see next page).



If you cannot find the Tas Box module in the Favorites, open the settings from the System Configuration window:



If you cannot find the Favorites or System Configuration windows, open them from the menu *View / Tool windows*:

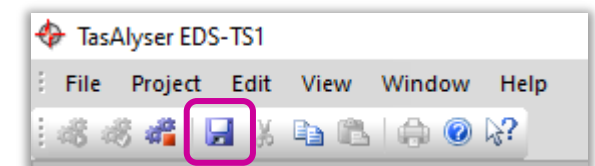


Tas Box Settings Window

Check the sections **A/D Channel Settings**, **RPM Properties** and **Base Clock Settings**. Take a note of the values for all columns or take screenshots of the settings.

Quick Screenshot in Windows 10:
press simultaneously
Windows key + Shift key + letter S
(or take a photo with your smartphone)

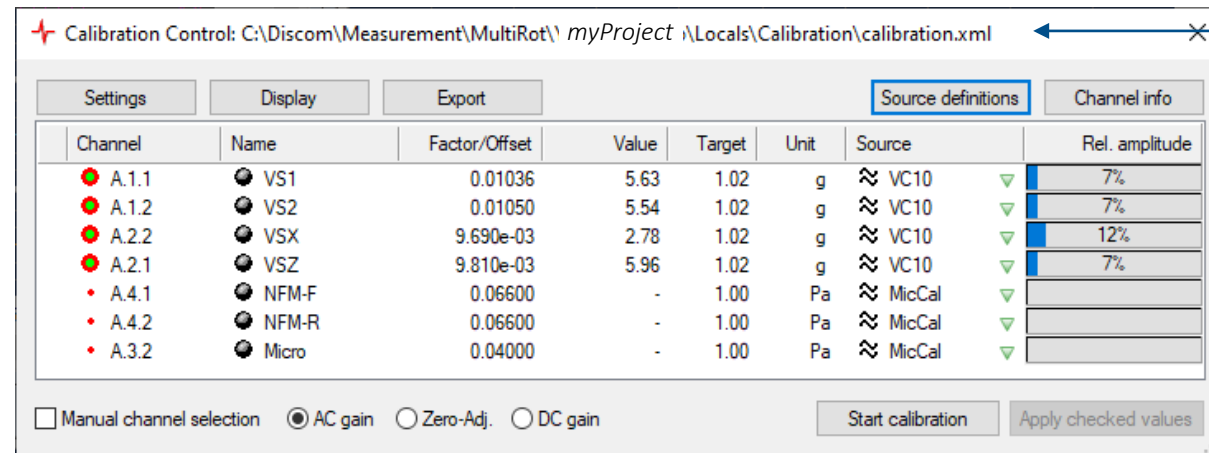
Now connect the new Tas Box, manually start a test run, ignore the error message and call up the Tas Box settings window. Set all parameters as recorded for the old box, then press TasAlyser's save button.



Calibration Check

In most cases, the calibration factors will be transferred when switching the Tas Box, as long as the sensors are connected in the same pattern (e.g., vibration sensor 1 to input A1.1, torque to input A2.2 and so on).

As a safety measure, also take a screenshot of the calibration factors. Open the Calibration module (see page 4 where to find it) and take notes or a picture:



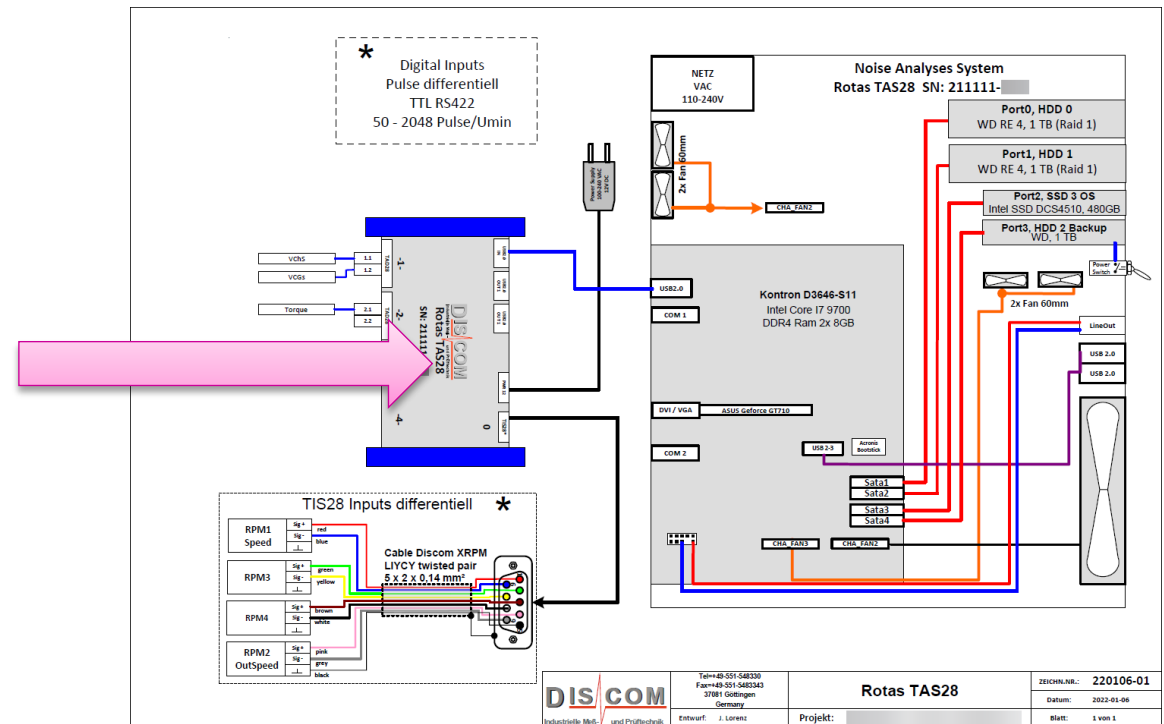
Refer to the separate Calibration manual for further details.

As for the Tas Box settings, if necessary, the calibration factors can be extracted directly from the Calibration.xml file, which is also contained in every project backup.

Documentation

In some cases (for example when switching from a Tas08 to a Tas28), it can be necessary to change the electrical wiring plan of the test stand to make sure that the new situation is documented for maintenance purposes.

You might also want to correct the block diagram in the documentation of the measurement PC to show the correct Tas Box type and wiring.



Remark:

Minimum recommended TasAlyser software version 2019-06 (revision 25100) or later
Tas Box firmware version: 2018 or newer

Getting the Tas Box Settings From File

If you cannot use the old Tas Box and get the settings from the TasAlyser window, you can read them from the settings file.

The Tas Box settings are stored in the file **TasConfiguration.xml** which is located in the 'Locals' subfolder of the project folder.

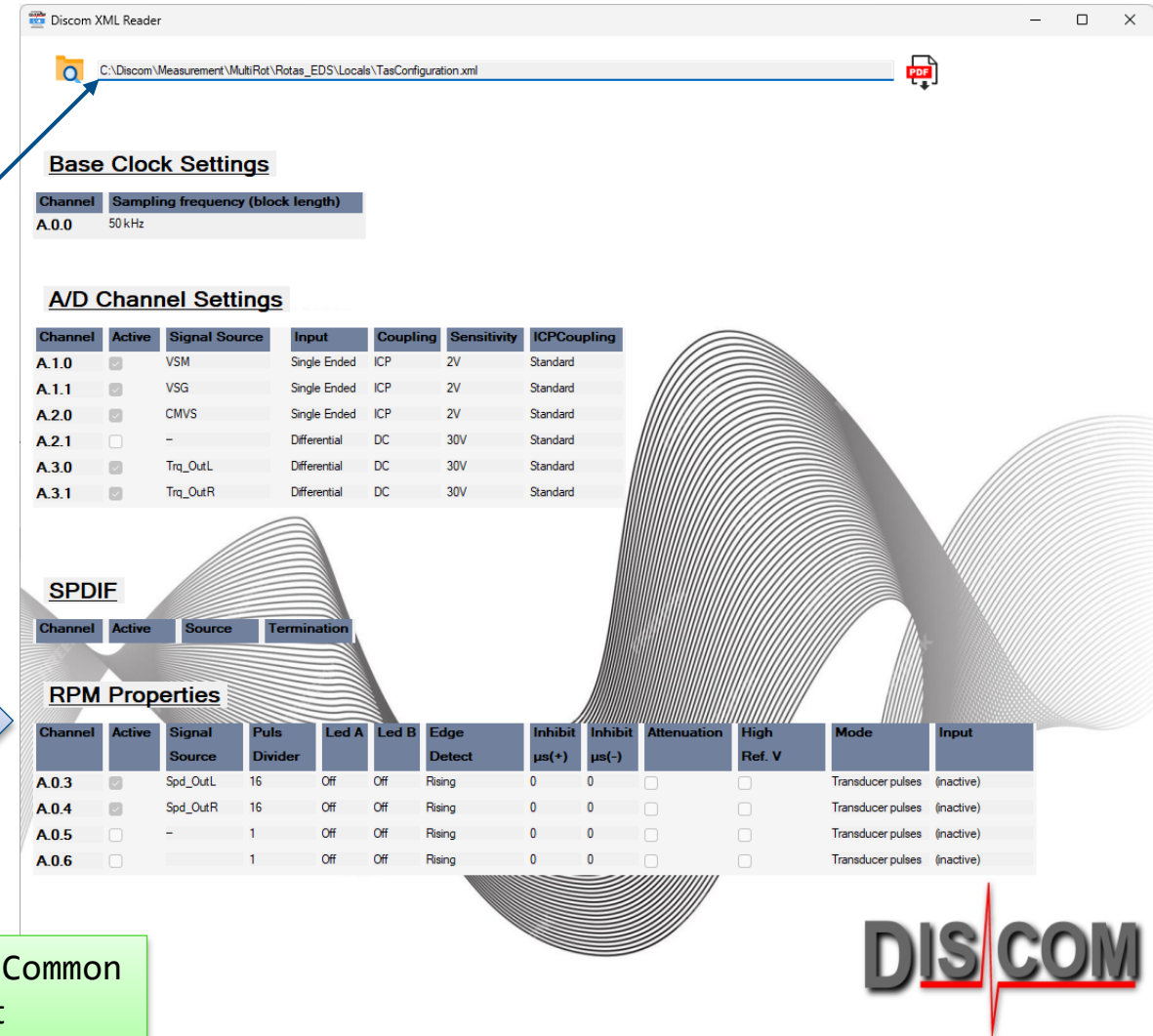
C:\Discom\Measurement\MultiRot(Project Name)**\Locals**

(In some projects, the file is called "TasSystemConfiguration.xml".)

Make sure to get the settings file for the old Tas Box (before the update, e.g. from a project backup).

Open the **Discom XML Reader** tool, and drag the xml file into the Reader window. The XML Reader tool will display the information, and you can adjust the Tas Box settings in TasAlyser accordingly.

Don't forget to press the Save button in TasAlyser!



The **Discom XML Reader** tool can be found in C:\Discom\Measurement\Common on a standard measurement PC, or downloaded from the Discom website at <https://download.discom.de/InstallTas/#XML-Reader>

Reading the Tas Box Settings From XML File

In case you cannot use the Discom XML Reader, you can open the “TasConfiguration.xml” file in a web browser or text editor (preferably one who understands xml syntax, like Notepad++).

Start the Edge browser (or the web browser of your choice) and drag the TasConfiguration.xml file into a new (empty) browser tab. Edge will show the contents in a structured format:

You might have to scroll down to the relevant information.

(Continued on next page)

You can click on the arrow marks to collapse and expand sections within the xml.

Understanding Tas Box Settings XML File

For each A/D module and TIS module in the Tas Box, there is an according section in the xml file. The pictures below show how to associate xml sections to the tables in the settings window:

Chan...	Active	Signal Source	Puls ...	Led A	Led B	Edge ...	In...	In...	Atte...	High ...	Mode	Error...
A.0.1	<input checked="" type="checkbox"/>	SpdOutL	8	Off	Off	Rising	0	0	<input type="checkbox"/>	<input type="checkbox"/>	Tr...	(in...
A.0.2	<input checked="" type="checkbox"/>	SpdOutR	8	Off	Off	Rising	0	0	<input type="checkbox"/>	<input type="checkbox"/>	Tr...	(in...
A.0.3	<input type="checkbox"/>	-	1	Off	Off	Rising	0	0	<input type="checkbox"/>	<input type="checkbox"/>	Tr...	(in...
A.0.4	<input type="checkbox"/>	-	1	Off	Off	Rising	0	0	<input type="checkbox"/>	<input type="checkbox"/>	Tr...	(in...

Channel	Active	Signal Source	Input	Coupling	Sensitivity	ICP operation
A.1.1	<input checked="" type="checkbox"/>	NFM_F	Single Ended	ICP	500mV	Standard
A.1.2	<input checked="" type="checkbox"/>	NFM_R	Single Ended	ICP	500mV	Standard
A.2.1	<input checked="" type="checkbox"/>	VSI	Single Ended	ICP	5V	Standard
A.2.2	<input checked="" type="checkbox"/>	VSO	Single Ended	ICP	5V	Standard
A.3.1	<input checked="" type="checkbox"/>	VSM	Single Ended	ICP	5V	Standard
A.3.2	<input type="checkbox"/>	Mic	Single Ended	ICP	500mV	Standard
A.3.3	<input type="checkbox"/>	-	Differential	AC	1V	Standard
A.3.4	<input type="checkbox"/>	-	Differential	AC	1V	Standard

```

<TasTisModule Id="0">
  <CTasRpmTisChannel Id="0">
    <PulsDivider>8</PulsDivider>
    <Led-A text="Off">0</Led-A>
    <Led-B text="Off">0</Led-B>
    <EdgeDetect text="Rising">0</EdgeDetect>
    <DeadTimePositiveEdge>0</DeadTimePositiveEdge>
    <DeadTimeNegativeEdge>0</DeadTimeNegativeEdge>
    <Signal-Source text="SpdOutL">4</Signal-Source>
  </CTasRpmTisChannel>
  <CTasRpmTisChannel Id="1">
    <PulsDivider>8</PulsDivider>
    <Led-A text="Off">0</Led-A>
    <Led-B text="Off">0</Led-B>
    <EdgeDetect text="Rising">0</EdgeDetect>
    <DeadTimePositiveEdge>0</DeadTimePositiveEdge>
    <DeadTimeNegativeEdge>0</DeadTimeNegativeEdge>
    <Signal-Source text="SpdOutR">5</Signal-Source>
  </CTasRpmTisChannel>
  <Active>1</Active>
  <Attenuation>0</Attenuation>
  <HiRef>0</HiRef>
  <Mode>1</Mode>
</TasTisModule>
    
```

```

<TasADS127 Address="A.1" Kind="8" Id="1">
  <Box>0</Box>
  <Module>1</Module>
  <TasADS127Channel Id="0">
    <Active>1</Active>
    <Signal-Source text="NFM_F">25</Signal-Source>
    <Input text="Single Ended">1</Input>
    <Coupling text="ICP">3</Coupling>
    <Sensitivity text="500mV">2</Sensitivity>
    <ICP-Check-Op text="Standard">1</ICP-Check-Op>
  </TasADS127Channel>
  <TasADS127Channel Id="1">
    <Active>1</Active>
    <Signal-Source text="NFM_R">26</Signal-Source>
    <Input text="Single Ended">1</Input>
    <Coupling text="ICP">3</Coupling>
    <Sensitivity text="500mV">3</Sensitivity>
    <ICP-Check-Op text="Standard">1</ICP-Check-Op>
  </TasADS127Channel>
</TasADS127>
    
```

With the xml file open in the browser, you can directly adapt the settings for the new Tas Box in TasAlyser.

Don't forget to save the new settings when you are done.