

# Knowledge Base Article

**Product Group:** IMx

**Product:** IMx-S

**Version:** N/A

## Abstract

This article explains how to add non-standard IMx POINTs in SKF @ptitude Analyst software. Only single channel POINTs are discussed in this guide.

## Overview

The following items will be addressed in this document:

- Selecting device type, application, sensor, and corresponding units
- Specific POINTs identified: AC, DC, Logic, Speed
- Configuration at channel level required for individual POINTs

**Note:** *Schedule/compliance, relays, alert/danger settings, etc. are the same for all POINT types. The main changes take place in the **Setup** tab under **Properties**.*

## AC/DC POINTs

Follow the steps below to add non-standard AC/DC POINTs into SKF @ptitude Analyst.

1. Non-standard vibration POINTs (AC/DC/Logic/Speed) require proper initialization under the Configuration settings for the corresponding IMx (Data Acquisition Device). From the SKF @ptitude Analyst main menu, select **Customize**, and then **Online Settings**. [Figure 1]

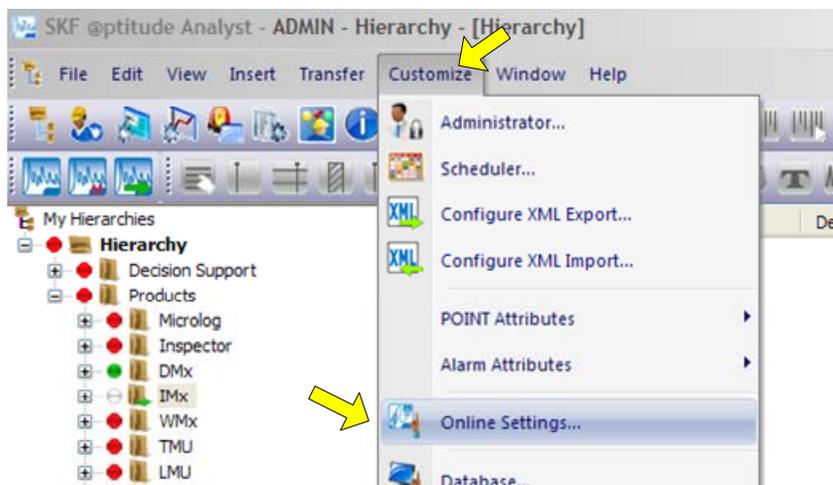


Figure 1. Customize → Online Settings

2. The **Online Settings** dialog box will appear. Ensure that the correct IMx unit is selected, and then press the **[Config...]** button. [Figure 2] This will display the IMx channel configuration settings.

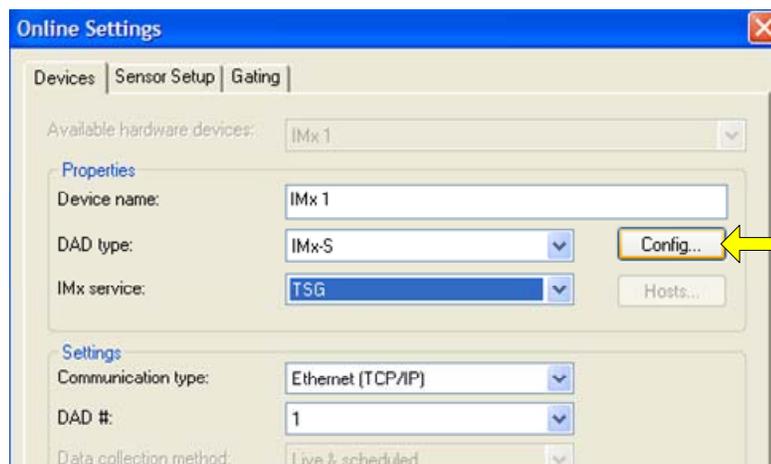
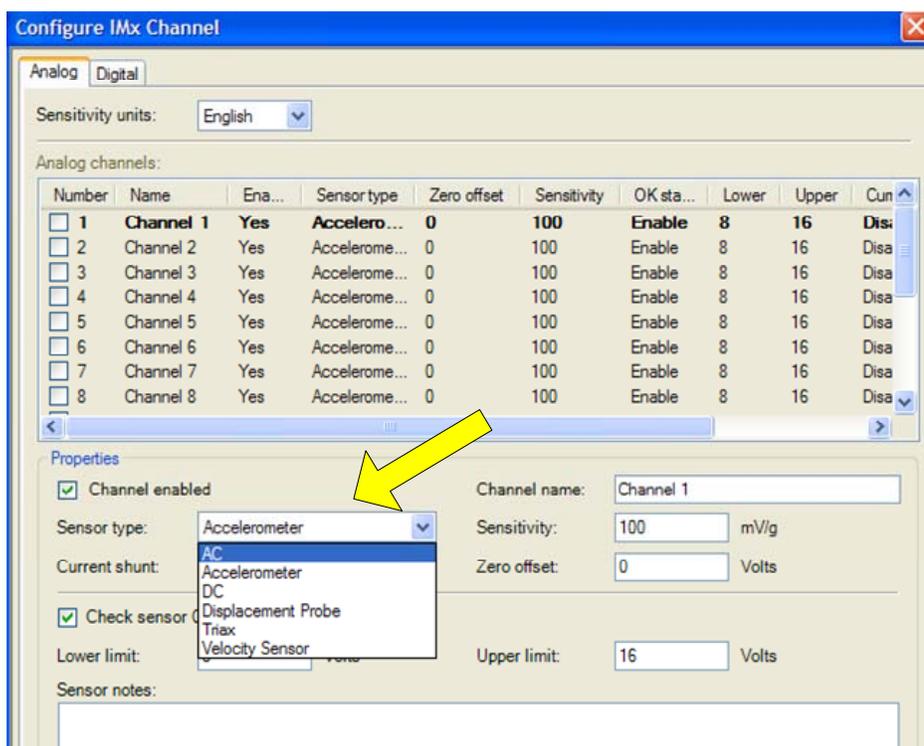


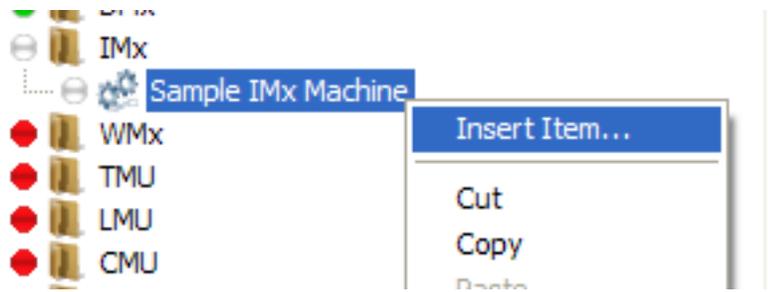
Figure 2. Selecting the Configuration for IMx

- There will be a total of 16 analog channels listed in the **Configure IMx Channel** window. Each one of these channels can be configured independently. **Selections made here must be matched to a corresponding DIP switch located in the I/O board of the IMx.** Please refer to the IMx installation guide for details related to DIP switch settings.
- Enter the parameters for the POINT type selected. [Figure 3] With AC and DC POINTs, the **Sensitivity** will automatically be set to match the measurement type. Press the **[Save]** button when done.



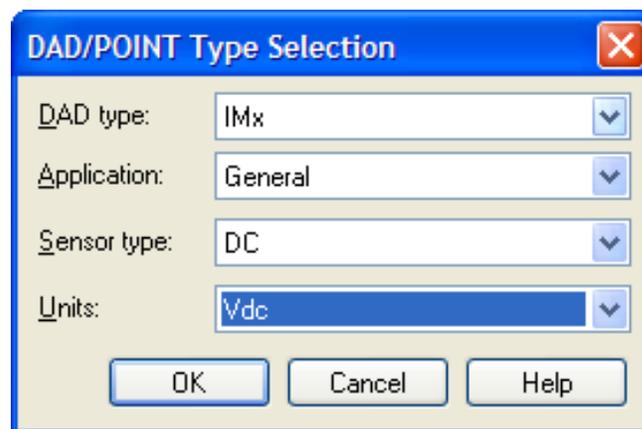
**Figure 3.** AC/DC POINT selection

- Now, go back into the hierarchy to insert the desired points. In the machine of interest, right-click and select **Insert Item** from the menu [Figure 4]



**Figure 4.** Entering a DC point in the hierarchy

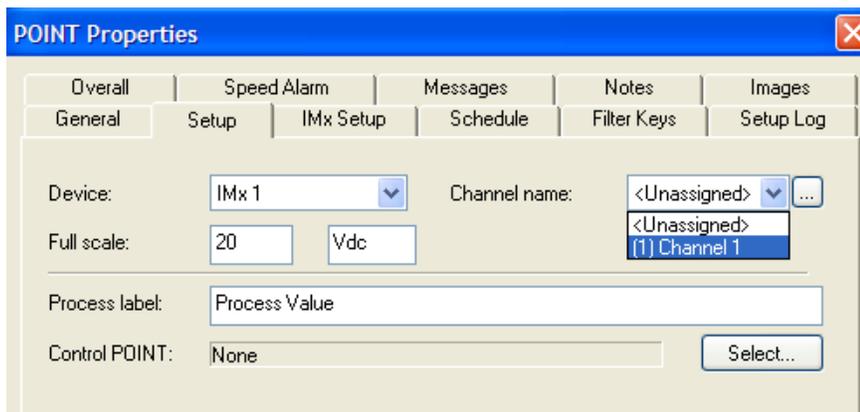
- In this example, **General** will be selected as the Application, and **DC** will be selected as the Sensor type. [Figure 5] Press the **[OK]** button to continue.



**Figure 5.** DC point selection

- The POINT Properties dialog will appear. The **General** tab simply shows a summary of the newly created POINT. A unique POINT name and description may be entered here.

8. The **Setup** tab provides the essential parameters that define a POINT. Ensure the correct IMx and corresponding channels are properly selected. [Figure 6]
9. Define the parameters in the other Properties tabs as needed.



**Figure 6.** DC Point Setup Parameters

**Note:** As demonstrated in the example above, only POINTs that are designated as **DC** items will appear in the drop-down list.

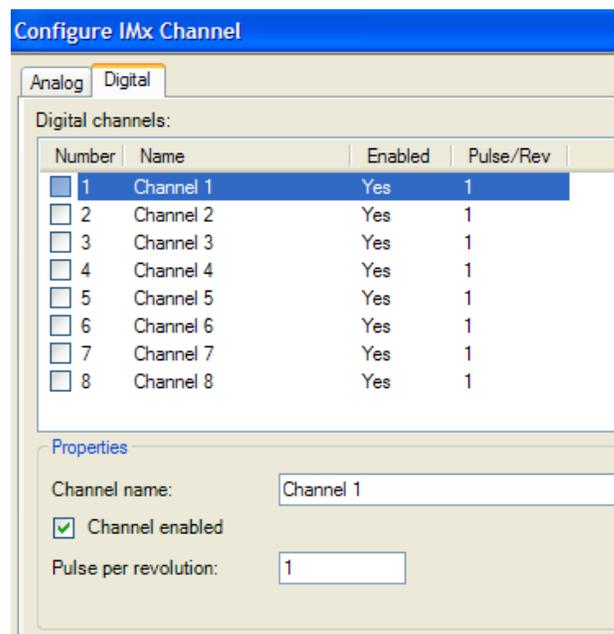
10. The point is now ready to be downloaded to the IMx unit. All process POINTs follow similar steps.

## Logic and Speed POINTs

Logic and Speed POINTs are similar in that both must be created under the Digital tab from within the Configure IMx Channel dialog box.

### Logic POINTs

1. Follow the instructions at the start of this document to get to the **Configure IMx Channel** dialog box, and then select the **Digital** tab. Ensure the channel of interest is enabled and the proper channel name is given. [Figure 7]



| Number                                | Name      | Enabled | Pulse/Rev |
|---------------------------------------|-----------|---------|-----------|
| <input checked="" type="checkbox"/> 1 | Channel 1 | Yes     | 1         |
| <input type="checkbox"/> 2            | Channel 2 | Yes     | 1         |
| <input type="checkbox"/> 3            | Channel 3 | Yes     | 1         |
| <input type="checkbox"/> 4            | Channel 4 | Yes     | 1         |
| <input type="checkbox"/> 5            | Channel 5 | Yes     | 1         |
| <input type="checkbox"/> 6            | Channel 6 | Yes     | 1         |
| <input type="checkbox"/> 7            | Channel 7 | Yes     | 1         |
| <input type="checkbox"/> 8            | Channel 8 | Yes     | 1         |

Properties

Channel name:

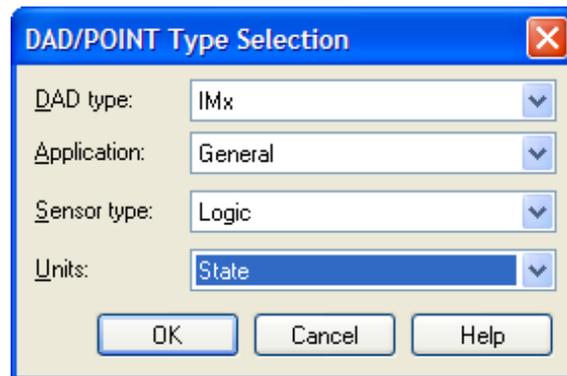
Channel enabled

Pulse per revolution:

**Figure 7.** Enabling Digital/Speed channels

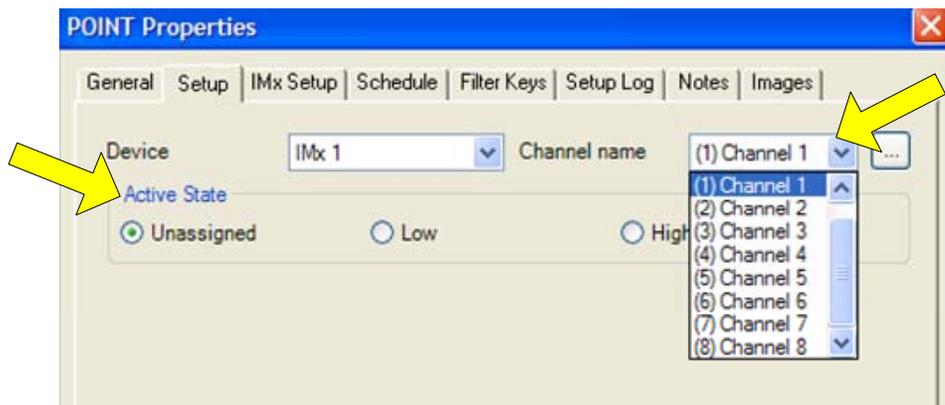
At this stage of a digital/speed POINT creation, the only difference would be the **Pulse per revolution** field. This field may be left at the default value of '1' for any logic POINT, but must be changed accordingly for a speed/tachometer point where there might be a requirement for diameter ratio conditions (such as gearboxes, unique aftermarket transducer output, etc.).

- Next, create a new digital POINT at the machine level. The DAD/POINT Type Selection dialog for a logic POINT is shown in Figure 8. IMx Digital POINTs can only be configured as a **State** type. Therefore, in the **Setup** tab, the user must define whether to look for a transition from logic '0' to logic '1', or vice-versa.



**Figure 8.** Logic Point Selection

- Open the POINT Properties window for the new POINT and click on the **Setup** tab. Figure 9 shows the parameters for a logic point. Select the proper IMx unit (**Device**) along with the corresponding channel (**Channel name**). Ensure the **Active state** setting is also defined.



**Figure 9.** Logic Point Parameter Entry

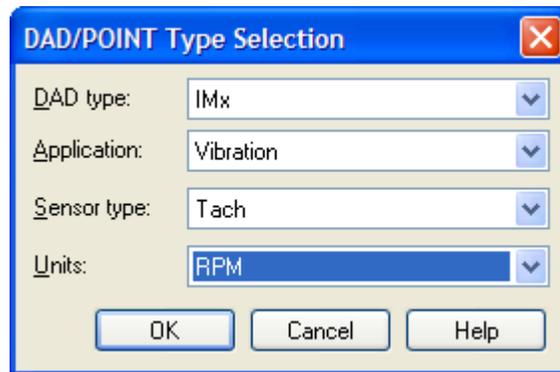
**Note:** Only eight channels will be shown (as opposed to 16 analog).

- Set the other parameters as desired in the remaining tabs and then save the changes by pressing [OK] at the bottom of the screen.

## Speed POINTs

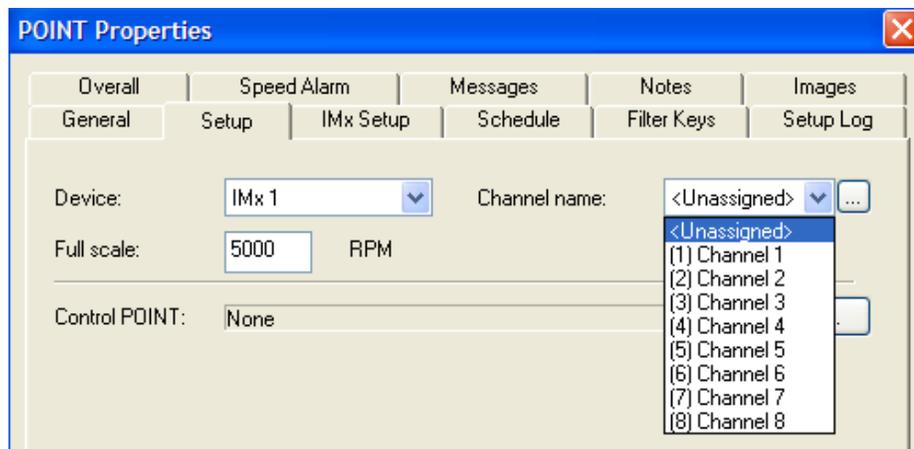
Speed-related POINTs are set up slightly differently than traditional digital POINTs.

1. In the DAD/POINT Type Selection dialog, select **Vibration** for the Application and **RPM** for the Units. [Figure 10]



**Figure 10.** Speed/Tachometer Selection

2. The parameters for a speed POINT are somewhat similar to those of a logic point. [Figure 11] In the **Setup** tab, select the proper IMx unit (**Device**) along with the corresponding channel (**Channel name**). The **Full Scale** value must be defined in *RPM*. Measurement units are defined in RPM by default. This unit of measure cannot be changed.



**Figure 11.** Speed/Tachometer Setup tab

3. Set the other parameters as desired in the remaining tabs and then save the changes by pressing the **[OK]** button at the bottom of the screen.

This concludes non-standard IMx POINT implementation. Please refer to the IMx installation guide for details related to DIP switch settings.

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For further assistance, please contact the Technical Support Group by phone at 1-800-523-7514 option 8, or by email at [TSG-Americas@skf.com](mailto:TSG-Americas@skf.com).

