

Data Flow Controller DX-series

Practices Guide

SynapseSync

Schedule

DX100-□□□□

Practices
Guide

Revision History

Version	Revised content	Date
Version 1.0	Original production	March 20, 2025
Version 2.0	Made corrections due to package support.	September 17, 2025
Version 2.1.0	Added support for English UI display.	March 31, 2026

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1.About the SynapseSync Schedule Package

1.1.Overview

This package provides additional custom components that run with SpeedBee Synapse (hereinafter referred to as Synapse).

When the package is registered, two components are added: Schedule Trigger and Interval Trigger.

Schedule Trigger: Outputs the value that the user sets at the time of the days of the week that the user sets.

Interval Trigger: Alternately outputs the values (0 or 1) specified by the system within the period of time that the user sets.

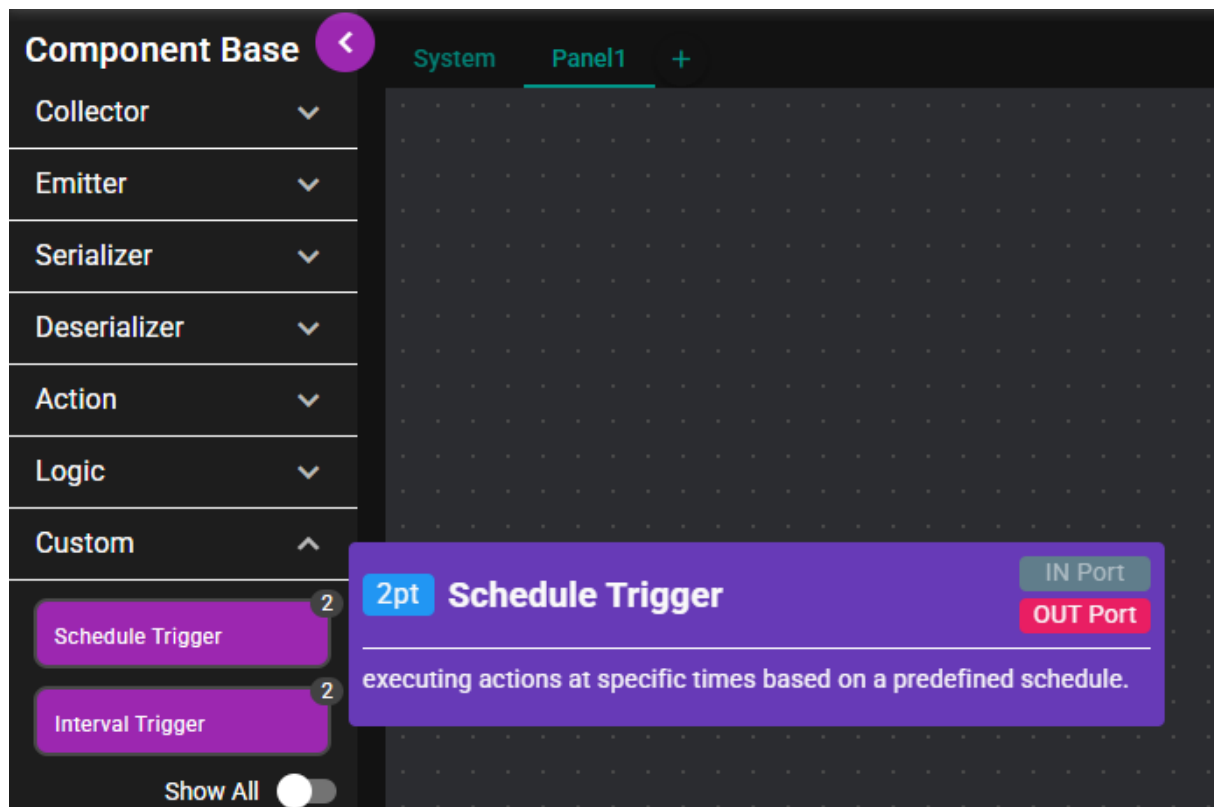
1.2.Basic Information About the Package

The component package provided is as follows.

Package file name (*1)	synapsesync_schedule.sccpkg
Operating environment	Platforms on which Synapse 4.9.5 or later is running
Components to be registered	Schedule Trigger, Interval Trigger (*2)

*1 Refer to 6.2.6.4 *Registering SCCPKG File in and Deleting SCCPKG File from Synapse in the DX-series SpeedBee Synapse User's Manual (Cat. No. V243)* for information on registering the package.

*2 If you add these custom components, they will be added under the *Custom* category.



1.3.Setting Screens

1.3.1.Schedule Trigger

Name Autostart disable

Time	Days of week	Output
00:00		

Rows per page: 10 1-1 of 1

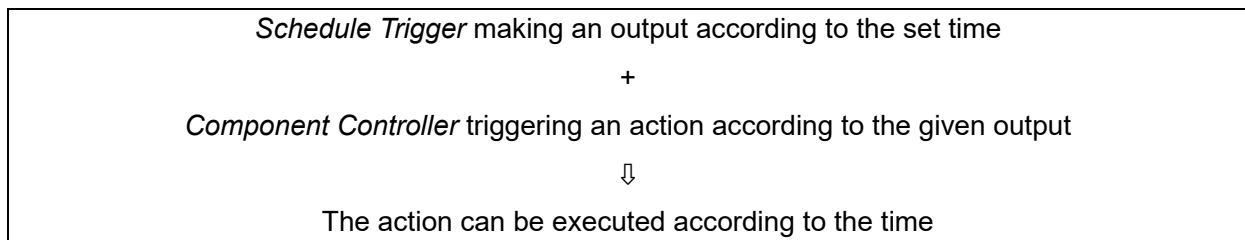
ADD

Item	Specification	Description
Time	Input	Time hh:mm
Days of week	Select	Days of week
Output	Input	Value
Delete button	Click	Deletion of an input data field
ADD button	Click	Addition of an input data field

The value that the user sets is output at the time of the day of the week that the user sets.

This component is designed on the assumption that this is used with other components such as Component Controller.

- Image



- Caution

You can make multiple schedule settings by adding them, but you cannot have conflicting time and days of the week.

- Example

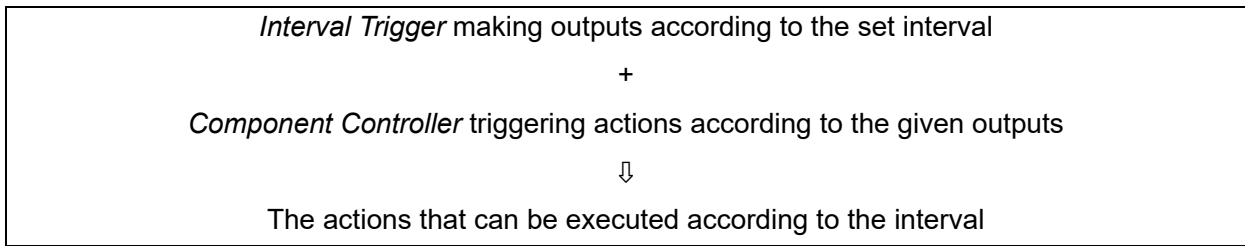
Time	Days of week	Output	Judgment
12:00	Mon	0	✓
12:00	Mon, Tue	1	✗
13:00	Mon, Tue	1	✓

1.3.2.Interval Trigger

Item	Specification	Description
Start Time	Input	00:00:00
End Time	Input	23:59:59
ON Time	Input	1800
OFF Time	Input	1800
Information	Display	ON Time: The period of time from when 1 is output until 0 is output next OFF Time: The period of time from when 0 is output until 1 is output next * The ON and OFF Times are repeated alternately.

The values (0 or 1) specified by the system are output alternately within the period of time that the user sets. This component is designed on the assumption that this is used with other components such as Component Controller.

- Image



- Usage example

The repetition of *an action executed for 45 minutes and a rest taken for 15 minutes*, and other similar usage cases are assumed.

- Caution

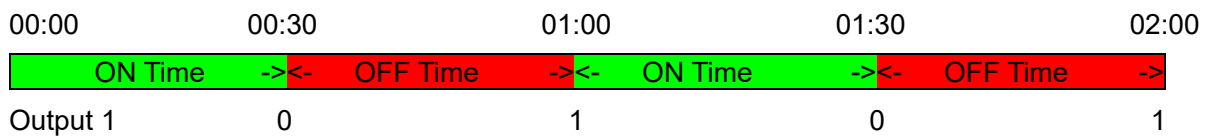
(1) The OFF Time starts after the ON Time passes.

Example:

Start Time: 00:00:00

ON Time: 30 (sec)

OFF Time: 30 (sec)



(2) The ON and OFF Times are determined based on the Start Time, rather than the startup time.

In the above example, thus, the output starts from 1 rather than 0 if the component starts up in the period of 00:30 to 01:00.

(3) An action cannot be executed over two days.

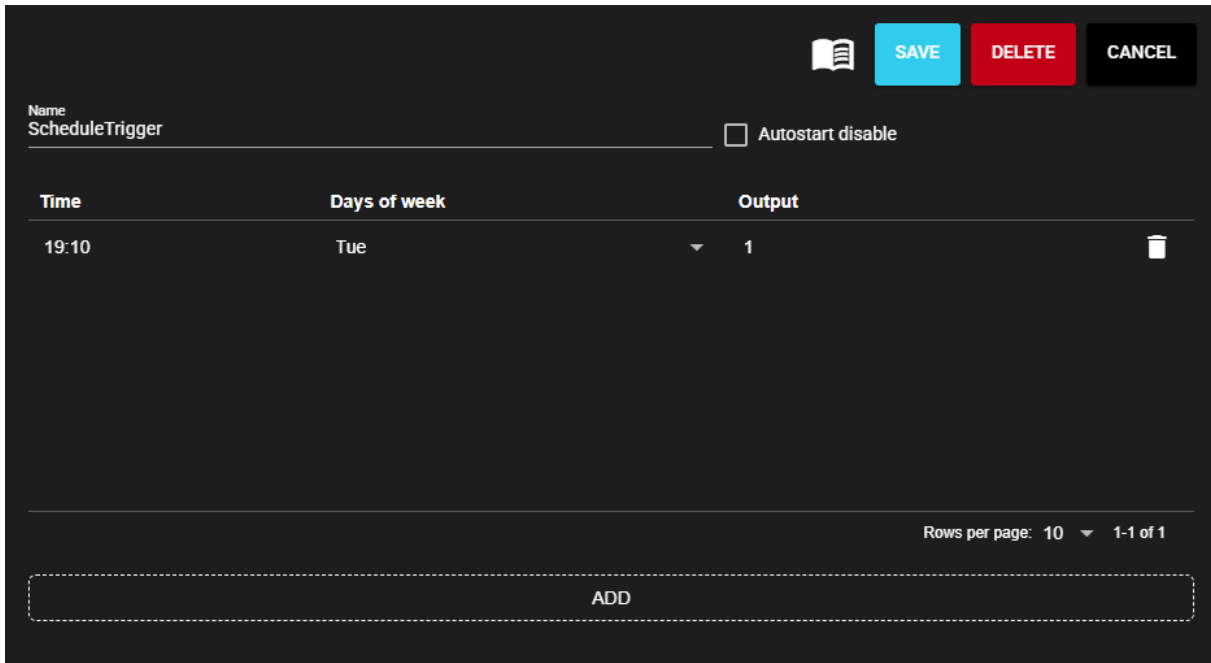
Example: Start Time: 23:59:59, End Time: 00:00:01

2.How to Use These Components

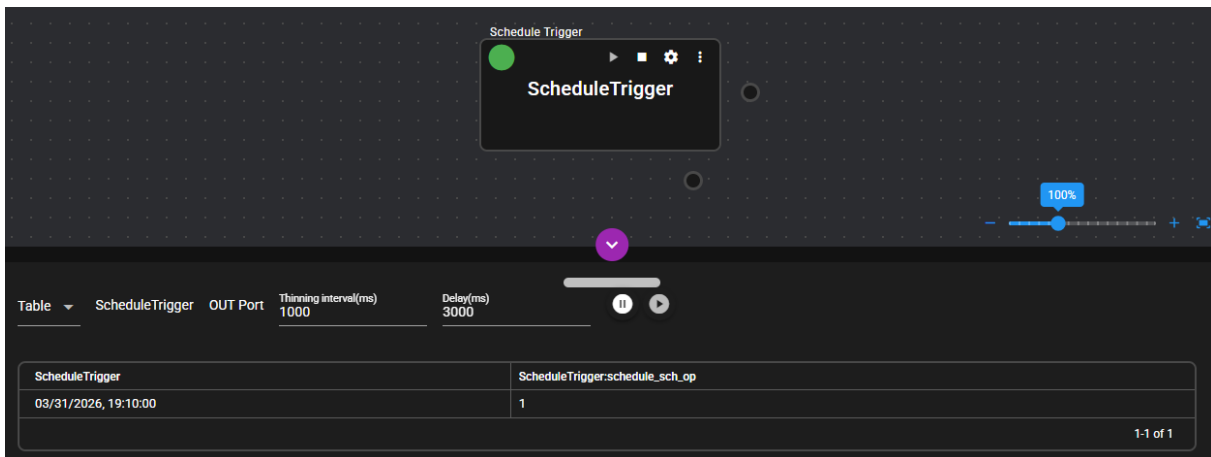
2.1.Schedule Trigger

2.1.1.Setting

Make a setting for a single data output to check it.



2.1.2.Component Execution



Because the set value is output at the set time, you can confirm that the setting is correctly executed.

2.2.Interval Trigger

2.2.1.Setting

Make a setting for a single data output to check it.

The screenshot shows the configuration interface for an Interval Trigger. At the top right, there are three buttons: 'SAVE' (blue), 'DELETE' (red), and 'CANCEL' (black). Below these is a book icon. The main configuration area has a dark background with white text. The 'Name' field is 'IntervalTrigger'. To its right is a checkbox labeled 'Autostart disable' which is currently unchecked. Below the name field, there are two columns for time settings: 'Start Time' is '19:15:00' and 'End Time' is '23:59:59'. Below that, there are two columns for duration settings: 'ON Time (sec)' is '5' and 'OFF Time (sec)' is '10'. An information icon (i) is located to the right of the OFF Time field.

2.2.2.Component Execution

The screenshot shows the execution interface for the Interval Trigger component. At the top, there is a control panel with a play button, a stop button, a settings gear, and a menu icon. Below this is a display area showing 'IntervalTrigger' with 'Output' and '0 Counts / min'. A progress bar at the bottom right shows '100%'. Below the display area, there is a table with columns for 'IntervalTrigger', 'OUT Port', 'Thinning interval(ms)', and 'Delay(ms)'. The table contains three rows of data. Below the table, there is a table with two columns: 'IntervalTrigger' and 'IntervalTrigger:interval_int_op'. The table contains three rows of data. A '1-3 of 3' indicator is at the bottom right of the table.

IntervalTrigger	OUT Port	Thinning interval(ms)	Delay(ms)
IntervalTrigger	IntervalTrigger	1000	3000
03/31/2026, 19:15:15			
03/31/2026, 19:15:05			
03/31/2026, 19:15:00			

IntervalTrigger	IntervalTrigger:interval_int_op
03/31/2026, 19:15:15	1
03/31/2026, 19:15:05	0
03/31/2026, 19:15:00	1

Because 1 is output at the start time and 0 is output five seconds later, you can confirm that the setting is correctly executed.

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Tutorial Video

<https://www.fa.omron.co.jp/dx1/video-manual/en/>



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Cat. No. V311-E1-01 0526