# MultiTouch Example

This visualization example shows how to evaluate and handle touch events of MultiTouch displays in CODESYS.

## Product description

This visualization example shows how to evaluate and handle touch events of MultiTouch displays in CODESYS. If visualization is used on a MultiTouch display, then an additional control concept is available to the user. Apart from the usual mouse and keyboard events, gestures and touch events are evaluated and processed.

### Supported gestures

- Pan gesture: pressing, shifting and releasing with a finger moves the contents of a window or a tab
- Flick gesture: fast shifting of a finger in an area, i.e. "flicking", leads to switching between different visualization screens
- Multi touch events: operating with several fingers at a time

  Several elements in a visualization screen can be actuated at the same time with several fingers. Thus it is possible to develop a two-hand control or a virtual mixer in which several sliders can be actuated at the same time.

The `IGestureEventHandler` interface of the `VisuElems.VisuElemBase` library enables IEC 61131-3 code to be implemented in order to react to gestures. A gesture event can be intercepted and consequential actions can be implemented.

The following clients can execute visualization on a MultiTouch device

- CODESYS TargetVisu on a device with Windows operating system
- CODESYS TargetVisu on a device with Linux operating system

## More information

The project `MultiTouchExample.project` shows the usage of the interface `IGestureEventHandler2`. The function block `GesturesHandler` implements the interface `IGestureEventHandler2`. At first the event handler must be registered at the event manager. This is done in the method `FB_Init` of the function block `GesturesHandler`. The methods `HandleFlickGesture`, `HandlePanGesture` and `HandleTouchEvent` will be called if a corresponding event occurs.

The example contains following functions:

**Scrolling:** Scrolling inside of frames and tab controls
**Multiple inputs:** Simultaneous control of input elements
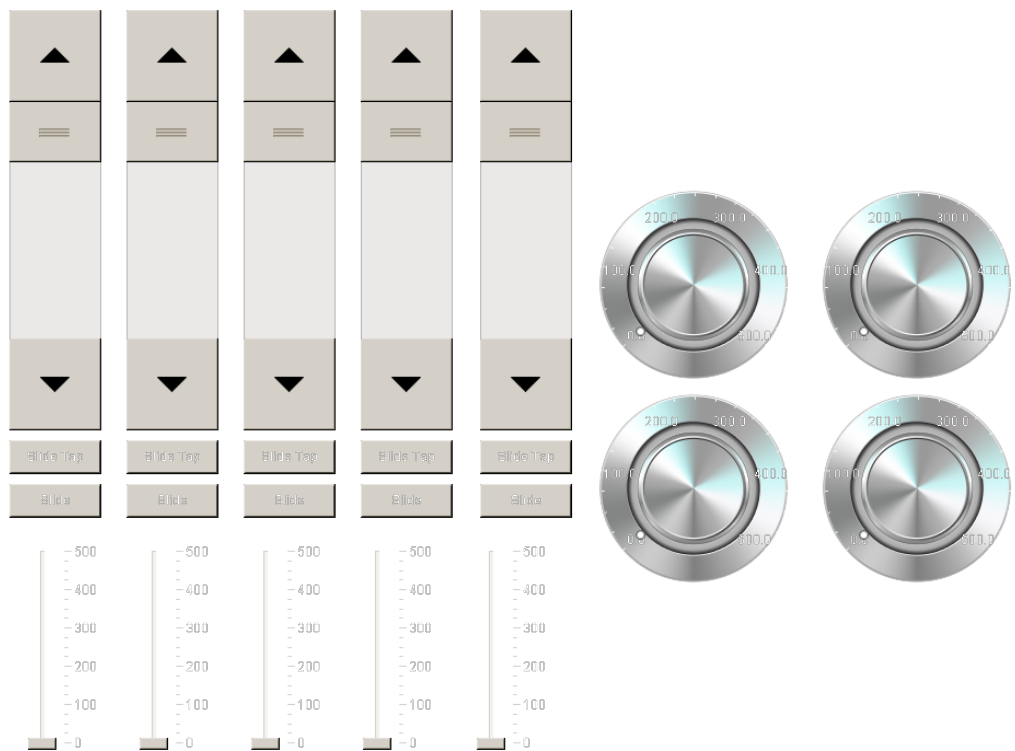**Two-hand inputs:** The example demonstrates the input handling with two hands
**Handling in IEC:** Event handling of touch events in IEC 61131-3; the example displays the current touch points at the screen
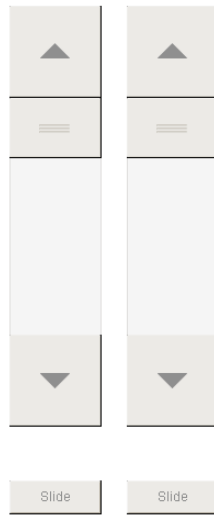**Flick detection:** Counts the horizontal and vertical flick events

## Screenshots

Slide  Slide
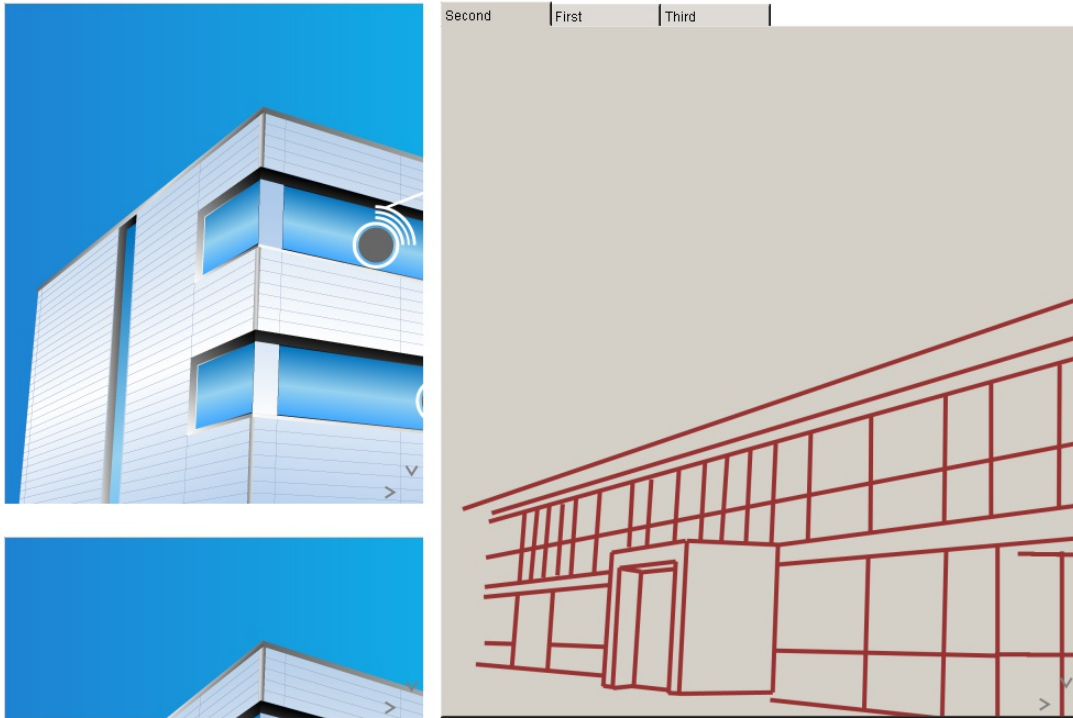
**Unlock Inputs**

| Scrolling | Multiple Inputs | Two-Hand inputs | Handling in IEC | Flick detection |
|-----------|-----------------|-----------------|-----------------|-----------------|

## General information

**Manufacturer:**

3S-Smart Software Solutions GmbH
Memminger Strasse 151
87439 Kempten
Germany

**Support:**

https://support.codesys.com

**Item:**
MultiTouch Example
**Item number:**
000057
**Sales:**

CODESYS Store
https://store.codesys.com

**Included in delivery:**
CODESYS Package

## System requirements and restrictions

| Programming System | CODESYS Development System Version 3.5.6.0 or higher |
| --- | --- |
| Runtime System | CODESYS Control Version 3.5.6.0 |
| Supported Platforms/ Devices | Note: Use the project "Device Reader" to find out the supported features of your device. "Device Reader" is available for free in the CODESYS Store. |
| Additional Requirements | • CODESYS TargetVisu on a device with Windows operating system or CODESYS TargetVisu on a device with Linux operating system<br>• MultiTouch display |
| Restrictions | - |

*Note: Not all CODESYS features are available in all territories. For more information on geographic restrictions, please contact sales@codesys.com.*
*Note: Technical specifications are subject to change. Errors and omissions excepted. The content of the current online version of this document applies.*