

Sound Demo

This example explains the mapping of device outputs. For illustration purposes it uses a sound card as a device and a program that allows the user to play some music.

Product description

When executing the MainVisu, the user will see a piano with the range of two octaves. A note will be played, as long as the user presses the mouse button on a key. If the mouse is released the sound will immediately stop. With a click on "Jukebox", it is possible to switch to the Jukebox mode. Three songs can be played there. The Jukebox mode comes with a play, pause and stop function. The user will also be able to change back to the piano mode.

Main_PRG: This contains the main logic of this example. It constantly changes between seven different states.

STATE.MUTE: All output bits will be set to FALSE and no sound will be played if the program changes to this mode. The animation of the jukebox will be stopped as well.

STATE.FUER_ELISE: In this state the song "Für Elise" (English: For Elise) will be played on the jukebox. It consists of 150 song components.

STATE.HAENSCHEN_KLEIN: In this state the song "Hänschen klein" (English: Little Johnny) will be played on the jukebox. It consists of 32 song components.

STATE.MERRY_XMAS: In this state the song "We wish you a merry Christmas" will be played on the jukebox. It consists of 37 song components.

STATE.PIANO: The Piano Mode gets activated in this mode. The MainVisu will present a piano to the user.

STATE.JUKE: The Jukebox Mode gets activated in this mode. The MainVisu will present a jukebox to the user.

STATE.WAITING: In this state nothing happens. The program simply cycles through ` this state until a state change gets triggered.

JUKEBOX (FB): The JukeBox FB controls the blinking animation of the JukeBox in the MainVisu. The Jukebox will change its appearance every 600ms. One cycle goes through 13 different Jukebox picture changes.

SoundCard: The path to the sound files can be changed in the "Internal Configuration" tab. Also additional songs can be added here.

Important Information

In order to make this example work, the CODESYS Control CFG file has to be extended. Change in your CODESYS installation folder to 'GatewayPLC/'. Open the file 'CODESYSControl.cfg' and add new component as 'IODrvSoundDemo'. See the screenshot below.

CODESYSControl - Editor	
Datei Bearbeiten Format Ansicht ?	
<pre>[ComponentManager] Component.1=CmpTargetVisuStub Component.2=CmpCodeMeter Component.3=IoDrvJoystickwin Component.4=IoDrvSoundDemo ;Component.3=CmpWebServer ;Component.4=CmpWebServerHandlerV3 ;Component.5=CmpHilscherCIFX ;Component.6=CmpPUSBCanDrv ;Component.7=CmpBlkDrvCanServer</pre>	
[CmpSettings] ;SplitDatabases=0 FileReference.0=SysFileMap.cfg, SysFileMap	
[CmpRouter] EnableLoopDetection=1 NumRouters=1 ;MaxRouters=1	
[CmpBlkDrvCom]	~
	> .::

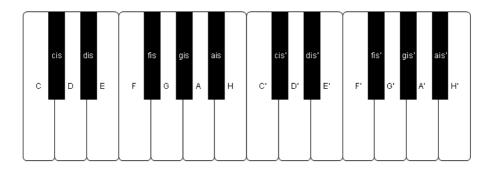
Insert the line 'Component.X=loDrvSoundDemo' to '~3SCoDeSysGatewayPLCCoDeSysControl.cfg'.

Mapping Table

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Screenshots

Play the Piano







General information

Manufacturer:

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

Support:

https://support.codesys.com

ltem:

Sound Demo Item number: 000027 Sales:

CODESYS Store https://store.codesys.com

Included in delivery:

- CODESYS software and / or license key with billing information
- For training courses and events: Booking confirmation

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	
	According to the availability of the CODESYS Runtime.	
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 De suise mente	Adding the "IODrvSoundDemo.dll" as component to	
Additional Requirements	~/GatewayPLC/CODESYSControl.cfg	
Restrictions	Windows Vista or higher requires the Sound Demo to run on "CoDeSys Control Win V3" instead of "CoDeSys Control Win V3 SysTray". Control WinV3 can be found in the Windows Start Menu.	
	64 Bit controls are not supported.	

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.