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Protocol specification of TCP/IP
Gira Control

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Introduction

Devices in the Gira Control series can be controlled remotely via the network. Functions for energy management can be carried out, such as switching into standby mode or functions for controlling an application remotely.

In this document, the commands and resulting possibilities to control the device will be described.

The configuration of a system such as the Gira HomeServer to send corresponding commands (TCP telegrams) via the network is not included in this document. Please take corresponding information from the operating instructions of the device with which the commands should be sent via the network.

TCP interface

A TCP interface is available for control at the following port:

TCP port 55111

The port 55111 is enabled in the firewall for the devices in the Gira Control series.

Structure of the TCP command

<COMMAND>_"<PARAMETER>"_"<PARAMETER>"_"…"

- A blank space should be inserted between the command and parameter (represented above with _)
- Parameters are placed in quotation marks
- When using more than one parameter, they should also be separated with a blank space

Example:

LEDBlink "RED" "200" "1000"

The example above causes the Gira Control 19 / 19.2 / 9.2 to have the status LED blink in the colour red. Here, the LED is switched on for 200 ms (pulse duration) and switched off for 1000 ms (pause duration).

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Structure of the parameter description in this document

Several commands allow the transfer of various parameters. If a command accepts a differing quantity of parameters, the quantity is noted in square brackets, and the meaning of the parameters is described in the following.

Example:

LEDBlink [1], [2], [3]

      [1] = colour

      [2] = pulse duration / pause duration

      [3] = colour / pulse duration / pause duration

In this example, the command "LEDBlink" can be called up with 1, 2 or 3 parameters. If 2 parameters are transferred, the first parameter designates the "pulse duration" and the second parameter specifies the "pause duration".

However, if only one parameter is transferred, a colour is specified in this position, signifying which colour the LED should blink in this example.

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This function is not supported by the Gira Control 19.2 and the Gira Control 9.2

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This function is not supported by the Gira Control 19.2 and the Gira Control 9.2

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Switching system into hibernate mode

Category:

Energy management

Description:

Switches the system into hibernate mode.

When a system switches into hibernate mode, the contents of the main memory are saved on the data carrier prior to switching the computer off. When the system is restarted, the desktop and programmes which were previously active are restored.

Command:

Hibernate

Restrictions:

This function is only supported by systems which support the hibernate mode.

Cannot be used with systems which use EWF (Enhanced Write Filter).

Examples:

Hibernate

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Switching the system into stand-by-mode

Category:

Energy management

Description:

Switches the system into stand-by-mode.

When the system is in stand-by-mode, the computer switches to a state with low energy consumption. For a computer in standby mode, several devices are switched off, and the computer uses less electricity. The system can be restored faster than when switching out of hibernate mode. Because the contents of the main memory are not saved on the data carrier in stand-by-mode, a power failure can result in a loss of information in a system in stand-by-mode.

Command:

Standby

Restrictions:

This function is only supported by systems which support stand-by-mode.

Examples:

Standby

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Shutting down the system

Category:

Energy management

Description:

Ends all running applications and shuts the system down.

Command:

Shutdown

Examples:

Shutdown

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Restarting the system

Category:

Energy management

Description:

Ends all running applications and restarts the system. Previously ended applications are not restarted when the system is started.

Command:

Restart

Examples:

Restart

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Switching the function display off

Category:

Energy management

Description:

Switches the display of the system off.

Command:

DisplayOff

Examples:

DisplayOff

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Switching the function display on

Category:

Energy management

Description:

Switches the display on.

Command:

DisplayOn

Examples:

DisplayOn

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Dimming function display

Category:

Energy management

Description:

Sets the brightness of the backlighting.

Relative change: DimmUp, DimmDown

Setting a predefined dimming level: DimmLevel 1 ... 6 (1 = bright, 6 = dark)

Setting a dimming value in % (0 ... 100%)

Command:

DimmUp   **DimmDown**   **DimmLevel [1]**   **DimmValue [1]**

Parameter:

[1] dimming level 1 ... 6 or dimming value 0 ...100

Restrictions:

Gira Control 19: The DimmValue function is not supported. DimmLevel must be used.

Gira Control 9: Setting values (DimmValue) lower than 32 darkens the display completely.

Examples:

DimmUp

DimmDown

DimmLevel "1"

DimmValue "63"

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Controlling LED

Category

Controlling hardware

Description

Controls the RGB LED. The LED can be switched on, switched off and switched to a blinking state. In addition, the blinking frequency can be specified.

This function is supported by Gira Control 19 / 19.2 / 9.2

Predefined colours:

- RED (abbreviated R)

- GREEN (abbreviated G)

- BLUE (abbreviated B)

- YELLOW (red/green) (abbreviated Y)

- MAGENTA (red, blue) (abbreviated M)

- CYAN (green, blue) (abbreviated C)

- WHITE (red, green, blue) (abbreviated W)

The long form or the corresponding abbreviation can be used for the value transfer.
Abbreviations can also be combined (example: "RG" for red and green.
Also corresponds to "Y")

Blinking frequency:

Blinking is specified using 2 parameters, the pulse duration and the pause duration. They are indicated in milliseconds and can be between 50 and 60000. The default value is "500/500".

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Commands

LEDOn   Switches the RGB LED on. The colour can also be optionally transferred as a parameter.

LEDOff   Switches the RGB LED off.

LEDColor   Sets the colour of the RGB LED without changing the switching state

LEDBlink   Switches the RGB LED into blinking state

LEDBlinkOff   Ends the blinking of the RGB LED. The RGB LED remains switched on in the last selected colour.

LEDPulse   Switches the RGB LED into a pulsing state. In the pulsing state, the LED blinks with the quantity of the transferred pulses. The blinking is repeated after the transferred pause.

LEDPulseOff   Ends the pulsing of the RGB LED. The RGB LED is switched off.

LEDFrequency   Sets the pulse-pause ratio for blinking and pulsing, but does not start a blinking function.

Restrictions:

Gira Control 9: This function is not supported.

Gira Control 9.2: This function is supported.

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Parameters:

LEDOn [0], [1]

      [0] = (no parameter transfer)

      [1] = colour

LEDBlink [1], [2], [3]

      [1] = colour

      [2] = pulse duration / pause duration

      [3] = colour / pulse duration / pause duration

LEDPulse [1], [2], [3], [4]

      [1] = quantity of pulses

      [2] = colour / quantity of pulses

      [3] = quantity of pulses / pulse duration / pause duration

      [4] = colour / quantity of pulses / pulse duration / pause duration

LEDFrequency [2]

      [2] = pulse duration / pause duration

Examples:

```
LEDOn "Red"

LEDOn "w"

LEDBlink "RG" "200" "1000"

LEDPulse "Cyan" "5" "200" "3000"

LEDPulse "3"

LEDFrequency "500" "2000"
```

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Starting an application

Category:

Controlling applications

Description:

Starts an application

Command:

StartApp

Parameters:

[1] Name of the application

[n] Name of the application / parameter 1 / parameter 2 / … / parameter n

Examples:

StartApp "notepad.exe"

StartApp "notepad.exe document.txt"

StartApp "notepad.exe" "document.txt"

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Ending an application

Category:

Controlling applications

Description:

Ends all applications with the names transferred as parameters.

Important: If more than one application with the same name is open, all corresponding applications are ended.

Command:

KillApp

Parameter:

[1] Name of the application (without extension)

Examples:

KillApp "notepad"

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Minimizing applications

Category:

Controlling applications

Description:

Minimizes all applications with the names transferred as parameters.

Important: If more than one application with the same name is open, all corresponding applications are minimized.

Command:

MinimizeApp

Parameter:

[1] Name of the application (without extension)

Examples:

MinimizeApp "notepad"

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Maximizing applications

Category:

Controlling applications

Description:

Maximizes all applications with the names transferred as parameters.

Important: If more than one application with the same name is open, all corresponding applications are maximized.

Command:

MaximizeApp

Parameter:

[1] Name of the application (without extension)

Examples:

MaximizeApp "notepad"

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Defining window position and size

Category:

Controlling applications

Description:

Maximizes all applications with the names transferred as parameters.

Important: If more than one application with the same name is open, all corresponding applications are maximized.

Command:

WinPos

Parameters:

[3] Name of the application (without extension) / position X / position Y

[5] Name of the application (without extension) / position X / position Y / size X / size Y

Examples:

WinPos "notepad" "100" "100" "640" "480"

WinPos "notepad" "200" "300"

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Opening an Internet page in full screen mode

Category:

Controlling applications

Description:

Calls up the Internet Explorer in kiosk mode. The page to be represented is transferred in the parameters.

Command:

BrowserFullScreen

Parameter:

[1] URL

Examples:

BrowserFullScreen "http://www.gira.de"

BrowserFullScreen "www.gira.de"

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Closing an Internet page

Category:

Controlling applications

Description:

Ends Internet Explorer.

Important: If Internet Explorer is open more than once, all instances are ended.

Command:

BrowserOff

Examples:

BrowserOff

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Controlling screensavers

Category:

Controlling the system

Description:

Starts or stops the screensaver.

Important: This command has no function if there is not a screensaver entered in the control panel.

Command:

ScreenSaverOn

ScreenSaverOff

Examples:

ScreenSaverOn
ScreenSaverOff

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Displaying the desktop

Category:

Controlling the system

Description:

Displays the system desktop or restores it.

Command:

ShowDesktop

RestoreDesktop

Examples:

ShowDesktop
RestoreDesktop

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