DIVUS CTP04

User Manual

Version 1.0

REV01-240729

GENERAL INFORMATION

DIVUS GmbH
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You are always welcome to inform us of errors or make suggestions for improving the program.

The present agreement also applies to special appendices to the manual.

This manual can contain terms and descriptions, which improper use by third can harm the copyrights of the author.

Please read the manual before beginning and keep the manual for later use.

The manual has been conceived and written for users who are experienced in the use of PCs and automation technology.

CONVENTIONS

[KEYS]	Keys that are to be pressed by the user are given in square brackets, e.g. [CTRL] or [DEL]
COURIER	On-screen messages are given in the Courier font, e.g. C:\>
COURIER BOLD	Keyboard input to be made by the user are given in Courier bold, e.g. C:\>**DIR**
„…“	Names of buttons to be pressed, menus or other onscreen elements and product names are given within double quotes. (e.g. “Configuration”).
PICTOGRAMS	In this manual, the following symbols are used to indicate particular text blocks.
	*Caution!* A dangerous situation may arise that may cause damage to material.
	*Hint* Hints and additional notes
	*New* New features

SAFETY INSTRUCTIONS

The present operating instructions contain those safety instructions that are required to safely operate the machine.

All persons working with the machine must heed the present operating instructions, especially the safety instructions.

In addition, all local stipulations governing the prevention of accidents must be heeded.

Only trained and authorized personnel may INSTALL AND OPERATE the machine.

PROPER APPLICATION: The machine has been designed for application inside the building automation and must not be used to control security functions.

The machine has been built using state-of-the-art technology and all applicable safety regulations. However, damage or negative effects to the machine or other material cannot be excluded if the machine is operated.

The machine meets the requirements of the EMC guidelines and of the harmonized European standards. Modifications to the machine hardware may affect the system's EMC compatibility.

Without special protection measures, the machine must not be used in EX areas and in plants that require special monitoring.

Danger of explosion. Do not expose the buffer batteries to heat. Serious injury may be the result.

The operating voltage of the machine must be within the specified range! The product label provides the required information.

LICENSES

DIVUS GmbH makes use of open-source software inside its products, e.g. the Linux operating system and its kernel.

Those software components are licensed under specific licenses, like the following:

- GNU General Public License (GPLv2)
- GNU Lesser General Public License (LGPL)

If you own one of our products, for three years after the latest factory production, you may request from DIVUS GmbH the source code for those software components which are licensed under the GNU General Public License or GNU Lesser General Public License, and make use, distribute and modify them accordingly to the respective licenses.

Note that re-use of source code released by DIVUS GmbH is unguaranteed, and DIVUS GmbH shall not bear any responsibility whatsoever for the source code.

We shall bear no responsibility whatsoever for any damage arising from changes (additions/ deletions) made to the software for this product by a third party other than DIVUS GmbH (or party authorized by DIVUS GmbH).

For any further information please contact our support service.

STANDARDS

The DIVUS KNX SERVER and DIVUS KNX SUPERIO meet the following guidelines and standards:

Low Voltage Directive 2014/35/EU (ex 73/23/CEE – 93/68/CEE – 06/95/CE)
Standard to which conformity is declared:
EN 50491-3:2009, EN 60950-1:2006+A11:2009+A1:2010+A12:2011 Safety

EMC Directive 2014/30/EU (ex 89/336/CEE – 92/31/CEE – 93/68/CEE – 04/108/CE)
Standard(s) to which conformity is declared:
EN 50491-5-1:2010, EN 50491-5-2:2010 Conducted & Radiated Emissions

RoHS2 Directive 2011/65/EU (ex 02/95/EC)
Standard(s) to which conformity is declared:
EN 50581:2012 Restriction of hazardous substances

The installation and wiring instructions contained in this documentation must be heeded. Conformity is indicated by the attached CE label.

The EC conformity statements can be obtained from:

DIVUS GmbH
Pillhof 51
I-39057 Eppan (BZ)

Regarding Directive 2012/19/EU (ex 2002/96/EC) waste electrical and electronic equipment has to be collected separately and is not allowed to dispose as unsorted municipal waste.

INDEX

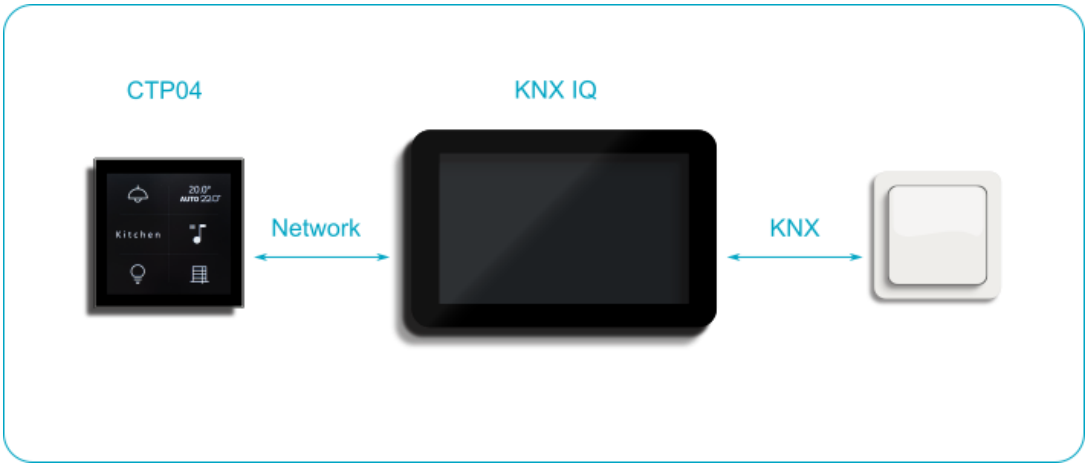
1 Introductory notes

1.1 INTRODUCTION

The DIVUS CTP04 is a 4" wall mounted touch panel with two main functions:

- Room controller
- Indoor unit for SIP based intercom systems

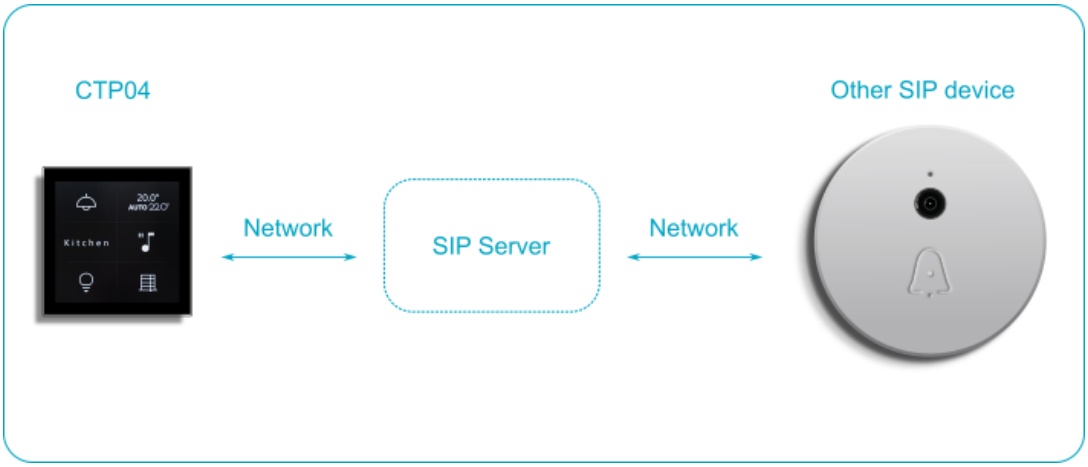
1.1.1 ROOM CONTROLLER FUNCTION



As a room controller, the CTP04 works as a client of a DIVUS KNX IQ. Its user interface is defined from the KNX IQ in the form of a *switch button design template*. The switch button design template is the graphical user interface that is designed for immediate operation, i.e. with the largest and clearest possible icons in large buttons. Touching a graphic button on the CTP04 is then converted into a command that reaches the KNX IQ via the network and from there reaches the target device as a KNX telegram and switches accordingly. In the same way, read-out values from a KNX device travel the same route in the opposite direction to the CTP04.

A DIVUS KNX IQ is therefore required as a server for use of the DIVUS CTP04 as a room controller. Conversely, one KNX IQ can operate up to 10 CTP04s as client devices.

1.1.2 SIP CLIENT FUNCTION



Like all other DIVUS touch panels, the DIVUS CTP04 comes with the DIVUS VIDEOPHONE as a pre-installed application for use as an internal unit in a SIP-based intercom system. For more detailed information on VIDEOPHONE, please refer to the relevant manual.

By configuring the SIP system (server address, user/ID and password), the external intercom station(s) and possibly also the other internal intercom stations, it is then possible to make or accept calls to other subscribers and, in the case of external intercom stations, also to display the corresponding video image and operate the door opener functions.

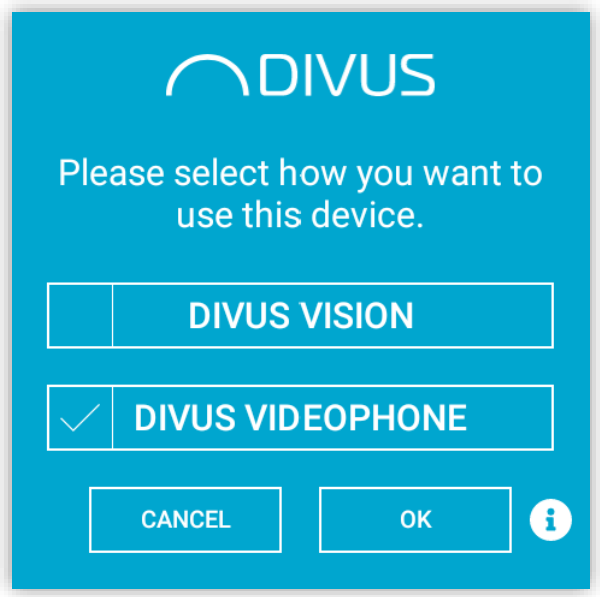
A minimal SIP-based intercom system requires a SIP server and at least 2 users who can then call each other. Normally there is one external and one internal intercom station, but other constellations are also possible.

In the DIVUS ecosystem, the SIP server role is played by the DIVUS CIRCLE (all models) and certain DIVUS KNX SERVERs for smaller systems or the DIVUS Heartbeat (all models) as well as the dedicated DIVUS VS1, VS2 and VS3 for medium to very large systems. Third-party devices or open-source solutions are also suitable for this purpose as long as they support the SIP protocol.

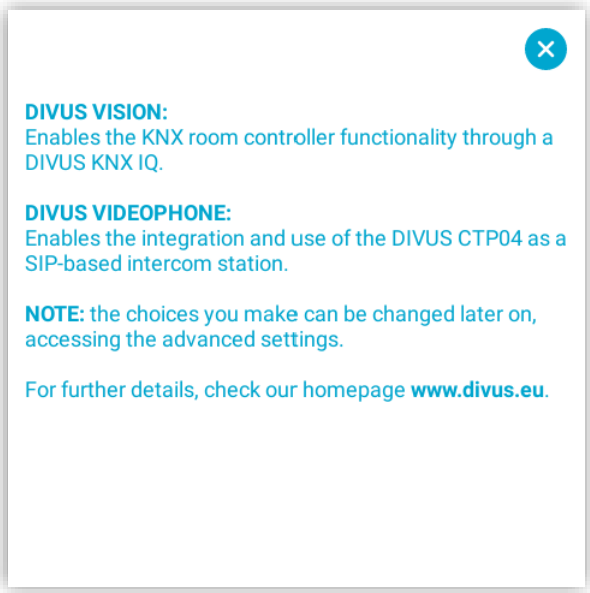
The same applies to an external unit or to an additional internal unit: it can be a DIVUS touch panel or a DIVUS CIRCLE or any other device that supports the SIP protocol.

1.2 INITIAL CONFIGURATION WIZARD

There is a simple page when you start the DIVUS CTP04 for the first time, offering to make a first choice of how the device will be used.



Basically, VISION stands for *ROOM CONTROLLER* and VIDEOPHONE stands for *SIP INTERCOM CLIENT* – in case you don't know those apps already. The small info button further explains:



You are free to select both apps or just one. In both cases it will configure the device in certain aspects:

- default app
- list of apps in the app menu

If you prefer to postpone this choice, push cancel and the window will close. The app menu will be complete but the wizard page will continue to return on every new device boot until you make a choice.

The main difference when choosing is whether VISION is selected or not: if it is, it will be automatically defined as the default app (the one shown when you approach the device) and the two VISION related buttons of the app

menu will be shown. If it is not selected, VIDEOPHONE will take its place as the default app and the VISION buttons will be hidden from the app menu. Also see chap. 1.5.

Further configuration changes, once the wizard is done, can be done in the CTP04 settings – see chap. 4.2.

1.3 DEVICE INTERACTIONS

Most interactions are meant to be operated using your fingers on the touch screen. Here to the details:

1.3.1.1 Pushing / tapping

Most interactions between the user and the visualisation are done by pushing / tapping on graphical buttons with a finger.

1.3.1.2 Long press

When long-pressed, a switch button will give access to the element's detail view.

In the VIDEOPHONE, when long pressing the volume button between the + and the – buttons, it will activate the do not disturb mode (calls are disabled) while a normal press will mute the device (calls come in but the device will not ring)

1.3.1.3 Swiping / dragging

Some interactions are by swiping or dragging: the pushed finger is moved on the touch surface in a given direction and then released. Examples of this type of interaction are e.g.:

- Moving vertically to adjacent pages
- Moving down or up to reach some functions of an element in a detail view (when inside a detail view of an element which has functions which don't fit in a page's view)
- Toggle an On/Off button in the detail view (Note: On/Off buttons offer both single touch switching and swiping to toggle from one value to the other)
- Swipe down the app menu (see chap. 1.5)
- For other cases in the normal view of VISION, please refer to the DIVUS VISION Manual.

1.4 NAVIGATION

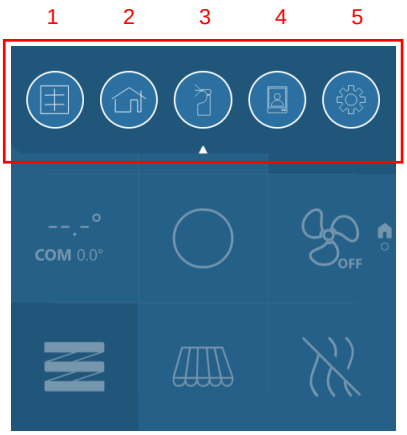
The DIVUS CTP04 has two different navigation concepts:

- The app menu appears when you swipe vertically downwards from the top edge (you "pull it down", so to speak) and allows you to call up other apps. A small white arrow pointing downwards indicates that you can swipe down from there.

- The page menu within the template. Navigation between pages is done by swiping vertically up or down. The menu shows the number and position of the pages.

Both are described in more detail below.

1.5 APP MENU



The app menu can be accessed by swiping vertically downwards from the top edge of the display. The small white arrow indicates this.

As soon as it appears, you can

- open one of the displayed apps

- close the menu again by swiping upwards from the bottom (the small white arrow points upwards - see image)

The apps are - from left to right:

1. VISION in switch button design (only visible when configured as a room controller)

2. VISION in normal design (only visible when configured as a room controller)

3. VIDEOPHONE

4. SCREENCLEANER

5. CTP04 Settings

VISION in switch button design is the default app if the CTP04 has been configured as a room controller (i.e. VISION was selected in the wizard page). The display will therefore always return to this app after a certain timeout.

For special cases or changes, access to the VISION visualisation in normal design is also possible - to do this, select the icon shown in (2). Such cases are e.g.:

- Access to elements that are not displayed in the switch button design
- Access to the VISION settings in order to...
    - ...start a new pairing with a DIVUS KNX IQ
    - … change the background colour

      Only on CTP04, under Configuration - Local settings - Design, you will also find the AUTO setting, which adopts the switch button design template including the background colour. If you want to customize this on a client device, you can switch to COLOUR and then select the desired colour. To return to the colour of the template, you must - conversely - select AUTO as the design again.
    - … select a different switch button design template

  More details on the CTP04 settings in chapter 4.

The icon shown in (3) opens or brings the VIDEOPHONE app to the foreground. This allows you to use its full range of functions. See chapter 3.

To start the SCREENCLEANER app, which then allows you to clean the touch surface without accidentally triggering commands, select the icon shown in (4). After the graphically shown timeout, the SCREENCLEANER window closes, reactivates the capacitive touch surface and displays the previously active app again.

The icon in (5) gives access to the settings of the CTP04, which affect device configuration options such as network, language, date and time settings, etc. See chapter 4.

1.6 PAGES MENU

As soon as more than one page is created in a switch button design in VISION, the minimal pages menu appears for helping in the navigation between the pages. This consists of a little house icon, which indicates the home page, and up to 5 small circles. This menu is for orientation purposes only: it shows the current position (the full symbol) and how many other pages are available where. It also indicates that the pages are arranged vertically on top of each other and not side by side. In the picture here, for example, there are 5 pages below the current page.

After a timeout of 60 seconds without activity, the display jumps back to the page defined as the homepage (with the corresponding tick symbol). For optimum navigation, it is therefore advisable to place the homepage in the centre: thus all pages can then be reached via the shortest route.

Note: The pages menu is not used for direct navigation, i.e. you do not navigate by swiping or touching - it merely provides an overview and an orientation aid.

2 CTP04 as room controller

2.1 COMMISSIONING

Commissioning a CTP04 as a room controller consists of a series of steps, some of which are carried out on the KNX IQ and some on the CTP04 itself. For those on the KNX IQ, please refer to the Vision manual for more details.

The prerequisite is, of course, that the CTP04 can communicate with the KNX IQ via a network connection and that both devices have the same version of the VISION application.

1. create a switch button design template on the KNX IQ (Vision app - see Vision manual for more details)
2. pair the CTP04 with the KNX IQ (the procedure is the same as described for client devices in general in the VISION manual)
3. if there is a difference in the version of the VISION app on the 2 devices after successful pairing, this will be pointed out at this point and the update of the device with the older version will be offered. The procedure can only be continued after the update: the list of available templates is offered for selection on the CTP04.
4. after selecting the switch button design template, it is loaded onto the CTP04
5. from this point on, the CTP04 is fully functional as a room controller
6. subsequent changes to the template are transferred directly to the CTP04 when it is saved

2.2 NORMAL OPERATION

The user interface consists of one or more elements, each of which can be operated as a switch or display a value. The status of a switch is indicated by the icon (pressed and not pressed have different icons) and by the lighter or darker colour of the background (depending on the used colour). In addition to the toggle function, which all switches have in common, certain elements can also have arrows or plus/minus symbols, allowing you to offer a second function of the same element for operation. The element name can also be displayed as an option. Finally, by holding down a button, you can access the full detail view of the element, which graphically looks the same as in the VISION app on other types of devices.

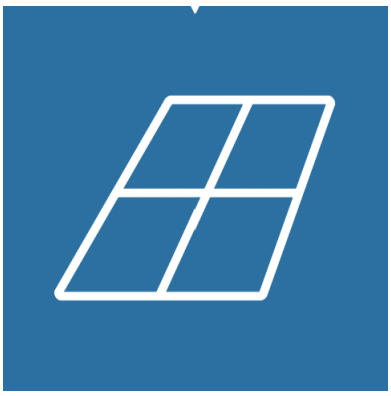
2.3 ELEMENT PROPERTIES

The properties of an element are

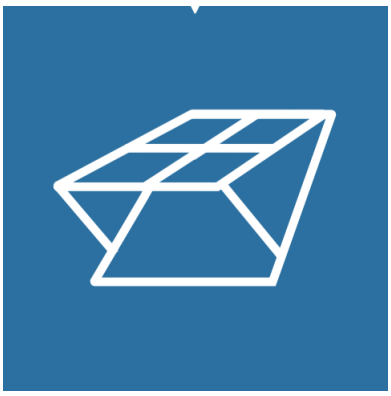
- Icon
- Status
- Value
- Name
- Extended functions
- Pin protection window
- Detail view

2.3.1 ICON

The icon symbolises the device to be controlled and can usually be selected when creating the element in VISION. See also Status.



Closed roof window



Open roof window

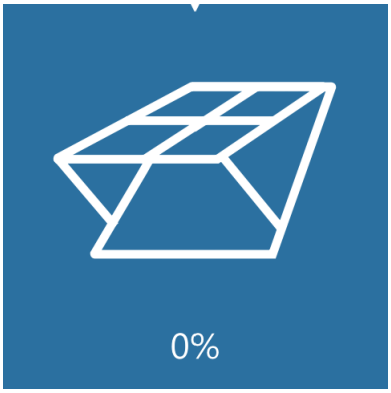
2.3.2 STATUS

The current status is indicated by the icon* and the lighter / darker background. In the example, two "pressed" switches are shown (i.e. status ON), while the others are switched off.

* Not all switches change their icon depending on their status; the exceptions are

- Thermostat and thermostat logic
- Customized slider
- Command button
- Unstoppable sequences and KNX scenes

2.3.3 VALUE



Certain elements (see Extended functions below) display the changed value under the icon for 10 seconds. Here is a brief overview:

Element type	Displayed value on change (10 sec.)
Blinds, venetian blinds	Percentage value / position (Up/down)
Dimmer, RGB(W), Tunable White	Percentage value of the dimmer
Music	Track info (artist and track) In this case, the title cyclically appears again and again and, of course, when the track or source is changed

2.3.4 NAME

The name can optionally be set to be shown in the Switch button designer (see the VISION Manual). It is then displayed below the icon. In certain cases (see Value), a changed value is displayed here for 10 seconds. The display then jumps back to the element's name.

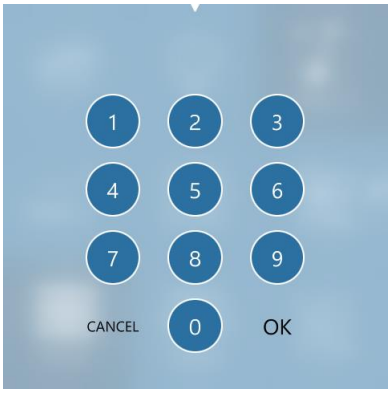
2.3.5 EXTENDED FUNCTIONS

Certain elements offer the option of using an extended view, where a value can be changed using two buttons (plus/minus or 2 arrows). Here is an overview of those elements and their functions:

Element	Main function (push the icon)	Extended function (push the additional symbols on the sides or above/below)
Dimmer RGB(W) Tunable White	On/Off	Dimming value - / +
Music	Play/Pause	Previous / Next (track or source)
Blinds Venetian blinds	(n/a) *	up/down < / >
Thermostat Thermostat-Logik	(n/a) *	Setpoint - / +

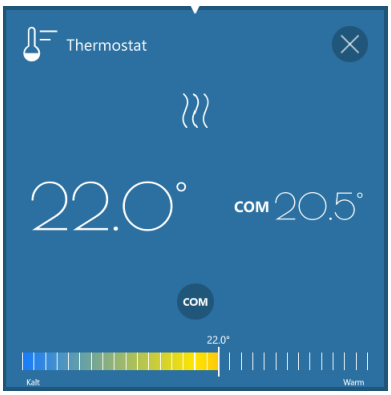
* With these elements, nothing happens when you press on the icon or the central area: either you activate and then use the extended buttons, or you can access the detailed view by long-pressing them to be able to change something.

2.3.6 PIN PROTECTION WINDOW



The PIN protection for an element must be defined in VISION. It then causes the numeric keypad shown here to be displayed after the first touch of a switch. Only after successfully entering the correct PIN code will the operation of the control element be enabled. The temporary login expires 10 seconds after the last interaction (i.e. touch) and a new PIN entry will be necessary at the next attempt.

2.3.7 DETAIL VIEW

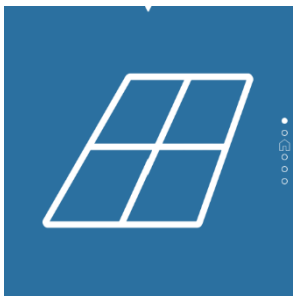
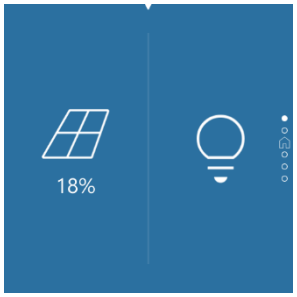
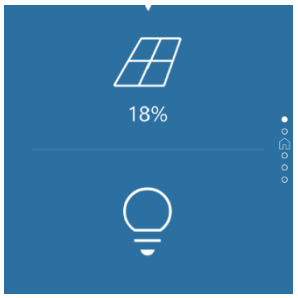
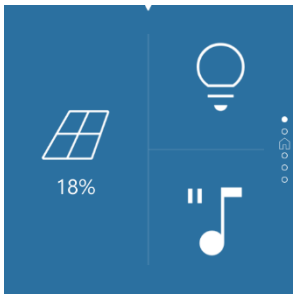
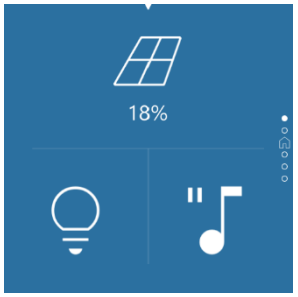
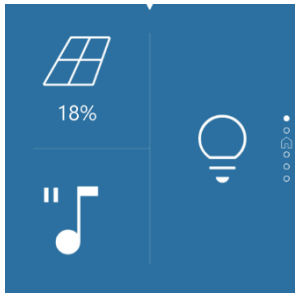
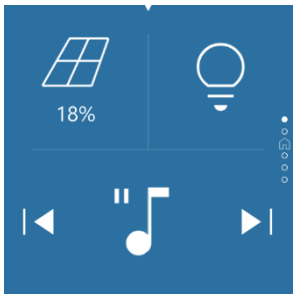
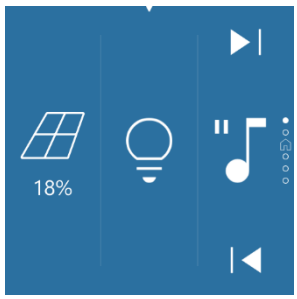


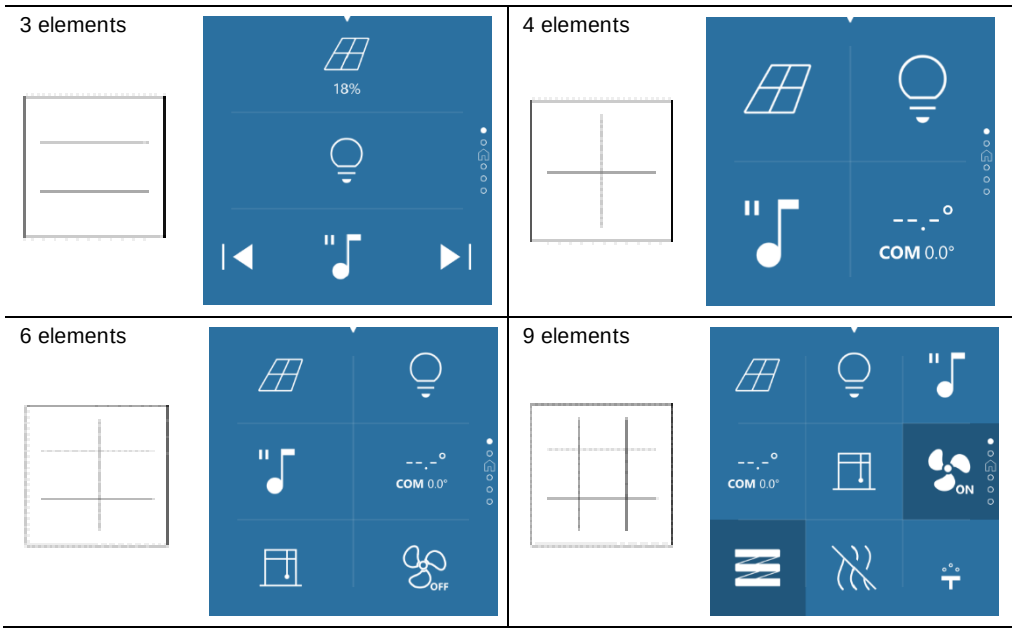
Behind each switch in a switch button design is the detail view, which looks the same as the VISION visualisation on other devices, except for a few details. As you will only access it from the CTP04 in exceptional cases, this view can only be accessed by keeping a switch pressed.

After the desired operation in the detailed view, close it again with the small X button in the top right-hand part of the window to return to the switch view.

Note: The functionalities that you cannot access or manage from the CTP04, compared to the detail view in the normal VISION design, are the schedules and the sequences.

2.4 NUMBER OF ELEMENTS/PAGE - OVERVIEW

1 element  	2 elements horiz.  
2 elements vert.  	3 elements  
3 elements  	3 elements  
3 elements  	3 elements  



2.5 *SWITCH BUTTON DESIGN TEMPLATES*

A switch button design template is what you manage in VISION under *Configuration - Visualisation - Switch button design templates* and can then select from the DIVUS CTP04 (see 2.13).

The background colour, the number of pages (max. 6), the main page and the arrangement and details of the individual elements on the pages are defined in a template.

You can find more detailed information on the switch button designer (where you can create and edit switch button design templates) in the DIVUS VISION Manual.

3 CTP04 as SIP Client

The SIP client function can be used in parallel with the room controller function or as primary function.

This decision is made during the initial setup in the wizard. This chapter deals with the special features that only arise if the CTP04 is to be used exclusively as a SIP client / indoor station.

For all special features and settings of the Videophone app, however, we refer you to the dedicated VIDEOPHONE 4 manual, as these do not differ at all on the CTP04 from what applies to all other DIVUS touch panel models.

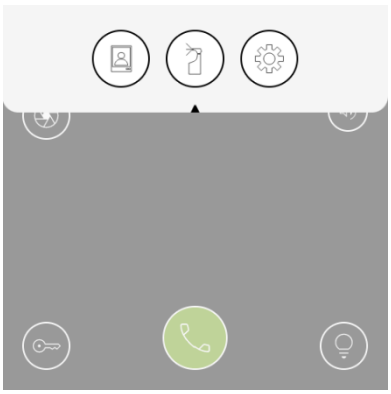
3.1 CTP04 – VIDEOPHONE

In this configuration, the DIVUS VIDEOPHONE 4 app takes on the main role, i.e. its window is displayed by default or is jumped back to after a certain timeout from other applications.

Whatever is currently displayed, the VIDEOPHONE app jumps to the foreground when there is an incoming call and rings. At the same time, it provides buttons for answering and hanging up and for the door opener functions. In the event of a call from an external intercom station, the configured video stream is also displayed.

In the same way, you can also start calls from the CTP04 that call other intercom users - whether external or internal.

3.2 APP MENU AS INDOOR STATION

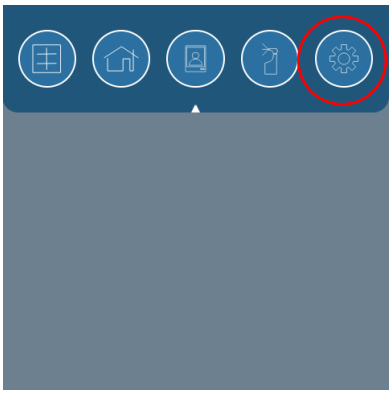


The app menu (see generally chapters 1.4 and 1.5) is reduced to these 3 apps in this configuration:

- *VIDEOPHONE*
- *SCREENCLEANER*
- *CTP04 LAUNCHER*

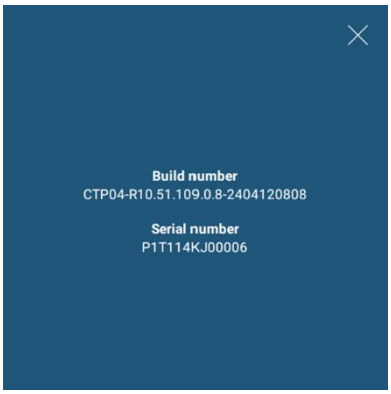
4 CTP04 Settings

4.1 ACCESS



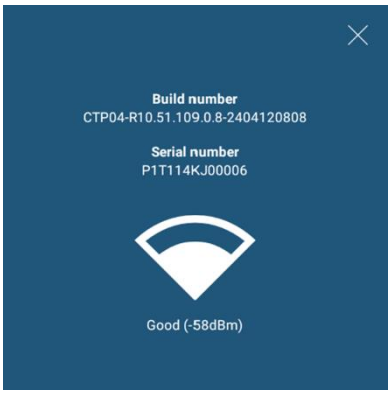
The *DIVUS CTP04 Settings* are used to manage the general and advanced device settings. They can be accessed via the app menu - the icon is the classic cogwheel for settings (far right).

Access is initially protected by the default PIN code 0000 - in the picture you can see the numeric keypad for entering it.



The small info icon in the lower right corner gives some essential information.

When using the ethernet connection, it shows build number and serial number:



When using Wi-Fi, it additionally shows the current signal strength:

4.2 SETTINGS OVERVIEW

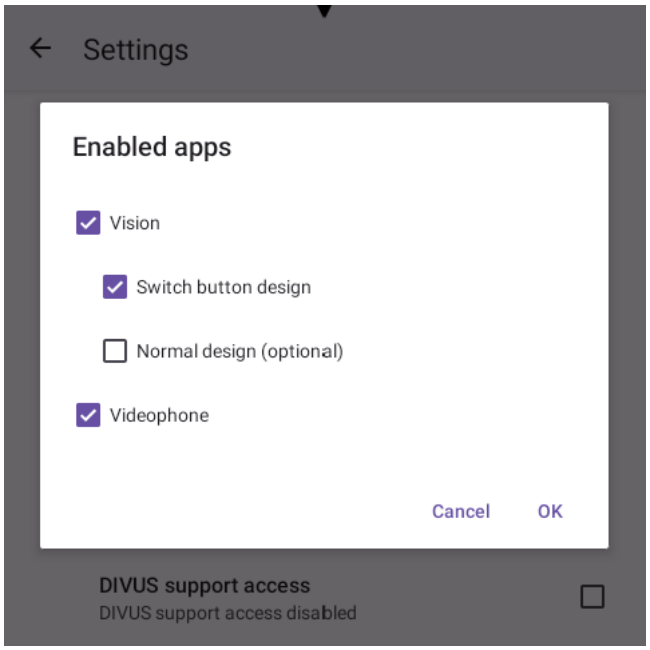
The main menu of the CTP04 settings contains these items:

- **General** settings
  - Network, language, date/time, etc.
- **Display / Lockscreen**
  - Settings regarding display, energy management etc. and the lock screen
- **Advanced** settings
  - Special settings, e.g. for Synchronizer access, TeamViewer, updates, PIN protection, etc.
- **Information**
  - For reading out essential information such as serial number, software version, etc.
- **Back** – Exits the settings

Detailed list of the settings:

Main menu entry	Sub menu entry	Description
General	Language	Allows you to select the system language. If supported, this is also used within the apps. Otherwise, English is used as a fallback language in the apps.
	Date/time	Provides the settings for date and time: NTP, time zone, etc.
	Network and connectivity	Here you will find the settings relating to the network configuration: Ethernet or Wi-Fi, Hostname. See chapter 4.3 for more details about the network configuration.

Display/Lockscreen	Display	Settings regarding the display, its power management and use of sensors
	Wakeup through proximity sensor	Enable/Disable the use of the proximity sensor to turn the screen on.
	Lockscreen type	Choose an option as lockscreen (Disabled/Vision/Videophone). Currently allows to choose an application to jump back to after the defined timeout. More options might be added in the future.
	Timeout	Timeout before launching the chosen lockscreen. Visible only if the lockscreen is not disabled.
Advanced	System password	Change the system password which allows access to all launcher settings
	User password	Change the user password which allows access to some launcher settings
	Enabled apps	Allows you to change the selections made during the wizard and add or remove applications to display and make accessible in the application menu.



VISION in the normal design is necessary if you want to change the connection to the KNX IQ device, select a different design template or edit other settings that affect the local app. It is not required for normal operation, which is why it can be deactivated / hidden from here.

	Automatic reboot	Allows to set an automated reboot daily or every x days.
	DIVUS support access	Allows access to be activated/deactivated. Enabling allows support personnel from DIVUS VPN access for support purposes.
	DIVUS Synchronizer access	Activates/deactivates access from the DIVUS Synchroniser.
	TeamViewer *Quicksupport*	Opens the corresponding support app
	System Update	Opens the corresponding app to update the system.
	Update Tool	Opens the program to manage app updates
	Power off / Reboot	Enables the system to be switched off or restarted.
	Application management	Opens the tool for managing the individual apps
	Volume control	Opens the sound and volume related settings
	Storage	Opens the overview of the current memory utilisation
Information	-	Shows serial number, software versions and other useful information about the device.
Back	-	Exits the settings

4.3 NETWORK CONFIGURATION

Per default, the DIVUS CTP04 will use the ethernet interface for data exchange and use DHCP to request an IP address. If you want to find out the assigned IP address or if you want to switch to a static IP address, go to the General settings – Network – Ethernet. The last option *Ethernet IP mode* allows to switch between DHCP and static.

4.3.1 WI-FI

If you ordered the DIVUS CTP04 with Wi-Fi, you will have a few additional menu points under General settings – Network regarding Wi-Fi and Bluetooth.

If you enable Wi-Fi, a scan of the available wireless networks will start and offer the results to choose from. You obviously need to enter the wi-fi password after the network selection and then make sure that the connection is successful.

4.3.1.1 WI-FI SIGNAL QUALITY

Once a Wi-Fi connection is established, its quality is monitored automatically by the CTP04. Should it be poor or should it drop for a longer time, a warning screen will be shown.

This warning is enabled per default but can be disabled through the *Don't show again* checkbox in the warning itself or in the Wi-Fi settings section.

In normal conditions, the Wi-Fi signal quality can be seen pushing the small info button on the CTP04 settings access page – see chapter 4.1

Note: Wi-Fi and Ethernet can only work alternatively: enabling one automatically will disable the other one while enabling both is not possible.

Note: in general, an ethernet connection is to be preferred to a Wi-Fi connection whenever possible: it is more stable, reliable and secure. We recommend to choose Wi-Fi only if a LAN cable connection is not possible on a given facility. If that is the case, remember to order the DIVUS CTP04(s) with Wi-Fi.

Note: planning and testing the Wi-Fi signal strength for each of the CTP04s using WI-FI on a project (i.e., the spots where the devices are going to be mounted) should be taken care of already before the installation. Nowadays e.g. mesh systems allow to strengthen the signal when the currently used networking devices don't offer a good enough signal where it is needed.

5 Appendix

5.1 RELEASE NOTES

VERSION 1.0

NEWS:

- First release

5.2 NOTES