GENERAL INFORMATION

DIVUS GmbH
Pillhof 51
I-39057 Eppan (BZ)

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We reserve the right to make changes to the manual without prior notification.

We assume no responsibility for any errors or omissions that may appear in this document.

We do not assume liability for the flawlessness and correctness of the programs and data contained on the delivered discs.

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

<table>
<thead>
<tr>
<th><strong>[KEY]</strong></th>
<th>Keys that are to be pressed by the user are given in square brackets, e.g. [CTRL] or [DEL]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Courier</td>
<td>On-screen messages are given in the Courier font, e.g. C:&gt;</td>
</tr>
<tr>
<td>Courier bold</td>
<td>Input to be made by the user are given in Courier bold, e.g. C:&gt;DIR).</td>
</tr>
<tr>
<td>“...”(double quotes)</td>
<td>Names of buttons to be pressed, menus or other onscreen elements and product names are given within double quotes. (e.g. “Configuration”).</td>
</tr>
</tbody>
</table>

**Symbolic**

- **Caution!** A dangerous situation may arise that may cause damage to material.
- **Note** Hints and additional notes.
- **NEW** Marks changes and new features

The terms „DIVUS TOUCHZONE“ and „DIVUS TZ“ or simply „TZ“ all point out the same product.
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.

STANDARD

DIVUS TOUCHZONE meets the following guidelines and standards:

Low Voltage Directive 2006/95/CE (ex 73/23/CEE – 93/68/CEE)

Standard(s) to which conformity is declared:
- EN 60950-1: 2001-02  Safety


Standard(s) to which conformity is declared:
- Emissions:
  - EN 61000-6-3: 2002-10
- Immunity:
  - EN 61000-6-1: 2002-10

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 2002/96/EC waste electrical and electronic equipment hast to be collected separately and is not allowed to dispose as unsorted municipal waste.
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A. Product description

A1. FRONT VIEW - DIVUS TOUCHZONE

TZ10 portrait mode

TZ15 landscape mode perspective

T207 portrait – TZ10 – TZ15 – TZ19 landscape mode size comparison
A2. INTERFACES - DIVUS TOUCHZONE

REAR CONNECTIONS
DIVUS TOUCHZONE has various connection possibilities on his back side. All necessary interfaces can be found there.

ATTENTION: Only the 7", 10" and 15" versions support PoE, the 19" version must be powered through DC in.

DIVUS TOUCHZONE - REAR CONNECTIONS

Rear Connections
- DIO
- DC in
- USB1
- USB2
- LINE Out
- LAN - PoE
- S1
- S2

### DIO

<table>
<thead>
<tr>
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<td>4</td>
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</tr>
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### DCIN

<table>
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<td></td>
</tr>
<tr>
<td>2</td>
<td>VIN -</td>
<td></td>
</tr>
</tbody>
</table>
FRONT CONNECTIONS
DIVUS TOUCHZONE offers important front connections for sensing and expansion too.

1. Microphone
2. USB OTG
3. Micro SDHC Card Slot
4. POWER-Button
5. RGB LED
6. HOME-Button
7. Loudspeaker

*Note:* with applied design cover, only the touchscreen and the HOME button are available for the handling of the device. The interface of DIVUS TZ was designed in a way that these input methods are enough. If you have own applications that require the BACK button, you can find it as hidden button under the design cover. In alternative you can use the soft keys, which are shown in the navigation bar of DIVUS TZ.

*Note:* further information regarding the interfaces and their control can be found in chapter C1.
A3. SCOPE OF DELIVERY

Hardware:
DIVUS TOUCHZONE
Fixing set to be used with wall mount kit
Retention screws
Aluminum front cover

Software:
Pre-Installed, fully functional operating system

Documentation:
Technical manual
Quickstart guide
Warranty conditions

Note: Please refer to chapter C of this manual which contains important information about the installation of the OS.
B1. GROUNDING

The following must be heeded to ensure that all electrical interference is safely absorbed: Connect the metallic wall mount kit with a central grounding point using the shortest possible distance. Make sure that the connection between the unit and the grounding point has the lowest possible impedance. All data cables connected to the unit must be shielded.

The shields must be grounded at both ends. A low-impedance connection must be established between the linked units. High compensation currents over the cable shields caused by potential differences must be excluded. Use a green-yellow cable with a minimum cross section of 2.5mm² for ground connection.

B2. COMMISSIONING

Power supply of TOUCHZONE is granted either through “Power over Ethernet” (7”, 10” and 15”) or through DC input on DC in plug (7”, 10”, 15” and 19”). Using DC input, the used power supply needs to provide safety extra-low voltage (SELV) and has to be compliant to EN60950-1 par.2.5 and EN61558-2-6 or equivalent. The 7” and 10” version must be supplied through a power source of no more than 15 VA under normal operating conditions or after a single fault. For all versions you must have the means for disconnection incorporated in the fixed wiring. Have the appliance connected to the mains using a device that allows the appliance to be disconnected from the mains at all poles with a contact opening. If using PoE, ensure that your switch, injector or power adapter is fully PoE compliant.

Power consumption of the device is defined in the technical documents. More technical details of the power supply can be found in section D2.

Caution! Pull out the power plug before opening the unit. Check all cable connections before commissioning the system. Make sure that all voltages and signals meet the specifications.

Attention! Only the 7”, 10” and 15” versions support PoE, the 19” version must be powered through DC in.

Note: Warranty regulations: DIVUS guarantees for DIVUS TOUCHZONE a warranty of 24 months after shipment (valid from date of delivery) if not stated otherwise. The warranty is only valid if all transportation takes place with the original package, including all shock absorbing elements, of the product.

Important:
Every repair shipment has to be approved by the technical support. Contact us under support@divus.biz. On that occasion you also get all necessary information, as well as the accompanying letter „repair request“. The original packaging has to be used for all transportation, as well for the one back to the distributor or manufacturer (like for repair). Otherwise DIVUS can’t give any guarantee for the product. Any damage occurring to the product if incorrectly packed will be charged to the client. Furthermore in such a case DIVUS will charge an additional fee for packing. For repair processes the document „repair request“ has to be compiled and returned with the product to allow us to guarantee an efficient service and a two week repair time.

For technical reasons only complete products can be returned to reparation.
B3. INSTALLING THE DIVUS TOUCHZONE

INSTALLING WALL MOUNT KIT

The wall mount box may be installed in a cut out in the wall, in a wooden structure thick at least 1.5 cm or in a dry mortarless construction. The cut out has to respect the sizes specified in the technical data and has to be at least 8 cm deep.

In the wall cut out, the box can become built in while it can be screwed on in a piece of furniture. It is important that the fore edge of the wall mount kit is flat and horizontally to the surface of the wall or the piece of furniture.

The wall mount kit offers cable access at all four sides.

INSTALLING TZ

Switch off the system/plant supply voltage. Connect the power and controlling cables. After the correct cabling and connecting the magnet, the TZ is put into the wall mount box and is fixed with the screws included in the packing. Now, you can install your design frame with slight, even pressure.

Caution! Unauthorized changes or modifications to the TZ configuration may result in permanent damage to the system or its functionality.

Only authorized trained personnel are allowed to make any modifications.

Caution! If you need to remove the design frame, extract it from the mounting horizontally. One-sided traction or slanted installing can damage the frame.

Caution! In order to be able to dissipate the warmth produced by the equipment, it must be guaranteed, that the temperature within the mounting box does not exceed 45°C. Under normal conditions this is given with an ambient temperature of up to 30°C. If these values are exceeded, additional cooling has to be provided.

The equipment must be installed vertically, i.e. the front plate must be in an angle of 90° to the base plate. Installation has to be conform to HD 60364-4-41 or other national prescriptions.
C. The operating system

DIVUS TOUCHZONE is delivered with the Android operating system in version 4.2.2. This operating system, used on countless smartphones and tablets, thanks to the Open Source technology offers nearly unga\textit{ted} capabilities as well as numerous usage possibilities due to the availability of manufacturer-specific applications. General information about the Android operating system can be found under www.android.com. Beneath the standard applications delivered by the default operating system (for example gallery, music player, ...), the following applications are installed by DIVUS:

- Google Play Store (prev. known as Android Market)
- DIVUS LAUNCHER
- DIVUS OPTIMA
- DIVUS VIDEOPHONE
- DIVUS KIBRO
- DIVUS S\texttt{CREENCLEANER}
- System-Update
- TeamViewer QuickSupport

The single applications are explained more in details in the following chapters.

\textbf{Note:} most of the screenshots shown within this manual are coming from devices in LANDSCAPE mode; the PORTRAIT mode typically offers the very same functionality, changes are limited to the graphical layout.

As in the previous version, also the new TZ series offers a navigation bar at the bottom of the display, which should simplify and fasten the navigation on the device. Beneath the HOME button, this navigation bar contains all the soft keys required for the navigation within the Android system. Find below a screenshot of the navigation bar:

The 6 keys within the navigation bar are (from left to right):

- VOLUME DOWN
- BACK
- HOME
- RECENTS
- VOLUME UP
- MENU

The VOLUME DOWN key lowers the volume of the DIVUS TZ and shows the current volume through a corresponding slider element, which also permits to access further volume settings.

The BACK key (depending on the shown app) permits to return to the previously shown page or to close the currently opened app.

The HOME key has the same functionality as the hardware HOME button and brings you back to the first page of the DIVUS LAUNCHER. The previously active app in this moment is brought to the background and continues running (the HOME button / key do NOT terminate running apps) if the HOME key is pressed some longer time, depending on the configuration additional actions (e.g. the access to Google NOW) become available.

A click on the RECENTS key shows the recently opened apps, what allows a quick switching between different applications and – via swipe gesture – also the closure of apps.

The VOLUME UP key increases the volume of the DIVUS TZ and – as also the VOLUME DOWN key – shows the current volume through a corresponding slider element, which also permits to access further volume settings.

The MENU key functionality depends on the currently shown app and – if available – shows additional menu.
and configuration options. The following screenshot shows an example of such a menu:

Furthermore, also the MENU key supports long-clicking: in this case it will show another pop-up window which permits to turn off or reboot DIVUS TZ:

**Caution!** Please ALWAYS use this menu in order to shutdown DIVUS TZ. An abrupt removal of the power supply can interrupt running processes and cause the dysfunction of different apps.

**NEWS - VERSION R2.0 - 2015:**

Since April 2015 the new versions of the DIVUS apps – described below – are available. Both the base image as also the single apps introduce a series of new features, which are shortly listed up below and will be described in the single chapters:

**GENERAL (Android base image):**

- Integration of volume control elements in the navigation bar
- Enabled support for the DIVUS Wi-Fi stick (not included, must be acquired separately)
- Adaption of the QuickSettings menu in the upper right status bar corner
- Removal of the flight mode option
- Adaption of the display settings menu
- Adaption of the brightness dimming control on the 10” device, to be the same as on other devices
- New version of the “System Update” app, with support for OTA updates
- New background images

**DIVUS LAUNCHER app (new version 1.1.1 rev.45):**

New Features:

**NEW WIDGET AREA:**

New widget area, supporting free positioning and resizing of the widgets (take care, by applying this update, you will have to re-position all previously connected widgets)

**NEW URL FEATURE:**

- Added the possibility to connect URLs to the launcher buttons and the autostart function, which can
then be opened through the integrated browser or DIVUS KiBro

- The button label is automatically created by getting the page title of the connected URL
- The button icon is automatically created by combining a default icon with the favicon of the connected URL

NEW DESIGN:

- Introduced new logo
- Introduced new icon
- Adapted standard background image for dark launcher (Panorama picture instead of black image)
- Adapted the design of the bright launcher buttons

OTHER:

- Introduced optional logo color changes, based on events (e.g. yellow if mute enabled, red if no network)
- Introduced new lockscreen option: image slideshow (additional options: select image folder and define the time period each image is shown)
- enabled proguard code obfuscation

BUG FIXINGS / CORRECTIONS:

- Increased default icon size from 70 to 80 pixel
- Adapted the way how to show the version name on A9 devices
- Fixed options menu on TZ15-19
- Changed the way on how to get images from internal storage, avoiding out of memory exceptions
- Changed layout of the app-chooser activity (now shown as a dialog) and adapted the button design
- Adapted preferences and settings in order to offer all the new features
- Adapted layouts: now only one port and one land layout is used for all screen sizes
- Added back function on title of preference screen, just like in Android settings
- Added new strings and translations
- Introduced note when changing between orientations with active extended layout (because cell layout changes)
- Removed unused permissions
- Navigation bar is now immediately shown / hidden if setting is changed
- Disabled reset of the background image on orientation change
- Adapted background handling code, now gravity is set to center and additional checks are made in order to prevent problems when images are not available
- Removal of the access to default Android settings (master password)
- Removed unused code
DIVUS OPTIMA app (new version 1.0.1 rev.40):

- Introduced new user agent for new TZ series (TZ_A9 instead of TOUCHZONE)
- Introduced new URL schemes for external link and camera handling
- Introduced web debugger library
- Introduced refresh button in toolbar
- Adapted start URL of the web server
- Fixed bug with toolbar functionality under Android Lollipop
- Introduced new icon
- Adapted background image to new design
- Enabled proguard code obfuscation

DIVUS VIDEOPHONE app (new version 1.0.1 rev.47):

- Fixed compatibility issue with 2N video streams
- Added more protections against wrongly configured camera URLs
- Fixed issue when sending multiple DTMF tones (delay was always 2000ms, independent from the set value)
- Limiting maximum delay for multiple DTMF tones to 9999ms
- Re-enabled error message and closure of the app if the native Android SIP stack is not available
- Introduced new icon
- Adapted background image to new design
- Small layout adaptions to the new background pictures
- Enabled proguard code obfuscation

DIVUS KIBRO app (new version 1.0.1 rev.7):

- Integrated intent for URL browsing, so KIBro can be used as default browser app
- Introduced progress bar
- Introduced settings button also within webview
- Introduced new icon
- Fixed options menu on TZ15-19
- Adapted loading of webview in order to avoid problems when getting URL from intent
- Enabled proguard code obfuscation

DIVUS ScreenCleaner app (new version 1.0.1 rev.9):

- Introduced new icon
- Enabled proguard code obfuscation

In order to get the new features described under "GENERAL", please check that your DIVUS TZ has loaded the latest software version. An update of your DIVUS TZ to the latest operating system version can be requested using the following form:


The single apps instead can also be updated directly through the Google Play Store (therefore all the new features can be obtained simply by updating the apps through the Play Store). If your account is correctly registered, you should automatically get a notification when new versions are available.
C1. HARDWARE INTERFACES

As already seen in chapter A2, DIVUS TZ offers different kinds of interfaces as well on the rear as on the front side. All interfaces are integrated and functional on Android level and can be accessed from custom applications through corresponding libraries. The following list shows the interfaces currently used by the applications of DIVUS, as well as the interfaces currently free and therefore usable in custom apps. In case you should need the function libraries for your own customizations, please refer to the technical support of DIVUS:

Front side:

- Microphone: Among others used by the DIVUS VIDEOPHONE app.
- USB-OTG: Works as well as USB host as also as USB device, which means that either USB devices (like USB storages, USB mice etc.) can be connected or DIVUS TZ can be used as mass storage on a PC.
- microSD Card Slot: Through the settings of DIVUS LAUNCHER connected microSD cards can be mounted / unmounted.
- RGB-LED: Is used by the DIVUS LAUNCHER for signaling purposes.
- Speaker: Among others used by the DIVUS VIDEOPHONE app.

Rear side:

- DIO: Among others used by the DIVUS VIDEOPHONE app.
- USB 1+2: For the connection of USB devices (like USB storages, USB mice etc.).
- Line Out: Can be used to forward the audio signal to a HiFi system (internal audio signal is disabled).

Note: Generally all USB devices compatible with Linux operating systems that are using the default drivers (HID devices, mass storages) can be used in combination with DIVUS TZ.

C2. GOOGLE PLAY STORE

At delivery, DIVUS TZ already contains the Play Store of Google, which can be used to obtain numerous apps of different manufacturers. This „door“ to the Android world gives you the possibility to customize DIVUS TZ exactly according to your wishes and to download different kinds of applications to your device.

Details on the first steps with the Google Play Store can be found on the following web page:

http://support.google.com/googleplay/?hl=en

1. The Play Store requires an active internet connection. If DIVUS TZ is used without internet access, The Play Store is either automatically hidden or shows a corresponding warning message.

2. In order to be able to use the Play Store, you have to check that your DIVUS TZ shows the correct date and time settings. If these settings are not correct, the Play Store cannot connect to its servers and will show no contents. The time/date settings can be configured through the settings page of the DIVUS LAUNCHER.

3. In case no app download should be possible, please empty the cache of the Play Store through the settings of the DIVUS LAUNCHER (System - Manage Applications – All – Google Play Store).

4. Please take care that you will not be able to install all apps on the Play Store on DIVUS TZ. The Play Store is filtering apps according to certain criteria (for example display size, permissions, additional functions like gravity sensor, GPS, phone etc.). If a device doesn’t support a required criterion, the app will not be shown on Play Store. So if you shouldn’t be able to see an app on DIVUS TZ that on your smartphone is visualised normally, it could be that DIVUS TZ doesn’t fulfill one of the criteria required by the app to be launched correctly. In this case you can try to get in contact with the manufacturer of the app in order to understand the missing criteria and eventually find a solution for being able to run the app on DIVUS TZ.
Note: The Play Store can only be used with a valid Google-Account. If needed, this account can be created directly on DIVUS TZ using the wizard within the Play Store. It is possible to create or remove as many accounts as desired.

C3. DIVUS LAUNCHER

The DIVUS LAUNCHER app is the main app of DIVUS TZ. Launcher apps in the Android world generally determine start screens or graphical interfaces that hide the original menu of Android. In this way the user should not be overwhelmed by the open architecture of Android, but should be able to focus on the most important functionalities.

Exactly this concept is followed also by the DIVUS LAUNCHER app, which shows a simple grid of 6 fields that permit a quick access to the most important functions / apps. Naturally it is possible to create more than one launcher page, with the possibility to change between them using a swipe gesture. Furthermore the DIVUS LAUNCHER offers also a series of settings which should make easier the configuration of DIVUS TZ.

After the first start of DIVUS TZ, the DIVUS LAUNCHER will present the following start screen:

![Welcome Screen](image)

The welcome message, as indicated also within the message itself, will be shown as long as the default password that protects the access to the settings page (0000) isn’t changed. By confirming the message you will see the first page of the launcher, which on 5 of the 6 available fields will already show preconfigured symbols for Building, Intercom, Multiroom, Energy and Security.

All these fields at delivery are not configured and therefore must be connected to the desired app using the long-click-function. The field “Building” for example can be connected to the pre-installed app DIVUS OPTIMA, in case you are using DIVUS KNXSERVER as building management system; or you connect the app DIVUS VIDEOPHONE to the field “Intercom” if you want to use the panel for door communication.

It’s the same with the other pages of the launcher; also their fields are empty. A simple click on an empty / not connected field shows an info message that the field must first be connected to an app via long-click-function before it can be used. If therefore a long click is executed on one of the fields, a list of the apps present in the device will be shown, which gives the possibility to select the desired app and connect it to the field. The selected app in the connection will be shown at the corresponding position in the launcher. Naturally the long click can be executed also on already connected fields in order to remove the connected app or to connect a different app.
The following screenshot shows the app selection popup, which is shown after executing a LongClick on one of the launcher button and which is used to connect the desired app:

As visible in the screenshot, instead of an app it’s also possible to connect a URL to a launcher button. In this case, instead of selecting an app from the shown list you can simply select the URL field, enter the desired target URL (e.g.: http://www.divus.eu) and click on "Set URL". If afterwards the corresponding launcher button is clicked for the first time, a dialog will appear which permits to select the browser to be used to show the URL (e.g. default Android browser, Google Chrome, DIVUS KiBro, …). In this dialog you can also specify whether to always use the same browser or to keep asking for the selection. The URL field is only enabled if DIVUS TZ has an active network connection.

Note: When connecting an app to a launcher button, the button will display the app icon as symbol and the app name as label; if you connect a URL, the symbol is a combination of a default icon and the favicon of the target URL, meanwhile the title of the target URL is used as button label.

As visible, the first 5 fields use customized icons. Other fields will simply show the icon of the connected app. If also the first 5 fields should show the original icons instead of the customized ones, this can be simply acquired by changing the corresponding parameters in the settings page of the launcher, as explained more in detail on the following pages.

The settings page is accessed by clicking on the DIVUS – Logo in the upper bar of the launcher. If the password protection is active, you will have to insert a password before (like 0000 at first access). The configuration page shows the following contents:

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The available settings are structured in 4 categories, which will be explained in the following chapters of this manual. Furthermore, this page shows the Android version installed currently on the device. By clicking on the last entry you will leave the settings menu and return to the launcher.

**CATEGORY „GENERAL”:**

The following screenshot shows the different settings / entries available in the first category:

The first to entries simply redirect to standard Android settings and allow to change the language of DIVUS TZ and to set the date and time correctly:

DIVUS TZ offers all the languages contained in the Android repertoire. Nevertheless, the applications of DIVUS are limited to the languages German, Italian and English. Further translations are added continuously. If a non-supported language is selected, those applications will be shown in English.

The date and time settings can be configured as well manually as also automatically via network and are necessary if you want to use the Play Store. It is recommended to use the automatic synchronization, which is also activated per default. Only the time zone must always be set manually.

The next entry deals with the network settings of DIVUS TZ:
DIVUS TZ supports as well the use of a static IP address as also the usage of DHCP. Depending on your network, these parameters must be configured correctly in order to connect DIVUS TZ with your network and also with the internet (check out the screenshot in the middle, which shows the configuration menu for the LAN port). If you are unsure about the correct configuration, please refer to your network administrator.

**Note:** When the connection has been established correctly, in the upper right corner of this configuration page a blue symbol showing 2 PCs will be shown. Only when this symbol is active, the DIVUS TZ is correctly connected to your network. If the symbol is white, no connection could be established.

DIVUS TZ furthermore supports also Wi-Fi-based connections. In order to enable this support, you will have to acquire the DIVUS Wi-Fi stick (not included in the delivery) and connect it to the device. Afterwards you can access the QuickSettings menu (can be accessed within the DIVUS LAUNCHER settings by swiping downwards, starting from the upper right corner of the status bar) and select the option “Wi-Fi”. The following menu permits to enable the Wi-Fi function, scan for available networks and configure the connection:

**Note:** at successful connection, in the upper right corner oft he status bar the typical blue Wi-Fi symbol will be shown. Only if this icon is shown and blue, the device will be able to communicate through Wi-Fi. DIVUS TZ now also supports parallel Wi-Fi and LAN connections and offers the default Android settings for the configuration.

The next 2 settings refer to the control of the RGB-LED of DIVUS TZ. The first option permits to use the blue LED as orientation LED. When the checkbox is enabled, the LED will be continuously on and can be seen as operating LED or as orientation LED by night.

The second option instead handles the control of the red LED and uses it to signal the current network state. If DIVUS TZ is not connected to a network and the checkbox of this option is enabled, the red LED will be turned on. As soon as the device connects to the network, the LED will turn off. Therefore, the option „Network-Check LED” acts in the same way as the symbol of the network connection described in the note above. Naturally, by disabling the corresponding checkbox, also this functionality can be disabled.

**Note:** The new TOUCHZONE series provides no more opening for the LEDs within the design frame. Nevertheless, the LEDs will be kept enabled per default, in order to provide visual feedback during the first operation / installation of the device.

The next setting is named „Show Navigation Bar” and permits to enable / disable the navigation bar visible at the bottom of the screen. At delivery, the navigation bar is always active, since the contained soft keys could be necessary when configuring and installing DIVUS TZ. A deactivation of the navigation bar can be useful if a kiosk operation or a “real” full-screen visualisation of apps is required.
The option “Logo Color Changes” permits to signal certain events within the device quickly and easily by changing the color of the DIVUS logo within the LAUNCHER interface. This option is disabled at delivery, if enabled, the following events can be signaled:

- Logo white: Default, no events occurred
- Logo yellow: The volume has been either set to 0 or muted
- Logo red: The device has no active network connection

If more than one event occurs contemporarily (e.g. mute and no network), only the latest event will be signaled through the logo color.

In order to return to the main menu, you can either use the BACK key in the navigation bar or you can simply click on the symbol beneath the title of the current menu (in this case “General”). This will work in every setting sub-menu.

**Category „Design“:**

The following screenshot shows the different settings / entries available in the second category, which permit to adapt the design and the graphical representation of the launcher app:

The option “Orientation / Color” offers 4 parameters:

- Dark Design - Portrait
- Dark Design - Landscape
- Bright Design - Portrait
- Bright Design - Landscape

At delivery, the design will already be set according to the order information, through this popup window it will be possible to change it also in a second moment.
The following screenshot shows an example of the launcher with the design "Bright Design - Landscape":

The menu entry “Use Extended Design” permits to enable the widget view of the DIVUS LAUNCHER, which opens a range of new possibilities and was completely redesigned in the latest version. If this option is enabled, the default grid view is reduced and will occupy only around 1/3 of the screen; the remaining area can be filled with so called widgets (find some information here: http://en.wikipedia.org/wiki/Software_widget). Find below a screenshot of a launcher page with enabled extended design and some connected widgets:

The widget area itself is not scrolled vertically anymore, but – as typical for the most launcher apps – divided in pages that can be swiped horizontally. In this way, an optimal usability concept is created: meanwhile on the right side you can swipe horizontally through the classic grid view and can get your quick access to the most important apps, in the very same way you can now swipe through the pages of the widget area on the left, which can be filled with any kind of information, thanks to the variety of the available widgets.

The connection of the widgets is as easy as the connection of apps to the launcher fields: just click and hold (= LongClick) on a free space within the widget area and a context menu will become available, where you can select and add the desired widget. The widget will be placed on a free position, using its default size. If the currently shown widget page offers not enough space for the widget, a corresponding warning message will be shown and the widget must be included on another page. Once the widget has been inserted, it is still possible to modify it.
• You can move and therefore reposition the widget by using Drag&Drop; simply start with a LongClick on
the widget, drag it to the desired position and drop it there. In order to simplify the positioning, while
dragging the widget a grid is shown.
• As long as you are dragging the widget, you can also move it from one widget page to the next one;
simply drag the widget to the border of the widget area and the page will automatically be changed.
• Furthermore, while dragging the widget also an “X” will be shown on the upper border; if the widget is
dragged on this symbol and dropped there, it will be removed from the widget area.
• If you execute a LongClick on the widget without changing its position, you can resize the widget; after
the LongClick, the widget will show blue squares on each side, which permit to adapt the size of the
widget.

The following screenshots show different states of the widget area (upper left: default state, upper right:
widget during repositioning, lower left: widget before removal, lower right: widget while adapting its size).

Note: at delivery some widgets will already be available per default. Additional widgets can be installed
through the PlayStore and in most cases will come directly together with other applications that you install. So
be sure to check out new widgets after any additional installation.

After the activation of the widget area (through the setting „Use Extended Design”), the option menu will
show 2 additional parameters:

The option „Page Amount Widget Area” permits to change the amount of pages available within the widget
area. You can select a value between 1 and 10 pages, the default value is 5.

The option “Widget Area Editable” instead permits to lock the widget area; if this setting is disabled, no
widgets can be added / changed / removed. This permits to pre-configure the widget area and afterwards
lock it in order to prevent modifications.

Now let’s jump back to the previously described options: the third menu point regarding the adaption of
the launcher design is called “Select Background” and permits to select a background picture, which will
be added beyond the launcher elements and will be shown in a semi-transparent way. This permits to
highly customize the DIVUS LAUNCHER in a very easy way. At delivery, DIVUS TZ already contains a set of
background pictures, which can be freely used. The background feature works for both the traditional and the extended design.

**Note:** in case you will use your own pictures, please take care on the color selection of the pictures. If for example you are using pictures with bright contents, please enable one of the WHITE launcher designs, since in that case the symbols and labels will be shown in black. If instead you will be using dark pictures, use one of the BLACK launcher designs, in order to get white symbols and labels. When using the default pictures, this change will be done automatically.

The following screenshots show different design versions of the launcher app:

![Launcher App Screenshot 1](image1)
![Launcher App Screenshot 2](image2)

The following 4 entries of the configuration window allow a further customization of the launcher, or better, of its grid view:

![Configuration Window Screenshot 1](image3)
![Configuration Window Screenshot 2](image4)
The entry „Page Amount Grid Area“ (screenshot on the upper right) allows the definition of the maximum amount of launcher pages. When using maximum configuration (5 pages), it will be possible to connect 30 apps to the DIVUS LAUNCHER. If only 1 page is selected, the launcher becomes a static page and the swipe gesture to change between pages will be disabled.

The checkbox „Grid Area Editable“ can be used to disable the corresponding function within the launcher; in this way, no new apps can be connected to the fields of the grid view of the launcher. This means that the final user will not be able to customize the launcher, but will only be able to access the apps previously connected by the system integrator. Therefore, grid and widget area can be locked independently now.

The „Icon Management“ (screenshot on the upper left), as already mentioned before in this manual, permits to show / hide the customized icons of the first 5 fields of the first page of the launcher.

The option „Show description on empty buttons“ permits to hide the label „No app assigned“ on empty launcher fields. This can be useful if e.g. not all of the 6 launcher fields of a page are connected to apps and nevertheless afterwards the launcher should be sealed by disabling the editing of the grid view (see explanation above).

The next section deals with the display and energy management of DIVUS TZ as well as with the configuration of the lock screen.

**Category „Display / Lock Screen“:**

The following screenshot shows the different settings / entries available in the third category:

The first 2 entries permit to configure the display / power management settings of the DIVUS TZ.

The menu „Display Settings“ is a link to a standard settings menu of Android and beneath the configuration of the display timeout (used for the display dim and off functions) also permits to manually change the
brightness of the display of DIVUS TZ. Furthermore the default background picture of the Android system can be adapted, which is shown for example in the RECENTS menu or in apps which do not occupy the full screen size (like e.g. the VIDEOPHONE app).

The entry „Power Management“ through a popup window will give you the possibility to select between one of the following options:

- The option „Display always on“ keeps the display constantly on maximum brightness and disables all kind of power saving options.
- The option „Dim“ will set the brightness of the display to the minimum value after a certain time (compared to the next option this has the advantage that the touchscreen of DIVUS TZ will still react to inputs).
- The option „Turn off“ will disable display and touchscreen after a certain time. In order to re-enable DIVUS TZ from this state, the HOME button must be pressed; no touch input will be recognized in this state.

The next menu entry is called „Brightness Control“ and is only enabled if for the „Power Management“ the option „Display always on“ has been selected. In this case it is possible to configure an automatic brightness control in dependency of the integrated brightness sensor. The configuration of the brightness control is done through the following menu:
The checkbox permits to enable / disable the control.

The 3 dimming steps permit to create different time scheduling. Each dimming step works in the same way; if the instant of time configured on the left is reached, the brightness will be set to the value of the corresponding slider.

When changing the slider values, the display brightness will be actively changed, in order to give you a preview of the brightness value that should be set.

For a correct functionality, all dimming steps must be correctly configured.

The setting „Lock Screen“ allows the configuration of a display lock screen for DIVUS TZ:

The At delivery this option is disabled. When enabling for example „Image“ as lock screen, further configuration entries (like timeout and path to the image, check out the screenshot on the upper right) are shown.

The selected image (or a default image, if no image is selected) after the defined timeout will just be shown in front of the launcher and prevent an unwanted commanding of the fields of the launcher. A swipe gesture to the left or right side will disable the lock screen and show the launcher pages again.

The additional entries permit to show also the current time within the lockscreen or to protect the lockscreen through a freely selectable password. In this way the lockscreen can protect the whole device against unwanted operation (can be useful if the device is installed in public places).

Furthermore the lock screen supports also gesture control: if for example a „1“ is drawn with the finger on the lock screen, the app DIVUS OPTIMA is automatically launcher; if a „2“ is drawn, the app DIVUS VIDEOPHONE is launched.

The „Slideshow“ option is very similar to the „Image“ option, but instead of showing just one picture, a set of pictures will be shown in typical screensaver manner. The parameter „Lock Screen Image“ is substituted by the parameter „Lock Screen Folder“, which permits to select the target folder containing the pictures that should be used for the slideshow. Furthermore the parameter „Lock Screen Interval“ is added, which permits to define the time each single picture should be displayed before changing to the next one.

The 2 „Template“ options can only be used in combination with a DIVUS KNXCONTROL device. By enabling this option it is possible to place functions of the OPTIMA visualisation directly on the lock screen and consequently command them without any delay. There are available 2 types of templates:

- Template (web)
- Template (native)

The web template offers its functionality through a special HTML page which is directly obtained from the connected KNXCONTROL device. This means that the contents will always be shown in the typical OPTIMA design and the same page / functions will be available also directly within the OPTIMA interface.
The native template instead offers a completely independent graphical interface, which is highly customizable and communicates directly with the KNXCONTROL device, without the use of HTML contents. This eliminates the loading times for the template and permits to use alternative designs.

The following screenshots show an active web template lock screen (on the left side) and the available settings for its configuration (on the right side), explained below:

- **Lock Screen Timeout:**
  Defines the time, after which the lock screen should be shown. Please take care that the first access to the lock screen after changing the template settings always will be take around 40 seconds; the defined value will then be used for any further start of the lock screen.

- **Lock Screen IP Address:**
  Defines the IP address of the KNXCONTROL device, which provides the lock screen template.

- **Lock Screen ID:**
  Defines the ID number of the room that is used as lock screen template. This number can be identified through the search function within the configuration area of OPTIMA. Just search for the desired room; in the list with the search results the ID number is shown right under the name of the room, as shown in the following screenshot:

- **Lock Screen Buttons:**
  Through this pop-up menu you can define how many buttons the used lock screen template should show. You can select between 1, 2, 4, 6 or 8 buttons. Please take care that the previously (through the ID number) selected room contains at least the selected amount of KNX objects; otherwise the lock screen template will show empty buttons.

- **Lock Screen Username:**
  Please specify the user name required for the login on OPTIMA. NOTE: for a better overview it is recommended to create a separate user in OPTIMA for the lock screen template.

- **Lock Screen Password:**
  Please insert the password corresponding to the user inserted before.

If all parameters have been configured correctly, at the next launch of the lock screen the desired buttons should be shown and a direct control of the system should be possible. Naturally, the previously explained lock screen gestures will remain active also when using the template option.

**Note:** Depending on the server configuration it can be possible that the login credentials at the first access have also to be inserted manually. Furthermore, in front of graphical changes to the visualisation (like e.g. a THEME switch) it will be necessary to reboot DIVUS TZ through the power off menu in order to take over all the changes.
The configuration of the native template is very similar to the one of the web template, but it offers a dedicated sub-menu for the configuration of the template design. The following screenshots show an active native template (left) and the available options for its configuration (right):

As also for the web template image lock screen, the gesture control remains valid, same as the timeout and password protection settings. Contrary to the web template, the native template doesn’t require any login data (since the contents are not received through the OPTIMA interface), but only the IP address of the connected KNXCONTROL device and the ID of the object that should be controlled. This means that the native template doesn’t use a room ID (as the web template), but the ID of a single KNX object. This ID can be found in the same way as the room ID (as described on the last page), by using the search function of the OPTIMA interface.

Furthermore, the native template offers the following sub-menu for the configuration of the lock screen template design:

Through the settings present in this menu, the style and design of the template can be defined. The following options are available:

- **Wall Design**
  Select one of the different designs, which will then be shown as background (and therefore as wall) picture of your switch.

- **Switch Design**
  Select the desired switch design. You can choose between 3 bright and 3 dark variants.

- **Switch Icon**
  Through this option you can define whether to show a functional icon on the switch (like e.g. light, audio, irrigation) or not.
• **Switch Label**
  Here you can specify a short description which will be shown below the switch.

• **Brightness Effect**
  If this effect is enabled, the switching function will not only result in the corresponding KNX action, but also the display of DIVUS TZ will be dimmed accordingly (switch OFF = display on minimum brightness, switch ON = display on maximum brightness).

After the configuration of the single options the lock screen can be used. Compared to the web template, the native template has no loading times and is immediately available. On the other side, the native template only offers one KNX function, meanwhile the web template can contain up to 8 KNX functions.

**Note:** If at the first start of the native template instead of the desired switch only an empty wall is visualised, this either means that there is no connection to the specified KNXCONTROL device or KNX bus, or that the configured KNX object hasn’t been configured to obtain feedback (status) messages from the bus and works in write-only mode. In this case, the switch will only be shown if you click once on the empty wall.

In order to see also the correct state of the object, the KNX object must be configured correctly within the OPTIMA interface. Information on the configuration can be found inside the installation manual of the OPTIMA interface.

The next section deals with the system settings of DIVUS TZ.

**Category „Advanced“:**

The following screenshot shows the different settings / entries available in the last category:

The entry “Password Protection” can be used to protect the current settings page; when clicking on the DIVUS logo within the launcher, a password dialog will be shown and the settings page will only be accessible when the correct password is inserted. At delivery, this password is set to 0000 and – as mentioned in the welcome screen – must be changed. If this field is left empty, the access to the settings will be unprotected.

The option “App Autostart” permits to select one of the installed apps, which will be automatically started by the DIVUS LAUNCHER once DIVUS TZ has completed the boot. This allows showing a specific app whenever the device makes a reboot. A click on the HOME button or HOME key will always lead back to the DIVUS LAUNCHER, the selected app therefore doesn’t substitute the launcher. In the latest version it is also possible to connect a URL instead of an app, which after completed startup will be shown within the specified default browser. The functionality / configuration hereby is the same as already explained earlier in this manual for the new URL functionality.
The “Cache-Cleaner Function” is a surveillance function, which should avoid that the memory of DIVUS TZ is filled through the installed applications. Normally each application must handle its cache on its own and clean it, if required. Sometimes it can happen that apps do not provide such functionality or it is overridden due to an incorrect usage of the app. In this case the cache cleaning can be handled directly through the DIVUS LAUNCHER.

Caution! The DIVUS apps manage their cache on their own and don’t require this functionality. Therefore the cache-cleaner is disabled per default. If you intend to use the DIVUS OPTIMA or DIVUS KIBRO app, please DO NOT ENABLE the cache-cleaner. If instead you are using other applications which apparently do not handle their own caches, you can enable this functionality.

The next 4 entries again link to standard menus of Android:

- **Manage Applications** (screenshot on the upper left) will show a list of applications installed on the devices (for example through the Play Store) and allows their administration and also uninstalling. Furthermore this menu can be used in order to clear the user data and cache of single applications.

- **Change Volumes** (screenshot on the upper right) permits to change the volumes of the DIVUS TZ (e.g. ring tone volume, media volume) and gives access to the various settings of the available audio signals.

- **Manage SD card** (screenshot on the lower left) can be used to mount / unmount microSD cards connected to the corresponding slot on the front side of DIVUS TZ. The menu permits to mount, unmount and also erase the storage card. Furthermore this menu also shows information about the integrated storages. At delivery, from the 8GB internal storage approximately 5GB are free for user data (like media, images,…); the remaining space is used by the Android installation itself.

- **Manage Accounts** (screenshot on the lower right) permits to add or remove accounts (like e.g. the Google accounts, required to access the features of the Play Store) and offers settings regarding the user data synchronization.

Caution! The access to further Android settings has been removed in the latest version, as also the master password availability, since no additional options are required in order to use the device within the functionalities intended by DIVUS.

Further information about the DIVUS LAUNCHER can be requested by contacting the technical support of DIVUS.
C4. DIVUS OPTIMA

The app DIVUS OPTIMA was especially designed to work in combination with DIVUS KNXCONTROL. The app can be classified as web app, which shows contents that normally can also be shown through a common browser, in an optimized way.

In order to get an idea of the representation of the app, the following screenshot shows the app displaying contents of a connected KNXCONTROL device:

Display Area of the pages coming from the KNXCONTROL device

Menu bar with quick access buttons for the home and favorites pages of the connected KNXCONTROL device, a reload button to refresh the page contents and the app settings button.

This manual will neither describe the contents of the server or its navigation, nor will it enter in detail on the server features themselves. All information regarding DIVUS KNXCONTROL can be found in the corresponding user and installation manuals.

Note: Since the last version of the app, URLs and unsupported camera signals are redirected to external applications. If for example you click on a link to an external URL, it will be opened through the browser app. In the same way, unsupported cameras can be shown through dedicated apps (e.g. VLC player).

The following pages will exclusively handle the configuration of the web app itself. A click on the „Settings“ button opens the configuration page of the app. If the settings page is protected by password, also here – as already described for the DIVUS LAUNCHER – the correct password must be inserted. The following screenshots show as well the password dialog as also the settings page:
The following list explains the single parameters that can be configured:

<table>
<thead>
<tr>
<th>SETTING</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>IP-Adresse</td>
<td>In this field the IP address of the targeted KNXCONTROL device must be entered. Take care, the web app supports only KNXCONTROL devices with the new OPTIMA interface. A click on this entry will start a scanning process, which will show a list of the KNXCONTROL devices found in the current network. Afterwards you can select the desired IP address simply by choosing it from the list. Naturally it is still possible to input the IP address manually.</td>
</tr>
<tr>
<td>SSL-Protection</td>
<td>This checkbox enables / disables the SSL protection of the server connection. Generally in local networks there is no need for SSL protection. Therefore this option is disabled per default.</td>
</tr>
<tr>
<td>Port</td>
<td>Depending on the previous setting, the default port is either 443 (SSL enabled) or 80 (SSL disabled). If the connected server has a special network configuration (e.g. uses port forwarding) and is reachable only through another port, the corresponding port can be set here. If you are using a standard version of the server you can just use the default values already set for this field.</td>
</tr>
<tr>
<td>Username</td>
<td>This value refers to the user name the app should use to login to the KNXCONTROL device. This user name must be present in the configuration of the server and dispose of the necessary permissions to access the visualisation. If this criterion is fulfilled, the user name can be inserted in this field and – in combination with the password in the next setting – will cause the app to automatically login to the server. If this field is left empty, the app will show an extra login window, where the authentication to the server has to take place.</td>
</tr>
<tr>
<td>Password</td>
<td>The password which is required – in combination with the user name explained above – in order to correctly login to the server.</td>
</tr>
<tr>
<td>Show Toolbar</td>
<td>Permits to show / hide the toolbar on the lower edge of the app (with the buttons HOME, FAVORITES and SETTINGS).</td>
</tr>
<tr>
<td>App-Autostart</td>
<td>If this option is enabled, the app will be automatically started after a reboot of DIVUS TZ. In this way, after every boot the connection to the server will be established immediately.</td>
</tr>
<tr>
<td>Keep Display On</td>
<td>This option defines whether the app should keep the display of DIVUS TZ always on or instead the energy settings (as defined within the DIVUS LAUNCHER) should be used.</td>
</tr>
<tr>
<td>Enable Auto-Hide</td>
<td>This option permits to set a timeout after which the app is closed automatically. This prevents that the app remains permanently in front and hides other applications. If the timeout is set to „0“ or left empty, this function is disabled.</td>
</tr>
<tr>
<td>Enable Debug Mode</td>
<td>The debug mode permits to debug the contents displayed within the app through a remote PC connected via USB and can be useful for the analysis and solution of visualisation problems. Since this option requires additional resources, you should only enable it if explicitly requested by the technical support of DIVUS.</td>
</tr>
<tr>
<td>Refresh App</td>
<td>This entry refreshes the interface of the software, without clearing the cache of the DIVUS TZ (see next point). This process is much faster than the deletion of the cache and is enough if only small changes to the visualisation occurred.</td>
</tr>
<tr>
<td>Empty Cache</td>
<td>If this menu entry is clicked, the local cache of DIVUS TZ is emptied / deleted and at the next connection to the server all necessary data is downloaded again from the server. This function is necessary whenever changes are made on the server side (like for example change of the theme, creation of new rooms etc.). In these cases the cache has to be refreshed before DIVUS TZ will show the new configurations.</td>
</tr>
<tr>
<td>Password-Protection</td>
<td>As already mentioned, this point allows defining a password which protects the access to the settings menu. If this field is left empty, access to the settings is granted to everybody clicking on the settings button.</td>
</tr>
</tbody>
</table>

The „Back“ entry will take you back to the main screen of the web app. If parameters of the web app have been changed within the settings menu, the connection will be refreshed automatically.

**Note:** Since the switching between local and remote access is not required when using the app on DIVUS TZ (it will always run in the local network), the corresponding option will be shown only when using the app on mobile devices.

When starting the app for the first time an advice will be shown that no server has been configured yet. The use of the app will only be possible if at least the IP address of the targeted KNXCONTROL device is inserted. When leaving the settings page after modifying this value, the app will try to connect to the specified server. During this procedure a loading screen will be shown, which will be substituted by the home page of the server as soon it is loaded completely.
The first connection can take up to one minute until completion since the necessary data has to be transferred from the KNXCONTROL device. Once the web app has been loaded completely, the connection to the server remains established and the pages of the visualisation can be accessed without further time delay. This is accomplished by using a background service which keeps active the connection to the server and prevents that the web app is closed automatically by the garbage collector of Android.

Caution! When using the app on devices without permanent power connection (like for example smartphones or tablets), the constant connection to the server can reduce battery life. Therefore, it is possible to terminate the app and its service at any time through the notification bar of Android (please check out the following two screenshots).

Further information about the DIVUS OPTIMA app can be requested by contacting the technical support of DIVUS.

C5. DIVUS VIDEOPHONE

The app DIVUS VIDEOPHONE completes the DIVUS intercom portfolio and makes video communication possible also on DIVUS TZ and other supported devices with Android operating system. The app follows the Windows version of the Videophone-Software (now available in version 3.0) as well in functional as in design terms and – just like the other DIVUS apps – is part of the applications preinstalled on DIVUS TZ.

When starting the app for the first time, it will show a welcome message – just like the DIVUS LAUNCHER – with some useful information. Before being able to use the app, it namely has to be configured and integrated as VoIP member into the existing system.

Note: This manual exclusively shows the configuration of the DIVUS VIDEOPHONE app and does not go deeper into the intercom topic. Depending on the system in use, you can find more details regarding the whole setup either in the manual of DIVUS VIDEOPHONE or in the ones of KNXCONTROL. In order to use the app it is required that a configured and working VoIP server is present in the system and that a user for DIVUS TZ has been configured correctly.
The following screenshots show the welcome message at first start as well as the configuration menu that is opened automatically when confirming the welcome message through the „OK“ button:

since the last version, the settings of the app have been grouped into categories (just like for the launcher app), in order to provide a better structure and overview. The following pages show how to correctly configure the Videophone app.

In order to use at least the minimal functionality of the app, the settings regarding the VoIP registration (the first category called „VoIP Settings“) have to be configured correctly. In the connection it will already be possible to reach other members of the VoIP server / to receive calls from other members.

Note: The app DIVUS VIDEOPHONE was designed for the use in combination with DIVUS systems. Since the app is based completely on the SIP standard, it will also be possible to use it with arbitrary VoIP servers. Nevertheless, DIVUS points out that the support for the app will only be granted when the Videophone app is used in combination with a system either from DIVUS or at least defined as compatible by DIVUS.

Note: if the app after a modification of those 5 parameters doesn’t register correctly on the VoIP server, please reboot your DIVUS TZ.

As already mentioned, those 5 settings are enough to register on the VoIP server and therefore to make calls between DIVUS TZ and other VoIP members. If also external units should be handled and the video signals of cameras should be displayed, also the following settings have to be configured correctly. The category „Configuration of the external and internal units“ offers different possibilities:

The menu entry „Phonebook“ opens a sub menu that permits to configure up to 10 external units and 20 internal units. On top of the sub menu a drop down menu permits to switch between external and internal units; furthermore, a help button that informs about the parameters to be set in this page and a back button (that also works as saving button) are present. The area below those buttons can be scrolled vertically and gives access to each of the external / internal units.

<table>
<thead>
<tr>
<th>SETTING</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enter VoIP Server IP</td>
<td>In this field the IP address of the targeted VoIP server must be entered. <strong>Take care:</strong> If you change this value, please restart your DIVUS TZ in order to guarantee a correct registration!</td>
</tr>
<tr>
<td>Enter VoIP Username</td>
<td>The username that has to be inserted in this field previously needs to be created on VoIP server side. If a system delivered by DIVUS is used, generally the users from 101 to 120 are already preconfigured and one of them can be used for this field (take care when assigning the usernames; each username can be used by only one device at the same time). If a KNX-CONTROL device is used as VoIP server, you will have to create an internal unit for DIVUS TZ in the corresponding configuration menu on the server. More information regarding this topic can be found in the manual of the server.</td>
</tr>
<tr>
<td>Enter VoIP password</td>
<td>The VoIP password, when using a system preconfigured and delivered by DIVUS, is always identical to the username. If you are using your own configuration, please insert the password that you have set during the creation of the corresponding user on the VoIP server.</td>
</tr>
<tr>
<td>Enter VoIP port</td>
<td>Defines the VoIP port, through which the VoIP server accepts registrations (normally ALWAYS „5060“, please change only in special cases).</td>
</tr>
<tr>
<td>Enable re-registration</td>
<td>If this option is enabled, an additional field named „Registration timeout“ will be shown, which allows the input of a time period in minutes. After this timeout the registration on the VoIP server will be force-closed and renewed. TAKE CARE: this option is not required in combination with VoIP servers delivered by DIVUS and is therefore disabled by default. Only when using certain third party systems (please check out also the note below) this setting can be required in order to get correct functionality, like e.g. in combination with AVM FRITZ/Box.</td>
</tr>
</tbody>
</table>
Every external unit shows the following parameters:

- **Type:**
  The type of the external unit can be selected through a selection popup

- **VoIP ID:**
  This value must match the VoIP-ID (username) of the external unit, as configured within the VoIP server

- **Display name:**
  Optionally a display name can be specified, which is shown in the status bar during incoming calls of the corresponding number (overwrites eventual values sent by the VoIP server)

- **Ringtone:**
  Optionally a separated ringtone can be selected, which will be played at incoming calls of the selected external unit

- **Camera Configuration:**
  This button opens a popup menu which permits to configure up to 2 camera signals (details can be found on the next page)

- **QuickDial button:**
  If this checkbox is enabled, the dial window of the app will show a corresponding QuickDial button with the VoIP ID (or the display name, if previously configured), which permits to call the external unit directly.

The internal units instead will show the following parameters:

- **VoIP ID:**
  This value must match the VoIP-ID (username) of the internal unit, as configured within the VoIP server

- **Display name:**
  Optionally a display name can be specified, which is shown in the status bar during incoming calls of the corresponding number (overwrites eventual values sent by the VoIP server)

- **QuickDial button:**
  If this checkbox is enabled, the dial window of the app will show a corresponding QuickDial button with the VoIP ID (or the display name, if previously configured), which permits to call the internal unit directly

- **Image file:**
  Optionally a picture can be defined, which will be shown at incoming calls of the selected internal unit; it is possible either to select a local picture file or to specify the URL of an image in the world wide web

- **Ringtone:**
  Optionally a separated ringtone can be selected, which will be played at incoming calls of the selected internal unit

The following screenshots show the configuration menu of the external units (upper left), the selection popup of the type of the external unit (upper right), the configuration menu with active manual configuration and additional options (lower left) as also the popup menu of the camera configuration (lower right):
Even the selection popup of the external units can be scrolled vertically and contains further entries (not shown in the screenshot above). For example the list contains the entry „Manual Config.”, which permits the integration of external units, whose type is not directly defined by an entry in the selection popup. In this case, beneath the fields already described on the previous page, also the following 4 entries will be shown for the external unit (see screenshot above):

- **DTMF - Accept:**  
  DTMF tone for starting the conversation
- **DTMF – dooropener:**  
  DTMF tone to control the door opener, is connected to the KEY-icon in the app
- **DTMF - Hangup:**  
  DTMF tone for closing the conversation
- **DTMF - auxiliary (optional):**  
  DTMF tone to control the auxiliary relay, is connected to the LIGHT-icon in the app

When selecting another type from the selection popup, above fields are automatically filled in correctly (and therefore are not shown at all); only in case of the manual configuration they have to be inserted.

The camera configuration was completely redesigned since the last version of the app and is now shown in a separate popup window.(check out screenshot above). Beneath the known support of camera streams in MJPG format, now it is also possible to configure camera streams using JPEG and RTSP/H.264 format (the letter still as BETA feature), for both the main camera as also for the optional secondary camera.

Meanwhile the second camera offers only those 3 configuration options (MJPG, JPEG and RTSP/H.264), the main camera continues to offer the possibility to use the camera signal of the selected external unit. Therefore, an additional option called “Use camera of selected intercom type” is available.

If selected, only the IP address of the camera of the external unit must be entered (without any prefix or paths), meanwhile for all other options the whole path to the camera signal must be entered. In order to give an idea, for each type an example is shown directly within the configuration popup; in this way, you just need to adapt the shown example path to the one matching your camera.

The following screenshot shows the available options for the camera type of the main camera:

![Camera configuration screenshot](image)

**Note:** If the manual configuration was selected as intercom type, the option „Use camera of selected intercom type” will not be shown, since with manual configuration there is no information about the used camera. In this case the camera must be configured using one of the other 3 options.
Note: please give special attention to the allocation of the VoIP IDs of the external units: only if the external unit effectively uses the VoIP ID, for which the configurations have been made, the camera signal and the DTMF tones will be assigned correctly. Please also note that the IDs are already preconfigured (901-910, corresponds to DIVUS standard for VoIP systems); for example, if you want to configure the external unit 910, please use the external unit 10 and don’t just rename the external unit 1 from 901 to 910. The same applies for the internal units, which according to the DIVUS standard are pre-configured from 101 to 120.

Once the external units are configured at wish, the changes can be saved by clicking on the text block on top of the page, as already mentioned before.

Caution! Please be sure that the entered camera paths are correct. Wrong, incomplete or incompatible values can cause crashes of the app! Furthermore please note that a correct usage of the app will only be guaranteed if the maximum camera resolution is not higher than 640x480 pixels. Higher resolutions can cause severe visualisation problems!

The menu entry „Select spy camera“ allows defining one external unit as door spy and therefore enable the camera of the external unit through the CAMERA icon of the app, even when there are no active calls.

Take care, this functionality requires that the external unit provides the camera signal permanently and not only when there are active calls. If both camera signals have been configured for the selected external unit, also when using the spy camera function, you will be able to switch between the 2 camera signals using a horizontal swipe gesture.

The last menu entry of this category is called „Door opener settings“ and was also introduced by the latest version of the app. Meanwhile in the past it was only possible to send out DTMF tones as main and auxiliary door opener actions, now it is also possible to send out KNX signals (using a connected KNXCONTROL device) or to control the digital in- and outputs present on the DIVUS TZ. Below there are 2 screenshots: on the left the mentioned sub-menu is shown, on the right side you can see the available door opener options:

For both door openers (main door opener = KEY symbol, auxiliary door opener = LIGHT symbol) the same options are available, the additional settings depend on the current selection:

Selection „Send DTMF (defined by the selected intercom type)“:
This is the standard setting active at delivery and may be known from previous versions of the app. When activated, the door opener will send out the DTMF signal that is defined for the corresponding intercom type in the phone book (either by using a pre-configured template like OPENDOOR etc. or by using the values defined in the manual configuration, as explained on the last pages).

Note: DTMF tones are sent out only during active voice communication. Therefore this door opener will work only during an active call. Opening the door when no call is active is not possible with this method, if desired, one of the other 2 options has to be used.

Since the DTMF tones for this selection already are defined through the phonebook, the only available setting is called “Default delay for multiple DTMF tones” and permits to set a waiting time (in milliseconds) when sending more than one DTMF tone, this is required by some external units for a correct function.

Selection „Send KNX signal (requires DIVUS KNXCONTROL device)“:
This function permits to control a door opener realized through KNX bus. In order to use this functionality, a working and correctly configured KNXCONTROL device must be installed in the system, which will be used to send out the commands. If this is ensured, the following parameters can be configured:
- **KNXCONTROL IP Address:**
  
  Please insert the IP address of the KNXCONTROL device that should be used in order to send out the command.

- **Object ID:**
  
  As already mentioned for the native lock screen template, the ID of the object that should be controlled must be localized using the search function of the OPTIMA interface and them must be entered here.

- **Duration of door opener signal:**
  
  Since the door opener signal is realized as an ON/OFF sequence, you can specify the length (in milliseconds) of the ON signal.

If all parameters have been configured correctly, the corresponding KNX command can be activated at any time through the door opener button shown in the graphical interface. Naturally it is possible to connect the main and the auxiliary door opener button to different object ID and even to different KNXCONTROL devices, if required!

**Selection „Control Digital Output (works only on DIVUS TOUCHZONE):“**

If the last option is selected, the door opener buttons can be used in order to control the digital outputs of DIVUS TZ. It is obvious that this functionality can be used only in combination with DIVUS TZ and therefore is not available if the app is used on other smart devices.

Also for this functionality the setting “Duration of door opener signal” is available, since also for the digital output you can define how long (always in milliseconds) the output should remain active. Furthermore, this selection offers a sub-menu for the configuration of the digital outputs, but also for the configuration of the digital inputs of DIVUS TZ. The following screenshot shows the mentioned sub-menu:

![Digital I/O Control](image)

The section „Digital Inputs“ is not directly related to the door opener signal, but it offers the possibility to open the app and start ringing in dependency of the status of the digital inputs. Therefore for example there is the possibility to realize an additional doorbell using a traditional push button; clearly this will not allow any kind of communication, but it can be used for signaling purposes. For each of the 4 available digital inputs one of the following options can be selected:

**Doorbell: (Show app & start ringing)**

If this option is selected, the app will be shown with a minimum interface (only the door call can be confirmed) and start ringing whenever the connected input is triggered.

**Advanced Doorbell: (Show app & start ringing)**

If this option is selected, the app will be shown with a minimum interface (only the door call can be confirmed) and start ringing whenever the connected input is triggered. Furthermore a freely configurable video signal can be shown. The video signal can be set up in the same way as for the external interfaces, using the new camera configuration popup window.

The section „Digital Outputs“ among others handles the door opener function. As already seen before with
the inputs, also for in this case it is possible to assign a functionality to every single one of the 4 digital outputs:

**Enable on incoming call: (e.g. for additional doorbell)**

If this option is selected, the chosen output at any incoming call is enabled for 2 seconds and for example can be used to trigger an external doorbell or other signaling device.

**Use as main door opener: (key button)**

If this option is selected, the chosen output will be used as main door opener and connected to the related symbol in the GUI. The duration of the signal is set by the value explained before.

**Use as aux door opener: (lamp button)**

If this option is selected, the chosen output will be used as auxiliary door opener and connected to the related symbol in the GUI. The duration of the signal is set by the value explained before.

Naturally both door opener functions can be configured completely independently (for example, the main door opener could send out a DTMF tone, meanwhile the aux door opener sends out a KNX command). Nevertheless, please mention that the configuration menu of the digital in- and outputs is the same for both main and aux door opener; therefore for every output you will see both options (main and aux door opener).

**Note:** Please always remember that the explained ports are DIGITAL in- and outputs! Their exact specifications can be found in the table below. Furthermore it is recommended that both in- and outputs are always connected through a relay circuit. Corresponding examples can below the mentioned table, with reference to the pin-out of the DIO connector, as shown on page E-7.

<table>
<thead>
<tr>
<th>Voltage output HIGH</th>
<th>3.3V</th>
<th>Voltage input HIGH (= off)</th>
<th>1.65 - 3.6V</th>
</tr>
</thead>
<tbody>
<tr>
<td>Voltage output LOW</td>
<td>0V</td>
<td>Voltage output LOW (= on)</td>
<td>0V</td>
</tr>
<tr>
<td>Output current</td>
<td>1.7mA</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Example circuit with relay on output 1:**

Max. cable length of control circuit: < 3m

**Example circuit with relay on input 1:**

Max. cable length of control circuit: < 3m

After the configuration of the desired values the different sub-menus can be closed and – if required – the settings of the last category can be adapted. This category, named “General Settings”, offers different settings related to the behavior of the app. (See Screenshot on the next page)
The menu entry “App Autostart” permits to define whether the app should be started automatically at completed boot of the DIVUS TZ or not. If the app should be able to react on incoming calls, this option must be enabled.

The menu entry “Enable auto-hide” permits to set a timeout after which the app is closed automatically. This prevents that the app remains permanently in front and hides other applications (for example when an incoming call is not answered). If the timeout is set to „0“ or left empty, this function is disabled.

The option “Keep Display On” defines whether the app should keep the display of DIVUS TZ always on or instead the energy settings of the device (as defined within the DIVUS LAUNCHER) should be used.

The option “Select ringtone” permits to select the default ringtone among the different ringtones present in the Android system. This ringtone is used whenever no custom ringtone has been assigned to the external / internal unit. Android supports also adding custom ringtones; in order to accomplish this task, please refer to the documentation of Android or use one of the tutorials present in the World Wide Web.

The “Do not disturb” mode can be seen as an extended mute mode: while the app – if only muted – still is opened automatically in front of incoming calls and for example wakes the device from sleep / standby mode, the “Do not disturb” mode blocks this. Incoming calls are completely ignored and will not be registered; outgoing calls can still be done normally.

This option can either be enabled through the option menu or also by long-clicking the SPEAKER button directly in the graphical interface of the app.

The following screenshots show 2 of the options explained above: on the left side the selection popup of the ringtones, on the right side the GUI of the app with active “Do not disturb” mode:

The point „Password protection“ is already known from the previous 2 apps and permits to define a password which protects the access to the settings menu. If this field is left empty, the access to the settings is unprotected.
**Note:** please always leave the settings using the BACK key, otherwise the app won’t take over the new settings and eventually will not work. The app in this case will also show a warning message with the necessary actions to be taken.

The following screenshot shows the app in use. On the right side of the screenshot you can find some explanations regarding the elements of the interface:

- **1. Video area**, in this window the video signal of the external unit / the door spy will be shown. If 2 video signals have been configured, it is possible to switch between them using a horizontal swipe gesture.
- **2. Status bar**, informs about the registration state on the VoIP server and about incoming calls.
- **3. DIVUS logo**, gives access to the settings menu.
- **4. Action area** with different buttons, please check out the table below for functionality description.

<table>
<thead>
<tr>
<th>BUTTON</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Key</td>
<td>Button to send the configured main door opener action (DTMF tone, KNX signal or digital output)</td>
</tr>
<tr>
<td>Light</td>
<td>Button to send the configured auxiliary door opener action (DTMF tone, KNX signal or digital output)</td>
</tr>
<tr>
<td>Camera</td>
<td>Toggle button to show / hide the camera signal / door spy camera</td>
</tr>
<tr>
<td>Volume +/-</td>
<td>Buttons to control the volume</td>
</tr>
<tr>
<td>Speaker</td>
<td>Toggle button (between + and -) to mute / unmute microphone/ speaker and to enable / disable the &quot;Do not disturb&quot; mode (using a long click)</td>
</tr>
<tr>
<td>Phone Green</td>
<td>Button to accept calls / start new calls</td>
</tr>
<tr>
<td>Phone Red</td>
<td>Button to decline / terminate calls</td>
</tr>
</tbody>
</table>

1. Video area, in this window the video signal of the external unit / the door spy will be shown. If 2 video signals have been configured, it is possible to switch between them using a horizontal swipe gesture.
2. Status bar, informs about the registration state on the VoIP server and about incoming calls.
3. DIVUS logo, gives access to the settings menu.
4. Action area with different buttons, please check out the table below for functionality description.
The following screenshots show some samples of the app in different states:

- Screenshot upper left: app with active video signal
- Screenshot upper right: minimum interface when launching door calls through digital input
- Screenshot lower left: volume changes through the +/- buttons
- Screenshot lower right: dial pad to call other VoIP members (with area for QuickDial buttons, empty in the screenshot)

Even if the DIVUS VIDEOPHONE app is closed, it must be reachable for incoming calls and open its interface automatically. In order to realize this, also the Videophone app – in the same way as the web app – uses a background service that handles the registration on the VoIP server and manages incoming calls.

⚠️ Caution! By using the app on device without permanent power connection (like for example smartphones or tablets), the execution of the background service can reduce battery life. Therefore it is possible to terminate the app and its service at any time through the notification bar of Android (please check out the following two screenshots).

Further information about the DIVUS VIDEOPHONE app can be requested by contacting the technical support of DIVUS.
DIVUS KIBRO is the perfect application for everyone that wants to visualise web contents in full screen mode. Actually it is a small kiosk browser app, which provides a set of options for configuration: it is for example possible to specify the URL to be accessed, the auto start behavior of the app, the display behavior (whether to keep the screen always on or to use the devices power settings) and much more!

The special feature of DIVUS KIBRO is its integrated cache management, which avoids that your device is filled up or even blocked by the continuous data transferred from the configured server URL. The cache management can be launched manually, but it can work also automatically, either on a time-scheduled base or on a fully automatic base, by controlling RAM and disk space in background.

In order to get an idea of the representation of the app, the following screenshot shows the app while displaying the DIVUS homepage:

Contrary to the DIVUS OPTIMA app, DIVUS KIBRO has no menu bars and uses the full display for showing its contents. Since the navigation bar on the bottom can also be hidden through the launcher app, it would even be possible to use the total area of the display.

**Note:** DIVUS KIBRO doesn’t work in combination with DIVUS KNXCONTROL devices and therefore can’t be used to show the contents of the OPTIMA interface. For that purpose always the OPTIMA should and must be used.

**Note:** since the last version DIVUS KIBro has become a full browser replacement (based on the functionalities of the default Android browser) and is offered as default browser whenever links / URLs should be opened from within other applications.

The following pages explain the correct configuration of the app. After the first start of the app, a short message will indicate that first of all the URL to be visualised needs to be configured. This can be done through the settings of the app, which are accessible through the menu key on the right side of the navigation bar. It will show a context menu, which besides also permits to refresh the app or open a popup window with information about the app.
The following screenshots show the message at first start (on the left side) and the mentioned information window (on the right side):

The following settings explain the parameters available for the configuration of DIVUS KIBRO:

<table>
<thead>
<tr>
<th>SETTING</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Default URL</td>
<td>In this field the URL of the web contents that should be shown must be entered. The app supports only plain HTML contents that do not require additional plugins. Furthermore the contents are shown as they are received; no scaling or zoom factors are applied. If the URL is changed, the app automatically deletes it caches and will renew the connection.</td>
</tr>
<tr>
<td>App-Autostart</td>
<td>If this option is enabled, the app will be automatically started after a reboot of DIVUS TZ. In this way, after every boot the connection to the server will be established immediately.</td>
</tr>
<tr>
<td>Keep Display On</td>
<td>This option defines whether the app should keep the display of DIVUS TZ always on or instead the energy settings (as defined within the DIVUS LAUNCHER) should be used.</td>
</tr>
<tr>
<td>Enable Fullscreen</td>
<td>This setting defines whether the status bar of Android on the upper border of the display should be hidden (= fullscreen mode) or shown. By default, DIVUS KIBRO is started in fullscreen mode.</td>
</tr>
<tr>
<td>Enable Auto-Hide</td>
<td>This option permits to set a timeout after which the app is closed automatically. This prevents that the app remains permanently in front and hides other applications. If the timeout is set to “0” or left empty, this function is disabled.</td>
</tr>
<tr>
<td>Password Protection</td>
<td>As already mentioned, this point allows defining a password which protects the access to the settings menu. If this field is left empty, access to the settings is granted to everybody clicking on the settings button.</td>
</tr>
<tr>
<td>Return to default URL</td>
<td>Return to default URL. This entry refreshes the interface of the software and returns to the specified default URL.</td>
</tr>
<tr>
<td>Empty Cache</td>
<td>If this menu entry is clicked, the local cache of DIVUS TZ is emptied / deleted and at the next connection to the server all necessary data is downloaded again from the server. This function is necessary whenever changes are made on the server side or if e.g. the URL has been changed completely. In these cases the cache has to be refreshed before DIVUS TZ will show the new configurations.</td>
</tr>
<tr>
<td>Automatic Memory Control</td>
<td>This feature should avoid that the app requires too many resources because of the continuous data transfer. The options are:   * Off   * Scheduled   * Automatic The first option disables the feature and results in no active memory control. The cache in this case must either be controlled and cleaned manually by the user or directly by the server side. The second option enables another menu entry (“Clear Interval”) which permits to set a time interval, after which the app continuously will delete its own cache storage. The third option is the intelligent solution, which automatically checks the free resources of the device and empties the cache only if it reaches a critical value. Furthermore, this mode also controls the RAM storage and eventually optimizes the RAM load.</td>
</tr>
</tbody>
</table>

At completed configuration the settings can be left by using the “Back” button; after a short loading time and visualisation of a corresponding loading icon DIVUS KIBRO will show the desired web contents.

**Note:** DIVUS KIBRO doesn’t support any plugins or special functions of a browser (like e.g. zoom, scale etc.). For this reason, only pure HTML contents can be visualised; pages that require special plugins on client side will not work! The compatibility with any type of web contents corresponds at most to the one of the default browser of Android 4.2.2.

Further information about the DIVUS KIBRO app can be requested by contacting the technical support of DIVUS.
C7. DIVUS SCREENCLEANER

The functionality of the app DIVUS SCREENCLEANER is self-explaining and really simple: by starting this app, all touch inputs will be blocked for 30 seconds and a cleaning screen with a small animation is shown. Furthermore a countdown is shown, which indicates how many time is left for cleaning. While the app is running, the glass front of DIVUS TZ can be cleaned without the risk of unwanted operation. Once the countdown reaches 0, the app will be closed automatically and the touch input is re-enabled.

The screenshot below shows the mentioned cleaning screen:

Further information about the DIVUS SCREENCLEANER app can be requested by contacting the technical support of DIVUS.
C8. TEAMVIEWER QUICKSUPPORT

The new DIVUS TZ generation at delivery already contains the app „TeamViewer QuickSupport“, which should simplify support cases, permitting the DIVUS personnel to connect remotely to the device (after authorization by the customer) and executing controls directly on the device. Naturally this requires that DIVUS TZ is correctly connected to internet.

If required, the app can be connected to a free launcher field and, once started, will show the following screen:

If the reported ID is passed to the DIVUS personnel, a remote connection can be initiated and an efficient support can be given.

Further information about the usage of the app „TeamViewer QuickSupport“ can be found on the homepage www.teamviewer.com.
In order to either update DIVUS TOUCHZONE to the latest version or to reset it to factory defaults, clearing all kind of user data (like settings, installed apps, Google accounts etc.), you can use the pre-installed app „System Update“.

After starting this app, you can either update your DIVUS TOUCHZONE using a special file or you can reset the device to factory settings. By selecting the second option, the device will automatically reboot, execute the reset and start with the factory defaults.

The following screenshot shows the simple graphical interface of the “System Update” app as well as the available options:

The usage of the first option in order to update the installed Android version is as easy as the reset procedure: if DIVUS releases new versions, this happens in form of a file called „Update.zip“. This file can be copied onto a microSD card or USB stick and can then be selected within the system update app. By starting the update, the device will reboot and afterwards start with the new Android version. This operation will not touch your user data, which remains unchanged!

**Note:** if you are using a USB stick for update, please note the enumeration of the USB slots. Slot nr. 2 is – as also visible on the rear label – the upper one of the 2 available slots.

**Note:** since the last version, the System Update app also offers an OTA functionality (OTA = „over the air”), in order to get updates online from the DIVUS server. If your DIVUS TZ is connected to internet, simply click on the button “Check for updates online”; if a newer version is found on the DIVUS server, it is automatically offered for the download. Afterwards the file is verified and – if confirmed by the user – automatically installed.
# D. Technical Data

## D1. MECHANICAL DATA

**Outside Dimensions DIVUS TOUCHZONE (Landscape):**

<table>
<thead>
<tr>
<th></th>
<th>TZ07</th>
<th>TZ10</th>
<th>TZ15</th>
<th>TZ19</th>
</tr>
</thead>
<tbody>
<tr>
<td>Width (d)</td>
<td>213 mm</td>
<td>288 mm</td>
<td>435 mm</td>
<td>515 mm</td>
</tr>
<tr>
<td>Height (e)</td>
<td>136 mm</td>
<td>200 mm</td>
<td>306 mm</td>
<td>345 mm</td>
</tr>
</tbody>
</table>

**Cut-out dimensions wall mount Box:**

<table>
<thead>
<tr>
<th></th>
<th>MTZ07</th>
<th>MTZ07-W</th>
<th>MTZ10</th>
<th>MTZ15</th>
<th>MTZ19</th>
</tr>
</thead>
<tbody>
<tr>
<td>Width (d)</td>
<td>210 mm</td>
<td>220 mm</td>
<td>281 mm</td>
<td>428 mm</td>
<td>507 mm</td>
</tr>
<tr>
<td>Height (e)</td>
<td>129 mm</td>
<td>141 mm</td>
<td>189 mm</td>
<td>291 mm</td>
<td>330 mm</td>
</tr>
<tr>
<td>Depth</td>
<td>75 mm</td>
<td>80 mm</td>
<td>80 mm</td>
<td>80 mm</td>
<td>80 mm</td>
</tr>
</tbody>
</table>

**Dimensions in mortarless mount kit:**

<table>
<thead>
<tr>
<th></th>
<th>MTZ07-T</th>
<th>MTZ07-WT</th>
<th>MTZ10-T</th>
<th>MTZ15-T</th>
<th>MTZ19-T</th>
</tr>
</thead>
<tbody>
<tr>
<td>Width (d)</td>
<td>210 mm</td>
<td>210 mm</td>
<td>287 mm</td>
<td>434 mm</td>
<td>513 mm</td>
</tr>
<tr>
<td>Height (e)</td>
<td>190 mm</td>
<td>190 mm</td>
<td>189 mm</td>
<td>291 mm</td>
<td>330 mm</td>
</tr>
<tr>
<td>Depth</td>
<td>75 mm</td>
<td>80 mm</td>
<td>80 mm</td>
<td>80 mm</td>
<td>80 mm</td>
</tr>
</tbody>
</table>

For the cutout see the wall mount box

### Fixing Elements

DIVUS TOUCHZONE has to be fixed to the wall mount box using the furnished screws / magnets.

### Material

- Front Face: Alloy anodized
- PC Unit: Alloy anodized

**Note:** Further details regarding the mounting of the different TZ versions can be found in chapter D3.
## DIVUS TOUCHZONE DATA OVERVIEW

### Technical Data: TZ07-A9 | TZ10 | TZ15 | TZ19

<table>
<thead>
<tr>
<th>Type of Design</th>
<th>Ultra compact embedded PC, front- or wall mount Android operating system for your applications, resistive and without any rotating part. Ultra-low Power. Homogeneous smooth glass surface with aluminum side border.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Versions</strong></td>
<td><strong>TZ07-A9</strong></td>
</tr>
<tr>
<td>With Back Cover Glass</td>
<td><strong>TZ07-B</strong></td>
</tr>
<tr>
<td>With White Cover Glass</td>
<td><strong>TZ07-W</strong></td>
</tr>
</tbody>
</table>

### Software

| Operating System | Android 4.2 |

### Front Unit

<table>
<thead>
<tr>
<th>Resolution (in Pixel)</th>
<th>WVGA (180 x 600)</th>
<th>WVGA (204 x 600)</th>
<th>WVGA (320 x 600)</th>
<th>WVGA (352 x 600)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meritab Taktlight</td>
<td>50,000 h</td>
<td>50,000 h</td>
<td>50,000 h</td>
<td>50,000 h</td>
</tr>
<tr>
<td>Method of operating</td>
<td>Preassembled capacitive touch screen with 3 mm glass front, dual touch capable.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### General Characteristics

<table>
<thead>
<tr>
<th>Processor</th>
<th>Samsung Exynos 4412 Quad Core 1.2GHz</th>
</tr>
</thead>
<tbody>
<tr>
<td>Memory</td>
<td>1 GB RAM (DDR3)</td>
</tr>
<tr>
<td>Power Supply</td>
<td>12-24VDC</td>
</tr>
<tr>
<td>Power Consumption without Peripherals</td>
<td>Max 7W</td>
</tr>
<tr>
<td>Warranty</td>
<td>24 Months</td>
</tr>
</tbody>
</table>

### Storage Medium

| High Speed Flash Memory 8GB (available disk space 5 GB) |

### Multimode

| Headphone socket | Microphone (ext) / Headset jack 3.5mm (ext) |
| Functionality | Integrated echo cancellation for bi-directional interphone communication |

### Interfaces

| LAN/Wi-Fi | 100 Mbps with 802.3ab (ext) / 1x-WLAN (optional) |
| USB (Universal Serial Bus) | 2 x USB 2.0 (1x ext), 1 x mini USB OTG (front accessible) |
| Digital Input/Output | GPO - 4 x input / 4 x output |
| Battery | Battery life system - RTC with capacitor backup |

### Surveillance

| Status LEDs | 1 x RGB LED |

### Ambient Conditions

| EMT | EU 45231, 55022, 55098 |
| Temperature | -40°C to +80°C (max) |
| Relative Humidity | 3% to 80% at 28°C (no humidity condenser) |
| Authorization | CE |

### Dimensions

| Cut-out with MTZ [mm] | 129 x 210 x 75 | 281 x 189 x 80 | 428 x 291 x 80 | 507 x 330 x 80 |
| Outside with Frame CTZ [mm] | 136 x 217.6 | 288 x 189.6 | 435 x 291.2 | 515 x 330.2 |
| Weight | 0.9 kg | 4.6 kg | 7.7 kg | 9.9 kg |

### Mechanical Characteristics

| Mounting | Fast and easy one man mounting system with wall mount boxes |
| Front | Steel and alloy anodized, to use with wall mount box (MTZ) and cover (CTZ) |
| PC Unit | EMT provided |

*Note: All data subject to print, data entry and changes acceptance.
D3. DIVUS TOUCHZONE WALL MOUNT BOX

OVERVIEW:

MTZ07

<table>
<thead>
<tr>
<th>Types</th>
<th>In wall mount box</th>
<th>In mortars less mount kit</th>
<th>In wall mount box</th>
<th>In mortars less mount kit</th>
</tr>
</thead>
<tbody>
<tr>
<td>for DTZ07 - 7.0&quot;</td>
<td>MTZ07</td>
<td>MTZ07-T</td>
<td>MTZ07-W</td>
<td>MTZ07-WT</td>
</tr>
</tbody>
</table>

Technical Data

<table>
<thead>
<tr>
<th>Cut-Out</th>
<th>129 x 210 x 75</th>
<th>141 x 220 x 80</th>
<th>190 x 210 x 75</th>
<th>190 x 201 x 75</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fixing kit</td>
<td>7.0&quot;</td>
<td>ca. 0.3 kg</td>
<td>ca. 0.3 kg</td>
<td>ca. 0.3 kg</td>
</tr>
</tbody>
</table>

MTZ10 - MTZ15 - MTZ19

<table>
<thead>
<tr>
<th>Types</th>
<th>In wall flush mount box</th>
<th>In mortars less flush mount box</th>
</tr>
</thead>
<tbody>
<tr>
<td>for TZ10 - 10.1&quot;</td>
<td>MTZ10</td>
<td>MTZ10-T</td>
</tr>
<tr>
<td>for TZ15 - 15.6&quot;</td>
<td>MTZ15</td>
<td>MTZ15-T</td>
</tr>
<tr>
<td>for TZ19 - 18.5&quot;</td>
<td>MTZ19</td>
<td>MTZ19-T</td>
</tr>
</tbody>
</table>

Technical Data

| Cut-Out/Fitting kit 10.1" | 281 x 189 x 80 | 281 x 189 x 80 / 287 x 189 x 80 |
| Cut-Out/Fitting kit 15.6" | 428 x 291 x 80 | 428 x 291 x 80 / 434 x 291 x 80 |
| Cut-Out/Fitting kit 18.5" | 507 x 330 x 80 | 507 x 330 x 80 / 513 x 330 x 80 |
| Weight     | ca. 4 kg            | ca. 4 kg                      |

Mechanical Characteristics

Wall mount box | steel plate with cover for clean installation
Cable access  | front, bottom, left

Grounding / Installation instructions / Installation

- Die Unterputzdose und das Treckenzubau können in einem Ausschnitt in der Wand oder in einem bis zu 1,5 cm dicken Möbelstück, sowie in einem Treckensbau befestigt werden. Der Ausschnitt muss den in den technischen Details spezifizierten Maßen entsprechen und beim Wandbauf mindestens 9 cm tief sein.

- In Wandausrichten und der Unterputzdose eingesetzt, während sie im Möbelstück angebracht werden kann. Es ist wichtig, dass die vordere Kante der Unterputzdose plan und waagerecht zur Oberfläche der Wand oder des Möbelstücks ist.

The wall mount box as the mounting kit may be installed in a cut out in the wall, in a wooden structure thick at least 1.5 cm or in a dry mortars less construction. The cut out has to respect the sizes specified in the technical data and has to be at least 9 cm deep.

In the wall cut out, the box can become built in while it can be screwed on in a piece of furniture. It is important that the front edge of the box is flat and horizontally to the surface of the wall or the piece of furniture.
WALL MOUNT KIT - MOUNTING MTZ10

1. Insert screws and tighten.
2. Attach the bracket to the wall.
3. Align the Mounting Kit with the display.
4. Secure the display to the wall.
5. Adjust the magnets for perfect fit.
6. Position the display face down.
7. Install the display back onto the Mounting Kit.
8. Make sure the display is securely mounted.
D4. MAINTENANCE AND UPKEEPING

DIVUS TOUCHZONE is a completely fanless system, a fact that reduces strongly the necessary maintenance expense.

**Note:** Additional information’s about the components which are used in DIVUS TOUCHZONE you will find in the original documentation of the manufacturer.