DIVUS CIRCLE small
DIVUS CIRCLE small+
DIVUS CIRCLE small C*
DIVUS SQUARE small C*

User manual

Version 2.8.0

REV02-2023-11-02

GENERAL INFORMATION

DIVUS GmbH Pillhof 51 I-39057 Eppan (BZ) - Italy

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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

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

SAFETY INSTRUCTIONS

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

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

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

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

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

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

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

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

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

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

The device is designed to be mounted at most 2m above the ground.

STANDARDS

The DIVUS TOUCHZONE meets the following guidelines and standards:

Low Voltage Directive 2014/35/EU (ex 73/23/CEE - 93/68/CEE - 06/95/CE)

Standard to which conformity is declared:

EN 62368-1:2014/A11:2017 Safety

EMC Directive 2014/30/EU (ex 89/336/CEE - 92/31/CEE - 93/68/CEE - 04/108/CE)

Standard(s) to which conformity is declared: Conducted & Radiated Emissions

EN 61000-6-1:2007

EN 61000-6-3:2007/A1:2011

Draft ETSI EN 301 489-1 V2.2.0

Draft ETSI EN 301 489-3 V2.1.1

EN 62311 (24GHz)

EN 300 330 V2.1.1

RoHS2 Directive 2011/65/EU (ex 02/95/EC)

Standard(s) to which conformity is declared:

EN 50581:2012 Restriction of hazardous substances

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

The EC conformity statements can be obtained from:

DIVUS GmbH Pillhof 51 I-39057 Eppan (BZ)



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

TABLE OF CONTENTS

	GENE	ERAL INFORMATION	_ 2
	CON	VENTIONS	_ 2
	SAFE	TY INSTRUCTIONS	_ 3
	STAN	NDARDS	_ 4
	TABL	LE OF CONTENTS	_ 5
1	IN	ITRODUCTION	_ 9
	1.1	GENERAL INFORMATION	_ 9
	1.2	VERSIONS AND MODELS	_ 9
2	W	/IZARD	11
	2.1	FOREWORD	11
	2.2	FIRST ACCESS	12
	2.3	STEP 1 – START	13
	2.4	STEP 2 – LICENSE AGREEMENT	14
	2.5	STEP 3 – SYSTEM INTEGRATOR DETAILS	15
	2.6	STEP 4 – CUSTOMER DETAILS	16
	2.7	STEP 5 - DATE/TIME	17
	2.8	STEP 6 – SIP LOCAL SETTINGS	19
	2.	8.1 STANDALONE MODE	19
	2.	8.2 EXTERNAL MODE	21
	2.9	STEP 7 – SIP CLOUD SETTINGS	21
	2.10	STEP 8 – NETWORK SETUP	22
	2.11	STEP 9 – SUMMARY / LAST STEP	23
3	W	/EB INTERFACE	24
	3.1	ACCESSING THE WEB INTERFACE	24
	3.2	SYSTEM SETTINGS SECTION	24
	3.	2.1 SYSTEM STATUS PAGE	24
	3	2.2 SYSTEM – UPGRADE	25

3.2.2	2.1 UPGRADE PROCEDURE	25
3.2.3	SYSTEM - BACKUP & RESTORE	27
3.2.3	3.1 BACKUP PROCEDURE	27
3.2.3	3.2 RESTORE PROCEDURE	28
3.2.3	3.3 FACTORY RESET	29
3.2.4	SYSTEM - REBOOT	31
3.2.5	SUPPORT	32
3.2.6	SETTINGS – SYSTEM INTEGRATOR	32
3.2.7	SETTINGS – CUSTOMER	32
3.2.8	SETTINGS - DATE/TIME	32
3.2.9	SETTINGS – SIP LOCAL	32
3.2.10	SETTINGS – SIP CLOUD	33
3.2.11	SETTINGS – I/O MODULES	33
3.2.12	SETTINGS – NETWORK	33
3.2.13	SETTINGS - DISPLAY (DIVUS CIRCLE ONLY)	34
3.2.14	SETTINGS – LANGUAGE	34
3.2.15	SETTINGS - VOLUME	34
3.2.16	SETTINGS – DOOR LOCK RELAY (DIVUS CIRCLE V.2 ONLY)	35
3.2.17	SETTINGS – PHOTO EVENTS	36
3.2.18	APPEARANCE (PREVIOUSLY CIRCLE SETTINGS)	36
3.2.19	LOGOUT	36
3.3 CIRC	CLE APPEARANCE SECTION (PREVIOUSLY CIRCLE SETTINGS)	36
3.3.2	ADDRESS & NAMES	38
3.3.3	PROFILES (DIVUS CIRCLE ONLY)	39
3.3.3	3.1 AVATAR CONFIGURATION	40
3.3.3	3.2 DASHBOARD CONFIGURATION	42
3.3.4	DAY & NIGHT	43
3.3.5	ILLUMINATION (DIVUS CIRCLE /CIRCLE SMALL/CIRCLE SMALL +)	43
3.3.6	HOLIDAY (DIVUS CIRCLE)	44

	3.3.7	ACCESS CONTROL	45
	3.3	.7.1 ADDING AND EDITING USERS	45
	3.3	.7.2 DELETING USERS	47
	3.3	.7.3 ENABLING / DISABLING USERS	47
	3.3	.7.4 DEFINING A USER'S SCHEDULE	47
	3.3	.7.5 IMPORTING AND EXPORTING USERS	48
	3.3	.7.6 IMPORTING AND EXPORTING SCHEDULES	49
	3.3	.7.7 ACCESS LOG	50
	3.3.8	SYSTEM SETTINGS	50
	3.3.9	LOGOUT	50
4	USER	NTERACTION	51
	4.1 STA	ARTING A CALL	51
	4.1.1	USING THE BELL ICON	51
	4.1.2	USING THE SCREEN (DIVUS CIRCLE ONLY)	52
	4.1.3	USING THE SCREEN (DIVUS CIRCLE SMALL+ ONLY)	52
	4.2 OPI	ENING THE DOOR	52
	4.2.1	MANUALLY	52
	4.2.2	FROM INSIDE	52
	4.2.3	ON THE MOVE	52
	4.2.4	USING AN ACCESS CODE ON THE KEYPAD (ON DIVUS CIRCLE)	53
	4.2.5	USING AN ACCESS CODE ON THE KEYPAD (ON DIVUS CIRCLE SMALL +)	53
	4.2.6	USING AN NFC TAG (REQUIRES THE OPTIONAL NFC MODULE - SEE CHAPTER 5.1)	54
	4.3 CLE	EANING (DIVUS CIRCLE ONLY)	54
	4.4 PR0	DGRAMMING A NEW NFC TAG	54
	4.5 VIS	UAL FEEDBACK	55
	4.5.1	CIRCLE SMALL AND CIRCLE SMALL +, CIRCLE / SQUARE SMALL C*	55
	4.5.2	CIRCLE	56
5	OPTIO	NAL MODULES	59
	5.1 NF0	C MODULE	59

	5.2	TOWER MODULE (CIRCLE ONLY)	59
6	1/	O MODULES	61
	6.1	I/O MODULE CONFIGURATION	61
	6.2	I/O MODULE OUTPUT FUNCTION CONFIGURATION	63
	6	.2.1 TIMER DESCRIPTIONS	64
7	С	OMMANDING RELAYS	66
	7.1	INTRODUCTION	66
	7.2	BUILT-IN RELAY	66
	7.3	I/O MODULE OPTION	66
	7.4	ACCESS 1 AND ACCESS 2 – EXPLANATION	66
8	Т	ECHNICAL DATA	68
	8.1	DIVUS CIRCLE - QUICK START GUIDE	68
	8.2	DIVUS CIRCLE SMALL / SMALL + - QUICK START GUIDE	80
	8.3	DIVUS CIRCLE - MOUNTING INSTRUCTIONS (MOUNTING BOX)	92
	8.4	DIVUS CIRCLE SMALL / SMALL + - MOUNTING INSTRUCTIONS (MOUNTING BOX)	93
	8.5	DIVUS CIRCLE - DATA SHEET	94
	8.6	DIVUS CIRCLE SMALL / SMALL + - DATA SHEET	101
	NOT	ES	107

1 Introduction

1.1 GENERAL INFORMATION

Thank you for having bought a DIVUS CIRCLE! This manual will help you to set up your smart intercom device in the optimal way.

The main features of your new DIVUS CIRCLE are:

- SIP outdoor station for intercom systems
- Wide angle camera
- Access by code or by NFC card (using MIFARE 13.56MHz standard)
- Command any other system through the DIVUS I/O module
- Access control
- Answer from DIVUS wall mounted panels and mobile devices

This manual will guide you through the setup and show you how to configure and manage all the functions of your new DIVUS CIRCLE.

1.2 VERSIONS AND MODELS

There are different hardware versions of DIVUS CIRCLE.

All models of version 2 have a third green interface on the back for the internal relay. Moreover, they also work with 24V power adapters. Version 1 devices have no internal relay and need a 48V power source.

Wherever in this manual the versions differ in functionality, the referred version is indicated explicitly.

The classic DIVUS CIRCLE and DIVUS CIRCLE small are now joined by the C* models:

- DIVUS CIRCLE small C*
- DIVUS SQUARE small C*

These have the same external dimensions as the DIVUS CIRCLE small, but their surface is characterised by the CORIAN® material in various colours.

For a more detailed overview of the functionalities that all models have in common or are only available on some, we offer the following overview table:

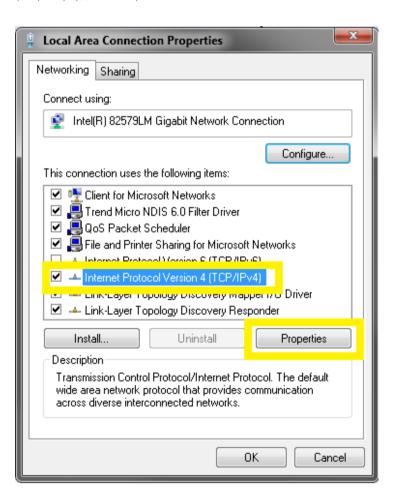
FUNCTIONALITY	CIRCLE	CIRCLE small +	CIRCLE small	CIRCLE/SQUARE small C+
CAPACITIVE RING BUTTON	✓	✓	✓	✓
ENTRY PER KEY CODE	✓	✓	×	×
ENTY PER NFC (OPTIONAL)	✓	✓	✓	✓
INTEGRATED RELAY	✓	✓	✓	✓
DASHBOARD WITH DESIGN OPTIONS	✓	×	×	×
LED-RING FOR WALL ILLUMINATION	✓	✓	×	×
FISHEYE- HD-CAMERA	✓	✓	✓	✓
APPROACH SENSORS	✓	✓	×	×
POE+	×	✓	✓	✓
ACCESS CONTROL	✓	✓	✓	✓
I/O-MODUL SUPPORT	✓	✓	✓	✓
INTEGRATABLE UNITS	1000 (MIT TOWERMODUL)	4	1	1
MATERIAL / COLOURS	GLASS / BLACK	GLASS / BLACK	GLASS / BLACK	CORIAN® / DEEP NOCTURNE DESIGNER WHITE SILVER GRAY

2 Wizard

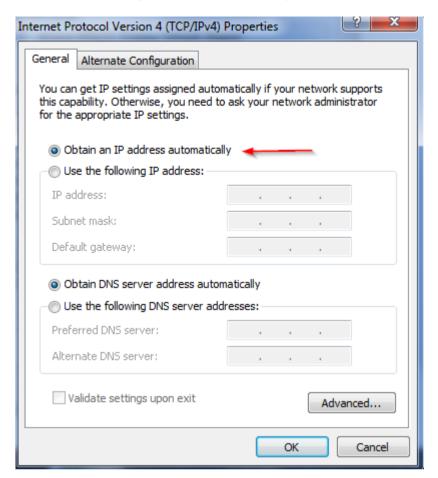
2.1 FOREWORD

This chapter describes the wizard that is displayed when you connect to your new DIVUS CIRCLE for the first time.

The prerequisite is, of course, that the DIVUS CIRCLE is already supplied with power and has completed the boot process. On the PC from which the configuration is to be carried out, you must ensure that it is set to DHCP. To do this, go to the adapter settings of the network interface used, then to the item "Internet protocol version 4 (TCP/IPv4)" (double-click):



Make sure that the settings here look like in the following screenshot:



At the end of the wizard, you can return to the usual settings. If these look like above anyway (i.e. you are already using DHCP by default), you do not need to make any changes to your PC to carry out the WIZARD.

2.2 FIRST ACCESS

Now you can connect to the DIVUS CIRCLE by entering the network name of the unit in the URL bar of your web browser. This consists of the abbreviation "sn" followed by the serial number of the unit, which can be found on the label on the back of the unit or on the box, e.g.:

• Serial number: 23002

Network name: sn23002

• To be entered in the web browser: https://sn23002
or alternatively: sn23002.local

To restart the wizard after the first completion - if necessary, add "/wizard" to the IP address, e.g. use (in the example above) https://sn23002/wizard



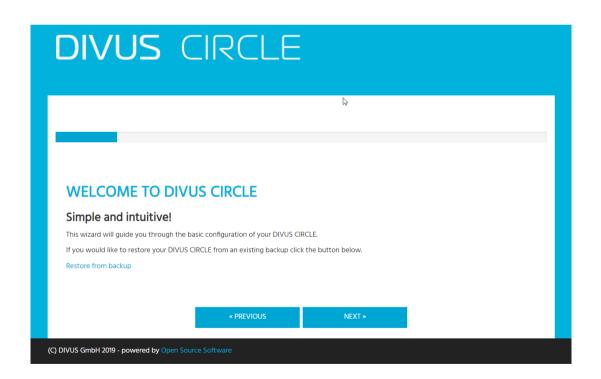
If the unit is not accessible, this command from MS PowerShell can be helpful: Resolve-DnsName -name sn23002

As first step select the desired language:



Then it starts in the selected language (click Save).

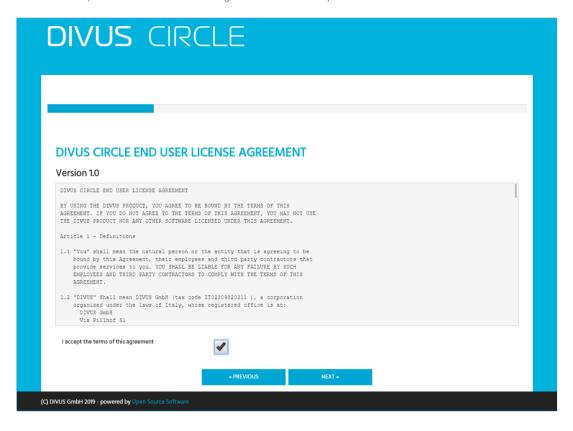
2.3 STEP 1 - START



If you have a previous backup which you want to restore, you can click the link *Restore from backup*. This will interrupt the wizard and you will be able to login to the CIRCLE with the restored configuration. Otherwise, read on

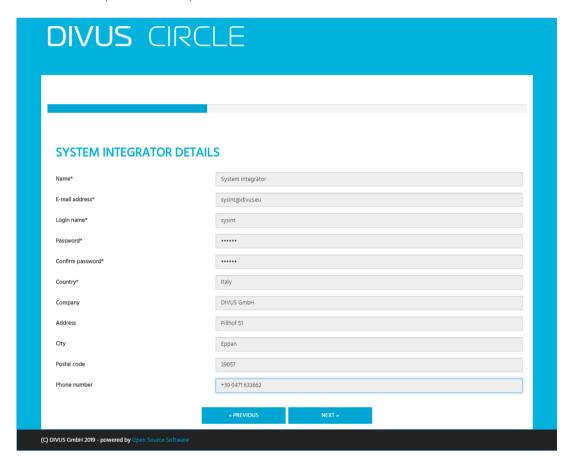
2.4 STEP 2 – LICENSE AGREEMENT

Read and accept the license terms checking the checkbox in step 2:



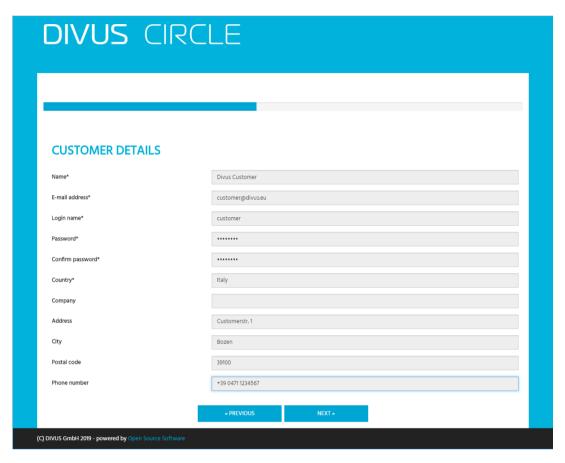
2.5 STEP 3 – SYSTEM INTEGRATOR DETAILS

Fill in at least the fields with a * about the system integrator, but we recommend taking the time to fill out all the fields to have complete and clear reports thereafter.



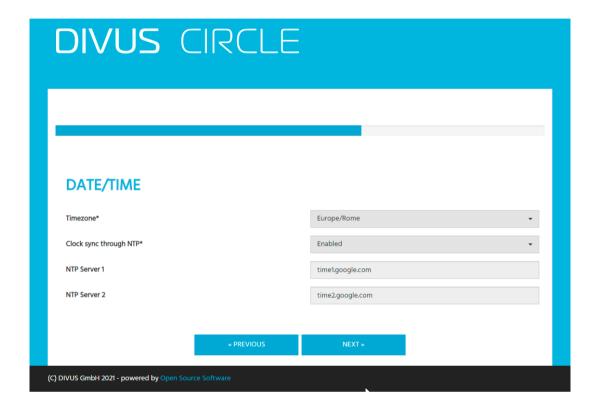
2.6 STEP 4 – CUSTOMER DETAILS

Again, fill in at least the fields with a * about the customer (again we recommend to fill out all the fields)



2.7 STEP 5 – DATE/TIME

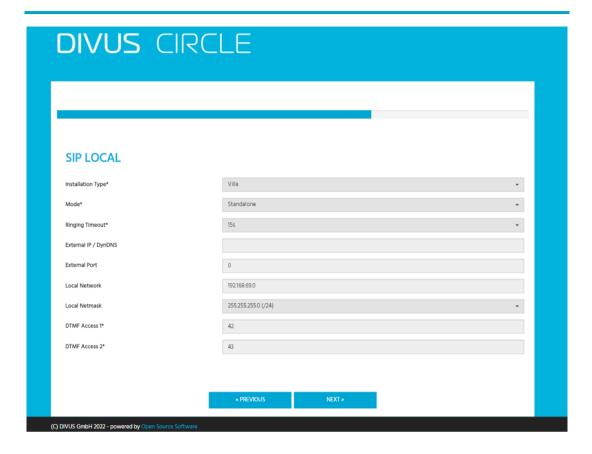
If your device will have internet access, you can choose the time zone, enable the synching and choose two NTP servers:



If the device will have no internet access, disable the NTP synching and enter date and time manually:



2.8 STEP 6 – SIP LOCAL SETTINGS



Choose the *installation type* and whether you are going to use the DIVUS CIRCLE as VoIP server (choose *STANDALONE*) or it will be a VoIP client on an external VoIP server (choose *EXTERNAL*).

INSTALLATION TYPE	NUMBER OF APARTMENTS
Villa	1
Compound with 2 apartments	2 *
Compound with 3 apartments	3 *
Compound with 4 apartments	4 *
Tower	>4 **

- * DIVUS CIRCLE and DIVUS CIRCLE small + only
- ** DIVUS CIRCLE with TOWER module only.

2.8.1 STANDALONE MODE



In Standalone mode, the Circle (any model) will be automatically assigned the VoIP ID 901 (used as client ID on its own VOIP server). Moreover, it will have these other IDs available for devices participating to the communication system:

IDS FOR ANSWERING DEVICES

IDS FOR ADDITIONAL INTERCOMS

1101, 1102, 1103, 1104	901 (taken by itself), 902, 903, 1201

The user can't change these! Also note that the password is equal to the id for the above accounts.

The IDs available for internal devices are automatically subdivided depending on the number of units configured through the "Installation type" setting:

	VILLA MODE	2 UNITS COMPOUND MODE	3 UNITS COMPOUND MODE	4 UNITS COMPOUND MODE
IDS APT.1	4: 1101 1102 1103 1104	2: 1101 1102	1: 1101	1: 1101
IDS APT.2	Х	2: 1103 1104	1: 1102	1: 1102
IDS APT.3	Х	Х	1: 1103	1: 1103
IDS APT.4	Х	Х	Х	1: 1104

Summarizing, this means:

- in Villa mode there are accounts for up to 4 internal devices. This is the default and only the models DIVUS CIRCLE and DIVUS CIRCLE small + also support the compound modes.
- In Compound mode for 2 units both will have max. two internal devices. In the other setups for 3 or 4 units, there is one device per unit available, using the IDs defined in the table above.
- If there is one other external device participating, it may be assigned one of the IDs 902, 903 or 1201.

If the device is set to *Standalone mode* and should be reachable also remotely, please fill in the fields *External IP/DynDNS* and *External Port*.

Please note that the new solution for remote access over the DIVUS Cloud is preferrable for new installations. See step 7.

The settings for DTMF-Tones are those used by DIVUS VIDEOPHONE (MOBILE) when you push the two door-opener buttons. So, it is best to leave them at the pre-set values.

2.8.2 EXTERNAL MODE

These are the settings when configuring an external SIP server:



Insert the SIP/VoIP server address and port and the username and password of the device's account. Please note that the field *Username* refers to what is technically called SIP ID. If the SIP/VoIP server in use also requires the username for authentication as a separate field from the SIP ID, a separate field for that can be used (see *Authentication username* above).

2.9 STEP 7 - SIP CLOUD SETTINGS

Here, the new cloud functionality can be activated and configured, if desired. Of course, a permanent internet connection of the device is a prerequisite for this to work.

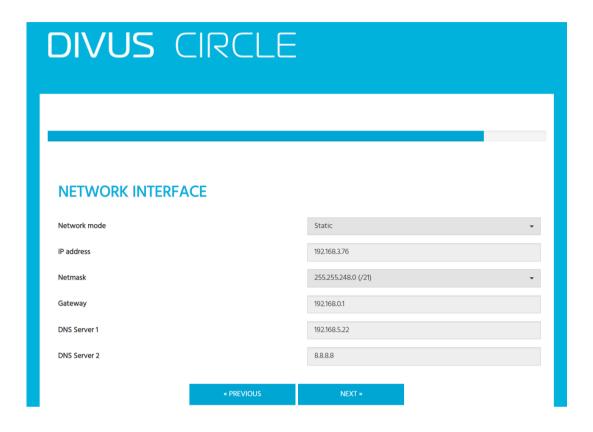
You can find more detailed information and all step-by-step instructions in chapter 3.2.10 and in the $\underline{\text{DIVUS}}$ VIDEOPHONE MOBILE manual.



Please note that the local SIP settings are completely independent from the Cloud SIP settings. This allows to have a working system also in cases where the internet connection should fail (or is not available yet).

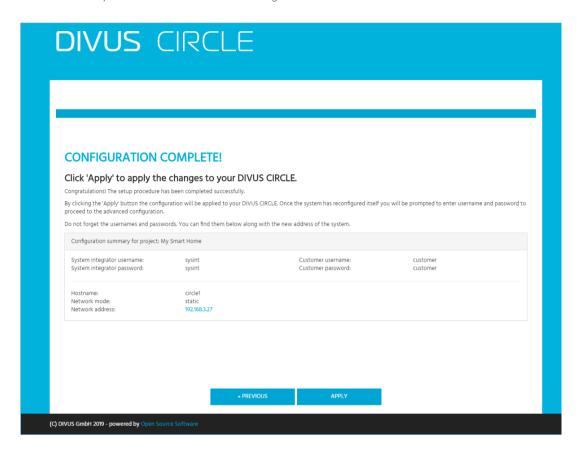
2.10 STEP 8 – NETWORK SETUP

Set the network according to your needs here:



2.11 STEP 9 - SUMMARY / LAST STEP

This last step shows the access data and the most important settings to be confirmed pushing the APPLY button. Please note that you have to remember these settings to access the web interface from here on!



After pushing the APPLY button, the system will reload to apply all the settings and you will be asked for username and password to access the web interface. See chapter 3.1 for further details.



Note: Don't forget the usernames and passwords! You will not be able to access the web interface without them once you concluded the wizard!

3 Web interface

3.1 ACCESSING THE WEB INTERFACE

Once you configured the DIVUS CIRCLE's basic settings, you need to authenticate to access its web interface. At this time, the system integrator and the customer accounts will have access to different parts of the web GUI.

USER ACCOUNT	ACCESS RIGHTS
System integrator	both System settings section and Appearance settings section
Customer	Appearance settings section only

To call up the web interface, use the IP address you chose during the wizard using https e.g.: https://192.168.0.72

3.2 SYSTEM SETTINGS SECTION

After the authentication as system integrator, you'll reach the configuration section. Here you will have an overview of the device's status and access to all the settings and to maintenance functions.

3.2.1 SYSTEM STATUS PAGE



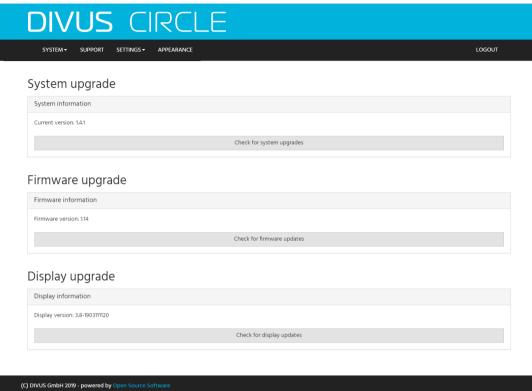
System status



test s	ystem logs										
May	6 16:40:39	divus-circle2	daemon.info	drdSIPs[849]:		d:::::d			d:::::d		S:::::
May	6 16:40:39	divus-circle2	daemon.info	drdSIPs[849]:	ddddddd	dd:::::drrrrr	rrrrrrrr	dddddd	dd::::d		S:::::
May	6 16:40:39	divus-circle2	daemon.info	drdSIPs[849]:	dd::::::	::::::::dr::::r	rr:::::r	dd::::::	::::::d		S:::::
May	6 16:40:39	divus-circle2	daemon.info	drdSIPs[849]:	d:::::::	::::::::dr:::::	r	d:::::::	::::::d		S::::
1ay	6 16:40:39	divus-circle2	daemon.info	drdSIPs[849]:	d:::::ddd	dd:::::drr::::	::rrrrr:::::	l::::::ddd	dd::::d		SS::
1ay	6 16:40:39	divus-circle2	daemon.info	drdSIPs[849]:	d:::::d	d:::::d r::::	:r r:::::r	l::::::d	d:::::d	-::::::::	SS
lay	6 16:40:39	divus-circle2	daemon.info	drdSIPs[849]:	d:::::d	d:::::d r::::	rrrrrrr	l:::::d	d:::::d		
lav.	6 16:40:39	divus-circle2	daemon.info	drdSIPs[849]:	d:::::d	d:::::d r::::	:r c	l::::::d	d:::::d		

The first page in the menu is also the system settings section's homepage. It gives a general overview of the system's state with memory and disk usage, name, serial number and IP address, load, uptime and the latest system's log.

3.2.2 SYSTEM - UPGRADE



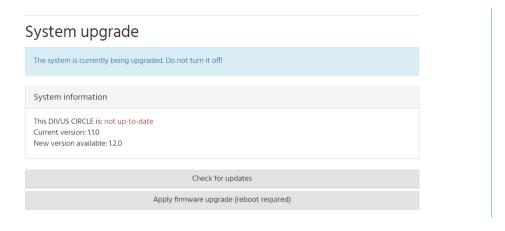
If the DIVUS CIRCLE has access to the internet, it will check whether there are new software versions available online when you use the button on this page. If so, you will be informed and may start the upgrade procedure by pushing the UPGRADE button.

3.2.2.1 Upgrade procedure

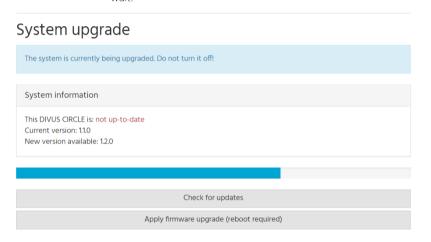
1. When you push the *Check for ... updates* button and a new version is found, this screen and a new button appear for starting the upgrade:



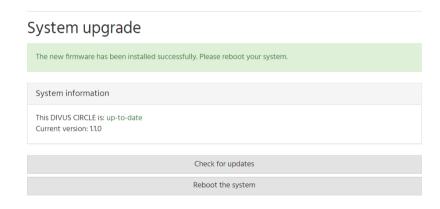
2. After confirmation, the download and upgrade will start...



...and the upgrade will be processed. This might take several minutes. Please wait

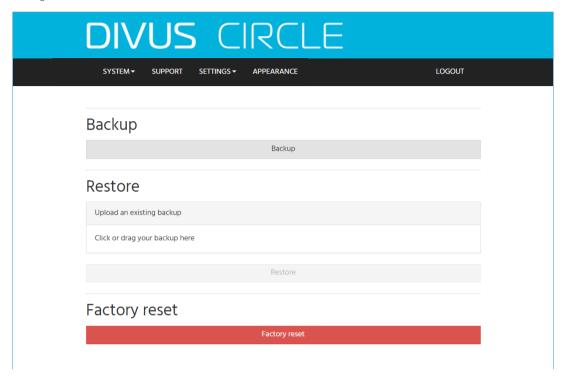


3. After the upgrade, you'll be prompted to reboot. Confirm the reboot and wait for the device to be up and running again. That might take several minutes.



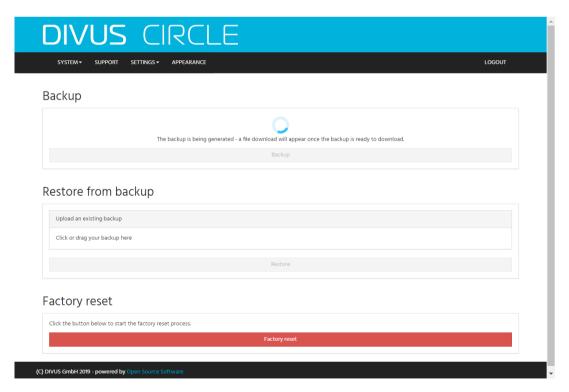
3.2.3 SYSTEM - BACKUP & RESTORE

This page has buttons to backup or restore the device using an existing backup, or to go back to factory settings.



3.2.3.1 Backup procedure

To create a backup, just hit the Backup button.

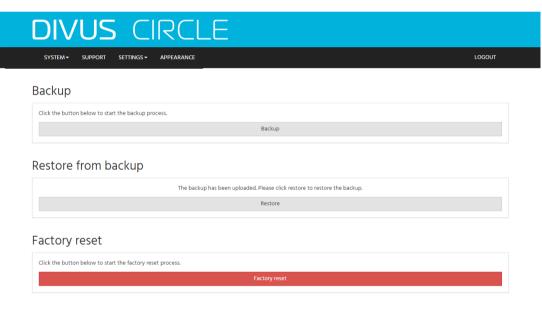


You'll be asked for a path to store the backup file – or it will be downloaded directly depending on your browser's settings.

3.2.3.2 Restore procedure



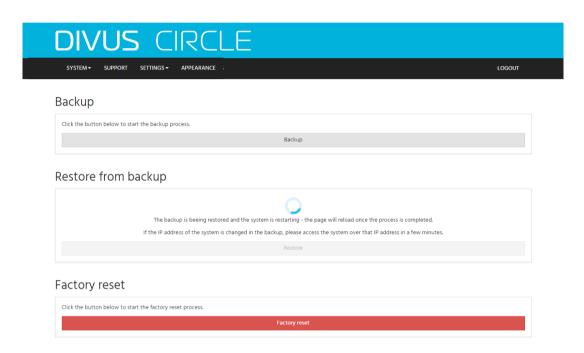
Drag and drop a backup file onto the "Click or drag your backup here" or click on it to choose it from your PC and it will be uploaded.



Then hit the Restore button as suggested and confirm:



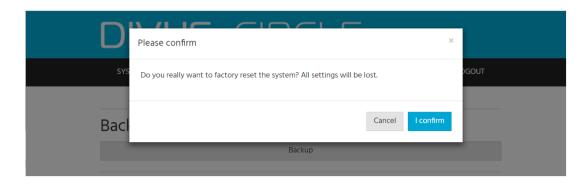
The restore procedure may take up to 5 minutes. Please wait and do not power off the device! Depending on the information contained in the backup, refresh the page if the IP address is still the same or use the IP address stored in the backup to load the web interface of the restored system after that:



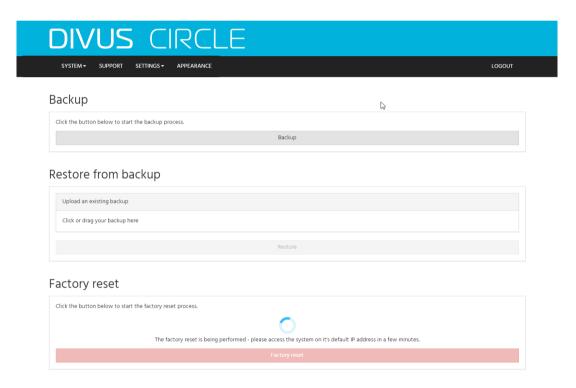
3.2.3.3 Factory reset

A factory reset will cause the device to delete all its settings, returning to the same state it was delivered in. So please bear in mind that the current configuration will be lost. If you have any doubts, make a backup before resetting the device.

To start the procedure, click the red Factory reset button!



Please note that a factory reset will cause the DIVUS CIRCLE to switch back to its original IP address. Go to chapter 2.1 to find out what address that is, depending on the CIRCLE model.



3.2.4 SYSTEM - REBOOT

From this page you can reboot your DIVUS CIRCLE:

After clicking the Reboot button and confirming, you will see...

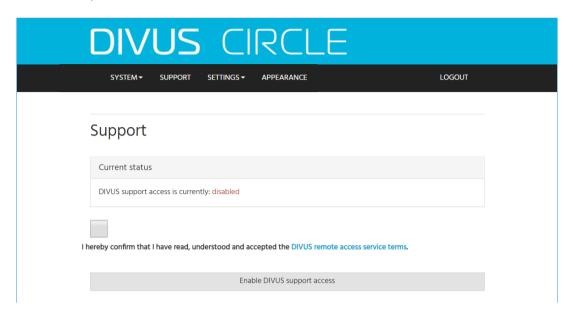


...and the device will reboot. Wait for the reboot to complete - this might take several minutes.



3.2.5 SUPPORT

This page allows to enable or disable the DIVUS support. This function is meant to give access to the DIVUS technicians using a VPN connection for issues which can't be solved by the user. It is disabled as default and needs the acceptance of the *DIVUS remote access service terms* – linked in blue - to be enabled.



3.2.6 SETTINGS - SYSTEM INTEGRATOR

Here you have access to the System Integrator information which was shown during the wizard (see 2.5). You can edit the information and store your changes.

3.2.7 SETTINGS - CUSTOMER

Here you have access to the Customer information which was shown during the wizard (see 2.6). You can edit the information and store your changes.

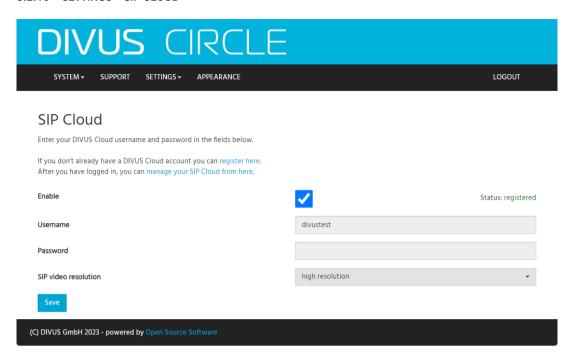
3.2.8 SETTINGS - DATE/TIME

Here you have access to the Date/Time information which was shown during the wizard (see 2.72.5). You can edit the information and store your changes.

3.2.9 SETTINGS - SIP LOCAL

Here you have access to the local SIP settings which were also shown during the wizard (see 2.8). You can edit the information and store your changes. Please note that the available options depend on the installation type and mode settings and change accordingly.

3.2.10 SETTINGS - SIP CLOUD



Here you will find the settings to enable/disable the SIP CLOUD on the device and connect to a DIVUS CLOUD account.

Depending on the camera built into the CIRCLE, you may also have the option to choose the resolution for the SIP video stream – reduce it to low resolution if the internet upstream of the facility is rather low or you get poor performance with the high resolution.

For more details about the SIP Cloud setup, please refer to the DIVUS VIDEOPHONE MOBILE manual.

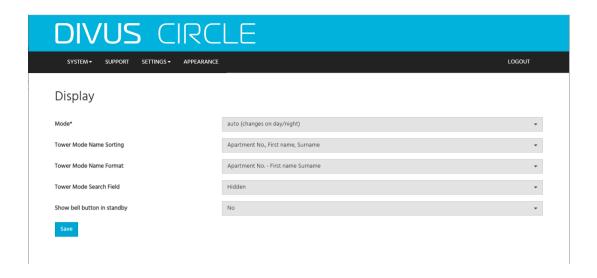
3.2.11 SETTINGS - I/O MODULES

Here you have access to the I/O Modules management. See chapter 6 for further details.

3.2.12 SETTINGS - NETWORK

Here you have access to network configuration which was shown during the wizard (see 2.10). You can edit the information and store your changes.

3.2.13 SETTINGS - DISPLAY (DIVUS CIRCLE ONLY)



- On this page you can configure the brightness of the DIVUS Circle display. The auto setting will switch between a brightness for day and another for night automatically. The manual setting allows to choose a value between 0 and 100 (%). Save your changes with the save button.
- **Hint:** The setting of 0% corresponds to the minimal brightness of the display where the content of the screen is still visible. You can't turn the display completely off.
 - Starting from version 1.11.0, you now can choose the sorting order for the items in the Tower module's list. The possible sorting fields are *apartment no.*, *first name* and *surname*. A similar choice can be made (independently) for the formatting i.e. in which order the fields should be printed on screen.
 - The search field shown in the Tower design can be hidden, if preferred.
 - The bell button usually shown in the middle at the bottom can be turned off when in standby mode.

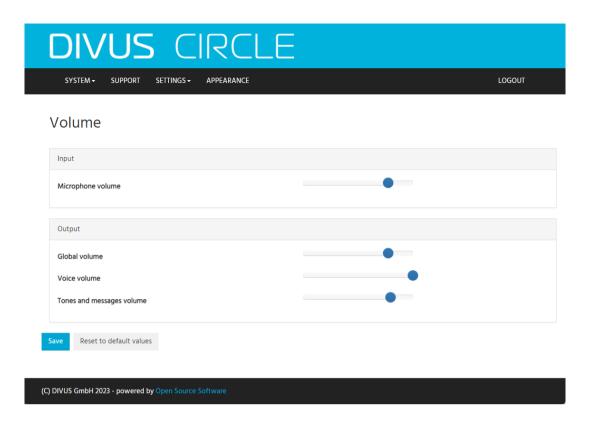
3.2.14 SETTINGS - LANGUAGE

Choose the language of your choice on this page. It will set the chosen language for the web interface and, for the DIVUS Circle, also for the Circle's GUI.

To apply the new language, a service restart is needed.

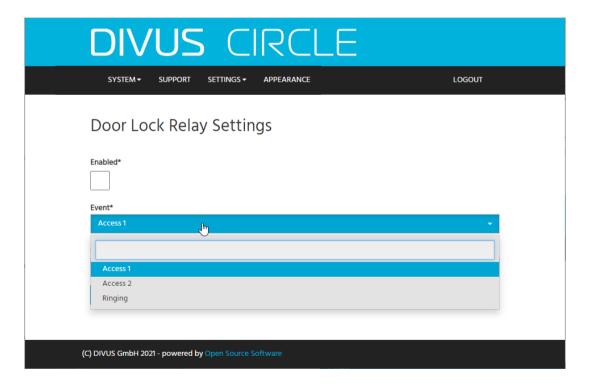
3.2.15 SETTINGS – VOLUME

There is one slider for the microphone and several sliders for the loudspeaker. By default, they are at optimal values for most spatial conditions. If you do not find the current settings appropriate, move the sliders on the respective bar and save the changes.



The Reset to default values will restore all the volume values to their defaults.

3.2.16 SETTINGS - DOOR LOCK RELAY (DIVUS CIRCLE V.2 ONLY)



DIVUS Circle V.2 (all models) have a built-in relay to e.g. open a door. If you use it, here you can activate it and set the duration of the impulse (i.e. for how long it will close the circuit when activated).

Starting from version 1.11.0 you can also choose whether to trigger Access 1 or Access 2. These two separate events are coupled with different DTMF tones (triggered through the DIVUS Videophone App). They are further described in chapter 7.4.

Version 2 of the firmware introduces the additional Ringing event: even when a call is activated the built-in relay can be triggered.

3.2.17 SETTINGS - PHOTO EVENTS

Here you can enable and configure a feature which will take photos on certain events, storing them on an ftp server. This means you need an account on an ftp/ftps server where you have the possibility (access rights and storage place) to store data. Once you have the configuration settings to access the ftp server, insert them in this page along with the desired event(s) and save the changes.

3.2.18 APPEARANCE (PREVIOUSLY CIRCLE SETTINGS)

Use this link to switch to the Circle appearance related settings as system integrator. The Appearance settings have a different graphic design and are used to configure the design and the physical interaction with the DIVUS Circle. The customer has access to these settings only, with his account. See chapter 3.3 for further details about all the appearance settings.

3.2.19 LOGOUT

Use this link to close your system integrator session. You will be redirected to the login page.

3.3 CIRCLE APPEARANCE SECTION (PREVIOUSLY CIRCLE SETTINGS)

You reach this section in two ways:

- 1. When clicking the Appearance link from the System Settings section
- 2. When logging in with the customer account

The menu is the following (on a DIVUS CIRCLE as example):



NAME	DESCRIPTION	DEVICE(S)	ACCESS RIGHTS
Address & Names Insert the data about the address and the owners		All	Sys. Int., Cust.
Profiles Configure the screen appearance of your DIVUS CIRCLE for one or more different situations		Circle	Sys. Int., Cust.
Day & Night	Configure the day and night settings	Circle	Sys. Int., Cust.
Night lighting	The LED ring can be used for illumination.	All except C*	Sys. Int., Cust.
Holiday	Configure a profile to be used while you are not at home	Circle	Sys. Int., Cust.
Access Control	Configure users with their access settings and schedules	All *	Sys. Int., Cust.
System Settings	Configure the system settings (as seen in chapter 3.2). Visible only when logged in as system integrator.	All	Sys. Int.
Logout	Closes the current session.	All	Sys. Int., Cust.

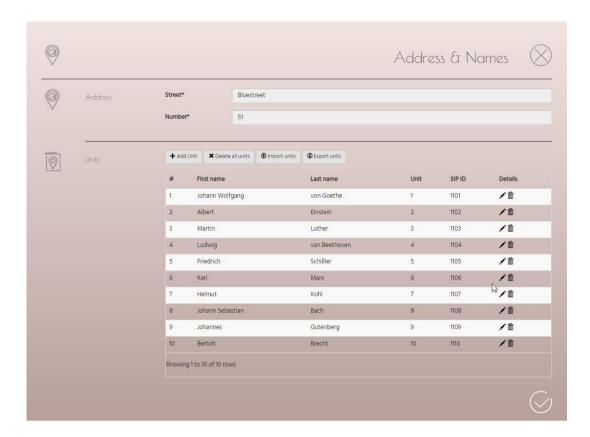
 $^{^{\}ast}$ Some settings on DIVUS Circle only (see single function's description for further details)

3.3.2 ADDRESS & NAMES

Insert the address and house number. Then, for each available unit, insert name and SIP number to be called.



This page presents a different set of options on a DIVUS CIRCLE if it is configured to use the Tower module:

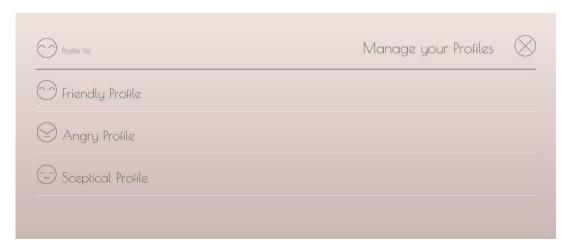


In this configuration you have the options to

- Add a single unit (inserting name, unit no. and SIP ID)
- Delete all the current units
- Import a units' file or export the current units as csv.

These options make it easy to configure the CIRCLE to work with any number of units and, if needed, to transfer units to another CIRCLE.

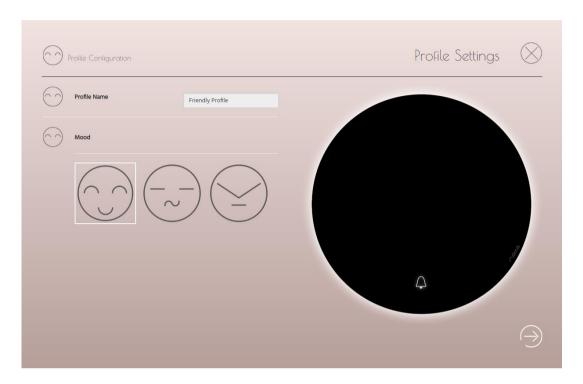
3.3.3 PROFILES (DIVUS CIRCLE ONLY)



Profiles can be used to configure the appearance of the DIVUS Circle differently for different situations. There are three templates, namely Friendly, Angry and Sceptical. In general, they may be used to configure different

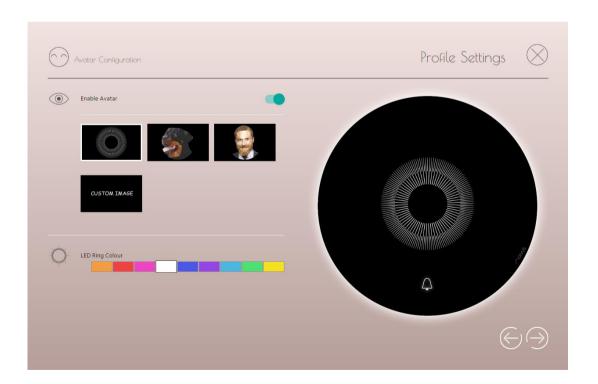
representations for different situations (e.g., at night or while you're on holiday). Choose one of them to reach the first configuration screen of that profile.

Here you may rename the profile and choose the preferred mood.



Use the white arrow to move to the next step.

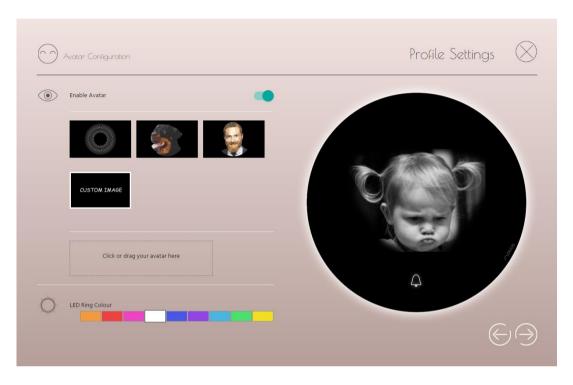
3.3.3.1 Avatar Configuration



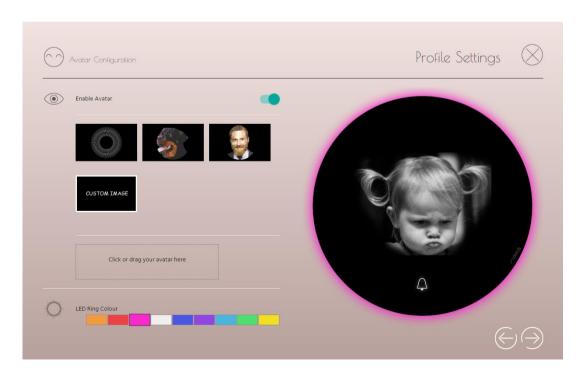
An Avatar is an image representing the DIVUS Circle or your smart home – if you prefer. It is used in the very first step of activation, when the device notices a presence with its radar sensor and awakes its screen. It will be shown for 2 seconds. Then the DIVUS Circle will switch to the Dashboard screen (see 3.3.3.2).

The default avatar is the white iris, making the DIVUS Circle look like a watching eye. You can choose another one of the predefined avatar images or upload your own one.

To upload a custom image, click the black "custom image" rectangle and then choose or drop an image directly onto the "Click or drag your avatar here" box. Ideally the image should have a diameter of 500 pixels.



In the lower part of the screen, you may choose the colour of the LED ring to combine with the avatar function. When you click on a colour, you'll see a preview of the result on the Circle shown on the right.



Then again, choose the right arrow to move on.

3.3.3.2 Dashboard Configuration

The dashboard is the main screen of the DIVUS Circle – the one you see when you start to interact with it. You can choose

- The LED ring colour. The chosen colour will be used for the LED ring while the dashboard is shown.
- The Dashboard Theme colour. The chosen colour will be used for all the variations of the dashboard design, which you choose in the next step. The white theme will offer high contrast designs.
- The *Dashboard Design*. Choose one of the predefined designs to be shown in the dashboard. The data inserted for the address and/or name might be used, depending on the chosen design.



If you prefer to use your own image or logo, choose one of the two templates showing the family picture. The usual box to choose or drop an image will appear under the templates, allowing to upload your file.

- Hint: All the settings for Profiles come with default values. You can immediately start to use your DIVUS Circle and it will use those default settings. You only need to make changes if you prefer to change some of the settings.
- Hint: Repeat the same steps for all the Profiles you want to change.
- Hint: All the changes will be stored at the end, clicking the white check mark icon (see above)

3.3.4 DAY & NIGHT

The DIVUS Circle can be configured to use a different appearance and behaviour depending on the time of the day. To achieve that, you can choose

- to use the automatic switching between day and night, or to use your own custom time settings defining the day's duration
- to assign one of the 3 available profiles to be shown by day and by night
- to enable or disable the IR lights to illuminate the subject in front of the DIVUS Circle's camera



Finally store your changes clicking the Save button.

3.3.5 ILLUMINATION (DIVUS CIRCLE /CIRCLE small/CIRCLE small +)

The illumination function uses the LED light ring as a means of illumination. The settings are

- To choose a colour (DIVUS Circle only)
- to enable / disable the function
- to use the day/night automated switching the LEDs will turn on at night, off at day.
- to override the start time and/or end time using custom time values. Please note that the override settings can only be used to shrink the time frame (not to enlarge it). So e.g. an override start at 20:00 o'clock means "do not turn the light on before 20:00".
- to define a manual time frame where the LED ring should be on



Hint: Please note that these settings are not the same as those for Day/Night. The Day/Night settings are used to assign different profiles to the two phases of the day. That means that the avatar screen and the dashboard screen will show the chosen colour for the LED ring when they appear. The Illumination settings define whether the LED ring should be on during the night when the DIVUS Circle is in its standby status i.e. there is no detected movement in front of it and no call ongoing.

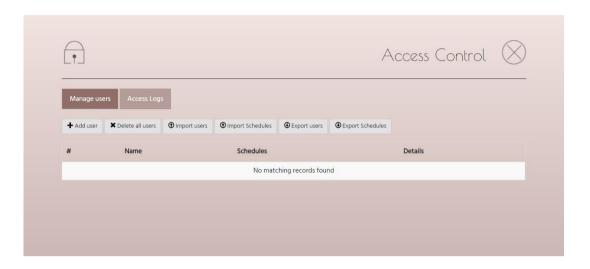
3.3.6 HOLIDAY (DIVUS CIRCLE)

Use this page to configure a profile to be shown in a period of time where e.g. you are on holiday.



3.3.7 ACCESS CONTROL

On this page you manage the users of the DIVUS Circle – seen as access control device.



Please note that this function is available with certain models and optional features only. See the following table:

	CIRCLE (v1)	CIRCLE small (v1)	CIRCLE small + (v1)	
ACCESS BY CODE	Requires at least 1 I/O module	n/a	Requires at least 1 I/O module	
ACCESS BY NFC	Requires at least 1 I/O module (see chapter 6) and the NFC module (see chapter 5.1)			
	CIRCLE (v2)	CIRCLE small (v2)	CIRCLE small + (v2)	CIRCLE/SQUARE SMALL C*
ACCESS BY CODE	~	n/a	~	n/a
ACCESS BY NFC		Requires the NFC m	odule (see chapter 5.1)	

3.3.7.1 Adding and editing users

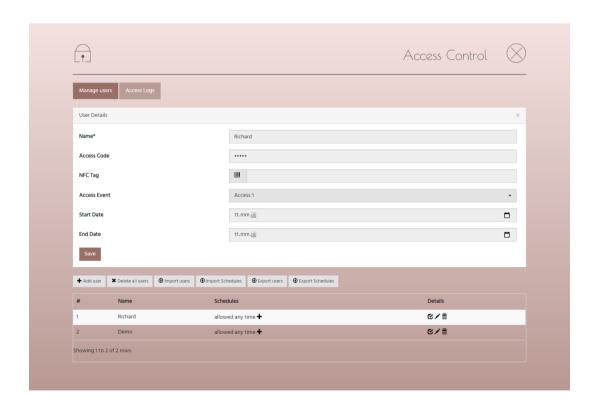
To add a new user, just push the + Add user button and the user form will show up.

To edit an existing user, push the pencil icon in the details of the user's table.



These are the fields to fill out:

SETTING	DESCRIPTION
Name	Insert a unique name for the new user
Access Code ¹	Insert a numeric code through which the user can open the door/gate (using the keypad function – see chapter 4.2.2)
NFC Tag ²	Will show the tag currently assigned to the user. Please note that any tag can be assigned to only one user. See chapter 4.4 for the procedure of assigning a new NFC tag to a user.
Access Event	Choose between Access 1 and Access 2 here. For more details, read chapter 6 (I/O modules) and chapter 7.4. Default is Access 1.
Start date	Define a start date from when the user will be allowed to access. Leave empty if the user should have no time limitations.
End date	Define an end date from when the user will not be allowed to access any more. Leave empty if the user should have no time limitations. Further details (like weekdays etc.) are defined later on.



 $^{^{\}rm 1}$ Only for DIVUS CIRCLE or CIRCLE S+. May need an additional I/O module.

 $^{^{2}\,}$ DIVUS CIRCLE/SQUARE (any model) with optional NFC module required.

To save a new user, you need to input at least the name of the user, which must be unique, and then save it using the *Save* button. Other details may be added also later on. The newly added user will be shown in the table.

3.3.7.2 Deleting users

To remove a user, just click the trash bin icon in the table's row corresponding to that user. To remove all the users of your DIVUS CIRCLE, click the *x Delete all users* button and confirm the alert. Please consider that a user deletion can't be undone.



3.3.7.3 Enabling / Disabling users

A user is enabled per default. If you need to disable a user, click the checkbox icon under Details, in the users' table.



The icon will show the new status of the user. A disabled user is obviously denied from accessing a system in any way.

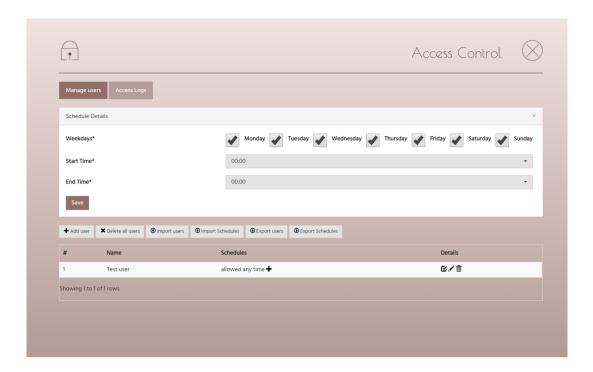


3.3.7.4 Defining a user's schedule

To add a new schedule to a user, click the + symbol in the user's row of the table.



The schedule's detail page will open:



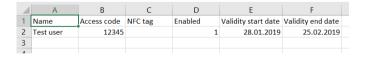
Choose the weekdays and the time of the day as desired. The user will have access in the chosen days and time. When done, save the schedule with the Save button. To add an additional schedule for different times, repeat the procedure. The defined schedules will appear in the users' table.



3.3.7.5 Importing and exporting users

To make the management of users easier – specially for larger numbers of users – and also for the purpose of having a backup for unforeseeable cases, you can export the existing users or import a list of users from a csv file.

The structure of the csv file is the following:



So, it is very easy to create also larger lists in your favourite spreadsheet program and then import them into your DIVUS CIRCLE. Even a pure text editor may be used. In that case, the same file looks like this - using semicolons to separate columns/values:

3.3.7.6 Importing and exporting schedules

As with users, also schedules can be exported and imported using csv files.



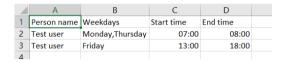
0

Note: to keep a correct relation between users and their schedules, when you are restoring both, first import the users' backup and then the schedules! Otherwise, the import will fail.

To export, just click the Export schedules button and choose a path for storing the csv file.

To import existing schedules, click the "Click or drag your csv here" area and choose the csv file or just drag and drop it there. The new schedules will appear in the users' table.

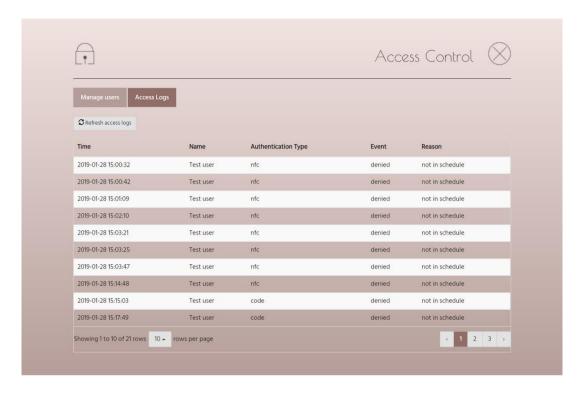
To edit or create schedules manually on your computer, open an exported csv file in your favourite spreadsheet program. It will look like this:



You may add rows keeping the shown structure and syntax, then saving and importing the file into your DIVUS CIRCLE. As already explained before, make sure that all the users you mention in the schedules are present in your system before you import the schedules, otherwise the import will fail.

3.3.7.7 Access Log

To see the access log, push the button on top of the Access Control page.



It will show all the interactions of your DIVUS CIRCLE with users – whether they used the access code or the NFC tag associated with their account and whether the access was granted or denied.

To see the latest actions, you may click the refresh button.

To navigate through the log, use the arrows and numbers shown at the bottom of the table.

3.3.8 SYSTEM SETTINGS

Use this entry of the main *Circle Settings* menu to move back to the System Settings. This entry will only be visible to the system integrator's account.

3.3.9 LOGOUT

To close the current session and get back to the login page, use this last entry of the main menu.

4 User interaction

4.1 STARTING A CALL

This chapter shows the various functions of the DIVUS CIRCLE from the end user point of view i.e., when you stand in front of the device and want to use its features.

4.1.1 USING THE BELL ICON

On all the models of DIVUS CIRCLE, the main and most intuitive action is pushing the bell icon to start a call. The icon will disappear for the time it is pushed as feedback to the finger's action and the configured call will start.



Ringing by pushing the bell button, on the other hand, does not make sense for configurations with more than one possible call receivers. In such cases, the bell button is hidden automatically to avoid confusion and you start a call by pushing the chosen target directly.



 $\textbf{Attention:} \ \textbf{If more than one button is displayed on the dashboard, the bell button is hidden} \\$

Once the call is started, you will hear the calling tone as you are used from normal phones and see an animation (DIVUS CIRCLE only, see image above). After a timeout of 30 seconds, the tone will stop and the call will close. If the call is answered before 30 seconds, you can talk to and hear the callee which will most probably open the door to let you in from the DIVUS VIDEOPHONE app he uses to answer from the inside. The LED ring will pulse during the call.

4.1.2 USING THE SCREEN (DIVUS CIRCLE ONLY)

Depending on the project, the DIVUS CIRCLE will show a single image or multiple buttons with names. Push the image or the desired button to call the corresponding unit.

4.1.3 USING THE SCREEN (DIVUS CIRCLE small+ ONLY)

The display of the DIVUS CIRCLE small+ is normally switched off. It is activated by the motion sensor or direct touch and remains active for 5 minutes after use before it switches off again. On a CIRCLE small + configured for multiple units, first make sure the name of the desired callee is shown (or move there using the shown arrows) and then click on the name to start the call.

4.2 OPENING THE DOOR

4.2.1 MANUALLY

It might sound stupid, but in quiet a lot of situations it may be the most natural and preferred option to open the door manually. In such cases, the DIVUS CIRCLE is used for calling and to see who is standing outside and then the door opening is done in the good old way – without special technologies.

4.2.2 FROM INSIDE

We recommend to use the DIVUS VIDEOPHONE app on a DIVUS touch panel as counterpart of the DIVUS CIRCLE for the inside of your intercom system. If used in conjunction with a DIVUS KNX SERVER, you can command a KNX device through the VIDEOPHONE app. That means the door opening function can be achieved through the app and the KNX SERVER directly. You don't need any additional hardware in this case.

The default option is to send the DTMF tone assigned to the door opening function (ACCESS 1) to the CIRCLE directly. The CIRCLE itself will then take care of forwarding that command to the configured output(s) which can be the integrated relay or one (or more) of the I/O module's outputs.



4.2.3 ON THE MOVE

The new DIVUS VIDEOPHONE MOBILE also enables you to participate in your own Intercom system via Cloud - i.e., to be able to answer the call from the outdoor intercom when it rings and possibly also to open the door/gate. More detailed information is available in the DIVUS VIDEOPHONE MOBILE manual.

4.2.4 USING AN ACCESS CODE ON THE KEYPAD (ON DIVUS CIRCLE)

The access code, which you assign to a user (see chapter 3.3.7) can be used to open the door.



To access this function, keep the bell icon pushed until the keypad screen shows up, if configured as "Villa". Otherwise long push the bell button within the screen area to reach it from the other screen designs.

Numbers will be placed randomly every time to avoid intruders checking your fingerprints. Insert the code followed by the ok button. If the code is correct and your schedule allows access currently, you will have a green feedback and the action to open the door will be executed.

If the code is not correct or your schedule is set to deny the access currently, you will get a red feedback signalling the denied access. Also see chapter 4.5.

In both cases, the attempt will be logged (see chapter 3.3.7.7).

4.2.5 USING AN ACCESS CODE ON THE KEYPAD (ON DIVUS CIRCLE small +)

The access code, which you assign to a user (see chapter 3.3.7) can be used to open the door. The keycode for the DIVUS CIRCLE small + is limited to the digits 1, 2, 3 and 4. Therefore the assigned code must be a number of at least 5 digits composed with only those digits. To access this function, keep the bell icon pushed for a couple of seconds, then release it and the keypad will appear. Numbers will be placed randomly every time, to avoid intruders checking your fingerprints. Insert the code followed by the bell button. If the code is correct and your schedule allows access currently, you will have a green feedback and the action to open the door will be executed.

If the code is not correct or your schedule is set to deny the access currently, you will get a red feedback signalling the denied access. Also see chapter 4.5.

In both cases, the attempt will be logged (see chapter 3.3.7.7).

4.2.6 USING AN NFC TAG (REQUIRES THE OPTIONAL NFC MODULE - SEE CHAPTER 5.1)

All the models of DIVUS CIRCLE can be equipped with the NFC module. To open the door, you hold the NFC tag near to the DIVUS CIRCLE and the tag is read. If it is associated with a user and that user is allowed to enter according to the schedule, the DIVUS CIRCLE will give a green feedback (meaning access granted) and the configured action will be executed (most probably opening a door or gate). Otherwise, the feedback will be red (meaning access denied) and no action will be triggered. Also see chapter 4.5.

4.3 CLEANING (DIVUS CIRCLE ONLY)

When the glass needs to be cleaned, you can use a special function of the DIVUS CIRCLE which will avoid that touching the screen triggers a call or another action. To activate the cleaning mode, first bring up the keypad screen (see 4.2.4). From there, push the *Screencleaner* button.

After the timeout, if needed, push the *Screencleaner* button again or, if done, push the *Exit* button to return to the normal dashboard screen.

4.4 PROGRAMMING A NEW NFC TAG

Your DIVUS CIRCLE, when ordered with the NFC module, will come with NFC cards which you can program, assigning them to users. If you need to buy additional cards or prefer to use badges or other types of NFC devices, please check that they use/support the MIFARE (Ultralight) / ISO 14443A standard with 13.56MHz. Other standards are not supported. We recommend to test a card type before making orders of bigger quantities.

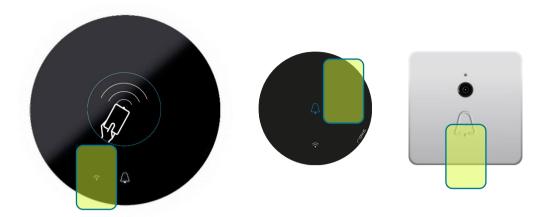
To program a new NFC tag:

- 1. Access the DIVUS CIRCLE's *Circle Settings* section of the web interface and go to *Access Control*. Then choose the user who shall have the tag assigned or create a new user.
- 2. When you have the tag ready, push the small barcode icon next to the NFC tag input field:



When you push it, it will show a spinning arrows icon and the DIVUS CIRCLE will be in programming mode. See chapter 4.5 for the device's visual feedback - depending on the model. (If you push the spinning arrows, the NFC scan will be aborted.)

3. Now hold the tag near to the device: for the DIVUS CIRCLE on the pulsating NFC icon, for the smaller DIVUS CIRCLE small and small + at the right of the bell symbol, for the DIVUS CIRCLE / SQUARE small C* in the centre below the bell button:



- 4. The NFC Tag field will be automatically filled with the data read from the tag.
- 5. When you save the user, the associated NFC code will be verified: if it is already present in the system and associated to another user, the saving will fail. If it is a new, unique code, the saving will succeed and the user will be able to access the system with the newly associated NFC tag.

4.5 VISUAL FEEDBACK

4.5.1 CIRCLE small AND CIRCLE small +, CIRCLE / SQUARE small C*

The bell icon has different colours to signal different states on these DIVUS CIRCLE models:

BELL OR LED COLOUR	MEANING
White	Default colour. System is ready. Push the bell icon to start a call.
Green	Access granted
Red	Access denied, or abort/timeout of the programming mode (1 sec. blinking)
Blue (blinking)	Programming mode (NFC)



The white LED ring is lit or off depending on the Day/Night settings. During a call, it pulsates.

4.5.2 CIRCLE

The DIVUS CIRCLE uses different elements to give visual feedback in different situations:

- The bell icon
- The screen
- The RGB LED ring

STATUS/EVENT	BELL ICON	SCREEN	LED RING COLOUR
Normal status	White colour. May also be disabled/hidden!	Shows avatar, dashboard or keypad depending on sensor events and user interaction	Depends on chosen configuration
	A		6 9 1 0 7 3 8 5 2 Cd 4 10 @: 28

Access granted/DTMF 1 [or 2]

"Welcome" animation Green



Access denied

"Lock" icon shown

Red



Programming mode (NFC)

NFC card icon shown, small NFC icon pulsating Light blue, pulsating



Call button pressed (ringing)

Black while pressed or hidden

Shows white circles animation

Rotating animation



Call ongoing (answered)

Shows call animation

White, pulsating



Screen cleaning



Screen cleaning animation

5 Optional modules

5.1 NFC MODULE

The NFC module adds the possibility to use NFC tags to open a door or gate. It requires a DIVUS I/O module which can execute the opening command(s) in many different ways. See chapter 6 for further details. Version 2 of CIRCLE (any models) can use the built-in relay directly – without the need of an I/O module – as target of the access granted event triggered by an NFC card.

A

Note: You need to specify that you want the NFC module when ordering a DIVUS CIRCLE (any model).

5.2 TOWER MODULE (CIRCLE ONLY)

The optional TOWER module adds additional capabilities to the DIVUS CIRCLE. It is thought for projects with many different residents or offices. It handles up to 300 entries (and more on request) showing a scrollable list and a search function, allowing to dial by call number directly also.

A

Note: The TOWER module is an optional module which must be ordered when you order the DIVUS CIRCLE.





From version 2 of the CIRCLE firmware, there are two new graphic templates for the Tower module. They make it possible to call the desired apartment/office unit directly via a numeric keypad. One additionally allows a picture or logo to be displayed next to the numeric keypad.





6 I/O Modules

I/O modules are hardware devices you can use to command any type of electrical device from the DIVUS Circle.



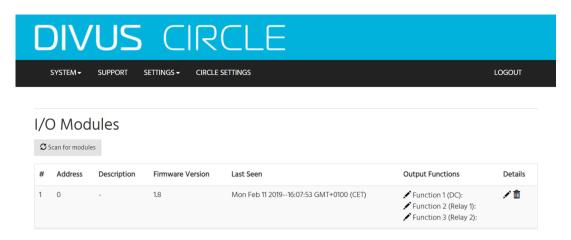
The DIVUS I/O module is connected to the DIVUS CIRCLE directly by cable (RS485 connectors).

6.1 I/O MODULE CONFIGURATION

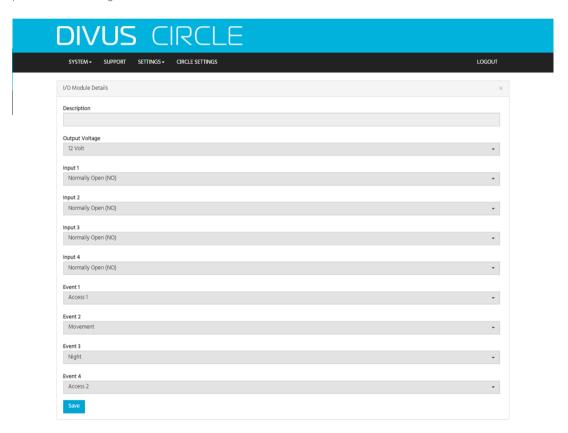
Once the device is connected to the DIVUS CIRCLE and powered, go to the System Settings using your system integrator account and, under Settings, choose I/O modules.



To discover a newly added I/O module, press the *scan for modules* button. If it is not the first one, please set its ID using the rotary switch on the device to a value different than the ones already in use.



If the scan was successful, you will see a result like above. To edit the functionality of the I/O module, click the pencil icon on the right.



These are the options:

Description	Use this field to add a description/name to the I/O module.
Output voltage	Choose between 12 V and 24 V
Input 1-4	Choose how to consider the 4 outputs between normally open and normally closed

Choose one of the available events as trigger for an output. These assignments are then available when configuring the single output functions of the I/O module. The choices are:

Event 1 -4

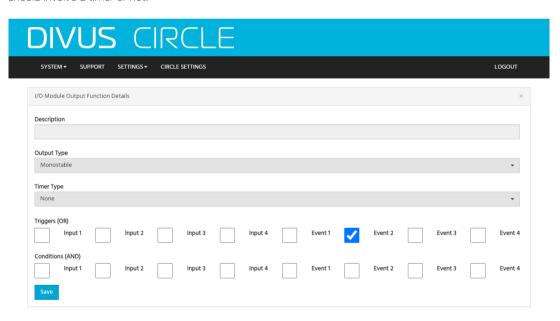
- Access 1
- Movement
- Night
- Access 2
- Ringing

Save the changes with the Save button when done.

6.2 I/O MODULE OUTPUT FUNCTION CONFIGURATION

To configure a function, click the pencil icon next to it in the I/O Modules settings page.

Basically, you can choose the way an output is switched, what event(s) should trigger it and whether the action should involve a timer or not.



These are the options:

Description	Use this field to add a description/name to the output function
Output Type	Choose between monostable and bistable
Timer Type	Choose whether you need a timer and, if so, which one. The options will show a graph explaining the way they work if you select one. The timer function is enabled only if the Output Type is monostable. See descriptions below.
Timer Duration	If needed, choose the timer's duration in seconds

Choose one or more options of what should trigger this output function. Of course, it may be any of the inputs, but you can also choose between other events the DIVUS CIRCLE:

- Access 1 (when the user answering from inside pushes the door opener, or a valid NFC card or key code is used)
- Movement (when movement in front of the DIVUS CIRCLE is detected)

Triggers (OR)

- Night (when brightness descends below a predefined min. value)
- Access 2 (same as Access 1 but addresses the second relay)
- Ringing (when somebody started a call from outside)

These events are assigned to Event1, ..., Event 4 from the general detail page of the I/O module (see chapter 6.1).

Conditions (AND)

All the chosen conditions must be met at the same time to activate this output. For the description of the options, see *Triagers* above.

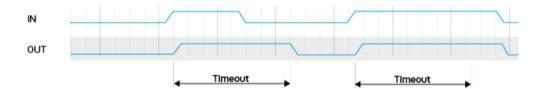
Save any changes with the Save button when done.

For other functions, repeat the described steps. The configuration structure allows also to have multiple actions on the same event (e.g. open a door and turn on a light on the "Access 1" event).

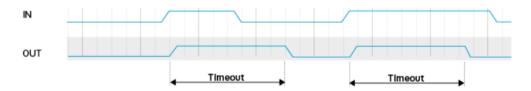
If you also count the built-in relay, the possible actions/outputs to trigger in parallel or for discrete inputs become 3.

6.2.1 TIMER DESCRIPTIONS

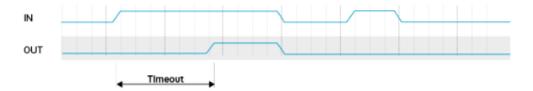
TPE The output signal goes high when the input signal goes high, it come back down after a timeout or after the input signal goes down (if the input signal stays high longer than the timer duration)



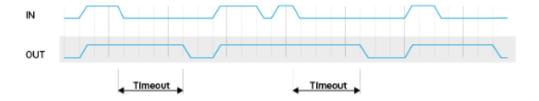
TP The output signal goes high when the input signal goes high, it comes back down after a timeout even if the input signal stays high longer than the timer duration.



TON The time out starts when the input signal goes high, the output signal goes high when the timeout expires only if the input signal is still high.



TOFF The output signal goes high and the timeout starts when the input signal goes high, the output signal goes down when the timeout expires. The timeout restarts every time the input signal goes high.





7 Commanding relays

7.1 INTRODUCTION

This chapter is meant to explain the possible interactions of the DIVUS CIRCLE (any model and version) with relays used to open doors or gates or switch lights etc.

The first step consists in finding out what version and model of DIVUS CIRCLE you have. After a first generation of all the models CIRCLE, CIRCLE small and CIRCLE small +, a second version followed introducing, among other things, a built-in relay.

Then, all possible combinations of your CIRCLE model with built-in or optional relays will be explained

7.2 BUILT-IN RELAY

Here is an overview to find out if you have the built-in relay.

	CIRCLE	CIRCLE small	CIRCLE small +	CIRCLE	CIRCLE small	CIRCLE small +
	(v1)	(v1)	(v1)	(v2)	(v2)	(v2)
_						

7.3 I/O MODULE OPTION

The possibility of connecting with 1 or more I/O modules is available to all models of DIVUS CIRCLE.

CIRCLE	CIRCLE small	CIRCLE small	CIRCLE	CIRCLE small	CIRCLE small
(v1)	(v1)	+ (v1)	(v2)	(v2)	+ (v2)
		\square	\square	\square	

7.4 ACCESS 1 AND ACCESS 2 - EXPLANATION

Version 1.11 introduced the possibility to command two relays from the answering device during an intercom call from DIVUS CIRCLE. You can check the current version of your CIRCLE software by logging in to the web GUI as system integrator:

System status

System details 1.11.0 PRODUCT DIVUS CIRCLE 2 VERSION HOSTNAME SERIAL NUMBER 22749 DATE 2019-11-28 (Europe/Rome) TIME 09:53:57 (Europe/Rome) OPERATING SYSTEM 19 hours, 10 minutes, 8 seconds arm
1x ARMv7 Processor rev 5 (v7l) ARCHITECTURE MEMORY 518MB total, 230MB free SYSTEM LOAD 0.22, 0.06, 0.06 CPU IP ADDRESS ETH1 IP ADDRESS TUNO 100.66.0.163 192.168.3.72

If your system is not up to date, follow the steps in chapter 3.2.2.1 to update it. For the update procedure to work the CIRCLE obviously needs to be connected to the internet. You may possibly also have to disable the firewall temporarily to make the update server reachable from the device.

The options regarding ACCESS 1 and ACCESS 2 then become available. You will find them under SYSTEM SETTINGS – SIP (for the DTMF tone), under SYSTEM SETTINGS – DOOR LOCK RELAY to configure the built-in relay and under the I/O module's setting page to configure its two relays.

The following table explains what ACCESS 1 and ACCESS 2 stand for:

	4.00500 OD4.VTFD 51/51/T	100500 0 51/51/5		
EVENT	ACCESS GRANTED EVENT	ACCESS 2 EVENT		
TRIGGERED BY	NFC (access granted event)	DTMF 2 (DEFAULT 43)		
	KEYPAD CODE (access granted event)			
	DTMF 1 (default 42)			
ОИТРИТ	Built-in relay and one or both relays of the I/O module	Any output configured for ACCESS 2 in the I/O module(s) configuration		

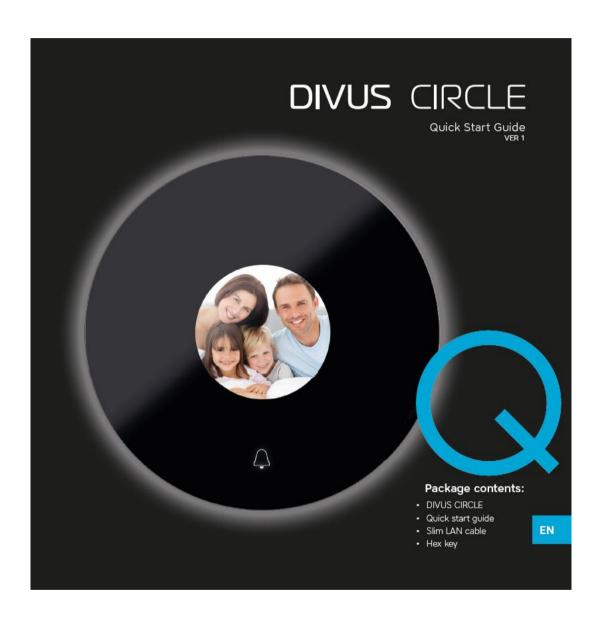
So, to further explain the table: the only fixed relation is between ACCESS 1 and the ACCESS GRANTED event which is triggered by several different user interactions.

If you have an I/O module connected to the CIRCLE (any model and version), you can freely configure the two relays to

8 Technical Data

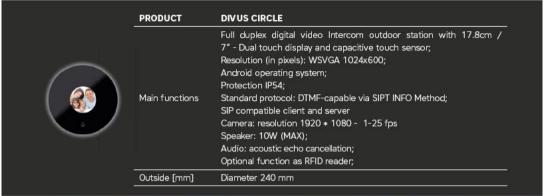
DIVUS CIRCLE - QUICK START GUIDE

8.1



DIVUS CIRCLE



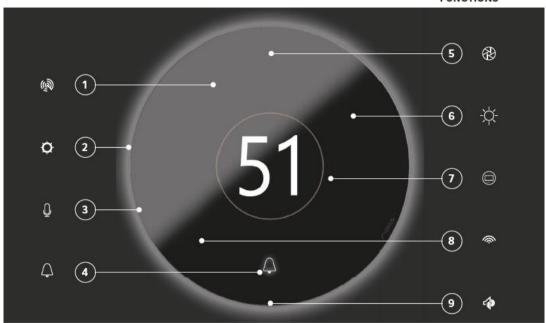




DIVUS CIRCLE

Quick Start Guide

FUNCTIONS



FRONT GLASS CONNECTION

- 1. Proximity sensor and radar
- 2. RGB Ring LED
- 3. Microphone
- 4. Bell touch button with RGB LED
- 5. Camera

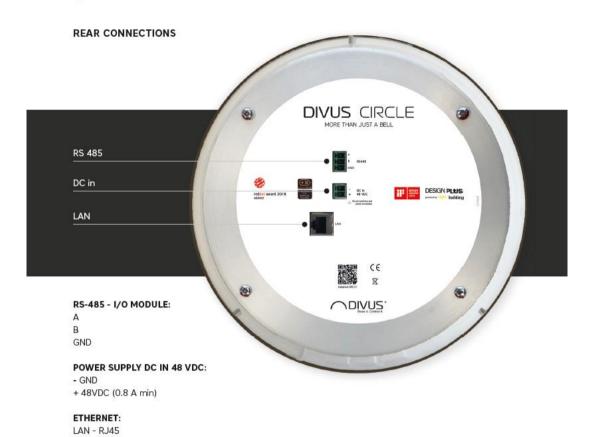
- 6. Brightness sensor
- 7. Display touch
- 8. RFID (optional)
- 9. Loudspeaker

EN

-

Version 1:

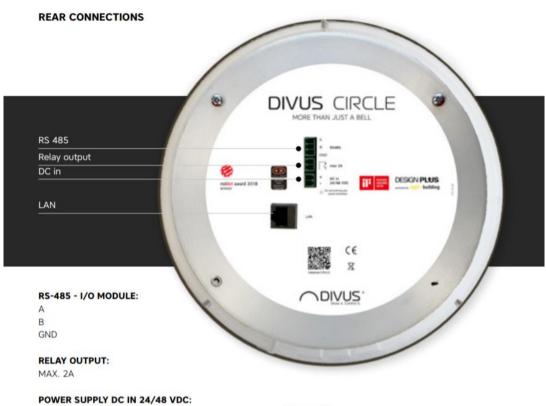
DIVUS CIRCLE Quick Start Guide



4

DIVUS CIRCLE

Quick Start Guide



- GND

+ 24/48VDC

ETHERNET:

LAN - RJ45

DIVUS CIRCLE Quick Start Guide

OPTIONAL I/O MODULE C D В 2 10 ① Digital Inputs **DIVUS CIRCLE** CE園 I/O MODULE Output 12 /24 VDC 1,5 A max total 4 1 GND 2 13 14 16 12 15 18 17

F

- A. Power supply (reversable)
- B. 4 digital inputs
- C. Rotary switch for modbus address
- D. RS-485 FTP AWG20/24 cable (Connect the cable shield to GND pin)

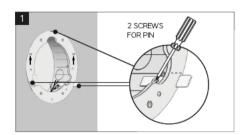
Ε

- E. 2 Programmable outputs 12/24 VDC (max. 1.5 A total) on both ports
- F. 2 Relay outputs to connect light, FCU, roller shutter motors, any other controlled load

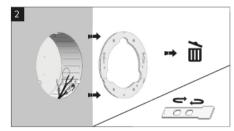
EN

DIVUS CIRCLE Quick Start Guide

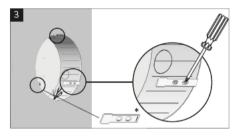
MOUNTING GUIDE



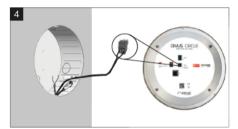
Unscrew the protective cover and take out the 3 pins contained in the mounting box - keep the pins.



Flip the pins and place them inside the mounting box at their previous position, with the wider end inside.



- the slits on the pins should be facing outside towards the wall - make sure that the slits are aligned with the wall
- Fix the pins in place (2 screws each) inside the mounting box



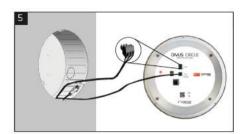
Connect the 48 VDC DC IN power supply to the corresponding socket.

6

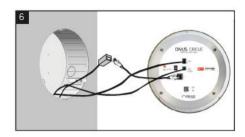
DIVUS CIRCLE

Quick Start Guide

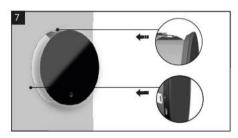
MOUNTING GUIDE



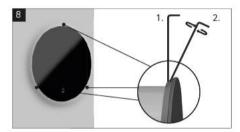
OPTIONAL: Connect the RS-485 to the corresponding socket (only required if I/O MODULE present).



Use the provided SLIM CABLE to connect the LAN port.



Insert DIVUS CIRCLE into the mounting box.



Fix DIVUS CIRCLE to the 3 pins (1 screw each).

EN

DIVUS CIRCLE

Quick Start Guide

FIRST SETUP

Connect your laptop to the same network of the DIVUS CIRCLE, be sure that your laptop is in the same physical network and has an IP address in the same logical subnet of DIVUS CIRCLE.

Open your browser and go to: https://192.168.69.72



Follow the guided instructions in the web interface: DIVUS CIRCLE configuration allows quick configuration of the most important functions.

It is possible to configure intercom settings and the overall design can be adjusted as desired.

DIVUS CIRCLE

Quick Start Guide

FEATURE CONFIGURATION

Follow the configuration instructions for your DIVUS CIRCLE interface.



Further information can be found in the user manual of DIVUS CIRCLE available under following URL:

www.divus.eu/media/circle/Manual_CIRCLE.pdf





DIVUS CIRCLE

Quick Start Guide

OUTDOOR AND INDOOR STATION

The app DIVUS VIDEOPHONE completes the DIVUS intercom portfolio and makes video comunication possible also on DIVUS TOUCHZONE.



The app must be registered on a VoIP server and the integrated phonebook can be customized with the various internal and external units, alllowing also to be connected with multiple video signals.

DIVUS CIRCLE

Quick Start Guide

USES CASES EXAMPLES







ΕN



DIVUS CIRCLE small



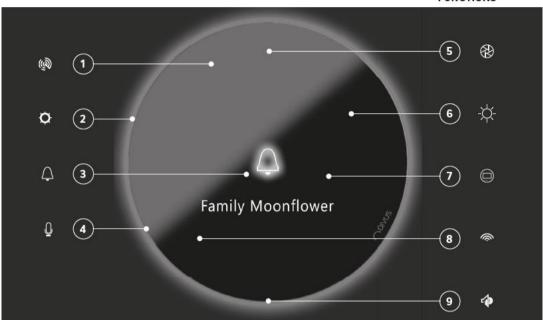
PF	RODUCT	DIVUS CIRCLE small small +			
Fairly Mozerfoses	ain functions	Full-duplex digital video door station With integrated proximity sensor, white LED wall light, day and night camera, call button, loudspeaker and microphone; Protection IP54 Standard Protocol: DTMF-capable via SIPT INFO Method; SIP compatible client and server Camera: Resolution 1920 * 1080, 1-25 fps Speaker: 5W (MAX) Audio: Acoustic echo cancellation, Optional function as RFID reader;			
		Optional 2.2" monocrom display with 4 touch buttons (only on CIRCLE small+)			
0.	utside [mm]	Diameter 140 mm			



DIVUS CIRCLE small

Quick Start Guide

FUNCTIONS



FRONT GLASS CONNECTION

- 1. Proximity sensor
- 2. White Ring LED
- 3. Bell touch button with LED
- 4. Microphone
- 5. Camera

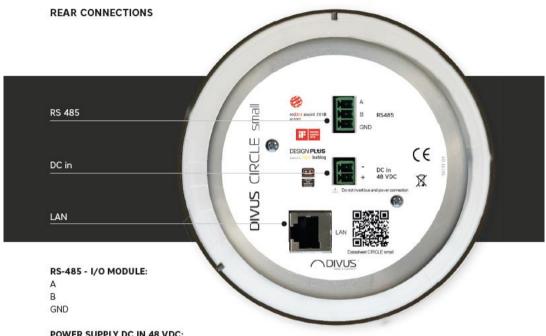
- 6. Brightness sensor
- 7. Display with 4 touch buttons (only on CIRCLE small+)
- 8. RFID (optional)
- 9. Loudspeaker

EN

3

Version 1:

DIVUS CIRCLE small Quick Start Guide



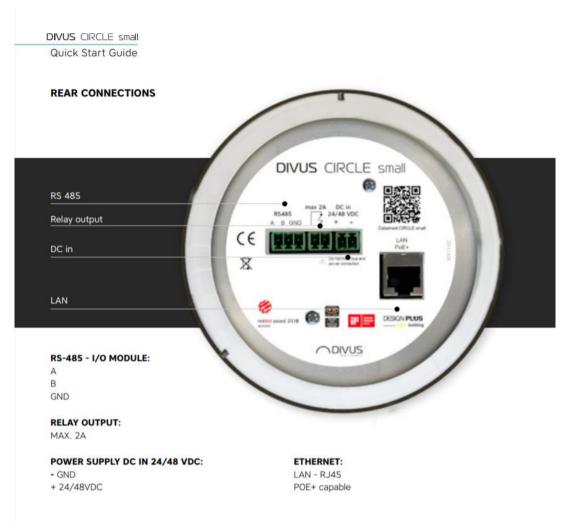
POWER SUPPLY DC IN 48 VDC:

- GND
- + 48VDC (0.8 A min)

ETHERNET: LAN - RJ45

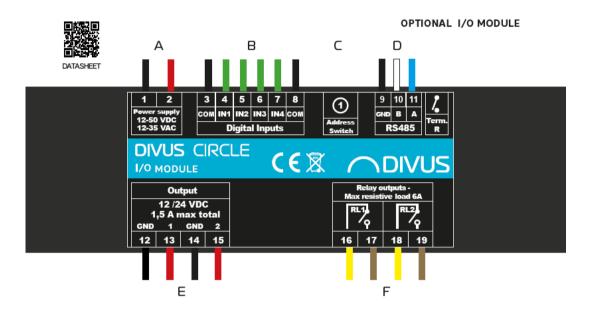
POE+ capable

Version 2:



4

DIVUS CIRCLE small
Quick Start Guide

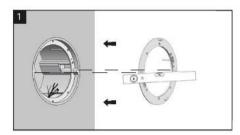


- A. Power supply (reversable)
- B. 4 digital inputs
- C. Rotary switch for modbus address
- $\textbf{D.} \hspace{0.5cm} \textbf{RS-485-FTP AWG20/24 cable (Connect the cable shield to GND pin)} \\$
- $\textbf{E.} \hspace{0.5cm} \textbf{2 Programmable outputs 12/24 VDC (max. 1.5 A total) on both ports} \\$
- F. 2 Relay outputs to connect light, FCU, roller shutter motors, any other controlled load

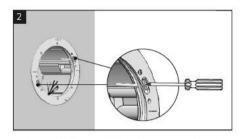
EN

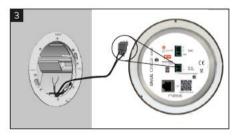
DIVUS CIRCLE small Quick Start Guide

MOUNTING GUIDE

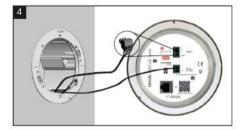


Place the metal gasket on the mounting box - make sure it's horizontal.





Connect 48 VDC DC IN power supply or POE+ to the corresponding socket.

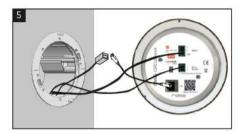


OPTIONAL: connect RS-485 to the corresponding socket (only required if I/O MODULE present).

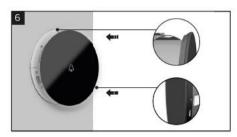
DIVUS CIRCLE small

Quick Start Guide

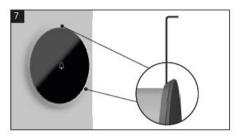
MOUNTING GUIDE



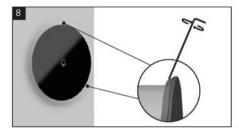
Use the provided SLIM CABLE to connect to the LAN port.



Insert DIVUS CIRCLE small into the mounting box.



Fix DIVUS CIRCLE small to the mounting box at the pins (1 screw each).



EN

DIVUS CIRCLE small

Quick Start Guide

FIRST SETUP

Connect your laptop to the same network of the DIVUS CIRCLE, be sure that your laptop is in the same physical network and has an IP address in the same logical subnet of DIVUS CIRCLE.

Open your browser and go to: https://192.168.69.73



Follow the guided instructions in the web interface: DIVUS CIRCLE configuration allows quick configuration of the most important functions.

It is possible to configure intercom settings and the overall design can be adjusted as desired.

DIVUS CIRCLE small Quick Start Guide

FEATURE CONFIGURATION

Follow the configuration instructions for your DIVUS CIRCLE interface.



Further information can be found in the user manual of DIVUS CIRCLE available under following URL:

www.divus.eu/media/circle/Manual_CIRCLEsmall.pdf





DIVUS CIRCLE small Quick Start Guide

OUTDOOR AND INDOOR STATION

The app DIVUS VIDEOPHONE completes the DIVUS intercom portfolio and makes video comunication possible also on DIVUS TOUCHZONE.



The app must be registered on a VoIP server and the integrated phonebook can be customized with the various internal and external units, alllowing also to be connected with multiple video signals.

DIVUS CIRCLE small

Quick Start Guide

USES CASES EXAMPLES

DIVUS SIMPLE VILLA

- DIVUS CIRCLE SMALL
- DIVUS HEARTBEAT
- DIVUS IO/MODULE
- DIVUS TOUCHZONE

DIVUS SIMPLE RESIDENTIAL 2-4 APARTMENTS

- DIVUS CIRCLE SMALL
- DIVUS HEARTBEAT
- DIVUS IO/MODULE
- 2-4 DIVUS TOUCHZONE 1 FOR APARTMENT

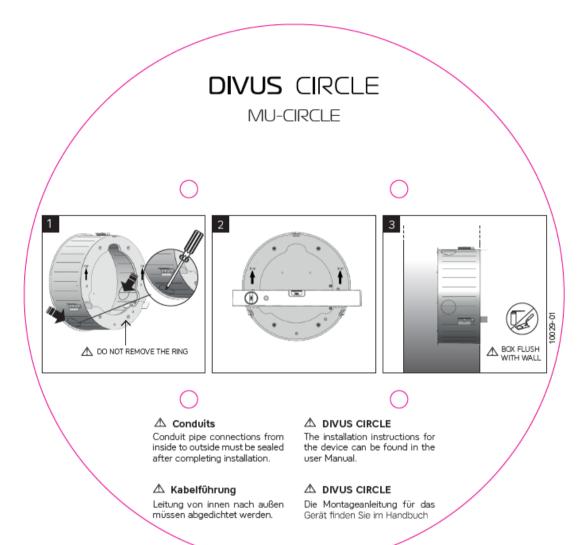




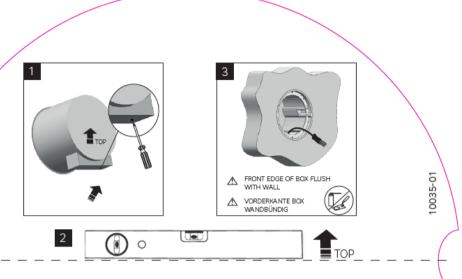








8.4 DIVUS CIRCLE small / small + - MOUNTING INSTRUCTIONS (MOUNTING BOX)



DIVUS CIRCLE

MU-CIRCLE small

⚠ Conduits

Conduit pipe connections from inside to outside must be sealed after completing installation.

⚠ Kabelführung

Leitung von innen nach außen müssen abgedichtet werden.

⚠ DIVUS CIRCLE small

The installation instructions for the device can be found in the user manual.

⚠ DIVUS CIRCLE small

Die Montageanleitung für das Gerät finden Sie im Handbuch



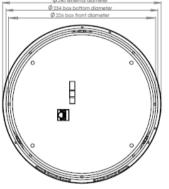






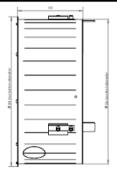
DIVUS CIRCLE

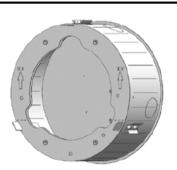
	DIVUS CIRCLE	
FUNCTIONALITIE	s	
Main functions	Voice communication over SIP/VoIP Video streaming IP cam (MJPEG) Callee selection over touch screen Optional: RFID reader (opens door over card / badge) Door opening over key code on touch screen Access scheduling Day / night profiles Customizable user interface and logo RGB LED light ring for illumination and function signalling	
DIMENSIONS	•	
DIVUS CIRCLE	Glass external diameter Depth (from wall) with glass thickness (4mm)	240 mm 12 mm
	Φ 240 external diameter Φ 234 has bottom diameter Φ 226 bas front diameter	102 Box depth 12





	Depth	102 mm
Wall mounting box	Diameter-box bottom	234 mm
(flush)	Diameter-box front side	226 mm
	Cable hole diameter	34 mm







DIVUS CIRCLE - PAGE 3



DIVUS CIRCLE

	DIVUS CIRCLE	
DESIGN		
	Compact device for wall mount with 7" Touchscreen; noiseless and without any rotating part, low power consumption. Smooth black circular glass surface. Aluminium back case	
Housing	Metal barrel for flush-mounting	
Protection	IP53 in conjunction with suitable housings / no direct sunlight	
ENVIRONMENT CO	NDITIONS (in protected outdoor areas with no direct sunlight	
Temperature	-15°C to +40°C max.	
Relative humidity	15% to 80%	
POWER SUPPLY VO	DLTAGE	
Power Supply Voltage	48 VDC	
Current ratings - max:	700 mA	
Current ratings - idle:	350 mA	
CONNECTIVITY		
	RJ45 ethernet RS485 serial interface (connects to the I/O-MODULE)	
CAMERA		
Sensor	1/3 CMOS sensor	
Resolution	1920x1080. 1-25 fps	
	Night vision with IR LEDs	
Lens	Wide-angle fish-eye lens; 1,7 mm, f 1/2,5"	
Coding Format	MJPEG	
AUDIO		
Inout/output	Microphone and loudspeaker (10W)	
Built-in functions	Acoustic echo cancelling, full duplex	
DISPLAY		
Hardware	7" LCD touch display	
LCD brightness	500 cd/m² Automatically adjusted brightness	
Inout/output Built-in functions DISPLAY Hardware LCD brightness	Acoustic echo cancelling, full duplex 7° LCD touch display 500 cd/m²	



DIVUS CIRCLE V2 - PAGE 3



DIVUS CIRCLE

	DIVUS CIRCLE
DESIGN	
	Compact device for wall mount with 7" Touchscreen; noiseless and without any rotating part, low power consumption. Smooth black circular glass surface. Aluminium back case
Housing	Metal barrel for flush-mounting
Protection	IP53 in conjunction with suitable housings / no direct sunlight
ENVIRONMENT CO	NDITIONS (in protected outdoor areas with no direct sunlight
Temperature	-15°C to +40°C max.
Relative humidity	15% to 80%
POWER SUPPLY VO	DLTAGE
Power Supply Voltage	24/48 VDC (min.1,6A - min.0,8A)
Current ratings - max:	700 mA @ 48 VDC
Current ratings - idle:	350 mA @ 48 VDC
CONNECTIVITY	
	1x RJ45 ethernet 1x RJ485 serial interface (connects to the I/O-MODULE) 1x Relay Output (max. 2A)
CAMERA	
Sensor	1/3 CMOS sensor
Resolution	1920x1080. 1-25 fps
	Night vision with IR LEDs
Lens	Wide-angle fish-eye lens; 1,7 mm, f 1/2,5"
Coding Format	MJPEG
AUDIO	
Inout/output	Microphone and loudspeaker (10W)
Built-in functions	Acoustic echo cancelling, full duplex
DISPLAY	
Hardware	7" LCD touch display
LCD brightness	500 cd/m² Automatically adjusted brightness
LCD resolution	WSVGA (1024+600)



DIVUS CIRCLE - PAGE 4



DIVUS CIRCLE

LCD resolution	WSVGA (1024+600)
Touch interface	Projected capacitive
	DIVUS CIRCLE
RFID OPTIONAL	
Standard	Mifare / ISO 14443A
Frequency	13,56 MHz
LUX SENSOR	
	Photodiode
RADAR	
	24GHz ISM Band - up to 4 m
PROXIMITY SENS	OR
Detection Range	10 cm ÷ 50 cm
RGB LED	
Luminosity Intensity	surrounding ring of 48 RGB LEDs; luminance on white: 1590-2800 mcd each
STANDARDS	
	CE conformity
	Suitable for DIN 18040 "Barrierefreies Bauen"
OUTPUTS	
	Through I/O module (see separated data sheet)





I/O MODULE

I/O MODULE

FOR DIVUS CIRCLE AND DIVUS CIRCLE small

TECHNICAL DATA

CHARACTERISTICS
The I/O module can control external loads such as electric locks (variable load between 250 mA and 1.5A at 12-24V) and standard lightings (12 - 220V). The module is connected via RS 485 to the master DNUS CIRCLE or CIRCLE small device and is able to execute the commands programmable on the CIRCLE device.
HARDWARE DESCRIPTION

HARDWARE DESCR	HARDWARE DESCRIPTION		
SPECIFICATION	SPECIFICATION		
POWER SUPPLY	12-50 V DC 12-35 V AC		
OPERATING TEMPERATURE RANGE	-20°C ÷70°C		
CONNECTIVITY			
RS 485	Max. distance 1km Max Bit rate: 115200 bps Terminal resistance settable via switch		
INPUTS/OUTPUTS			
DIGITAL INPUTS	Amount: 4 optoisolated Input type: NPN Type of connection:open-drain, com to GND		
оитритѕ	Amount:2 Output voltage: 12/24 V DC settable depend on supply voltage board Maximum current deliverable:1,5 A (total)		
RELAYS	Amount:2 Maximum current: 6A resistive load Maximum tension: 250 VAC, 25 VDC Form C relays are SPDT and break the connection with one throw before making contact with the other (break-before-		





I/O MODULE

FOR DIVUS CIRCLE AND DIVUS CIRCLE small

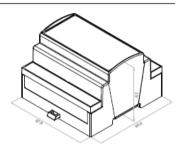
TECHNICAL DATA

I/O MODULE

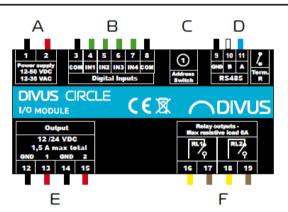
MECHANICAL DESCRIPTION

DIN RAIL MOUNTING BOX

The container for electronic instruments that can be hooked onto the DIN rail (EN60715) has been chosen according to DIN 438880 standards, as shown in the figure. It's a 5 modules unit.



CONNECTION DETAILS



- A. Power supply (reversable)
- B. 4 digital inputs
- C. Rotary switch for modbus address
- D. RS-485 FTP AWG2Q/24 cable (Connect the cable shield to GND pin)
- E. 2 Programmable outputs 12/24 VDC (max. 1.5 A total) on both ports
- F. 2 Relay outputs to connect light, FCU, roller shutter motors, any other controlled load







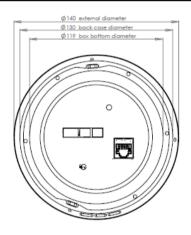
DIVUS CIRCLE Small | DIVUS CIRCLE small + VER.1

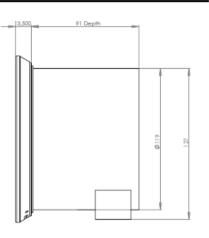


DIVUS CIRCLE small

OUTDOOR INTERCOM STATION FOR WALL MOUNT TECHNICAL DATA

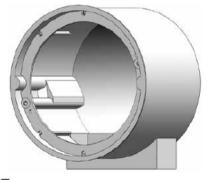
	DIVUS CIRCLE small	DIVUS CIRCLE small +	
FUNCTIONALITIES			
Main functions	Voice communication over SIP/VoIP Video streaming IP cam (MJPEG) Optional: RFID reader (opens door over card / badge) LED light ring for illumination and function signalling		
DIMENSIONS			
DIVUS CIRCLE small	Glass external diameter: 140 mm Depth (protruding from wall) with glass thickness (4mm)	13,5 mm	





Wall mounting box (flush)

Depth: 91 mm Diameter-box bottom: 119 mm





DIVUS CIRCLE SMALL/ + - PAGE 3



DIVUS CIRCLE small

	DIVUS CIRCLE small	DI	VUS CIRCLE small +
DESIGN			-
	Compact device for wall mount; noiseless and without surface. Aluminium back case	any rotating pa	art, low power consumption. Smooth black circular glass
Housing	Metal barrel for flush-mounting		
Protection	IP53 in conjunction with suitable housings / no direct s	sunlight	
ENVIRONMENT CO	NDITIONS (in protected outdoor areas)		
Temperature	-15°C to +40°C max.		
Relative humidity	15% to 80%		
POWER SUPPLY VO	DLTAGE		
Power Supply Voltage	48 VDC / Poe+		
Current ratings - max:	200 mA		
Current ratings - idle:	90 mA		
CONNECTIVITY	•		
	RJ45 ethernet RS485 serial interface (connects to the I/O-MODULE)		
CAMERA			
Sensor	1/3 CMOS sensor		
Resolution	1920x1080. 1-25 fps		
	Night vision with IR LEDs		
Lens	Wide-angle fish-eye lens; 1,7 mm, f 1/2,5"		
Coding Format	MJPEG		
AUDIO	•		
Inout/output	Microphone and loudspeaker (5W)		
Built-in functions	Acoustic echo cancelling, full duplex		
RFID (OPTIONAL)			
Standard	Mifare / ISO 14443A		
Frequency	13,56 MHz		
PROXIMITY SENSO	R		
Detection Range	30 cm		
LED			
Luminosity Intensity	surrounding ring of 30 white LEDs; luminance on white:	: 710-1400 mo	od each
STANDARDS			
	CE conformity		
OUTPUTS			
	Through V0 module (see separated data sheet)		
DISPLAY			
Display	NO display	Gra	aphic OLED, 128 x 32 white on black
Touch	NO touch	Too	uch: 4 segments



DIVUS CIRCLE SMALL/ + V2 - PAGE 3



DIVUS CIRCLE small

	DIVUS CIRCLE small	DIVUS CIRCLE small +	
DESIGN			
	Compact device for wall mount; noiseless and without an surface. Aluminium back case	y rotating part, low power consumption. Smooth black circular glass	
Housing	Metal barrel for flush-mounting		
Protection	IP53 in conjunction with suitable housings / no direct sun	light	
ENVIRONMENT CO	NDITIONS (in protected outdoor areas)		
Temperature	-15°C to +40°C max.		
Relative humidity	15% to 80%		
POWER SUPPLY VO	DLTAGE		
Power Supply Voltage	24/48 VDC (min 1,6A/min.0,8 A) / PoE+		
Current ratings - max:	200 mA @ 48 VDC		
Current ratings - idle:	90 mA @ 48 VDC		
CONNECTIVITY			
	1x RJ45 ethernet		
	1x RS485 serial interface (connects to the I/O-MODULE) 1x Relay Output (max. 2A)		
CAMERA			
Sensor	1/3 CMOS sensor		
Resolution	1920x1080. 1-25 fps		
	Night vision with IR LEDs		
Lens	Wide-angle fish-eye lens; 1,7 mm, f 1/2,5"		
Coding Format	MJPEG		
AUDIO			
Inout/output	Microphone and loudspeaker (5W)		
Built-in functions	Acoustic echo cancelling, full duplex		
RFID (OPTIONAL)			
Standard	Mifare / ISO 14443A		
Frequency	13,56 MHz		
PROXIMITY SENSO	R		
Detection Range	30 cm		
LED			
Luminosity Intensity	surrounding ring of 30 white LEDs; luminance on white: 7	10-1400 mcd each	
STANDARDS			
	CE conformity		
OUTPUTS			
	Through I/O module (see separated data sheet)		
DISPLAY			
Display	NO display	Graphic OLED, 128 x 32 white on black	
Display			



DIVUS CIRCLE SMALL/ + - PAGE 4



I/O MODULE

FOR DIVUS CIRCLE AND DIVUS CIRCLE small

TECHNICAL DATA

I/O MODULE

CHARACTERISTICS

The I/O module can control external loads such as electric locks (variable load between 250 mA and 1.5A at 12-24V) and standard lightings (12 - 220V). The module is connected via RS 485 to the master DIVUS CIRCLE or CIRCLE small device and is able to execute the commands programmable on the CIRCLE device.

HARDWARE DESCRIPTION		
SPECIFICATION		
POWER SUPPLY	12-50 V DC 12-35 V AC	
OPERATING TEMPERATURE RANGE	-20°C ÷ 70°C	
CONNECTIVITY		
RS 485	Max. distance 1 km Max Bit rate: 115200 bps Terminal resistance settable via switch	
INPUTS/OUTPUTS		
DIGITAL INPUTS	Amount: 4 optoisolated Input type: NPN Type of connection:open-drain, com to GND	
OUTPUTS	Amount:2 Output voltage: 12/24 V DC settable depend on supply voltage board Maximum current deliverable:1,5 A (total)	
RELAYS	Amount:2 Maximum current: 6A resistive load Maximum tension: 250 VAC, 25 VDC Form C relays are SPDT and break the connection with one throw before making contact with the other (break-before-make)	





I/O MODULE

FOR DIVUS CIRCLE AND DIVUS CIRCLE Small

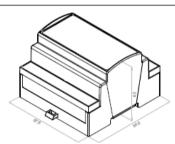
TECHNICAL DATA

I/O MODULE

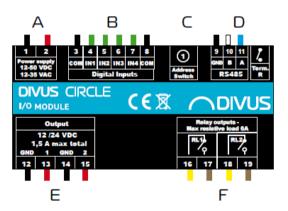
MECHANICAL DESCRIPTION

DIN RAIL MOUNTING BOX

The container for electronic instruments that can be hooked onto the DIN rail (EN60715) has been chosen according to DIN 438880 standards, as shown in the figure. It's a 5 modules unit.



CONNECTION DETAILS



- A. Power supply (reversable)
- 4 digital inputs
- C. Rotary switch for modbus address
- D. RS-485 FTP AWG20/24 cable (Connect the cable shield to GND pin)

 E. 2 Programmable outputs 12/24 VDC (max. 1.5 A total) on both ports
- 2 Relay outputs to connect light, FCU, roller shutter motors, any other controlled load



NOTES

DIVUS CIRCLE user manual . 108