

Gateway V1 Digital Smart Home Controller OPERATING MANUAL

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1. Important safety information

Read this manual before attempting to install the device!

Read this manual carefully before beginning operation with your Gateway V1 components. Keep the manual so you can refer to it later if you need to. If you hand over the device to other persons for use, hand over this manual as well.

Symbols used:

Attention! This indicates a hazard.

Please note: This section contains important additional information.

2. Hazard information

We do not assume any liability for damage to property or personal injury caused by improper use or the failure to observe the hazard information. In such cases any claim under warranty is extinguished! For consequential damages, we assume no liability!

This product is intended for indoor use only in dry locations! Do not use in damp or wet locations, near a bathtub, sink, shower, swimming pool, or anywhere else where water or moisture are present. The device must be protected from the effects of moisture, vibrations, solar or other methods of heat radiation, cold and mechanical loads.

Do not use the device if there are signs of damage to the housing, control elements or connecting sockets, for example, or if it demonstrates a malfunction. If you have any doubts, please have the device checked by an expert.

 \bigtriangleup Do not open the device. It does not contain any parts that can be maintained by the user. In the event of an error, have the device checked by an expert.

For safety and licensing reasons (CE), unauthorized change and/or modification of the device is not permitted.

The device is not a toy; do not allow children to play with it. Do not leave packaging material lying around. Plastic films/bags, pieces of polystyrene, etc. can be dangerous in the hands of a child. Keep children away from packaging parts. They may try to swallow them, choking hazard!

 \angle For power supply, only use the original power supply unit (5 VDC/1,2 A/6 W) delivered with the device.

The device may only be connected to an easily accessible power socket outlet. The mains plug must be pulled out if a hazard occurs.

Always lay cables in such a way that they do not become a risk to people and domestic animals.

The device may only be operated within residential buildings.

Using the device for any purpose other than that described in this operating manual does not fall within the scope of intended use and shall invalidate any warranty or liability.

This Gateway V1 device does not meet the specifications to be used as an alarm / security system for your household. Do not attempt to do this, since the manufacturer will not take over any liability in case of technical failure.

Place the Gateway V1 device on a flat surface e.g., on the top of some piece of furniture.

If you leave some space between the Gateway V1 and other nearby objects, this may improve the sensitivity and signal quality for RF and WiFi signal reception.

For correct function of the IR signal features, free direct line of sight is needed between sending and receiving unit. Sometimes it may work via a reflection on your room 's ceiling, but there is no guarantee.

Do not expose the devices to extreme temperatures.

Do not cover the devices with e.g. tablecloth or newspapers. Circulating air is required in order to avoid overheating.

Do not place the devices near flammable materials, e.g. curtains or flammable liquids.

Do not place open fire, like burning candles, near the devices.

3. Others

i The warranty will be void if the housing is opened.

i The bottom side of the Gateway V1 housing consists of rubber, which in some cases may macerate and damage the surface of your furniture over time. To make sure to avoid this, you may place a non-slip pad underneath the Gateway V1.

4. Introduction

The Gateway V1 is a wireless smart home automation system, based on 433Mhz RF, 868Mhz and the WiFi protocol. All available devices can be controlled through a computer (PC or Mac), smartphone or tablet.

You can install your smart home solution in just a few little steps. This device combines the ability of operating RF (433 / 868 MHz) switches and power sockets, various IR controlled devices, and compatible WiFi controlled power sockets inside your personal smart home environment. Power sockets can be controlled by timers or grouped inside routines. Use your RF wall switches, existing IR remote controls, or any web browser to perform switching operations inside your home.

All current technical documents and updates are provided at <u>www.ids-digital.de</u>.

5. Package contents

Please check your package for completeness, and for all parts being undamaged. The contents should be:

- The Gateway V1 Smart Home Controller unit
- Two 433 MHz RF-controlled power sockets
- Two 433 MHz RF wall mount switches
- 1 x 5V USB power supply
- 1 x connection cable USB type $B \rightarrow micro USB$

6. Function and device overview

The Gateway V1 Access Point is the central unit of the wireless smart home automation system. It connects smartphones, tablets and Computers (PC or Mac), via the Web Browser with all Gateway V1 devices (Switches, Power Sockets, etc..) and transmits configuration data and control commands to all devices. You can simply adjust your smart home control to your personal needs at any time and place.

Device overview

Front



Bottom



- (A) Reset button
- (B) Micro-USB connector
- (C) LED ring
- (D) QR Code

7. Installation

This chapter describes how to easily set up your Gateway V1 system step by step.

Connect the 5V USB power supply to the Gateway V1. The device will beep once and blink until the boot-up process is complete.

If you power up the Gateway V1 for the first time, it does not know anything about the surrounding WiFi networks. To integrate it into your home network, you will need to perform two major steps to configure:

- (A) Access your Gateway
- (B) Add the Gateway into your WiFi Network

7.1 Access your Gateway

- (a) After boot-up of the Gateway V1, it will start its own Access Point for enabling the first login. Use your smartphone, tablet or PC for performing the following steps.
- (b) Check for available networks on WiFi. You should be able to find an SSID name like [GatewayV1_681890286F24] in your list. Select this list item to connect to,

the default password is [123456789].



(c) Use a web browser to open the page [http://192.168.55.1/m_lo.html].

or

(d) Alternatively, you may use the camera of your smartphone / tablet to scan the QR code that you will find on the sticker at the bottom of the Gateway V1, or use the following one:



(e) Log INTO the Gateway V1, using the default password [admin].



(f) If you are logged in for the first time, the device will immediately ask to change your password. Do so and confirm by pressing the [SAVE] button.

GENERAL	WIRELESS	PRESET
Access		
Old Passv	word	
New Pass	word	
Repeat Pa	assword	
SAVE		
Time		
(09:13:22 17/11/2017	2
Time from	Network	0
	nertime	

7.2 Add the Gateway into your WiFi Network

 Now select the category [WIRELESS] at the top of the [SETTINGS] menu. At the bottom of the [WLAN] tile, press the [SCAN] button to check for available WiFi networks.

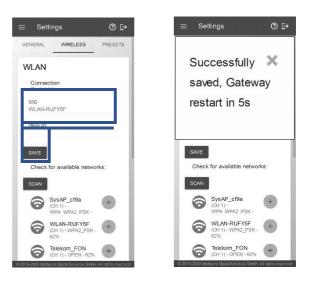
≡ Se	ltings	@ ⊳
GENERAL	WIRELESS	PRESETS
WLAN		
Conne IP - 0.0		
SSID		
Passwo	ard	
SAVE		
Check	for available netwo	rks:
SCAN		
6	SysAP_cf9a (CH 1) - WPA WPA2 PSK -	+
6	WLAN-RUFY5F (CH 1) - WPA2_PSK 62%	+
ଚ	Telekom_FON (CH 1) - OPEN - 62%	-

(b) Select the network of your home router by pressing on the [+] button near its name inside the list and your WiFi network will show up under [SSID] as well.

≡ Se	ttings	@ ₽
GENERAL	WIRELESS	PRESETS
WLAN	l	
Conne IP - 0.0		
SSID WLAN-	RUFY5F	
SAVE		
Check	< for available netv	vorks:
SCAN		
ଚ	SysAP_c19a (CH 1) - WPA_WPA2_PSK -	•
6	WLAN-RUFY5F (CH 1) - WPA2_PSF 62%	(+
6	Telekom_FON (CH 1) - OPEN - 62	5 +

(c) Type in password of your WiFi network and press the [Save] button.

The Gateway V1 will [restart] like this:



and now Go to the WiFi settings on your Smartphone/Tablet or PC and change it to your home WiFi Network.

(d) Open your web browser and type [http://gateway_V1/m_lo.html], or scan the QR code below:



If the following [LOGIN] page will start – *CONGRATULATIONS* - you have mastered the first step to integrate the Gateway kit into your home WiFi Network.

We recommend setting a bookmark in your browser, to be able to re open this page quickly

1



The Gateway is now set up and immediately ready for use.

8. Menus

8.1 Home / Sensors menu

The first menu shown after login will be the Home Page.

The Gateway has internal (build in) environment sensors for [Temperature], [Humidity] and [Barometric / Air Pressure]. In addition, it can also display the history of these measurements for the past 24 hours like this:

E Home	Humidity	Air Pressure	Đ
23.07 60 Temperature Live	15.80	Air Pressure Live	1100
235 P 220 725	175 2 ⁹ 183	100.5 5 100.5	
22.0 00:60 00:67 Temperature History	00.58 00.57 Humidity History	1030.0	9-57 093

8.2 Energy menu

This page allows you to monitor the status of a WiFi power socket.

i

A WiFi power socket must be purchased separately. Please contact us for more information.

For using this page, you will need compatible power sockets that allow remote power monitoring. Please address to your electronics dealer.

All known compatible WiFi power sockets will be listed automatically in the dropdown menu on the first card. Select a compatible WiFi power socket with the dropdown menu, now the logging will start, and data will be displayed.

Note: Selecting another power socket or reloading the page will reset the logged data inside the graphs like this:

IDS-Tasmota .70	w.	Voltage	Power
Volts:	0		
Watts:	0		
kWh today:	0.000		
KWhi yesterday:	0.000	0.0	0.0
KWIh total:	1.338		
oltage Live		Current Live	Power Live
350		1.0	20
000		0.8	15
250			
110		0.5	10
		4	
100		0.3	0.5

8.3 Commands menu

The [Commands] menu is used for learning and saving RF, IR, and WiFi

■ Commands					G
		RF IR	WIFI		
Floor lamp off sw	SEND	Floor lamp on sw	SEND 🗸	Floor lamp off ps	SEND
Floor lamp on ps	SEND ¥	Radio on ps	SEND ¥	Radio off ps	SEND 🗸
RF 7	stibi) V	RF 8	300 9	RF 9	seve 👻
RF 10	5190 v	RF 11	S110 ¥	RF 12	11.50
RF 13	SEND	RF 14	SEND 👻	RF 15	SEN0 -
RF 16		RF 17	300 👻	RF 18	1510
RF 19	seato 👻	RF 20	seno 🗸	RF 21	5EM0 ~
RF 22	serio 👻	RF 23	seko 🖗	RF 24	8400 V

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commands for use in timers and routines. Each card inside this menu is representing a command. The menu is divided into three different containers for [RF], [IR], and [WiFi], which can be accessed using the tabs at the top of each view.

In the [IR] commands section, you can train and store commands from e.g. the infrared remote control of your TV or set-top box, so the Gateway device can send commands in lieu of these remote controls. In addition, you may use IR commands from one of your RCUs to trigger actions on the Gateway V1.

In the WiFi commands section, you have access to all compatible WiFi power sockets that are present in your home network. Only a single scan operation is needed, there is no need to train individual commands in this section.

8.4 Routines menu

This page allows to connect some RF / IR / WiFi switching actions to a timer event, or to some incoming RF/IR/WiFi signal event that the Gateway V1 has been trained before. To do this, it will use the information of the RF / IR / WiFi cards that have been saved before in the Commands menu.

8.4.1 Timer Routines

You may assign up to five switching actions to a timer event. Your timer event will describe a unique or a regularly recurring moment and a duration. You may temporarily disable a timer routine, in order to pause its use without deleting it.

≡ Routines				E•
		TIMER RF WIFI IR		
Timer 1		Timer 2 Please enter a name: Day Day Time Time Duster Doutes Doutes Date Time Time	Timer 3	() (
Timer 4	())) v	Timer 5	> V Timer 6	()» v
Timer 7	())) v	Timer 8	» ~ Timer 9	

8.4.2 Externally Triggered Routines

You may assign up to five switching actions to a known incoming RF or IR signal, or to a WiFi switching state.

In addition, you may assign a location to your routine for locating it inside the [SCENES] menu view (See 5.1.5). You may temporarily disable one of these routines, in order to pause its use without deleting it.

8.5 Scenes menu

This menu will show a view of all active and located routines (except timer routines) in a structured view by location. Each location will be represented by a card. Routines that are not assigned to a location will not be listed. A [Send] button near each listed routine allows to activate or test this routine even without the specified trigger signal, so you can use your smartphone or tablet as a command center.

				TIMER RF WIFI		
Floor lar	mp off sw	• ^	Floor lar	np on sw	• ^	
		SAVE			SAVE	
Location	Living Room	Ψ.	Location	Living Room	•	
Action 1	Floor lamp off ps	w.	Action 1	Floor lamp on ps	v	
Action 2	Wall spotlight off ps	¥	Action 2	Wall spotlight on ps	v	
Action 3	TV RCU Power onoff	Ŧ	Action 3	TV RCU Power onoff	v	
Action 4	Heating Off	w.	Action 4	Heating On	¥.	
×		+	×		+	
0		-			-	

8.6 Information menu

This menu provides some technical information about the hardware and software of your Gateway V1 device. There are no settings to be modified here.

However, in cases when you need to request application support for your Gateway, you may be asked for some version information from this page.

		Chip		WLAN	
Version:	0.9.5	Type:	ESP32	Hostname:	Gateway_V1
Revision:	2b0baea-dirty	10:	681890286F24-V	Mac	68 18:90 28:6F 24
Date	2020-04-02 / 15:10:33	Revision	1	Ρ.	192.168.98.60
Model ID:	0010001	Cores:	2	IP (AP)	192.168.55.1
RF ID:	34	Features:	WIF#5T/BLE		
AM		FLASH		USER DATA	
max RAM:	307328 bytes	Size:	4194304 bytes	EEPROM	IDS1 / 704 bytes
tree RAM:	183320 bytes	Speed.	80000000 Hz	SPIFF5:	IDS1 / 11943 bytes
free NVS:	14400 bytes	Type:	external	Sketch:	1540000 bytes (78 %)

8.7 Settings menu

The following settings can be adjusted here:

- Change the login password / PIN;
- Adjust the time zone for the internal clock;
- Change the color theme of the OSD;
- Change the menu language (except login page and update page);
- Change the User Profile / Calibrate internal sensors;
- Scan for WiFi networks and connect to a network;
 Configure the internal WiFi Access Point (AP);
- Reset all configurations to factory values.

	_	GENERAL WIRELESS PRES	ETS		
Access	Time			OSD Language	
Old Password		09:54:36		English	w.
New Password		m Network		Color Theme	
	inte tro	n Network		Green	Ψ
	Auto Sur	nmertime		User Profile	
SAVE				Expert	v
	Summer	time		SAVE	
	UTC +	1:00 🔻			
	pool.r	itp.org	_		
	SAVE:				
Sensors					
Temp Calibration	22.90 °C				

8.8 Update menu

In case a Software update is available for your Gateway V1, you can use this menu to change to the new software version within less than a minute.

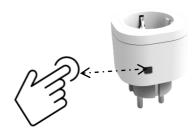
I Update		
Ipgrade by file upload Browse Cick to select a fie	Upgrade from web server	
(POBACE)	_	

You have the choice to either download the new software to your PC and install it from there, or to directly download the latest version from the web server via Internet.

9. Pair the switches with the power sockets

If you want to access one of the power sockets directly with one of the wall switches, follow the steps below (if you are not interested in doing this, you can skip this part).

(a) Take the power socket and press down the LED/button unit at the side of the socket while plugging it to mains power. Keep the button pressed for three seconds.



- (b) If you release the button now, the LED will blink.
- (c) Take the RF wall switch and press down the "on" ("1") side. If the power socket recognized this signal successfully, the LED will stop blinking, learning is complete.

To delete all learned commands from the power socket, use the following procedure:

- (a) Take the power socket and press down the LED/button unit at the side of the socket while plugging it to mains power. Keep the button pressed for three seconds.
- (b) If you release the button now, the LED will blink.
- (c) Send an "off" ("0") command, the LED will start to blink faster.
- (d) Wait 20 seconds until the LED of the power socket completely stops blinking.

10. Learning and saving commands

10.1 RF commands

Before you can receive or transmit an RF command, you need to assign one of the pull-down cards to this command name [Type].

The Gateway V1 must be trained for this command in the following way:

- Open one of the cards by clicking on the down-arrow.
- Select the device type in the drop-down menu.
 - Select a [Switch] option if you want to be able to receive and process a specific RF command from a switch.
 - Select a [Socket static] option if you want to be able to send a specific RF command (that needs to be learned from an RF switch) to a power socket.
 - Select a [Socket learnable] option for pairing a power socket to the Gateway, using a generic RF code that has not been learned from an RF switch.

5 Gateway - Commands × +		IDS Gateway - Co	mmands - Mozilla Firefox		
Construction of the second	192.168.98.60/m_de.html			··· 🖂 🕁	± k∧ ⊡ ¢° i
		PO*	IR WIT	A CONTRACTOR	
RF 1 Type Please select Please select SaMMErK Switch	x)	RF 2		RF 3	99 •
433MH2-KL Solket learn 433MH2-KL Socket learn 433MH2-KL Socket learn 868MH2-FC Socket learn 868MH2-FC Socket learn 868MH2-FC Socket learn	ic nable	RF 5		RF 6	
NF 4	Ý	KF 5	· · · · ·	v 0	·
RF 7	and V	RF 8		RF 9	10.00 V
RF 10	ania 🗸	RF 11	and v 1	RF 12	2010
RF 13	(serie) (* 7)	RF 14		RF 15	ana 🖌
		0.5.13	Services Settlet: All Agets reserved		

If you selected a [Switch] or a [Socket static] option, proceed as follows:

- Press [LEARN], the Gateway will respond with a beep.
- Now press [OFF] (0) on the RF power switch; if the signal is recognized by the Gateway, it will respond with another beep; the [SAVE] and [SEND] buttons will be activated.
- If learning is not successful, an error message in red will be shown; try again.
- For some types of RF devices, the Gateway will automatically generate a complementary pair of [OFF] and [ON] commands, otherwise the learning procedure must be repeated for the [ON] (I) command.
- Click on the [SEND] button for testing the function of the newly learned command; if the new command does not work, press [CLEAR] and try to learn again.
- Click on the text input line and type in a useful name for this command, then press [SAVE].
 - Hint: The [SAVE] button refers only to the individually entered card name. No need to use [SAVE] if you prefer to use the automatically generated default names.
- If you need to delete one of the learned commands, use the corresponding [CLEAR] button.

If you selected a [Socket learnable] option, use the following steps:

• Press the [GENERATE] button, the Gateway will respond with a beep.

- Take the power socket and press down the combined LED/button unit at the side of the socket while plugging it to mains power. Keep the button pressed for three seconds.
- If you release the button now, the LED will blink.
- Press the [SEND] button of the freshly generated "On" command. If the power socket recognized this signal successfully, the LED will stop blinking, learning is complete.

In case you need to unlearn a command on a power socket, please refer to chapter 4.2.

10.2 IR commands

The Infrared commands will be trained in a similar way, except there is no need to choose between a switch or a socket before learning.

- Open one of the cards by clicking on the down-arrow.
- Press the [Learn] button on the card.
- Now take your RCU and point with it to the top of the Gateway housing, then press the RCU button that you want to be learned; If the command is recognized by the Gateway device, the [SAVE] and [SEND] buttons will be activated.
- If learning is not successful, an error message in red will be shown; try again.
- Click on the [SEND] button for testing the function of the newly learned command.

- Click on the text input line and type in a useful name for this command, then press [SAVE].
- If you need to delete one of the learned commands, use the corresponding [CLEAR] button.

10.3 WiFi commands

If you open this tab for the first time, no cards are shown that correspond with available WiFi power sockets.

This is how to find available WiFi power sockets:

- Press the [SCAN] button; the scanning process will take some minutes.
- For each detected power socket on [WIFI], a new card will be automatically generated on the screen. For easier identification, this default name contains the last byte of the socket 's IP address.

		RF IR WI	FI		
		Wifi Power Sock	ets		
Tasmota .58	 .	IDS-Tasmota .69		IDS-Tasmota .70	••• ·
		Please enfer a name: DELETE SAVE			

You may use the switch symbol on the card to switch this socket on or off.

In case the power socket is compatible to power measurement commands, the power consumption on this socket will automatically be shown below the switch symbol; Sockets of this type can be monitored in detail using the [ENERGY] page. Use the down-arrow symbol to open the card for renaming or deleting.

Click on the text input line and type in a useful name for each power socket, then press [SAVE].

If you need to delete a single card, use the corresponding [DELETE] button; For deleting all WiFi cards, use the [CLEAR ALL] button on the top card.

11. Routines

11.1 Programming a timer

		TIMER RF	WIFI IR	
Timer 1	() v	Working day Plasta order a name: Day Date TT. MM. JU Date Tree Or 00: 45:00 0 (thur Action 1 Begin End Coffee maker On End Coffee maker Off Action 2 Begin End Radio off ps X		⊙> v

- Open one of the timer cards by clicking on the down-arrow.
- Select day/date, time and duration of the event.
 - Note: Configure either a single date or a weekly/daily event!
- Assign actions to beginning and end of the specified time range.
- You can also configure the timer to be triggered by sunrise or sunset, if the temperature or humidity is outside of the range.
- When opening the corresponding pulldown menus, all available actions are listed.
- You may add up to 5 actions to each event start/end by using the [+] buttons, remove them by using the [x] buttons.
- Enter a useful name for this timer.
- Click the switch at the upper right of the card to enable/disable this timer.

• Click the [SAVE] button.

11.2 Programming externally triggered routine

Depending on the type of signal that you want to use as trigger, you need to select one of the tabs [RF], [IR], or [WIFI] first. All known input signals (that have been successfully trained to the Gateway V1) will be shown assigned to a card.

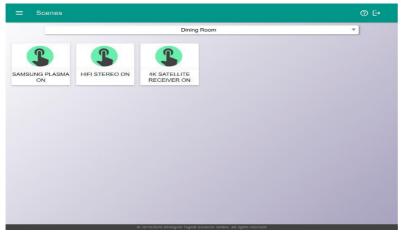
E Routines							ۥ	
					TIMER RF WIFI	IR		
		Pleas	e note:	For proper funct	on of these routines, good rec	eption of the infrared	signals is essential.	
TV RCU	Power onoff	()=	~	TV Ch d	own	Ó.	TV Ch up	
RCU red	btn	-	^	RCU gro	een btn	•	•	
Location	Dormitory	SA.	Æ	Location	Dormitory	SAVE		
Action 1	Floor lamp off ps	Ψ.		Action 1	Floor lamp on ps	v		
Action 2	Heating Off	٣		Action 2	Heating On	v		
×			+	×		+		

- Open one of the cards by clicking on the down-arrow.
- Use the pulldown menu to connect the signal source to an action.
- You may add up to 5 actions to this card by using the "+" buttons, remove them using the "x" buttons.
- If you want this routine to appear in the Scenes menu, select a location from the **"locations"** pulldown selector.
- Click the switch at the upper right of the card to enable/disable this routine.
- Click the [SAVE] button.

11.3 Configuring externally triggered routines to scenes

RF or IR routines will become visible in the [SCENES] view as soon as a location is selected, and the routine is switched to active state.

Using the respective "location" entry of each routine correctly, the [SCENES] structure represents the distribution of Smart Home switches and actuators inside your home, and becomes clear for easier use like this:



Since the name of an entry inside a Scene represents the initial command's name, it is sometimes recommendable to rename the command again to get an entry name with a more obvious purpose.

12. Application examples

12.1 Timer example

Use case: Automatically switch on the lights in your living room and at the front door in the evening; automatically switch them off when it's bedtime.

We can use two RF power sockets that we learn in the [Commands-RF] section. If we assign appropriate names to these sockets, it might look as follows:

		RF IR WR			
Front door light off sw	SEND	Front door light on sw	SEND 👻	Front door light socket on	SEND
Front door light socket off	SEND ^	Living room socket off	SEND ^	Living room socket on	SEND
Type 433MHz-Kt Socket learnable Please enter a name		Type 433MHz-Kt Socket static Please enter a name	<u>*</u>	Type 433MHz-Kt Socket static	*
CLEAR SAVE	SEND ¥	CLEAR SAVE	SEND	CLEAR SAVE	1010
RF 10		RF 11	100 V	RF 12	996 V
RF 13	=10 ¥	RF 14	and w	RF 15	seas v
		RF 17		RF 18	

Now we can program a timer to handle these sockets: In this example, the timer will work daily, switching the light on at [18:30] and switching it off at [22:30].

≡ Rou	tines		TMER RF	WPI IR		Ø ⊡
Evening Please and Evening I	er a name	Jan A	Timer 2	()) ×	Timer 3	()) v
Day Date Time Duration	Mo To Wo Th Th Th So So All					
Action 1 Begin End	Front door light socket on Front door light socket off	* *				
Action 2 Begin End	Living room socket on Living room socket off	*) *)				
×		+				
Timer 4		())) v	Timer 5		Timer 6	())) v

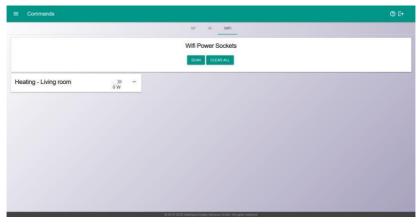
Did we forget anything? Oh, the enabling switch at the top of the card is still in "Off" position! To get the timer into armed state, we need to click on like this: , and then press [SAVE].

Note: make sure you always enable the switch to be active!

12.2 RF routine example

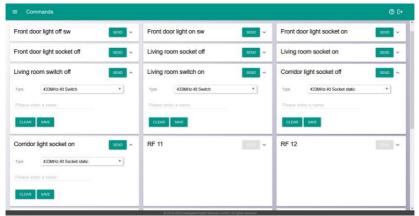
1

Use case: In the late evening. When the RF wall switch for the living room light is switched off manually, this means that I am now leaving the living room. Automatically switch on the light in the corridor (so I will not stumble) and switch off the TV. Furthermore, switch off the electrical heating in the living room (since I am interested in its total power consumption, the heating is connected to a WiFi power socket that can be monitored via the "Energy" page).



We need to learn the RF commands for the socket at the corridor light:

We give a suitable name to our WiFi Socket in the [Commands-WiFi] Section:



In the [Commands-IR] section, we learned the command of the TV remote control's "Power" button.

		RP	R WFI		
TV Power Switch Please enter a name.	SEND	IR 2	and v	IR 3	1991 - A
IR 4	2610 V	IR 5	3000 v	IR 6	5510
IR 7	stati v	IR 8	300 V	IR 9	10.00
IR 10	ana 🗸	IR 11	400 ¥	IR 12	-496
IR 13	1010 ¥	IR 14	100	IR 15	800
IR 16	100 V				

Now we can open the [Routines-RF] section and program an RF routine for our use case. We select the RF routine card that corresponds with the [OFF] state of the living room's light switch and enter our configuration there:

			SAVE
		Location Living Room Action 1 Comidor light socket on Action 2 TV Power Switch Action 3 Heating - Living room Off X	* * *
iving room switch on			

12.3 One more RF routine

use case: I am in the need of a second remote control for my set-top box, but I only need to switch channels up or down with this second RCU.

■ Commands		RP IR WI	1		@ E
Front door light off sw	SEND 👻	Front door light on sw	SEND 🗸	Front door light socket on	SEND ¥
Front door light socket off	SEND	Living room socket off	SEND 🗸	Living room socket on	SEND ~
Living room switch off	SEND 🛩	Living room switch on	SEND ¥	Corridor light socket off	SEND 🗸
Corridor light socket on	SEND	RF TV Ch down Type 433MHz-RI Switch Please enter a name CLEAR EAR	SEND A	RF TV Ch up Type 433MHz-K1 Switch Please enter a name	SEHD A
RF 13		RF 14	300 v	RF 15	1400 -
RF 16	210 ¥	RF 17	5630 · •	RF 18	1000

I can use an RF switch for this and "translate" this command to IR with the Gateway device. Let's learn the commands from our RF switch in the first step:

		RF R	NEF1		
TV Power Switch	SEND	TV Red button	SEND	TV Green button	SEND 🗸
IR TV Channel up	SEHO A	IR TV Channel down	SEND	IR 6	
Please enter a name		Please onter a name			
CLEAR SAVE		CLEAR SAVE			
IR 7	5183 v	IR 8	3010 V	IR 9	sett.
IR 10	ans 🗸	IR 11	100 V	IR 12	36 ¹ 0
IR 13	1044 v	IR 14	100 -	IR 15	-
IR 16					

Now learning the commands that we need from the infrared RCU:

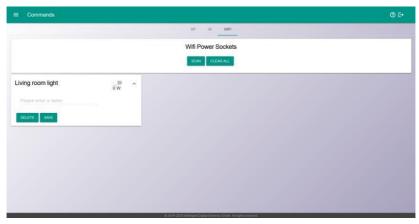
Finally, we use two RF routines to connect the incoming RF switch signals to the IR commands that we need to send.

ont door light off sw	. · ·	Front door light on sw		Living room switch off	
ving room switch on	() • •	RF TV Ch down	SAVE	RF TV Ch up	CO SAVE
		Location Living Room Action 1 IR TV Channel down	*	Location Living Room Action 1 IR TV Channel up	* *
			-	The second secon	

12.4 WiFi routine example

Use case: "Mirroring" the state of a WiFi power socket with some RF power sockets. Imagine a WiFi socket that is controlled either via another routine, or via pressing the hardware switch on the device, or even by using an "Alexa" skill. We have two RF sockets that we want to always follow the WiFi socket's state. Say we have three lights in our living room, one equipped with the WiFi socket, the other ones with RF sockets.

In the [Commands-WiFi] Section we have identified the power socket that is connected to our first living room light:



In the [Commands-RF] Section, we learned the commands to control our two RF sockets.

■ Commands	RF IR W/I	© E
Front door light off sw	 Front door light on sw 	SEND - Living room socket 1 on SEND -
Living room socket 1 off	Living room socket 2 off	SEND ^ Living room socket 2 on SEND ^
Type 433MHz-Kt Socket learnable *	Type 433MHz-Kt Socket static	Type 433MHz-Kt Socket static Please enter a name
CLEAR SAVE	CLEAR: BAVE	CLEAR SAVE
iving room switch off	 Living room switch on 	SEND ~ Corridor light socket off
Corridor light socket on	RF TV Ch down	SEND ~ RF TV Ch up
RF 13	~ RF 14	~ RF 15 v v
RF 16	~ RF 17	× RF 18

Now we need to configure two WiFi routines in the [Routines-WiFi] section, one each for the [OFF] state and the [ON] state of the WiFi socket.

Do not forget to check the state of the enable switches on each card before pressing [SAVE].

Routin	95			TIMER RF WIFI	8	0
iving roon	n light Off	• •	Living ro	om light On	• •	
	Living Room	SAVE	Location	Living Room	SAVE	
tion 2	Living room socket 1 off	•	Action 1 Action 2	Living room socket 1 on	*	
×		+	×		+	
×		+	×		+	

12.5 IR routine example

By involving the Gateway V1 device, we can use any kind of IR remote control to perform a switching routine for RF or WiFi sockets.

Use case: I found that I have some unused buttons on the remote control of my TV. Say, now I want to use the red RCU button to switch the living room light next to our TV on, and the green RCU button to switch it off. This living room light is connected to a WiFi power socket.

In the [Commands-WiFi] Section we already have the needed commands available from example 7.4:

■ Commands			0 F•
		RF IR WFI	
		Wifi Power Sockets	
		SCAN CLEAR ALL	
Living room light	0 W ^		
Please enter a name Living room light			
DELETE SAVE			
		4.2918-2020 Intelligent Digital Devices Gridit, val rights reserved	

In the [Commands-IR] Section, we learn and save the commands that we need from the IR remote control:

Commands		RF R	- WIFI		Ø E+
TV Power Switch	SEND V	TV Red button Please enter a name: CLEAR SAVE	SEND	TV Green button Please enter a name: CLEAR SAVE	SEND
IR 4	200 v	IR 5	3850	IR 6	365.0
IR 7	end v	IR 8	300 V	IR 9	
IR 10	Star v	IR 11	400 ¥	IR 12	4.0
IR 13	125	IR 14	100	IR 15	100 V
IR 16	EIO V				

We need to assign two IR routines in the [Routines-IR] section, one each for the [OFF] state and the [ON] state of the WiFi socket.

Routines					Ø
		TIMER RF WIFT	R		
	Please note:	For proper function of these routines, good rec	eption of the infrared signe	als is essential.	
V Power Switch	()) v	TV Red button	•	TV Green button	-
			SAVE		SAM
		Location Living Room	· •	Location Living Room	्रम्
		Action 1 Living room light On		Action 1 Living room light Off	
			(+)		
			+		
				h.	-

Well, what about the card in the [Scenes] menu that we automatically created by generating this routine? We can already use it instead of the IR remote control:



If we prefer to use our smartphone instead of the RCU, we may go back to the [Commands – IR] menu and rename these IR commands to some names that are easier to understand, so the result on our smartphone browser will look like this:



Now we have the option to switch the lights in our living room with the IR remote control (in the living room) or with our smartphone (from any location within the signal range of our WiFi home router).

13. Using the settings menu

13.1 Change the password / PIN

Changing the password requires to type the old password once, and then type the new password twice in two consecutive lines. The change will take effect when you press the [SAVE] button.

Please note that a password does not allow language-specific Latin characters like e.g., "ä ö ü ß é ñ ó", or Chinese characters.

	GENERAL WIRELESS PRESETS	
Access CDF/Reward 2245 Rev Financed 2245 Explore Present 2245 Explore Present	09:51:37 7/4/2020 Time from Network	OSD English ♥ Color Theme Green ▼ Jser Profile Expert ♥
Sensors 'emp Calibration	22.90 °C	

13.2 Change the clock settings

If your Gateway V1 device has Internet access, we recommend using network time.

For time zone selection, use the selector at the bottom of the [Time] tile.

13.3 Change the color theme of the menu

Choose your preferred color and press the [SAVE] button. The page will reload in the new color scheme.

Access	Time	OSD	
Old Password	09:52:29 _{7/4/2020}	English	T
New Password		Color Theme	
	Time from Network	Green	¥
Repeat Password	Auto Summertime	Green Blue Pink	
	Summertime	UD SAVE	
	UTC + 1:00		
	SAVE		

13.4 Change the language

Currently the user interface of the Gateway V1 supports six menu languages: English, German, Spanish, Chinese, French and Italian. Choose your language and press the [SAVE] button. The menu will reload with the new menu language.

13.5 Change the user profile

This menu item offers to change the amount of menu items:

				100
≡ Settings	GENERAL WIRELESS PRI	ESETS		E+
Access Old Passeord New Passeord Repeat Passeord	Time 09:52:14 7/4/2020 Time from Network Auto Summertime Summertime UTC + 1:90 pool rdp.org		SD guage aglish emain wakith hitesis err Profile epert Ave	¥ v
Sensors Temp Calibration	22.90 °C			

- "Expert" mode: Complete set of menus.
- "Easy" mode: Removes all configuration menus that are not needed for simply using the Gateway V1.
- "Island" mode: Reduced set of configurations that are needed for an isolated operation mode without router access. (Please note: The internal Access Point (AP) does not allow to connect to more than 4 client devices at the same time. Compared to a normal home WiFi router, the internal AP is likely to be inferior in terms of signal strength and range.)

13.6 Calibrate the sensors

The factory settings of the Gateway V1 do not contain calibration values for the internal environment sensors, so the results of the measurements may derive from the actual values. You can perform your own calibration, in order to adjust the measurement results to the devices that are already present in your household. After pressing the [SAVE] button, the calibration values will be saved. (Hint: It is recommended to boot up the Gateway device at least 60 minutes before calibrating, so the sensors have already normal operation temperature.)

		Auto Summertime		User Prome	
SAVE		Summertime	()#	Expert	×
		UTC + 1:00 pool ntp org	*		
Sensors Temp Calibration	21.19 °C			4	
umidity Calibration	20.17 %				
Pressure Calibration	•				
-					

13.7 Connect to a new network

The "WLAN" tile allows to scan for networks in your area and choose one to connect to it. Alternatively, you may as well type the SSID of the network manually. Now type the password of the new network in the next line. After pressing the [SAVE] button, the Gateway V1 will automatically reboot and connect to the new network.

13.8 Change the configuration of the access point (AP)

Normally there is no need of changing the AP configuration. When the Gateway V1 has connected to your home router and no device is connected to the AP anymore, the AP will be switched off automatically.

In case you intend to use the Gateway V1 without connection to an external router, you may change the settings on the "Access Point" tile and then press the [SAVE] button to confirm. (Please note: The internal AP does not allow to connect to more than 4 client devices at the same time. Compared to a normal home WiFi router, the internal AP is likely to be inferior in terms of signal strength and range.)

13.9 Reset all user settings to factory values

Only use this menu if you are sure that you want to really delete all user settings and configurations. There will be no way available to recover the deleted settings from any backup data.

14. Troubleshooting

- I tried to skip the changing of the default password at the beginning of the installation procedure, but now I cannot use the Gateway V1 device.

For security reasons, the device does not allow connecting to a home router or using the RF/IR/WiFi controlling features if the default password "admin" is still valid. Please change the password and choose an own one. This is meant as a security measure for your home network, to prevent unauthorized users from entering this device's menu too easily.

- The Gateway V1 did not connect to my home router, I cannot find it using the URL "http://Gateway_V1" in my browser.

Please check if the AP of the Gateway V1 is still active. If connection to the specified home router is not possible, the AP will remain active, so you can still log in via the AP and repeat the procedure of scanning and trying to connect to the external WiFi router. Maybe it was just a typo in the password that you entered.

You may also use the configuration pages of your home router, to check if a device named "Gateway_V1" has been granted connection on your router. If this is the case, you have the additional option to use the IP address that the router assigned to the Gateway V1, in order to call it on the URL line of your browser.

- The reception of RF signals is unreliable.

The range of good RF reception is strongly influenced by the installation site of your Gateway V1 device. Do not place it too close to other objects. An ideal place would be the top of a shelf or cabinet

(rather than in a corner, between other electronic devices, or on the floor).

- I have reset my password with the button on the login page, and now I cannot connect to the Gateway anymore.

When you reset your password, the Gateway V1 automatically disconnects from your home router for security reasons, so you have to login via the Gateway's Access Point (AP) on 192.168.55.1 to change the password (Remember, the default password will be "admin" again). If you do not remember how to use the AP, please refer to chapter earlier in the manual. As soon as your new password is set, you may change to the "Settings \rightarrow Presets" menu and press the "Boot now" button. The Gateway will reboot, and you can access it via your home router again.

15. Maintenance and cleaning

The device does not require you to carry out any maintenance.
Enlist the help of an expert to carry out any maintenance or repairs.

Clean the device using a soft, lint-free cloth that is clean and dry. You may dampen the cloth a little with lukewarm water in order to remove more stubborn marks. Do not use any detergents containing solvents, as they could corrode the plastic housing and label.

16. General information about radio operation

Radio transmission is performed on a non-exclusive transmission path, which means that there is a possibility of interference occurring. Interference can also be caused by switching operations, electrical motors or defective electrical devices.

The range of transmission within buildings can differ greatly from that available in the open air. Besides the transmitting power and the reception characteristics of the receiver, environmental factors such as humidity in the vicinity have an important role to play, as do on-site structural/screening conditions.

Hereby, Intelligent Digital Services GmbH, Maria-Goeppert-Strasse 5, 23562 Lübeck, Germany declares that the radio equipment type Gateway V1 follows Directive 2014/53/EU. The full text of the EU declaration of conformity is available at the following internet address: www.ids-digital.de

17. Technical specification

Power Supply Unit:	5Vdc/1200mA			
Chip Type:	ESP32			
Internal Flash Memory:	4 Mbyte			
Internal RAM:	520 Kbyte			
Supported Wi-Fi Standards:	802.11b/g/n, 2.4 GHz			
Radio Frequency band:	433.0433.0 MHz			
	868.0-868.6 MHz			
Supported IR protocols:	NEC, RC5, RC6, Sony,			
	Panasonic, IVC,			
	Samsung, LG, etc.			
Device shot name:	Gateway V1			
Supply voltage Plug-in mains adapter	100-240 Vac/50 Hz			
(input):				
Power consumption plug-in mains	2.5W max.			
adapter:				
Supply voltage	5 VDC			
Current consumption	500 mA max			
Standby Power consumption	1.1 W			
Ambient temperature	5 to 35ºC			
Dimensions (W x H x D):	118x 104 x 26 mm			
Maximum radiated power :	10 dBm max.			
Receiver category :	SDR category 2			
Typ. Open area RF range:	400 m			
Duty cycle:	<1% per h/<10% per h			

Subject to technical changed

Instructions for disposal

Do not dispose of the device with regular domestic waste! Electronic equipment must be disposed of at local collection points for waste electronic equipment in compliance with the Waste Electrical and Electronic Equipment Directive.

CEInformation about conformity The CE sign is a free trading sign addressed exclusively to the authorities and does not include any warranty of any properties.

i For technical support, contact your specialist dealer.

All technical data and functions described in these operating instructions are subject to change without notice. For misprints and errors, we assume no liability.

18. Declaration of Conformity

Intelligent Digital Services GmbH hereby declares that the Gateway V1 device is in accordance with the basic requirements and the other relevant provisions of the RoHS Directive 200/65 / EU, and the RE Directive 2014/53 / EU. You can obtain the declaration of conformity for this product from:

http://www.ids-digitaltv.de

If you have any questions, please contact with your local seller.