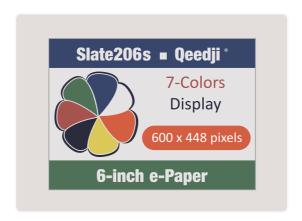
# Qeedji

**User manual** 

SLATE206s

1.10.10 001A\_beta5



# **Legal notice**

#### SLATE206s 1.10.10 (001A\_beta5\_en)

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#### **Product information**

Product design and specifications are subject to change at any time and `Qeedji` reserves the right to modify them without notice. This includes the hardware, the embedded software and this manual, which should be considered as a general guide to the product. The accessories supplied with the product may differ slightly from those described in this manual, depending on the developments of the various suppliers.

#### Precautions for use

Please read and heed the following warnings before turning on the power: - installation and maintenance must be carried out by professionals. - do not use the device near water. - do not place anything on top of the device, including liquids (beverages) or flammable materials (fabrics, paper). - do not expose the device to direct sunlight, near a heat source, or in a place susceptible to dust, vibration or shock.

#### **Warranty clauses**

The `Qeedji` device is guaranteed against material and manufacturing defects for a certain duration. Check the device warranty duration value at the end of the document. These warranty conditions do not apply if the failure is the result of improper use of the device, inappropriate maintenance, unauthorized modification, operation in an unspecified environment (see operating precautions at the beginning of the manual) or if the device has been damaged by shock or fall, incorrect operation, improper connection, lightning, insufficient protection against heat, humidity or frost.

#### **WEEE Directive**



This symbol means that your appliance at the end of its service life must not be disposed of with household waste, but must be taken to a collection point for waste electrical and electronic equipment or returned to your dealer. Your action will protect the environment. In this context, a collection and recycling system has been set up by the European Union.

# **Table of contents**

Daret	 Inctal	lation
Part	 IIIStai	lativii

Introduction	1.1
Product faces	1.2
Labelling	1.3
Dimensions	1.4
Connectors pin-out	1.5
Batteries	1.6
Device fixture	1.7
Reboot	1.8
Part II : Configuration	
Bootloader	2.1
Middleware	2,2
Mass storage file system	2.3
Blank content	2.4
Date & time	2.5
LEDs behaviour	2.6
USB mass storage mounting	2.7
Wake-up and low power strategy	2.8
Software upgrade	2.9
System configuration	2.10
NFC tag TTY	2.11
Troubleshoot	2.12
Appendix: Timezone	2.13
Part III : Wasm App management	
Wasm App management	3.1
Part IV : Technical information	
Technical specifications	4.1
Conformities	4,2
	712
Part V : Contacts	
Contacts	5.1

# Part I Installation

#### 1.1 Introduction

This user manual explains how to install and configure your SLATE206a device.

#### **Recommendations and warnings**

The SLATE206a device is designed to be used inside a building.

This device matches the Class A requirements.

■ In a residential environment, this device may cause radio interference. In this case, the end user is supposed to take appropriate measures.

This device is designed to be supplied:

- by batteries (4X CR2430),
- by an USB-C cable<sup>1</sup>,
- by the Supply POGO type connector 12.

■ The batteries life time is supposed to be 2 years by considering 4 daily screen content updates using the WIFI connectivity, with this wake up conditions: every 15 minutes, 5 days a week, from 8:00 AM to 7:00 PM.

When replacing the batteries, replace the four batteries at the same time. The batteries must be changed by a qualified person knowing the replacement procedure. For further information, refer to the chapter § Battery replacement. The warranty does not cover batteries replacement. The batteries must be recycled according to the regulations of your country.

The Bluetooth system operates in the 2.4 GHz frequency bands, the operation of which does not require a license due to the low transmission power and the low risk of interference. This frequency band is between 2402 and 2480 MHz.

To get a best content rendering on the screen, the device should be not installed under direct sunlight.

With this screen technology, it is normal that slight differences in content rendering in terms of colors may be observed between devices.

With this screen technology, during a content update, intermediate contents may be displayed during few second before reaching the target content. Color irregularities and defective pixels are not covered by the warranty.

#### **Package Contents**

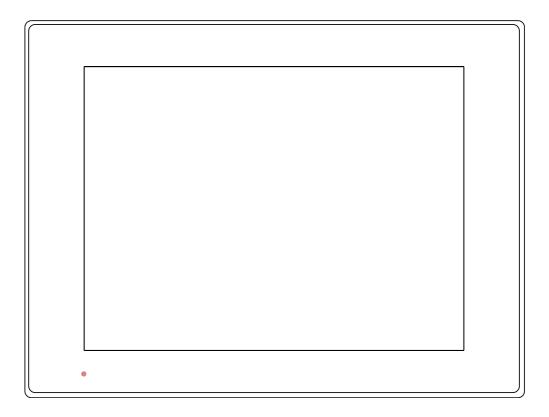
Items	Description	Quantity
Device	SLATE206a device with wis middleware embedded	1
Power pack	Four batteries CR2430 with plastic holder	1
Mounting bracket	Bracket for wall mounting	1
Screws	M2 x 35 mm (1,37 ") slotted countersunk screw (DIN 963) - a2 stainless steel	2
Adhesive tape	3M double sided tape (W x H x D): 65 mm x 19 mm x 0.6 mm	1

<sup>&</sup>lt;sup>1</sup> When this supplying ways are chosen, the presence of the batteries in the device is not required.

<sup>&</sup>lt;sup>2</sup> May be supported end of 2024. For further information, contact sales@geedji.tech.

# **1.2 Product faces**

#### Front face

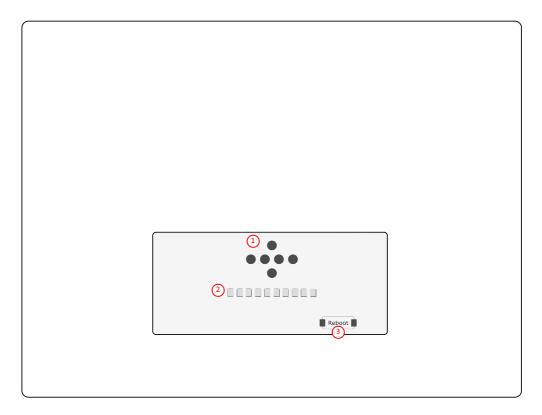


#### Down face



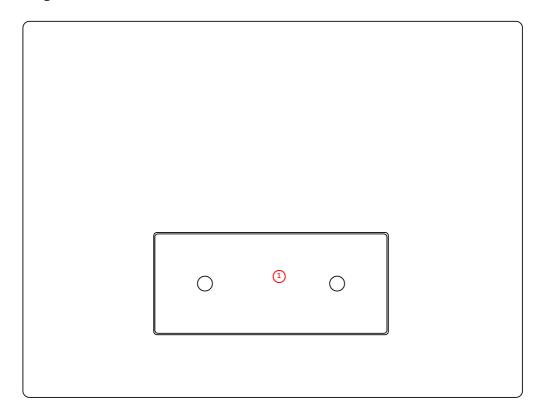
- ① USB type-C connector ② ③ Holes to host screws heads to fix the mounting bracket

# Rear face without mounting bracket



- Supply POGO type connector
   Debug POGO type connector (covered at factory by a product label)
   Reboot POGO type connector

# Rear face with mounting bracket



• 1 Mounting bracket

#### 1.3 Labelling

#### **Product label**

These are the labels stuck on the case. They are showing information embedded also in the QR code:

- · the device model,
- the product serial number (PSN),
- the MAC addresses.

They are showing also:

- the power supply characteristics,
- the manufacturer Website,
- the conformity logo.





**☞** This is an example of registration QR code URL:

i.qeedji.tech?model=SLATE206a&sn=01630-00001&mac.wLan1=00-1C-E6-02-87-8B&mac.wpan1=77-88-99-AA-BB-CC.

#### **Packingbox label**

This is the label stuck also on the packingbox. It is showing:

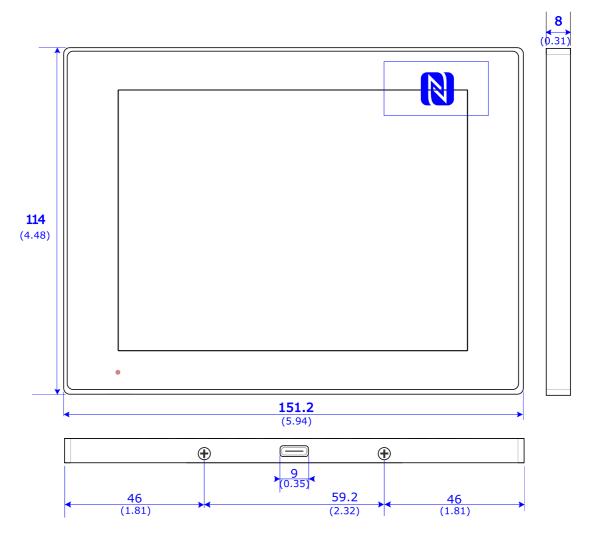
- the device model,
- · the QR code embedding the product serial number (PSN),
- the manufacturer Website.



- The QR code on the packingbox label is corresponding to the product PSN, for example: PSN01630-00001 CD0 .
- The serial number of the device may be requested in case of technical support.

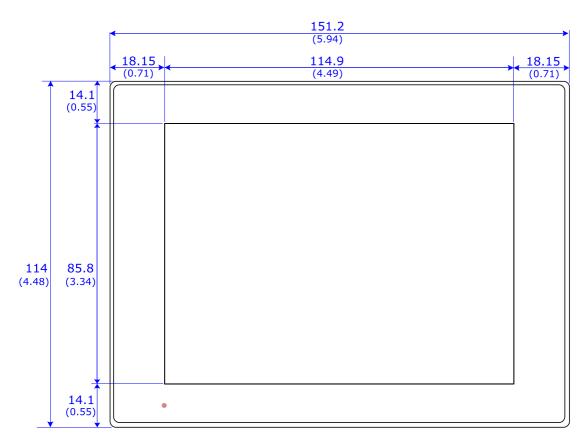
# **1.4 Dimensions**

# **Device dimensions**



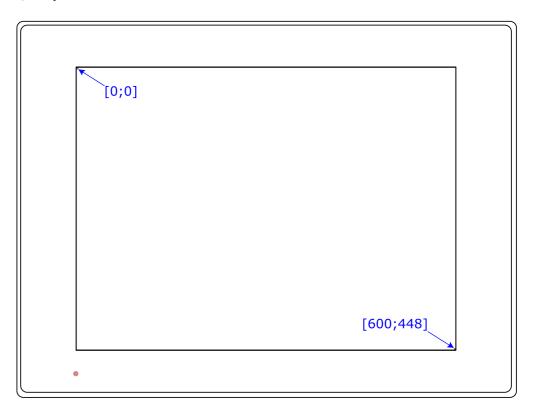
The dimensions values are displayed in millimeters in the upper part followed just below by its equivalent value in inches (between brackets).

#### **Screen dimensions**



The dimensions values are displayed in millimeters in the upper part followed just below by its equivalent value in inches (between brackets).

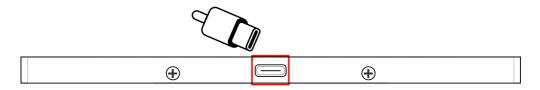
# Screen dimension [X,Y] in pixels



# 1.5 Connectors pin-out

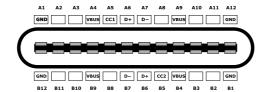
#### **USB-C** connector

The device can be supplied by the USB-C connector located at the bottom face of the product.



Information type	Value
Туре	USB type-C
Data	USB 2.0
Power	USB PD¹ (Power delivery)

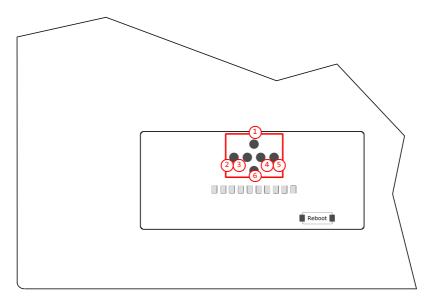
This is the USB-C connector pin-out for the SLATE206a device:



- ¹ The SLATE206a device is an USB sink device by default, in order to be supplied by an external power source device.
- <sup>2</sup> The SLATE206a device can be an USB source device only when supplied by the Supply POGO type connector which should be supported end of 2024.

### **Supply POGO type connector**

The device can be supplied by the Supply POGO type connector located at the back of the product.

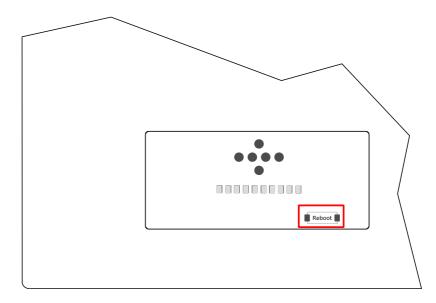


- 1 VCC,
- (2) GND,
- 3 Not connected,
- 4 Not connected,
- 🌀 GND,
- ⑥ VCC.

The POGO connector allows the device to be supplied by a specific wall connector sold separately. For further information, contact sales@qeedji.tech.

# **Reboot POGO type connector**

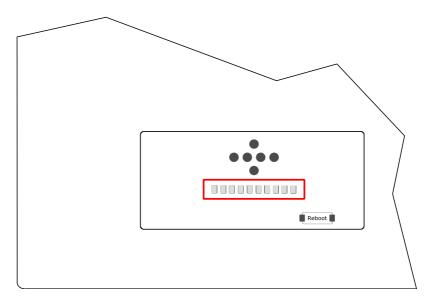
The Reboot POGO type connector can be used to force a software restart. For further information, refer to the chapter § Hardware reset.



After a software restart, a new battery level estimation is done.

# **Debug POGO type connector**

The Debug POGO type connector is used only for debug purpose by the ISV developping their own App. It is covered at factory under a product label.



#### 1.6 Batteries

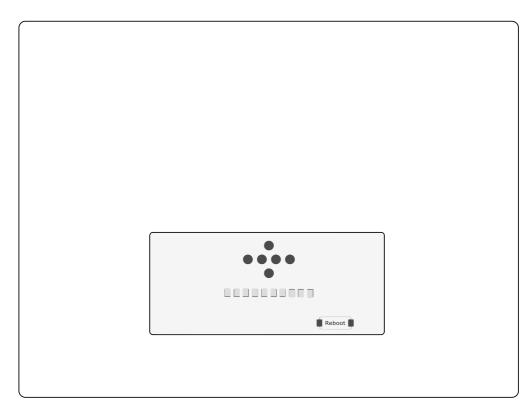
#### **Specifications**

The SLATE206a device is designed to work with 4 CR2430 Lithium coin batteries. The battery model has been chosen to obtain the best efficiency when using the SLATE206a device. The batteries features are described below. However, an equivalent reference may be used. Use the same reference for all batteries to obtain the best battery lifetime.

Characteristic	Information
Туре	CR2430
Nominal voltage	3 V
Typical capacity	290 mAh
Chemical system	Lithium Manganese Dioxide
Reference	2430/CR2430 VP-1 ENERGIZER LITHIUM Energizer

#### Installation of the batteries

If your SLATE206a device must be supplied with the provided batteries, place the SLATE206a device, with the back face in front of you and with the mounting bracket removed.



△ The batteries must stand in their plastic holders with the positive face facing up like shown below before being inserted in the SLATE206a device.

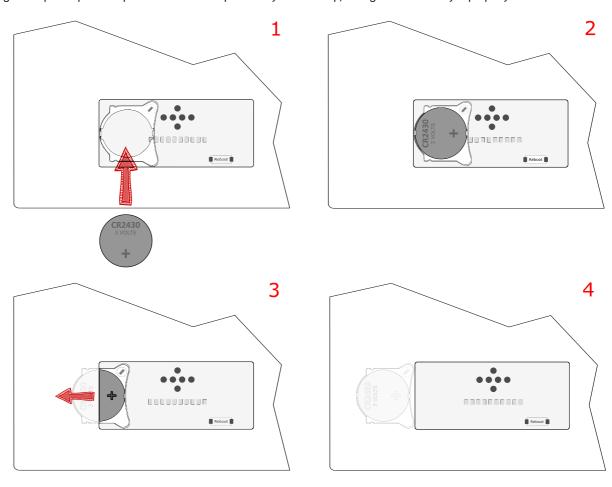
■ In case the four batteries were not delivered with their holders, contact support@qeedji.tech.



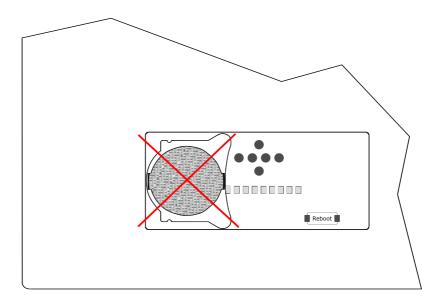
- (1) CR2430 battery,
- 2 Battery holder.

Glide the first battery 3 with its holder with the right orientation into its place.

Use your finger or a pen to push the plastic of the holder part until you feel a clip, telling that the battery is properly installed.

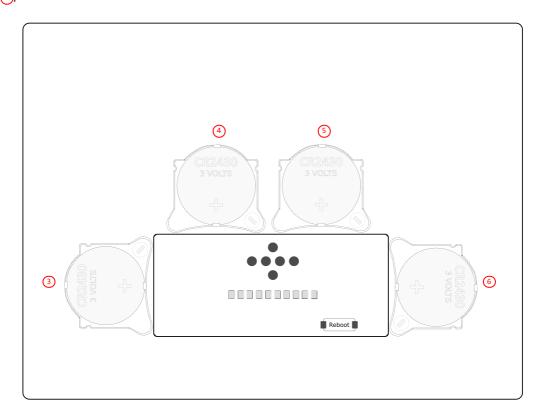


△ You must stand the holders with their batteries in the right way, meaning the positive face of the battery facing towards your eyes when you are inserting the batteries.



Insert the other batteries in their respective holders by matching the orientation explained in the illustration below:

- secondth battery <sup>4</sup>,
  third battery <sup>5</sup>,
  fourth battery <sup>6</sup>.

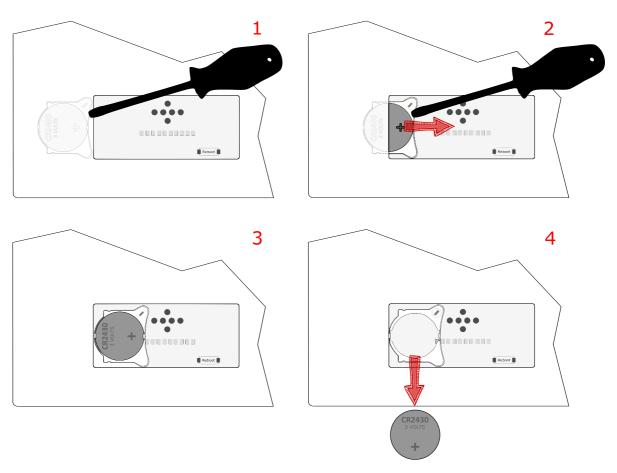


■ Once the batteries are installed, they are entirely hidden in the case.

# **Removal procedure**

- △ In case the batteries must be replaced, you must change the four batteries at the same.
- **☞** The batteries must be changed by a qualified people, who is knowing perfectly the batteries replacement procedure.
- **☞** The batteries must be recycled according to your country's regulations.

Remove the plastic holder hosting the first batteries by using a little slotted screwdriver. Grab then pull the edge of the plastic holder. Then remove the battery from its holder.



Repeat the same for the three others batteries.

# 1.6 Batteries level estimation

The batteries level is estimated in percent of its maximal capacity. The batteries level estimation can be displayed in the App content when the console mode is activated.

When the four batteries have been changed by new one, the battery level value is 100%. If the batteries level is less than 100% after the replacement, contact support@qeedji.tech.

The batteries must be replaced when the content cannot be updated due to lack of power capacitity in the batteries. In this case, the estimated batterie level is 0%.

#### 1.7 Device fixture

The SLATE206a device must be used indoor and has to be installed using the provided mounting bracket.

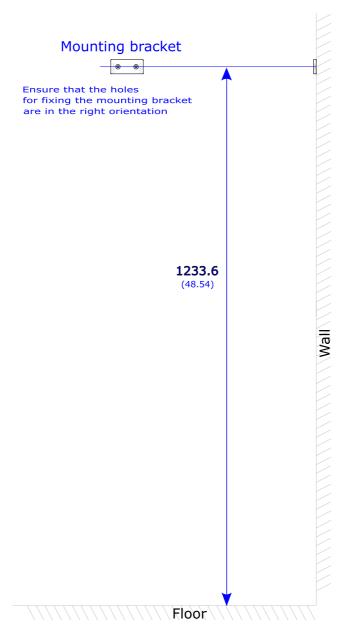
To ensure the right rendering of the screen content, the SLATE206a device should not be installed under direct sunlight.

## **Installation height**

△ To know the most optimized height to fix the SLATE206a device, refer to the legislation in force in your country, related to the accessibility to disabled persons of establishments open to the public during their construction and of facilities open to the public during their development.

■ The legislation in force in France for poster device or tablet device implies to install the top of the screen area at 1300 mm (or 51,18 ") maximum far from the floor. To install SLATE206a device, remove 80.5 mm (or 3.15 ") to the 1300 mm then add 14,1 mm (or 0.55 ") to this height to determine the height of the two drilling holes. For example, for the France country, the hole center should be drilled at (1300 - 80.5 + 14.1) = 1233.6 mm (48.54 ") far from the floor.

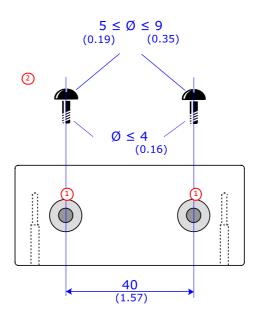
This is an example of mounting bracket fixation height in the France country.



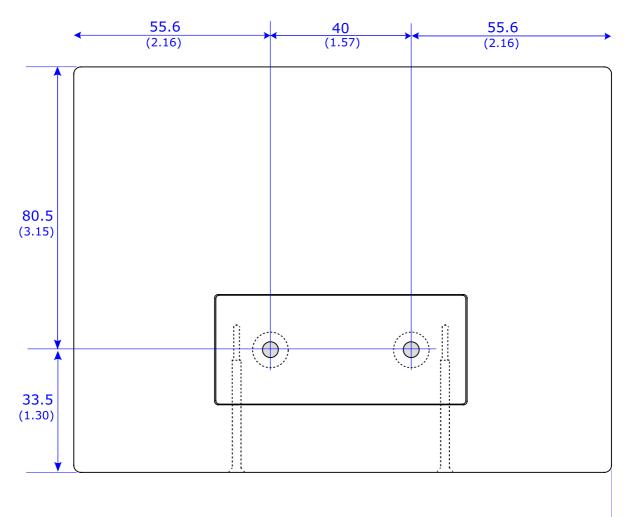
<sup>■</sup> The dimensions values are displayed in millimeters in the upper part followed just below by its equivalent value in inches (between brackets).

#### **Installation with screws**

This mounting bracket can be fixed using screws (recommended).



- 1 Counterbores are facing to you to welcome the screw heads,
- 2 Holes for fixing the SLATE206a device are facing downward.
  - The dimensions values are displayed in millimeters in the upper part followed just below by its equivalent value in inches (between brackets).
  - The screws and dowels to tighten the mounting bracket to the wall are not delivered with the product because they are depending on your wall material.

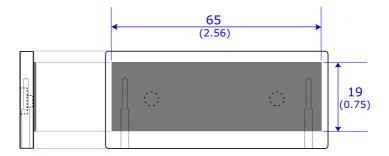


△ The mounting bracket is not symmetrical and can only be installed in one direction. Check that the mounting bracket is facing the right way before fixing it. Use a level to check that the mounting bracket is perfectly horizontal.

#### Installation with adhesive tapes

When it is not possible to fix the device with screws on the wall, for example when the device must be fixed on a glass wall, you can use the provided adhesive tape.

⚠ Clean carefully the surface before sticking the adhesive tapes.



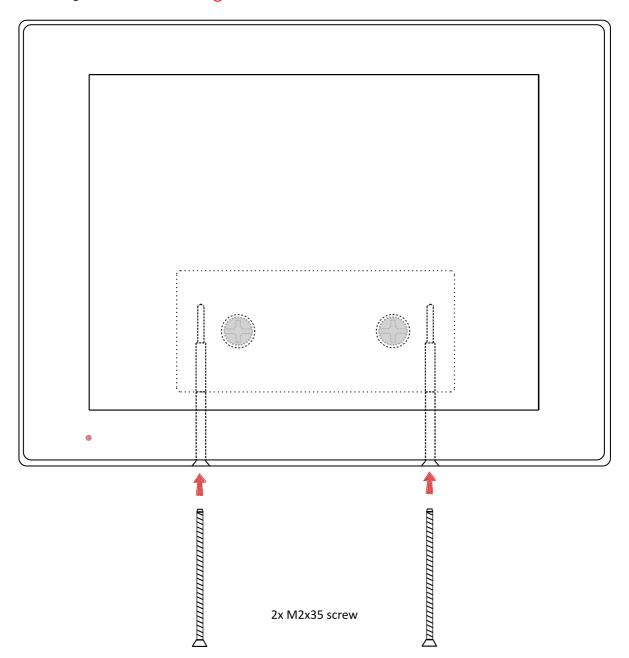
■ The dimensions values are displayed in millimeters in the upper part followed just below by its equivalent value in inches (between brackets).

^ The mounting bracket is not symmetrical and can only be installed in one direction. Check that the mounting bracket is facing the right way before fixing it. Use a level to check that the mounting bracket is perfectly horizontal.

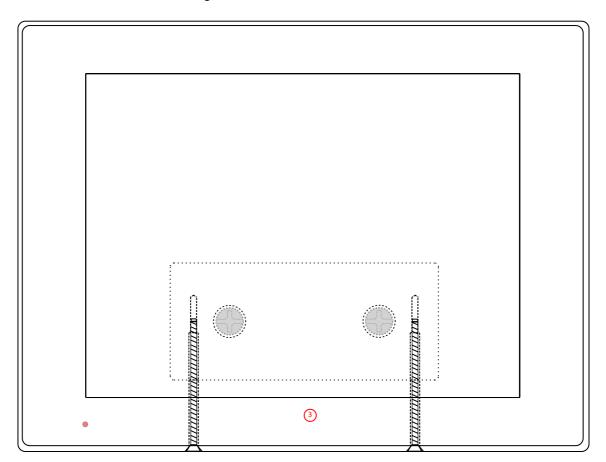
A Press the entire surface of the adhesive strip firmly onto the mounting bracket before placing the mounting bracket on the glass wall. Once the adhesive tape has been stuck down, it is very difficult to remove it from the mounting bracket or from the glass wall. When the adhesive tape is removed from the mounting bracket or from the glass wall, it must be replaced.

#### Lock the device

Once the mounting bracket is fixed with screws or adhesive tapes, place the SLATE206a device face to the mounting bracket. Fix it definitively with the two provided screws using a little slotted screwdriver 3.



Tighten the screws until the screws heads reach the edge of the case.

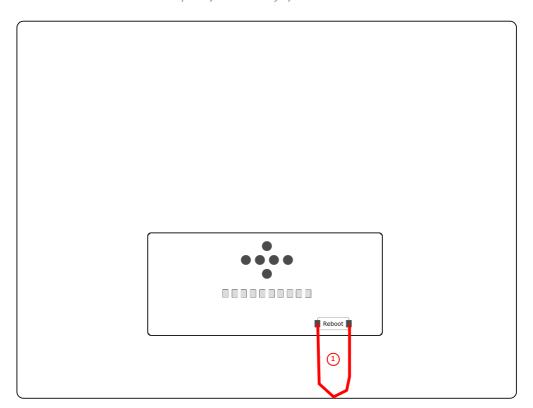


# 1.8 Reboot

It is possible to force a device restart by making an electric contact between the both pin of the Reboot POGO type connector.

#### **Procedure**

- remove the SLATE206a device from the wall,
- place the SLATE206a device with the back face in front of you,
- use a object in steal like a paperclip (1) and make an electric contact during one second between the both pin of the Reboot POGO type connector.
  - The electric contact can be done also with the steal part of the extremity of an USB-C cable.



1 Electric contact done with a paperclip.

# Part II Configuration

# 2.1 Bootloader

The device is embedding a bootloader, stored at factory which is able to launch the wis middleware. The bootloader is installing the wis software release file as soon as a .rpk file is available on the FAT file system.

#### 2.2 Middleware

The SLATE206a device embeds the WIS (or Wasm Innes System) middleware.

#### **TestCard content**

When coming straight from factory, the default screen content is blanck. When the testcard content is activated in the HTA, the *TestCard* content displaying some information of your SLATE206a device (WLAN MAC address value, WPAN MAC address value, model).

#### **Content update**

The screen content can be updated thanks to your Wasm App. If the testcard content is deactivated in the HTA, the TestCard content disappears automatically as soon as the Wasm App update the content.

#### WLAN/IPV6

The WIS middleware supports a WIFI/IPV6 stack allowing to connect and communicate over WIFI routers with IPv6 as well as IPv4.

These are the supported WIFI security modes:

WIFI	Security
WLAN	WPA2-PSK
WLAN	WPA-PSK
WLAN	WPA3-SAE (not tested)

#### **Proxy server**

The proxy server feature has not been tested.

#### **System preferences**

These are the preferences allowing to configure the behavior of the wis middleware:

Name	Туре	Crypted	Default value	Validity	Description	From version
hostname	String	No		15 characters max, 0 character min, with constraints: 'a' to 'z', 'A' to 'z', '0' to '9', '-' and ''. The characters '-' and ''. Don't have the right to be the first or the last.	Device hostname	1.10.10
datetime.timezone	String	No	Europe/Paris	Utz whitelist	Date timezone	1.10.10
ntp.enabled	Bool	No	False		Enable ntp	1.10.10
ntp.server.url	String	No	time-b- g.nist.gov	Taille <= 64	Ntp url	1.10.10
testcard.enabled	Bool	No	False		Display testcard instead of app	1.10.10
ble.enabled	Bool	No	True		Enable ble feature on nfc wakup	1.10.10
app.min-main-tick- interval	u16	No	900	1 <= n <= 65535	Min interval of app main tick when on battery in seconds	1.10.10
app.watchdog-timeout	U16	No	10	1 <= n <= 65535	Max wasm exécution duration in seconds	1.10.10
wakeup.day.interval	String	No	T0800/T1900	Any valid interval (see explanation).		
11 characters max, 6 characters min. '0' to '9', 'T' and '/'.	période d'activité du device. Éteint en dehors de cette période	1.10.10				
wakeup.weekdays.mask (TODO)	U8	No	31	1 <= n <= 127	En dehors des jours sélectionnés, le device est éteint. 1 => Monday 2 => Tuesday 4 => Wednesday 8 => Thursday 16 => Friday 32 => Saturday 64 => Sunday	1.10.10
wakeup.weekdays (TODO)	String	No	MO,TU,WE,TH,FR	Liste des jours	En dehors des jours sélectionnés, le device est éteint.	1.10.10
wifi.ssid	String	No		32 caractères max	Wifi ssid	1.10.10

# NFC tag default value

Default value syntax:

 $\verb|https://i.qeedji.tech/fr/?model=SLATE206a&sn=[psn\_sr]&mac.wlan1=[mac\_id]&mac.wpan1=[mac\_vpan]|$ 

for example:

# Date and time

The default date and time is 1st January 2024, 00:00:00. The date and time values can be updated:

- by the NTP server,
- by the Wasm App.

To watch the current date, plugging the SLATE206a device on a computer, and copy a file on the USB mass storage. Check the last modified date if the copied file.

#### 2.3 Mass storage file system

The USB mass-storage file system of the SLATE206a device is FAT.

The mass storage formatting is automatically done by the WIS middleware when a factory restauration is done.

To mount the USB mass-storage of your SLATE206a device on your computer, connect an USB-C cable between your computer and the SLATE206a device.

■ You can connect also an USB-C cable between your phone device and the SLATE206a device.

When coming from factory and when the WIS middleware has started:

- · the screen content is blank,
- · the file system contains these two files:
  - system prefs.cfg,
  - eposter\_system\_configurator.hta.

The file system of the SLATE206a device can store then about 1.9 MB data:

Middleware version	used space	available free space
1.10.10	17 KB	1923 KB

The file system contains files either intrinsic to the WIS middleware or intrinsic to the installed App.

Filename	Description	Size
eposter_system_configurator.hta	HTA graphic user interface allowing to configure the device	KB
system_prefs.cfg	image of the HTA graphic user interface in text format (.cfg) allowing to configure the device	КВ
configuration.js	temporary file created when a modification is saved in the HTA graphic user interface. This file disappear when it is taken into account the the WIS middleware	КВ
wis_qeedji_slate206a_occident- ep26w-setup.1.10.10.rpk	WIS firmware upgrade version with <i>.rpk</i> extension. Disappears automatically when the firmware is installed by the bootloader as soos as the USB-C cable is unplugged	1065 KB

Description of the main files which may be found in the file system when an App is installed:

Filename	Description	Size
<name>-slate206a-setup- <xx.yy.zz>.wap</xx.yy.zz></name>	WASM App with .wap extension that must be installed by the WIS middleware. This file disappears automatically when the App is installed successfully by the WIS middleware as soon as the USB-C cable is unplugged. Once installed, the App lives in in the internal flash of the MCU. It is not visible anymore in the USB mass storage file system.	
manifest- <mac>.xml</mac>	.xml file linked to the WASM App (optional)	
<pre>.app/<device_mac_id>. <app_uuid>.js Or .app/<configuration>.js</configuration></app_uuid></device_mac_id></pre>	.js configuration script for App. Disappears automatically when the App is installed by the WIS middleware as soon as the USB-C cable is unplugged	
.app/ <uuid>.ppk</uuid>	logo in the PPK format	
app_prefs. <uuid>.cfg</uuid>	When the .js configuration script for App is executed, it is deleted from the file system then an app_prefs. <pre>app_prefs.<uuid>.cfg</uuid></pre> is generated in the USB mass storage file system	

After having added, modified or removed some file through the USB mass storage of the SLATE206a device, eject the device properly with your MS-Windows before unplugging the USB cable. In case a corrupted APPLI.CFG is detected, the file is deleted and the SLATE returns to factory settings. Consequently the Test card is displayed?????.

#### Erase whole file system

In case all the files and directories of the USB mass storage are removed, the device configuration returns to the factory configuration, meaning no WIFI interface configured.

■ The App installed in the internal flash is still running but with unconsistent parameters in terms of datasource, room, and layout. The logo cannot be diplayed anymore. After having erased the whole file system, the App must be published again on the SLATE206a device.

It is recommended to use the HTA to restore cleanly the factory setting.

#### **Restore factory settings**

When the device returns to factory settings:

- the App is uninstalled,
- the device configuration is reset to the factory configuration.

To return to factory settings, edit the eposter\_system\_configurator.hta and press on the Restore to factory button.

#### 2.4 Blank content

The blank content can be displayed when:

- · no WASM App is running on the device,
- the WASM App is running properly but the device is facing a configuration trouble:
  - wrong WIFI router parameter (SSID, security, password),
  - wrong DNS server value,
  - wrong network interface (IP, DNS, gateway),
- the WASM App is running properly but the middleware is facing a execution error<sup>1</sup>,
- the WASM App is running but an error prevent it to display the App content:
  - wrong server URL name, wrong M365 application credential, wrong room resource,
- the WASM App is running but the device is in sleep mode:
  - wrong waking period settings:
    - week days,
    - start time,
    - end time,
  - · wrong date&time:
    - NTP server,
    - last modified file on the file system,
- wrong timezone value,
- . the WASM App is running but the device is plugged to your computer with an USB-C cable preventing to update to screen content,
- the WASM App shoud run but the WIS middleware cannot start due to lack of energy on batteries:
  - · batteries not inserted in the product or inserted in the wrong way in the product,
  - batteries with too low energy level.

<sup>&</sup>lt;sup>1</sup> To activate error logs, execute the eposter\_system\_configurator.hta on the device file system, check the Shows errors on NFC Tag TTY option and press on the Save button. For further information, refer to the chapter § NFC tag TTY.

#### 2.5 Date & time

The SLATE206a device embeds a real-time clock (RTC) used to maintain the Date & Time up-to-date.

#### Behaviour when the RTC has not been updated

After a SLATE206a device startup or after a batteries change, the RTC stays to its default factory value, so the Date & time information is not consistent. The wake-up heartbeat policy using the Date & Time information can not working properly.

To ensure that the SLATE206a device configuration can be taken into account, when the Time & Date is not consistent,

- · the heartbeat timeslot is:
  - 7/7 days,
  - o 24/24 hours.
- the wake-up hearbeat period is 15 minutes.

#### Date & time update

These are the 2 way options to update the RTC on each wake up session:

- · thanks to NTP,
- thanks to the date available in the HTTP request when communicating with the data source server,
- thanks to the date of the last file lastly modified in the USB mass storage.

# 2.6 LEDs behaviour

# • Device start-up initialisation

LEDs	Information
The red LED is flashing once	The device has just started.

# • WIS upgrade

LEDs	Information
The red LED is flashing once every 4 seconds during 30 seconds	The device is performing a middlewae version upgrade.

# • Supercapacity reloading mode

LEDs	Information
The red LED is lightened continuously	The batteries are reloading the batteries. The WIS middleware is not available. When the batteries are sufficiently reloaded, the led comes OFF and the WIS starts. At the first start up, the time fo the device to be ready to work is 10 seconds after having plug an USB-C cable or 6 minutes after having inserted batteries.

# • Step 3: Application mode and content update

LEDs	Information
The red LED is flashing once every 1 seconds	Content update is in progress. The content update duration can be 30 seconds.

#### 2.7 USB mass storage mounting

When you execute the eposter\_system\_configurator.hta, the USB Mass Storage option is checked by default meaning that the USB mass storage mounting is activated by default as soon as an USB-C cable is plugged between the SLATE206a device and your computer (or between the SLATE206a device and your phone device).

Depending on actions to initialize network and actions to draw a new content on the screen, the USB mass storage may take time to be mounted. These are the following steps when the SLATE206a device is waking up:

- · step #1: network initialization,
- · step #2: drawing,
- step #3: USB mass storage mounting.

#### **USB** mass storage mounting deactivation

For safety reason, to prevent the file system to be modified by any people by connecting a computer to the device, the USB mass storage mounting on a computer or a phone device can be deactivated.

A When the USB mass storage mounting is deactivated, the user cannot change the device configuration.

A When the USB mass storage mounting is deactivated, the user cannot publish an App from Screen Composer to the SLATE206a device.

To deactivate the USB mass storage mounting, execute the eposter\_system\_configurator.hta and uncheck the USB Mass Storage option then press on the Save button.

# **USB** mass storage mounting restoration

Even when the USB mass storage mounting has been deactivated, the USB mass storage mounting can be restored temporarily by making five hardware reboots in less than one minute:

- remove the wall mount bracket,
- remove the USB-C cable from the SLATE206a device
- · do these steps 5 times:
  - connect a paper clip during 1 second between the both pin of the reboot connector at the rear face of the device,
  - remove the paper clip during 3 seconds.

After this procedure, if you connect again an USB-C cable between the SLATE206a device and your computer, the USB mass storage is mounted in your Windows computer file system. You can temporary:

- publish an App on the SLATE206a device with Scren Composer,
- execute the eposter\_system\_configurator.hta, change the device configuration and press on the Save button,

A Note that the USB Mass Storage option in the HTA is still unchecked. If you want to restore the systemcatic USB Mass Storage mounting when plugging an USB cable between the SLATE206a device and your computer, check the USB Mass Storage option and press on the Save button.

### 2.8 Wake-up and low power strategy

#### **Wake-up strategy**

Waking-up the device consists in be able for the wis middleware to exit from the low power to:

- · resume the Wasm App,
- · process the tasks intrinsic to the middleware like:
  - be able to install a new WIS middleware release,
  - be able to install and configure a Wasm App,
  - be able to modify the device configuration.

These are the wake-up ways:

- \*wake-up on heartbeat\*: the middleware wakes-up every heatbeat period (by default: 15 minutes) within a heartbeat validity timeslot (by
- \*wake-on-wlan\*: the middleware wakes-up on specific WLAN network event,
- \*wake-on-nfc-tag\*: the middleware wakes-up when a mobile device is approached to detect the NFC tag value of the SLATE206a device.

The screen content is updated only when it is strictly different from the previous one.????

#### Low power strategy

The middleware must be able to enter in low power to save battery and when the content does not required to be updated.

In low power state:

- the middleware supports a minimal of functionnaliies to be woken-up afterwards,
- the Wasm App is not running,
- · the energy consumption is minimal to save battery.

# 2.9 Software upgrade

To upgrade the WIS middleware of your SLATE206a device:

- download the wis\_qeedji\_slate206a\_occident-ep26w-setup.1.10.10\_beta9.rpk from the Qeedji Website,
- plug the SLATE206a device to your Windows computer with an USB-C cable and wait for the USB mass storage is mounted properly in your computer,
- copy the software file wis\_geedji\_slate206a\_occident-ep26w-setup.1.10.10\_beta9.rpk On the USB mass storage file sytem,
- eject properly the USB mass storage,
- wait for about 30 secondes, the time for the SLATE206a device to reboot and install the new WIS middleware (the red LED is blinking once every 4 seconds),

When the USB mass storage is mounted back again, the software release upgrading has completed.

To check the WIS middleware version, execute the <code>eposter\_system\_configurator.hta</code> and check the version number,

<sup>&</sup>lt;sup>1</sup> If you have not, download the latest wis version on the Qeedji Website.

### 2.10 System configuration

The configuration of the system is stored in the dedicated heap in RAM memory by using system preferences ( key:value ).

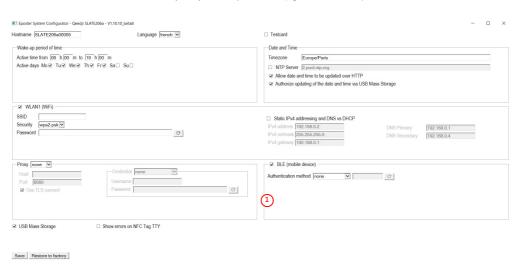
The system configuration is stored in the system\_prefs.cfg file (format json/UTF-8) in the USB mass storage.

This is an exmaple of default configuration:

```
"software_full_version":"1.10.10",
    "model":"SLATE206a",
    "manufacturer":"Qeedji"
    "hostname": "SLATE206a00005",
    "regional.language": "fr-FR",
    "datetime.timezone": "Europe/Paris",
    "datetime.updater.http.enabled":true,
    "datetime.updater.filesystem.enabled":true,
    "usb.enabled":true,
    "ble.enabled":true,
    "ble.credential": "none",
    "nfc.tty.enabled":false,
    "testcard.enabled":false,
    "ntp.enabled":false,
    "ntp.url": "2.pool.ntp.org",
    "screen.rotation":0.
    "wlan1.enabled":true,
    "wlan1.ipv4.static.enabled":false,
    "wlan1.ipv4.static.addr.address":"192.168.0.2",
    "wlan1.ipv4.static.addr.netmask":"255.255.255.0",
    "wlan1.ipv4.static.addr.gateway":"192.168.0.1",
    "wlan1.ipv4.static.dns.primary":"192.168.0.1"
    "wlan1.ipv4.static.dns.secondary":"192.168.0.4",
    "wlan1.proxy": "none",
    "wlan1.proxy.host":""
    "wlan1.proxy.port":8080,
    "wlan1.proxy.tls.use_connect":true,
    "wlan1.proxy.credential": "none",
    "wlan1.proxy.credential.user_password.username":"",
    "wlan1.ssid":"",
    "wlan1.security":"wpa2_psk",
    "app.main-tick.min":900,
    "app.watchdog.timeout":10,
    "wakeup.day.interval":"T0800/T1900",
    "wakeup.weekdays":"MO,TU,WE,TH,FR"
}
```

The first setting to configure when you are receiving the SLATE206 is to setup at least the WLAN interface.

Double click on the eposter\_system\_configurator.hta to execute it. The WIS middleversion is printed in the upper banner of the eposter\_system\_configurator.hta user interface, for example Eposter System Configurator - Qeedji SLATE206a - V1.10.10.



The HTA user interface allows to set and display the device configuration settings:

- Hostname: myDeviceNameOnWLANNetwork (ex: SLATE206a00100)
- Language :
  - French: language used in runtime to display information (date format, hour format) is French,
  - English: language used in runtime to display information (date format, hour format) is English,

- Testcard
  - checked (default): TestCard content display activated
  - unchecked: TestCard content display deactivated,
- Wake-up period of time:
  - Active time from 0..23 h 0..59 m to 0..23 h 0..59 m (default: 8 h 00 m to 19 h 00 m)
  - Active days:
    - Mo:
      - checked (default): wake up allowed this week day,
      - unchecked: wake up not allowed this week day,
    - Tu:
      - checked (default): wake up allowed this week day,
      - unchecked: wake up not allowed this week day,
    - We:
      - checked (default): wake up allowed this week day,
      - unchecked: wake up not allowed this week day,
    - Th:
      - checked (default): wake up allowed this week day,
      - unchecked: wake up not allowed this week day,
    - Fr:
      - checked (default): wake up allowed this week day,
      - unchecked: wake up not allowed this week day,
    - Sa:
      - checked: wake up allowed this week day,
      - unchecked (default): wake up not allowed this week day,
    - .
      - Su:
         checked: wake up allowed this week day,
      - unchecked (default): wake up not allowed this week day,
- Date and time:
  - Timezone: (default: Europe/Paris) 2
  - NTP Server
    - checked: date&time updating thanks to NTP server is activated. Enter the NTP server domain,
    - unchecked (default): date&time updating thanks to NTP server is deactivated,
  - Allow date and time to be updated over HTTP:
    - checked (default): date&time updating thanks to the date&time value present in the HTTP request done when using an App connecting to a server. The date&time updating is done from the remote server only when the time between the device and the server is greater than 24 hours. Avoid to use this function when working with NTP.
    - unchecked: date&time updating from the remote HTTP server stored in the App datasource is deactivated
  - Authorize updating of the date and time via USB Mass Storage:
    - checked (default): date&time updating thanks to the date&time of the latest modified file on the file system, typically thanks to the date&time of the temporary configuration.js created when the HTA is modified. Avoid to use this function when working with NTP. That implies that the computer time zone is the same as the SLATE206 timezone.
    - unchecked: date&time updating from last modified file is deactivated.
- WLAN1 (WiFi)
  - SSID: myWifiRouterSSID
  - Security:
    - Wpa-psk: select the WLAN router security for WPA-PSK,
    - Wpa2-psk: select the WLAN router security for WPA2-PSK,
    - Wpa3-sae: select the WLAN router security for WPA3-SAE (not tested),
- Password: myWifiRouterPassword
- · Static IPv4 adressing and DNS versus DHCP
  - unchecked (default): IPV4 address get from DHCP server,
  - checked: static configuration:
    - IPv4 address: myDeviceIPv4address,
    - IPv4 netmask: myDeviceNetmask,
    - IPv4 gateway: myDeviceGateway,
    - DNS primary: myPrimaryDNSServer
    - DNS secondary: mySecondaryDNCServer
- Proxy
  - None (default):
  - Static:
    - Host: myProxyDomain
    - Port: myProxyPort
    - Use TLS Connect:
      - · checked: TLS connect using activated,
      - unchecked: TLS connect using deactivated,
    - Credential:
      - Username: myProxyBasicAuthCredentialIdentifier
      - Password: myProxyBasicAuthCredentialPwassword
- BLE (mobile device):
  - Checked (default): enable Bluetooth and allows the device to be woken up by NFC reading when the device is asleep (= outside the working range).
    - Authentication method
      - None,
      - Pin code 4 digits: enter the pincode value (RFU)
  - Unchecked: disable Bluetooth and does not allow the device to be woken up by NFC reading when the device is asleep (= outside the working range).
- USB Mass storage:
  - Checked (default): the USB mass storage is mounted automatically in the Windows when the SLATE device is plugged to a computer or to a phone device.

- *Unchecked*: the USB mass storage is not mounted automatically in the Windows when the SLATE device is plugged to a computer or to a phone device. Consequently, the access to this HTA user interface is not possible anymore <sup>3</sup>.
- Show errors on NFC tag TTY:
  - Unchecked (default): the factory value (i.e. registering URL) is kept in the NFC tag memory area, for i.e. i.qeedji.tech? model=SLATE206a&sn=1630-00005&mac.wlan1=00-1c-e6-02-78-bc&mac.ble=00-1c-e6-02-78-bd
  - Checked: if no error and no warning, the factory value (i.e. registering URL) is kept in the NFC tag memory area. If an WIS middleware error is detected, a error code is printed in the NFC tag memory area replacing the factory value (i.e. registering URL). When the problem is solved, the factory value (i.e. registering URL) is printed back in the NFC tag memory area. For further information, refer to the chapter &sect Appendix: NFC tag TTY.
- <sup>1</sup> The SLATE206 must be at least 5 min OFF in the day (for example 00h00 to 23h59 is not supported) After changing a parameter and saving the configuration, the user is asked to close the HTA user interface and eject the device mass storage from the Windows explorer (or remove the USB-C cable).
- <sup>2</sup> for further information, refer to the chapter &sect Appendix: Timezone.
- <sup>3</sup> To work around, apply the procedure to restore the USB mass storage by the bootloader.
  - Each time a setting is modified and the Save button pressed in the eposter\_system\_configurator.hta user interface, a temporary configuration.js is created allowing to tell to the WIS middleware that a new configuration needs to be taken into account.

Pour la visibilité du numéro de version, des préférences lecture seule ont été ajoutées, et le numéro de version est visible dans le titre du hta.

**Bouton Save** 

**Bouton Restore factory preferences** 

Pour la question: Appuyer sur le bouton "Restauration des preferences usines" dans le HTA ne récucite pas un fichier CFG d'usine quand ce fichier est absent. Seul le slate peut restaurer les prefs. Pour ça, il faut que le fichier cfg soit supprimé, puis l'usb éjecté. Une fois rebranché, le fichier cfg d'usine est présent.

### 2.11 NFC tag TTY

In case you think that the device is facing unexpected trouble, it is possible to activate error log printing on the memory area of the NFC Tag. To activate the error logs printing, execute the <code>eposter\_system\_configurator.hta</code>, check the <code>Shows errors on NFC Tag TTY</code> options, press on the <code>Save button</code> and <code>eject the USB mas storage</code> so that the WIS middleware can take into account the modifications.

Prerequisite: own an App on your phone device able to read NFC tag.

Fly the phone device over the SLATE206a device to read its NFC tag value.

### Shows error on NFC tag TTY not activated

NFC tag value	Conditions
<pre>i.qeedji.tech ?model=SLATE206a&amp;sn=<device_short_psn_value>&amp;mac.wlan1= <device_mac_id_value>&amp;mac.ble=<device_ble_mac_addr_value></device_ble_mac_addr_value></device_mac_id_value></device_short_psn_value></pre>	Factory value which cannot be overwritten while Shows error on NFC tag TTY is not activated.

### Shows error on NFC tag TTY activated

NFC tag value	Conditions
<pre>i.qeedji.tech ?model=SLATE206a&amp;sn=<device_short_psn_value>&amp;mac.wlan1=<device_mac_id_value>&amp;mac.ble= <device_ble_mac_addr_value></device_ble_mac_addr_value></device_mac_id_value></device_short_psn_value></pre>	when no WIS error and no WIS warning.

IFC tag value	Conditions
ERRORS- <yyyy-mm- d&gt;T<hh:mm:ss>Z Not in orking period</hh:mm:ss></yyyy-mm- 	Warning: the device is woken up outside the working period thanks to the plugged USB cable
ERRORS— <yyyy-mm- d&gt;T<hh:mm:ss>Z Wifi onnect</hh:mm:ss></yyyy-mm- 	Error: WLAN router access trouble prevents the device to connect to the network. Check the device WLAN configuration.
ERRORS- <yyyy-mm- d&gt;T<hh:mm:ss>Z Ip onfiguration</hh:mm:ss></yyyy-mm- 	Error: Network interface connectivity trouble. Check the device network configuration.
ERRORS- <yyyy-mm- d&gt;T<hh:mm:ss>Z Dns</hh:mm:ss></yyyy-mm- 	Error: The DNS server does not allow to resolved the server domain. Check the DNS server.
ERRORS- <yyyy-mm- d&gt;T<hh:mm:ss>Z Dns for ntp</hh:mm:ss></yyyy-mm- 	Error: The DNS server does not allow to resolved the NTP server domain. Check the NTP server domain and check the DNS server.
ERRORS- <yyyy-mm- dd&gt;T<hh:mm:ss>Z Ntp</hh:mm:ss></yyyy-mm- 	Error: The device can to access to the NTP server. Check the NTP server domain and check the DNS server.
ERRORS— <yyyy-mm- dd&gt;T<hh:mm:ss>Z No app installed</hh:mm:ss></yyyy-mm- 	Error: No App is installed on the device. You must install an App to update the content.
ERRORS- <yyyy-mm- d&gt;T<hh:mm:ss>Z Power wait timeout</hh:mm:ss></yyyy-mm- 	Error: Not enough energy to update the screen content. Check the level of batteries.
ERRORS- <yyyy-mm- d&gt;T<hh:mm:ss>Z Wait for power</hh:mm:ss></yyyy-mm- 	Error: Not enough immediate energy to update the screen content. Waiting the batteries self-loading.
ERRORS- <yyyy-mm- d&gt;T<hh:mm:ss>Z App exception</hh:mm:ss></yyyy-mm- 	Error: Exception raised inside the App because it is corrupted. Publish again the App.
ERRORS- <yyyy-mm- id&gt;T<hh:mm:ss>Z App prefs vrite</hh:mm:ss></yyyy-mm- 	Error: Trouble faced when writing App preferences. The file system seems corrupted. It is advised to restore factory settings, reconfigure the device and publish again the App. If the problem persists, contact <a href="mailto:support@qeedji.tech">support@qeedji.tech</a> .
ERRORS— <yyyy-mm- dd&gt;T<hh:mm:ss>Z System orefs write</hh:mm:ss></yyyy-mm- 	Error: Trouble faced when writing System preferences
ERRORS- <yyyy-mm- ld&gt;T<hh:mm:ss>Z Prefs lecrypt</hh:mm:ss></yyyy-mm- 	Error: Trouble faced when decrypting preferences values
ERRORS- <yyyy-mm- do&gt;T<hh:mm:ss>Z Draw mire</hh:mm:ss></yyyy-mm- 	Error: Trouble faced when drawing the testcard content

NFC tag value	Conditions
ERRORS— <yyyy-mm-dd>T<hh:mm:ss>Z Rtc init failure</hh:mm:ss></yyyy-mm-dd>	Fatal error: RTC initialization hardware failure ¹.
ERRORS— <yyyy-mm-dd>T<hh:mm:ss>Z Flash init failure</hh:mm:ss></yyyy-mm-dd>	Fatal error: Flash initialization hardware error <sup>1</sup> .
ERRORS— <yyyy-mm-dd>T<hh:mm:ss>Z Shutdown failure</hh:mm:ss></yyyy-mm-dd>	Fatal error: Shutdown hardware failure <sup>2</sup>
ERRORS— <yyyy-mm-dd>T<hh:mm:ss>Z External resources corrupted</hh:mm:ss></yyyy-mm-dd>	Fatal error: External resource corrupted in external flash <sup>2</sup>
ERRORS— <yyyy-mm-dd>T<hh:mm:ss>Z Failsafe mode level 1</hh:mm:ss></yyyy-mm-dd>	Fatal error: Too many reboot per minute reached <sup>2</sup>
ERRORS— <yyyy-mm-dd>T<hh:mm:ss>Z Failsafe mode level 2</hh:mm:ss></yyyy-mm-dd>	Fatal error: After exit fail soft mode level 1, too many reboot per minute reached <sup>2</sup>
ERRORS— <yyyy-mm-dd>T<hh:mm:ss>Z Device identity corrupted</hh:mm:ss></yyyy-mm-dd>	Fatal error: Device identity parameters corrupted in internal flash <sup>3</sup>

<sup>&</sup>lt;sup>1</sup> This problem could be an hardware problem. Try to restart the device by making a device reboot. For further information, refer to the chapter § Hardware reset. If the problem persists, contact <a href="mailto:support@qeedji.tech">support@qeedji.tech</a>.

<sup>&</sup>lt;sup>2</sup> The WIS middleware or the App is not stable. Try to restart the device by making a device reboot. For further information, refer to the chapter § Hardware reset. If the problem persists, try to install again the WIS middleware and publish again the App. If the problem persists, contact support@qeedji.tech.

<sup>&</sup>lt;sup>3</sup> This problem should never occur. This is probably a device production issue. If the problem persists, contact <a href="mailto:support@qeedji.tech">support@qeedji.tech</a>.

### 2.12 Troubleshoot

### Content update unexpected long duration

In case the batteries level comes low, in some case, the content may take more than 30 seconds to be updated, the time for the batterie to load the internal supercapacity. During this duration, the red LED is enlightened.

### Blinking during content update

During a content update:

- · the red LED is blinking,
- the screen is displaying several intermediate content per second until reaching the target content.

The target content must be displayed in less than 30 seconds.

### **Content not updated**

The content is updated only when the information in the content must be modified.

### 2.13 Appendix: Timezone

Continent	Country/Town pair values supported for the timezone field
Africa	Africa/Abidjan, Africa/Accra, Africa/Addis_Ababa, Africa/Algiers, Africa/Asmara, Africa/Asmera, Africa/Bamako, Africa/Bangui, Africa/Banjul, Africa/Bissau, Africa/Blantyre, Africa/Brazzaville, Africa/Bujumbura, Africa/Cairo, Africa/Casablanca, Africa/Ceuta, Africa/Conakry, Africa/Dakar, Africa/Dar_es_Salaam, Africa/Djibouti, Africa/Douala, Africa/El_Aaiun, Africa/Freetown, Africa/Gaborone, Africa/Harare, Africa/Johannesburg, Africa/Juba, Africa/Kampala, Africa/Khartoum, Africa/Kigali, Africa/Kinshasa, Africa/Lagos, Africa/Libreville, Africa/Lome, Africa/Luanda, Africa/Lubumbashi, Africa/Lusaka, Africa/Malabo, Africa/Maputo, Africa/Maseru, Africa/Mbabane, Africa/Mogadishu, Africa/Monrovia, Africa/Nairobi, Africa/Ndjamena, Africa/Niamey, Africa/Nouakchott, Africa/Ouagadougou, Africa/Porto-Novo, Africa/Sao_Tome, Africa/Timbuktu, Africa/Tripoli, Africa/Tunis, Africa/Windhoek
America	America/Argentina/Buenos_Aires, America/Argentina/Catamarca, America/Argentina/ComodRivadavia, America/Argentina/Cordoba, America/Argentina/Jujuy, America/Argentina/La_Rioja, America/Argentina/Romentina/Santa, America/Argentina/Santa, America/Argentina/Santa, America/Argentina/Santa, America/Argentina/Santa, America/Argentina/Santa, America/Argentina/Santa, America/Argentina/Santa, America/Indiana/Indiana/Indiana/Margentina/Santa, America/Indiana/Indiana/Indiana/Indiana/Vevay, America/Indiana/Vincennes, America/Indiana/Petersburg, America/Indiana/Iell_City, America/Indiana/Vevay, America/North_Dakota/Beulah, America/Indiana/Center, America/Kentucky/Louisville, America/Kentucky/Monticello, America/North_Dakota/Beulah, America/Indiana/Center, America/Rentucky/Louisville, America/Kentucky/Monticello, America/North_Dakota/Beulah, America/Indiana/Center, America/Arguaina, America/Kentucky/Louisville, America/Kentucky/Monticello, America/North_Dakota/Beulah, America/Indiana/Vince/America/Indiana/Vince/America/Anchorage, America/Anguilla, America/Argua, America/Arguania, America/Arguan, America/Belanc-Sablon, America/Boayista, America/Bahia_Banderas, America/Barbados, America/Belem, America/Belanc-Sablon, America/Boayista, America/Boayista, America/Boayista, America/Campo, America/Cambunda, America/Candon, America/Campo, America/Campo, America/Campo, America/Campo, America/Campo, America/Coral_Harbour, America/Cordoba, America/Costa_Rica, America/Ceston, America/Cuidab, America/Coral_America/Coral_America/Coral_America/Coral_Cora
Antartica, Artic	Antartica/Casey, Antartica/Davis, Antartica/DumontDUrville, Antartica/Macquarie, Antartica/Mawson, Antartica/McMurdo, Antartica/Palmer, Antartica/Rothera, Antartica/South_Pole, Antartica/Syowa, Antartica/Troll, Antartica/Vostok, Artic/Longyearbyen
Asia	Asia/Aden, Asia/Almaty, Asia/Amman, Asia/Anadyr, Asia/Aqtau, Asia/Aqtobe, Asia/Ashgabat, Asia/Ashkhabat, Asia/Atyrau, Asia/Baghdad, Asia/Bahrain, Asia/Baku, Asia/Bangkok, Asia/Barnaul, Asia/Beirut, Asia/Bishkek, Asia/Brunei, Asia/Calcutta, Asia/Chita, Asia/Choibalsan, Asia/Chongqing, Asia/Chungking, Asia/Colombo, Asia/Dacca, Asia/Damascus, Asia/Dhaka, Asia/Dubai, Asia/Dubai, Asia/Dubai, Asia/Istanbul, Asia/Jakarta, Asia/Jayapura, Asia/Jerusalem, Asia/Kabul, Asia/Karachi, Asia/Kathmandu, Asia/Katmandu, Asia/Khandyga, Asia/Kolkata, Asia/Krasnoyarsk, Asia/Kuala_Lumpur, Asia/Kushing, Asia/Kuwait, Asia/Macao, Asia/Macau, Asia/Magadan, Asia/Makassar, Asia/Manila, Asia/Muscat, Asia/Nicosia, Asia/Novokuznetsk, Asia/Novosibirsk, Asia/Omsk, Asia/Oral, , Asia/Phnom_Penh, Asia/Pontianak, Asia/Pyongyang, Asia/Qatar, Asia/Qotarany, , Asia/Qyzylorda, Asia/Rangoon, Asia/Riyadh, Asia/Saigon, Asia/Sakhalin, Asia/Samarkand, Asia/Seoul, Asia/Shanghai, Asia/Singapore, Asia/Srednekolymsk, Asia/Taipei, , Asia/Tahskent, Asia/Tbilisi, Asia/Tehran, Asia/Tel_Aviv, Asia/Thimbu, Asia/Thimphu, Asia/Tokyo, , Asia/Vladivostok, Asia/Yakutsk, Asia/Yangon, Asia/Yekaterinburg, Asia/Yerevan
Atlantic	Atlantic/Azores, Atlantic/Bermudes, Atlantic/Canary, Atlantic/Cape_Verde, Atlantic/Faeroe, Atlantic/Faroe, Atlantic/Jan_Mayen, Atlantic/Madeira, Atlantic/Reykyavik, Atlantic/South_Georgia, Atlantic/St_Helena, Atlantic/Stanley
Australia	Australia/ACT, Australia/Adelaide, Australia/Brisbane, Australia/Broken_Hill, Australia/Canberra, Australia/Currie, Australia/Darwin, , Australia/Eucla, Australia/Hobart, Australia/LHI, Australia/Lindenman, Australia/Lord_Howe, , Australia/North, Australia/NSW, Australia/Perth, Australia/Queensland, Australia/South, Australia/Sydney, Australia/Tasmania, Australia/Victoria, Australia/West, Australia/Yancowinna
Chile	Chile/Continental, Chile/EasterIsland
Europe	Europe/Amsterdam, Europe/Andorra, Europe/Astrakhan, Europe/Athens, Europe/Belfast, Europe/Belgrade, Europe/Berlin, Europe/Bratislava, Europe/Brussels, Europe/Bucharest, Europe/Dusseldorf, Europe/Helsinki, Europe/Istanbul, Europe/London, Europe/Madrid, Europe/Minsk, Europe/Moscow, Europe/Paris, Europe/Sarajevo, Europe/Warsaw
Pacific	Pacific/Auckland, Pacific/Fiji, Pacific/Guam, Pacific/Honolulu, Pacific/Majuro, Pacific/Midway, Pacific/Noumea, Pacific/Tongatapu
Etc	Etc/GMT, Etc/GMT+0, Etc/GMT+1, Etc/GMT+2, Etc/GMT+3, Etc/GMT+4, Etc/GMT+5, Etc/GMT+6, Etc/GMT+7, Etc/GMT+8, Etc/GMT+9, Etc/GMT+10, Etc/GMT+11, Etc/GMT+12, Etc/GMT0, Etc/GMT-0, Etc/GMT-1, Etc/GMT-2, Etc/GMT-3, Etc/GMT-4, Etc/GMT-5, Etc/GMT-6, Etc/GMT-7, Etc/GMT-8, Etc/GMT-9, Etc/GMT-10, Etc/GMT-11, Etc/GMT-12, Etc/GMT-13, Etc/GMT-14, Etc/Greenwich, Etc/UCT, Etc/Universal, Etc/UTC, Etc/Zulu

When using Etc/GMT+9, understand	GMT-9 . For further information	n, refer to the Website https://www	.gsp.com/support/virtual/admin/unix/tz/gn	nt/

# Part III Wasm App management

### 3.1 Wasm App management

A Wasm App is a smart applicative software calling the Wasm API supported by the WIS (for Zephyr Qeedji System) middleware to use the device peripherals:

- · display,
- · WiFi,
- BLE,
- · USB mass-storage.

As soon as a Wasm App is installed, the Wasm App is executed automatically and the screen content updated automatically according to the Wasm App implementation.

The Wasm App must be developped by ISV. For further information, refer to the SLATE206a developper manual.

By default, no Wasm App is installed in the SLATE206a device at factory.

### **Wasm App installation**

To install a Wasm App on the SLATE206a device:

- copy your Wasm App (.zap file) and an appropriate configuration script (.js allowing to configure the App itself) at the root of an USB storage device, and plug it on the USB-C connector of the SLATE206a device,
- copy your Wasm App ( .zap file) on a remote Wasm App web server, copy an appropriate configuration script ( .js file allowing to define the Apps Web Server URL and to configure the App itself) at the root of an USB storage device, and plug it on the USB-C connector of the SLATE206a device?????.

The App installation occurs:

- After wis middleware start-up,
- · After USB cable plugping between the SLATE206a device and on a PC computer,
- After installation request done by the Wasm App.

Once installed, the Wasm App is configured then executed automatically. Consequently, if present before the Wasm App installation, the Test Card content disappears automatically.

- When a new Wasm App is installed, the Wasm App preferences related to the previous Wasm App are automatically removed to take into account the new one.
- Only one Wasm App can be installed at a time on the SLATE206a device.

### **Wasm App upgrading**

To upgrade your Wasm App on the device, build the Wasm App with a new version number and copy the Wasm app like explained in the chapter Wasm App installation.

### **Wasm App configuration**

To change the Wasm App configuration:

• copy an appropriate configuration script ( .js allowing to configure the App itself) at the root of an USB storage device, and plug it on the USB-C connector of the SLATE206a device.

### **Wasm App uninstall**

The Wasm App can be removed from the device????? How?

### Wasm App for SAP10e

A dedicated Wasm App may be available soon to support content coming from SAP10e devices.

## Part IV Technical information

### **4.1 Technical specifications**

Model	Manufacturer
SLATE206a	Qeedji

Processor	
CPU	NRF5340 (dual Arm® Cortex®-M33)

### Middleware WIS (Wasm Innes System)

Display	
Electronic paper 6" with 7 colors	
644x448 pixels	

Power supply	Information  4.75 V to 5.45 V¹ (recommended values)4.70 V to 5.50 V¹ as minimum and maximum values	
Through USB-C connector		
Through batteries	3V, 4xCR2430 Lithium coin battery	

<sup>&</sup>lt;sup>1</sup> Requires to use a NAPOE109ks adapter.

USB Data
USB 2.0

Network	Information
802.11 a/b/g/n/ac/ax (WIFI 6)	IPV6, built-in antenna

WPAN	Information
Bluetooth Low Energy 5 GATT	
Frequency band: 2.402 to 2.480 GHz	
Tx Power: +7.5 dBm	
Protocol	Multi-protocol

Storage	
Internal Flash Memory for WASM middleware	1 MByte
External Flash Memory for file system	2 MBytes

Built-in TAG	Information
NFC	The TAG value can be modified by the WIS middleware or by the Wasm App

Operating temperature	Storage temperature
+0 °C to +40 °C	-20 °C to +60 °C

Operating humidity	Storage humidity
< 80 %	< 85 %

Weight (mounting bracket + batteries included)	Dimensions (W x H x D)
203 g	151,2 x 114 x 8 mm
0,44 lb	5,94" x 4,48" x 0,31"

Enclosure flame rating	Information
Vo	

Warranty	
1 year	

### **4.2 Conformities**

In conformity with the following European directives:

- LVD 2014/35/EU,
- EMC 2014/30/EU.

### Part V Contacts

### **5.1 Contacts**

For further information, please contact us:

- Technical support: support@qeedji.tech,Sales department: sales@qeedji.tech.

Refer to the <code>Qeedji</code> Website for FAQ, application notes, and software downloads: <a href="https://www.qeedji.tech/">https://www.qeedji.tech/</a>

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