# dido.dmg.it

# Matisse Multimedia Display

**Contents**

# Safety and usage cautions

Before installing our products, we recommend you to consult the section about safety and usage cautions at the link below.

# Mounting

⊖ **Matisse 7″**

**With studs on 1,5/3 mm faceplate**
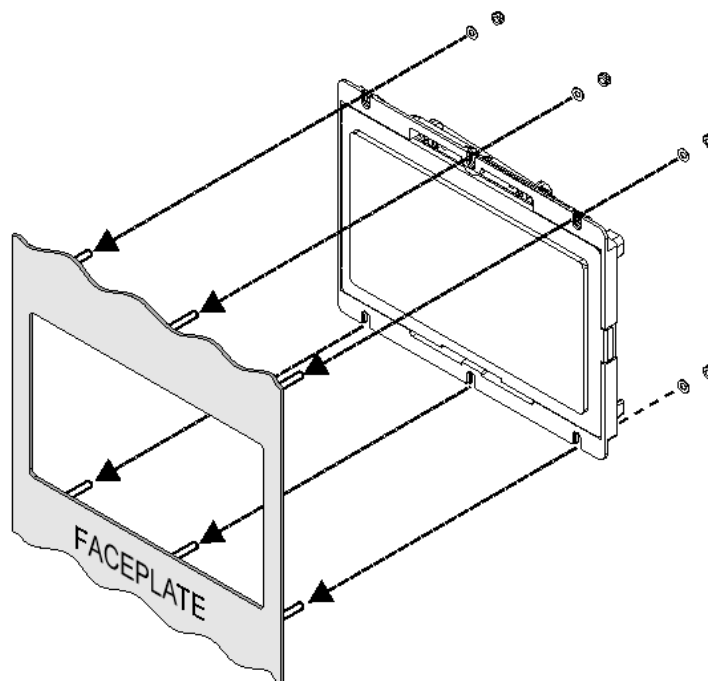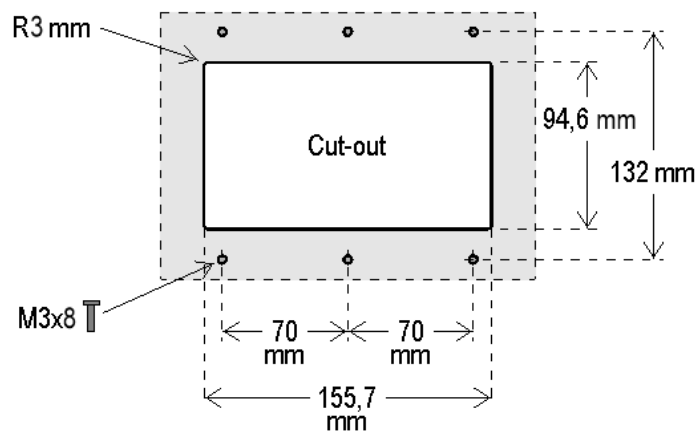
⚠️ If you are replacing an existing position indicator, please verify that studs' length match the above mentioned one; if not, please shorten them.

## ⊖ Matisse 10,1″

**With studs on 1,5/3 mm faceplate**
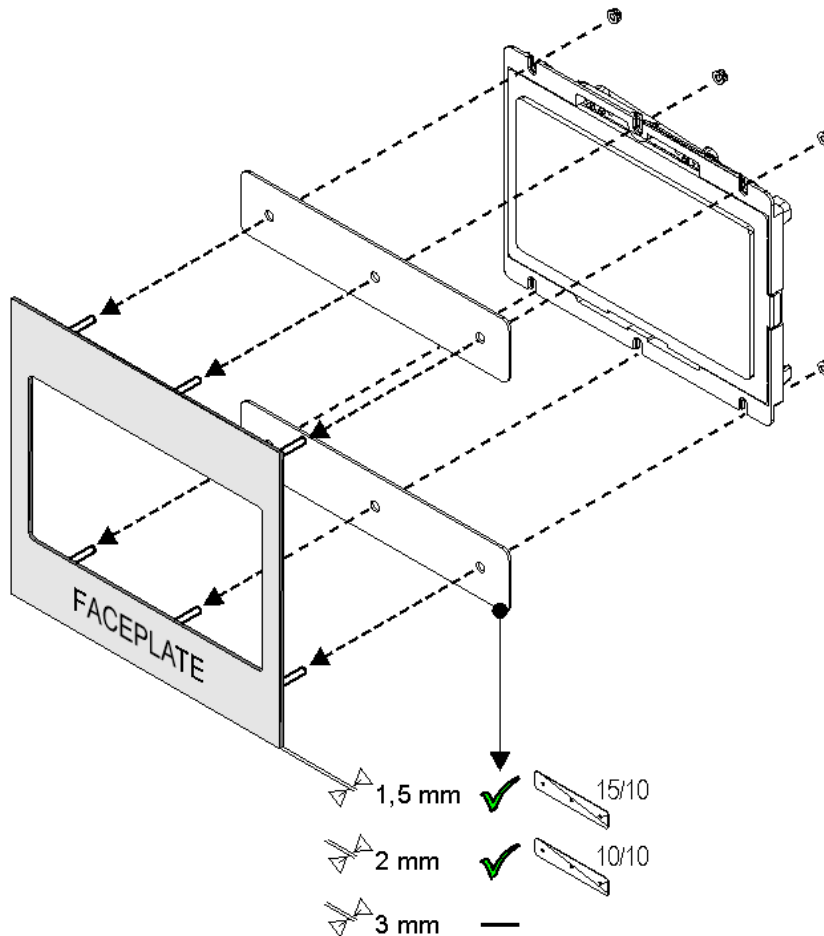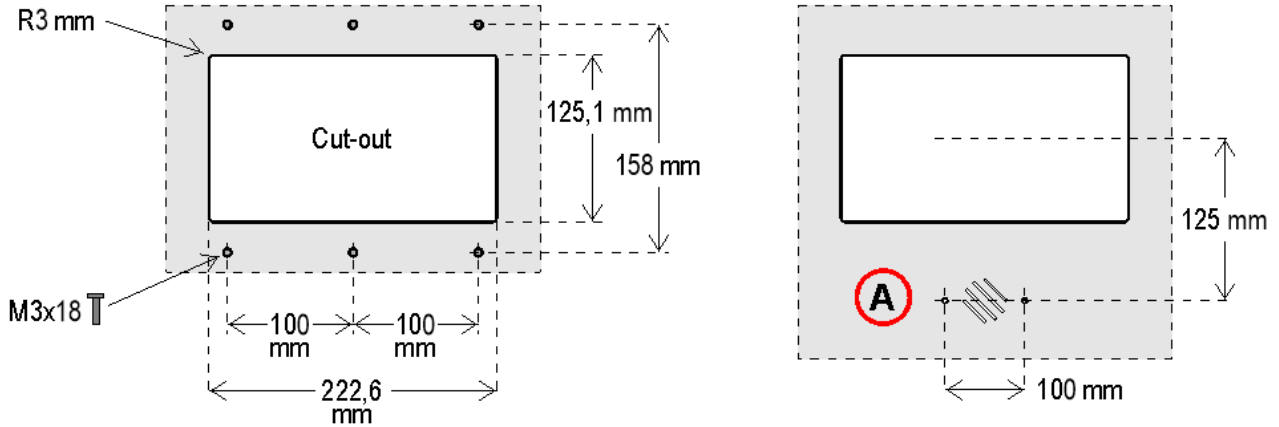


**A) – ESYSPK2 external speaker (option)**

## ⊖ Matisse BIG (15,6″/18,5″/21,5″)

**With studs on 1,5/2 mm faceplate**



▯ M3x10
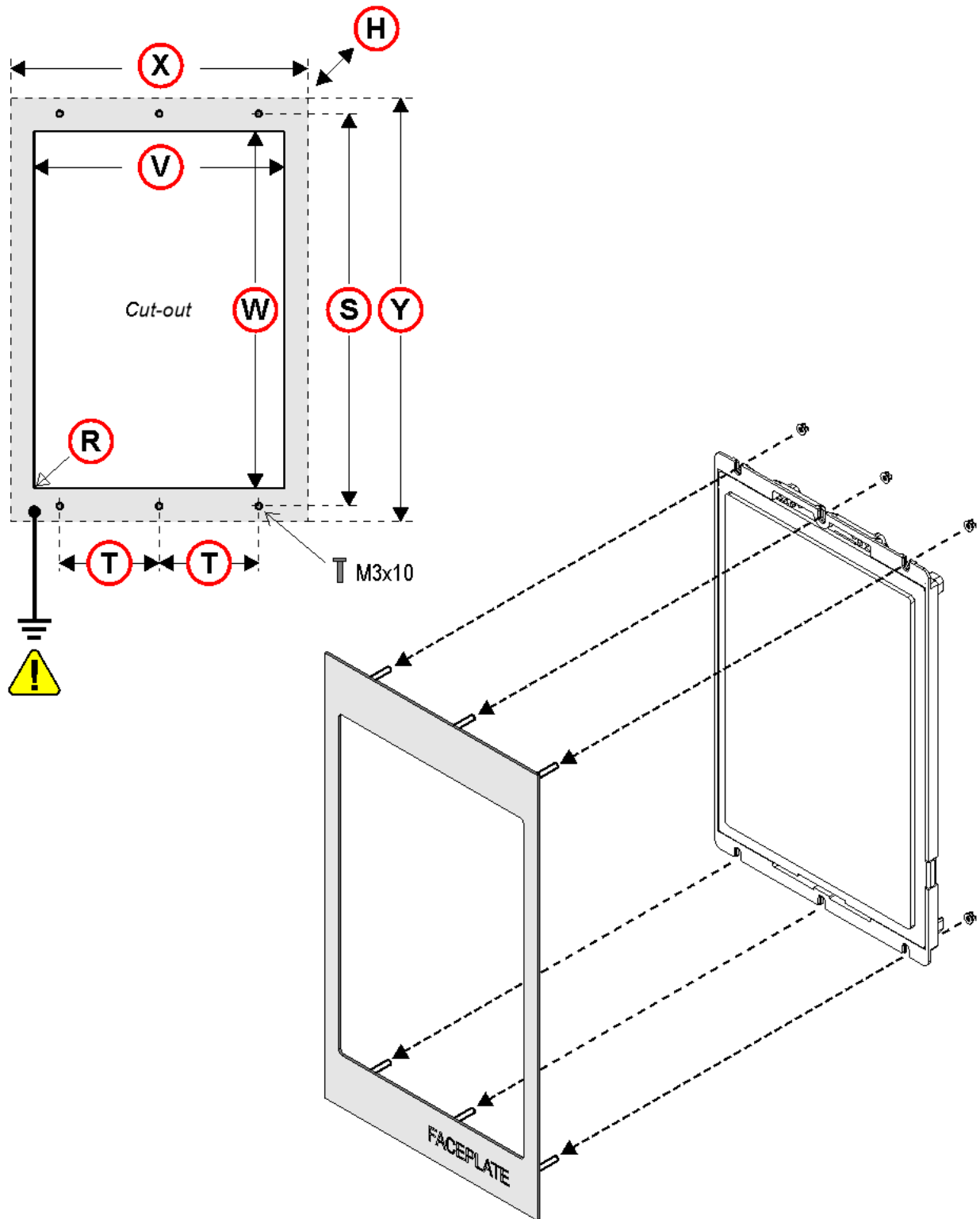
| TFT | DIMENSIONS: (X x Y x H) | CUT-OUT (V x W - R) | STUDS SxT |
|---|---|---|---|
| TFT 15,6" | 232,5 x 430,5 x 44 | 192.6x343,6 mm - R0,1 | 413x100 |
| TFT 18,5" | 284 x 497,5 x 49 | 229.6x408,6 mm - R0,1 | 480x110 |
| TFT 21,5" | 324,5 x 564,5 x 49 | 266.6x475,6 mm - R0,1 | 547x140 |

**With studs on 2/3 mm faceplate**
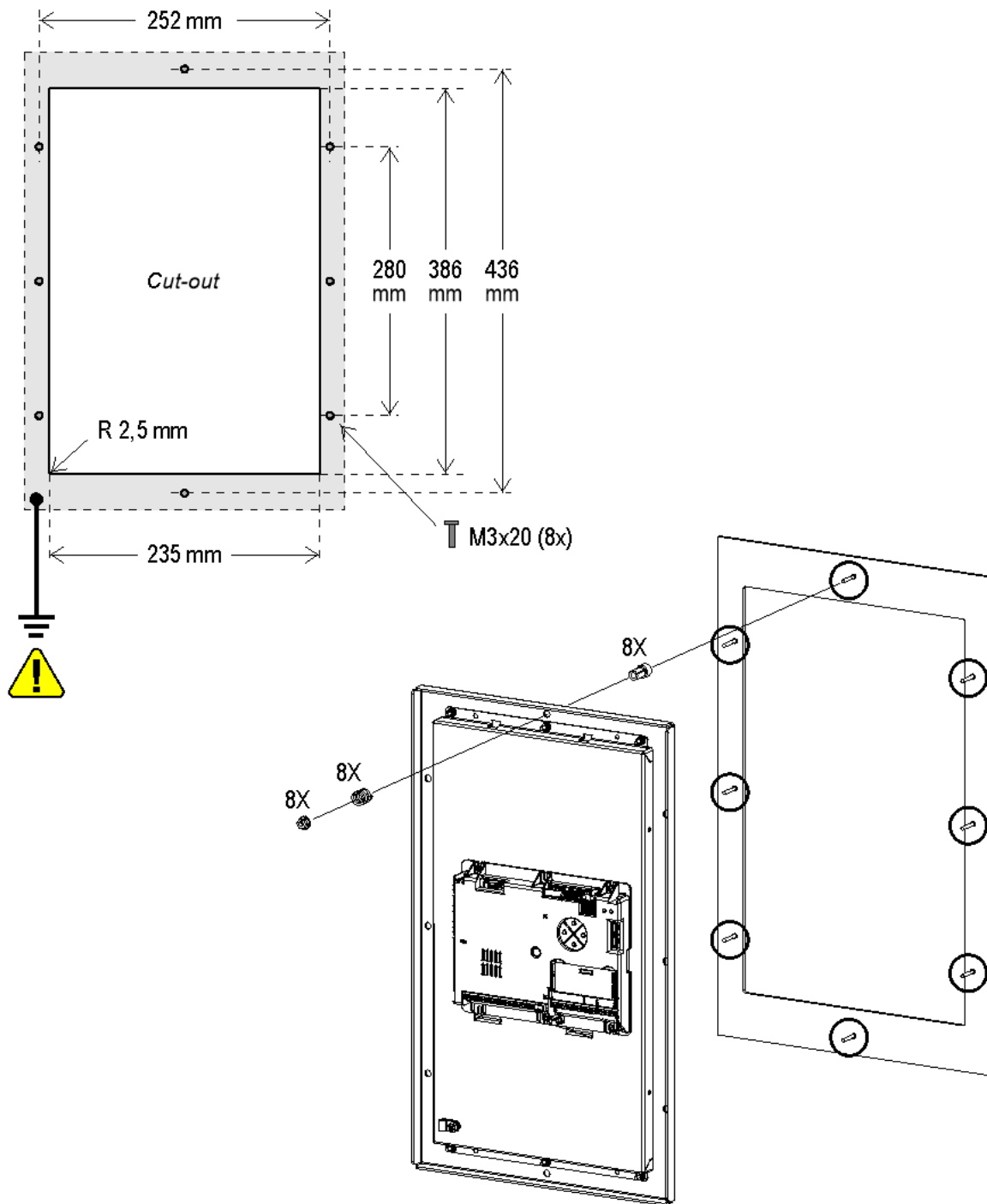


# Wiring Instructions

## POSITION & DIRECTION Input Wiring

**Power Supply**

⚠️

Check that the display panel has been ground connected.

**Matisse 7″ / 10,1″ / CPU only**



| | |
|---|---|
| 7" | 270mA |
| 10,1" | 330mA |
| CPU | 150mA |
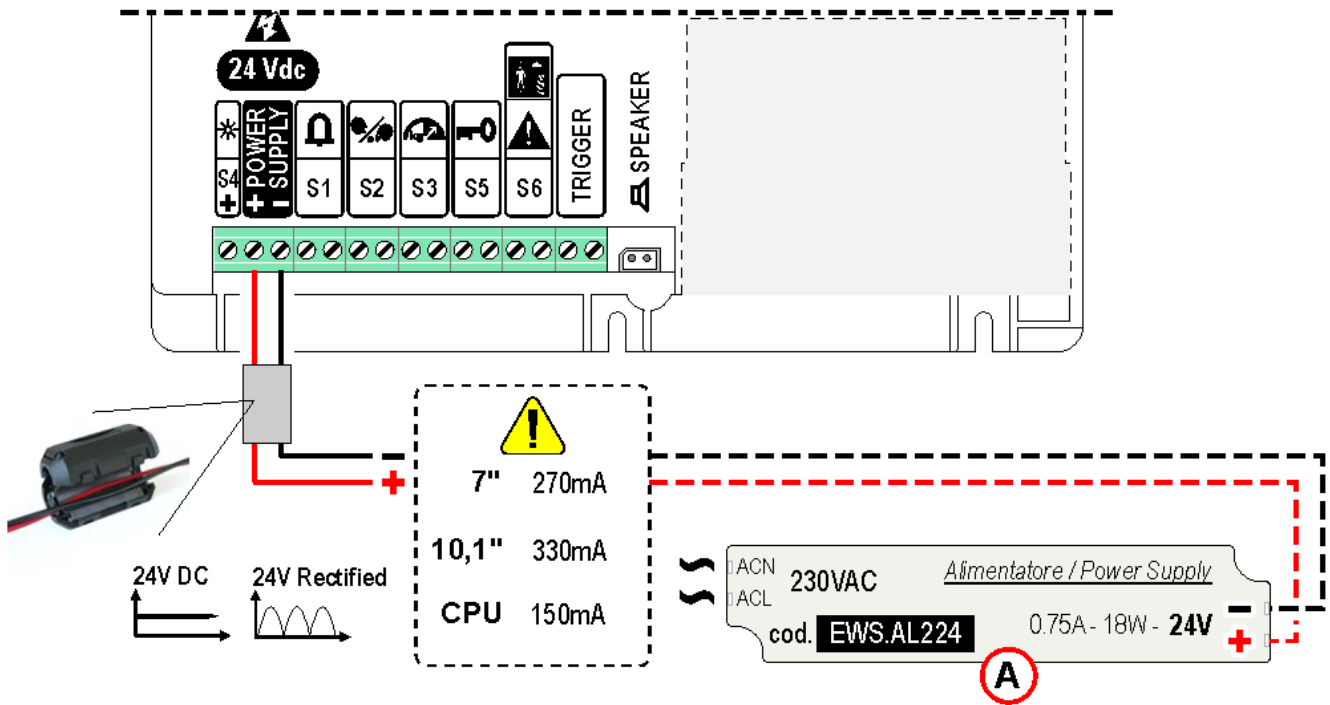
A) – EWS.AL224 – Optional power supply (0.75A – 18W – 24V)

**Matisse 15,6″ / 18,5″ / 21,5″**



| | |
|---|---|
| 15,6" | 600mA |
| 18,5" | 700mA |
| 21,5" | 800mA |
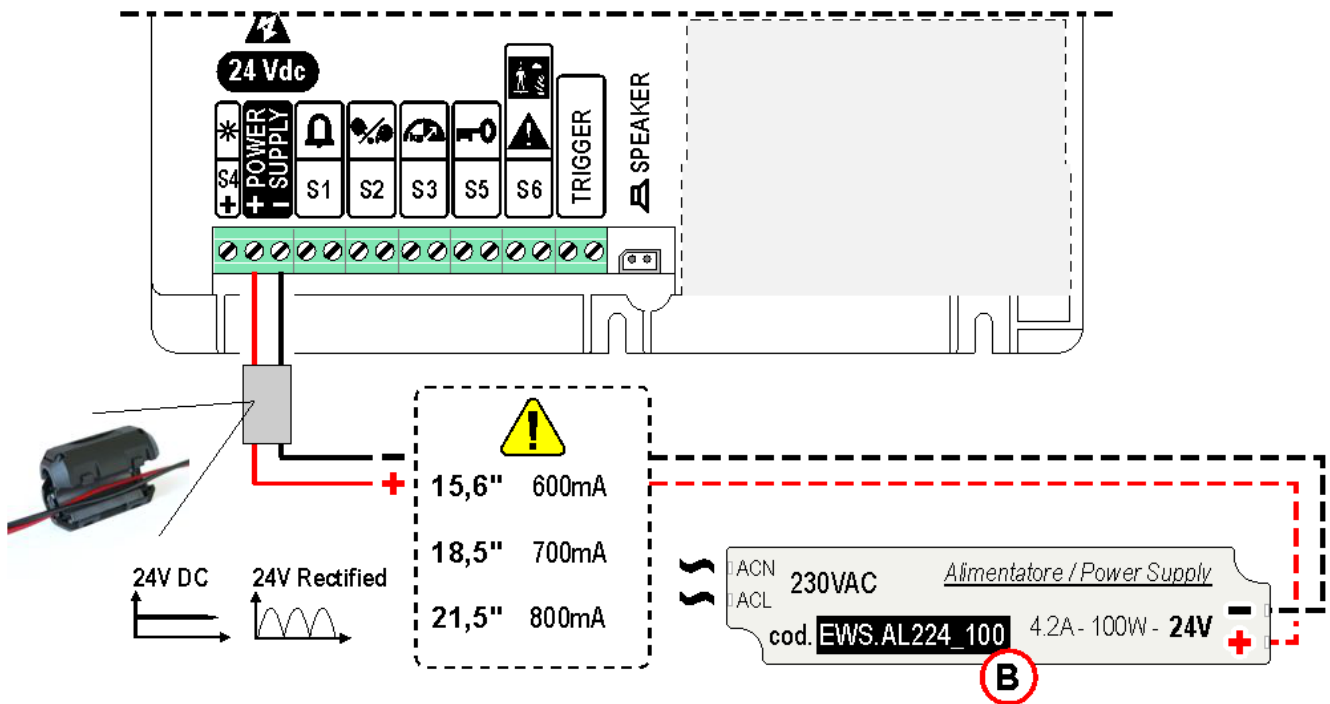
B) – EWS.AL224_100 – Optional power supply (4.2A – 100W – 24V)

⊖ **Pitagora 4.0**

**DMG CAN serial protocol**

*CAR*



**DMG**

**3-wires serial**



24V DC

Pitagora V3

*CAR*



CONTROLLER
V3
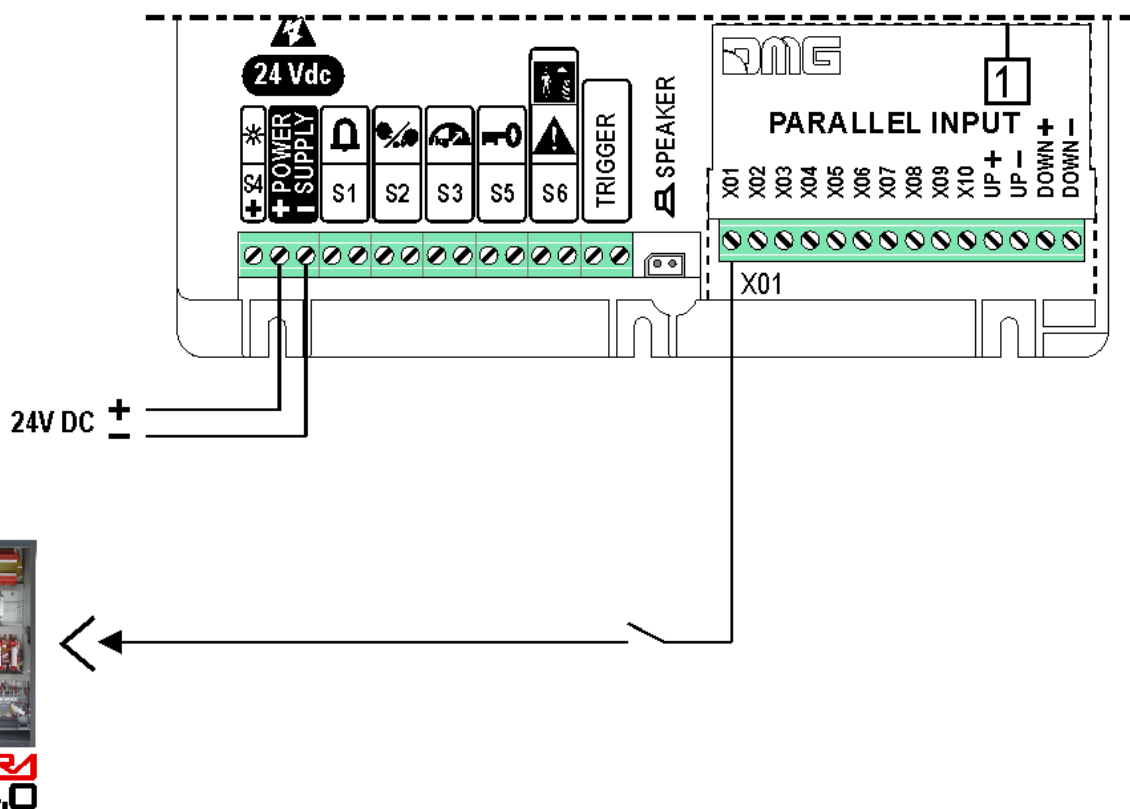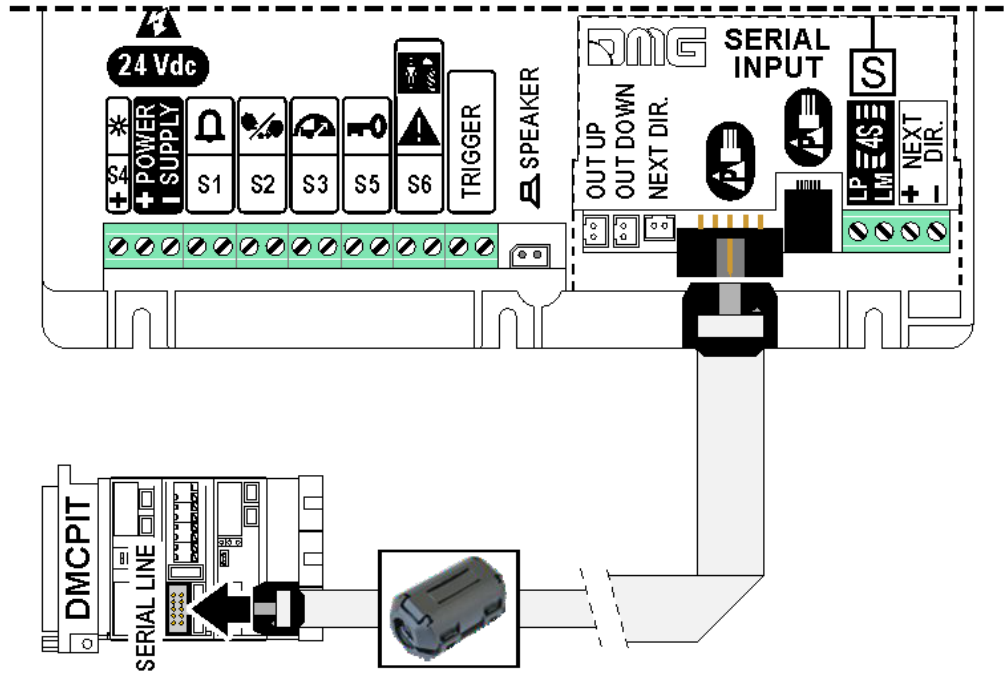
## Encoder DEUM

*For more details please refer to the Encoder DEUM support page*

**DMG CAN serial protocol**



OTHER CONTROLLERS

Encoder **DEUM.M15CAN**

**DMG**

**3-wires serial**



Encoder *DEUM.M15CAN*

OTHER CONTROLLERS

24 Vdc

POWER SUPPLY S4

S1 S2 S3 S5 S6

TRIGGER

SPEAKER

24V DC

PARALLEL INPUT

X01 X02 X03 X04 X05 X06 X07 X08 X09 X10 UP UP DOWN DOWN

X01

**RS485 serial**

*CAR*



Encoder *DEUM.M15SER*

OTHER CONTROLLERS

24 Vdc

POWER SUPPLY S4

S1 S2 S3 S5 S6

TRIGGER

SPEAKER

24V DC

SERIAL INPUT

OUT UP OUT DOWN NEXT DIR.

LP LM NEXT DIR.

LP LM
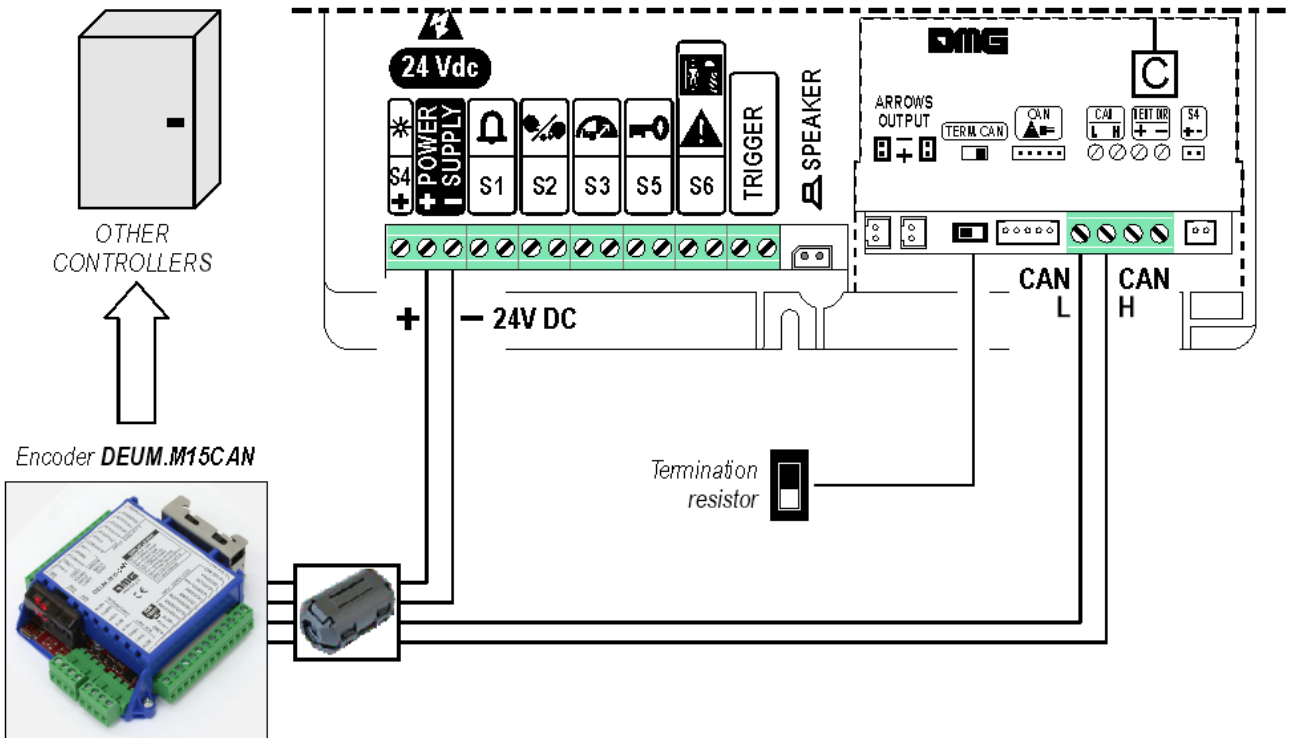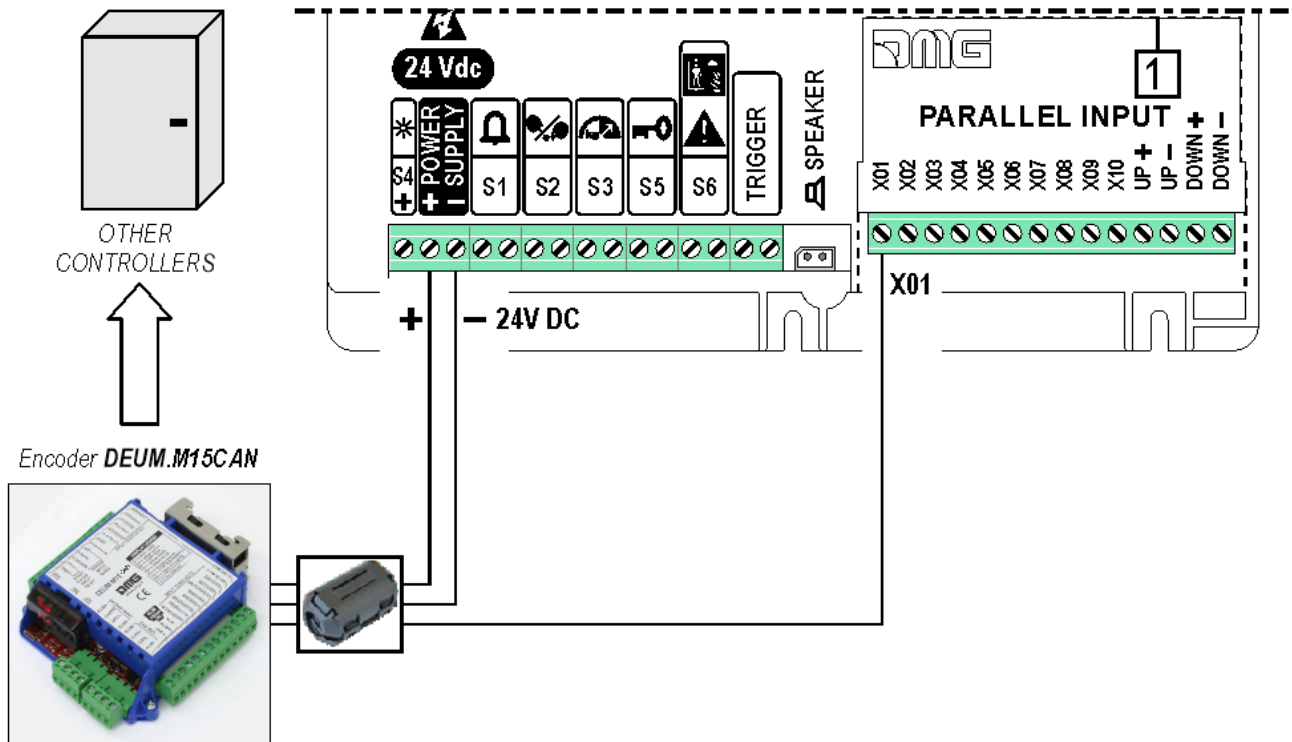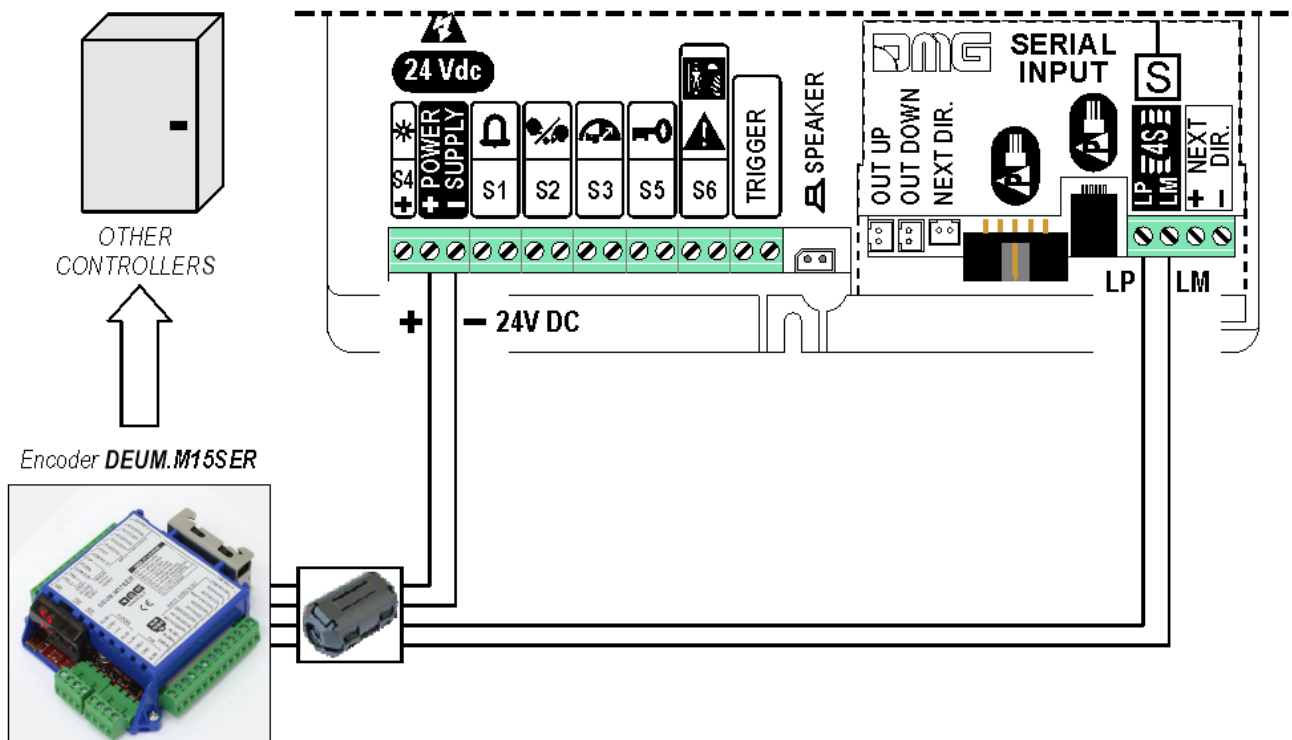
## ⊖ Autonomous Positioning System

The Autonomous Positioning System for the DMG displays of the Raffaello, Giotto and Matisse series, allows to show the lift position and direction independently from the controller. The interface uses the sensors signals installed on the top of elevator car.
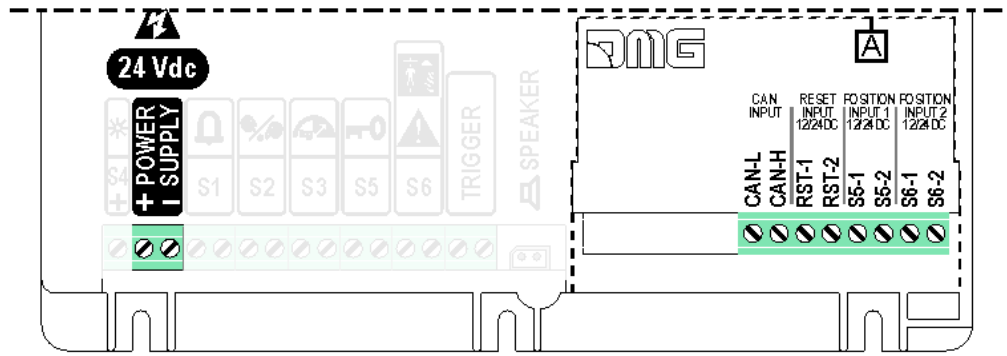
If available, it is possible to use the same position sensors used by the controller.

If NOT availale, you have to install:

• 1 NO magnetic sensor on the cabin + 1 magnet at every floors for counting position.

• 1 NO magnetic sensor on the cabin + 1 magnet at main floor for the RESET.

In this interface there is a CAN BUS serial line for piloting the position indicators of floor.

For all other functions (Voice Synthesizer, gong, indicators, etc.) please refer to the display technical support page.

*Autonomous positioning System*

⊖  **Other Controller**

**Proprietary CAN protocol**
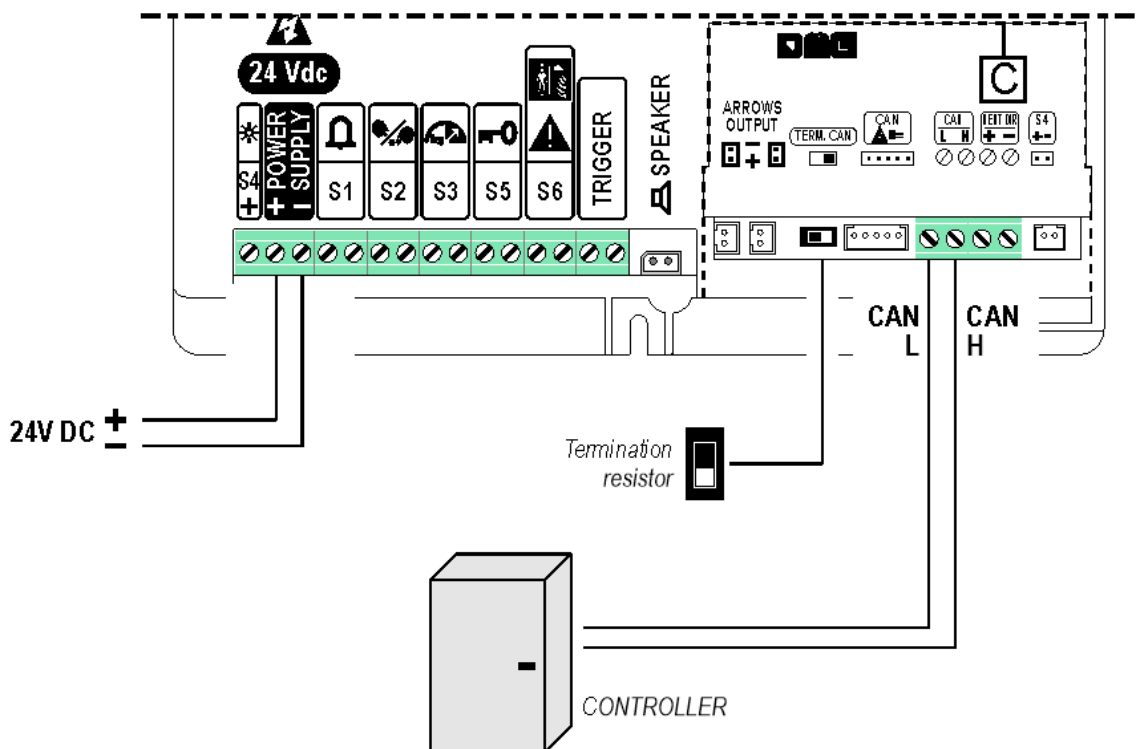


**1 Wire / Floor**
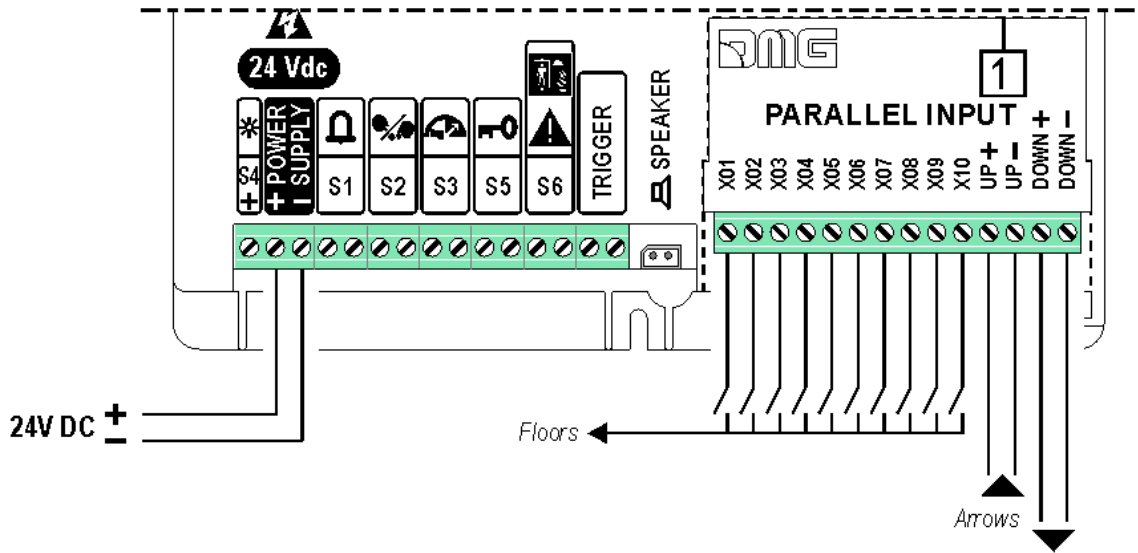
⚠️ 10 floors max.

**1 Wire / Segment**
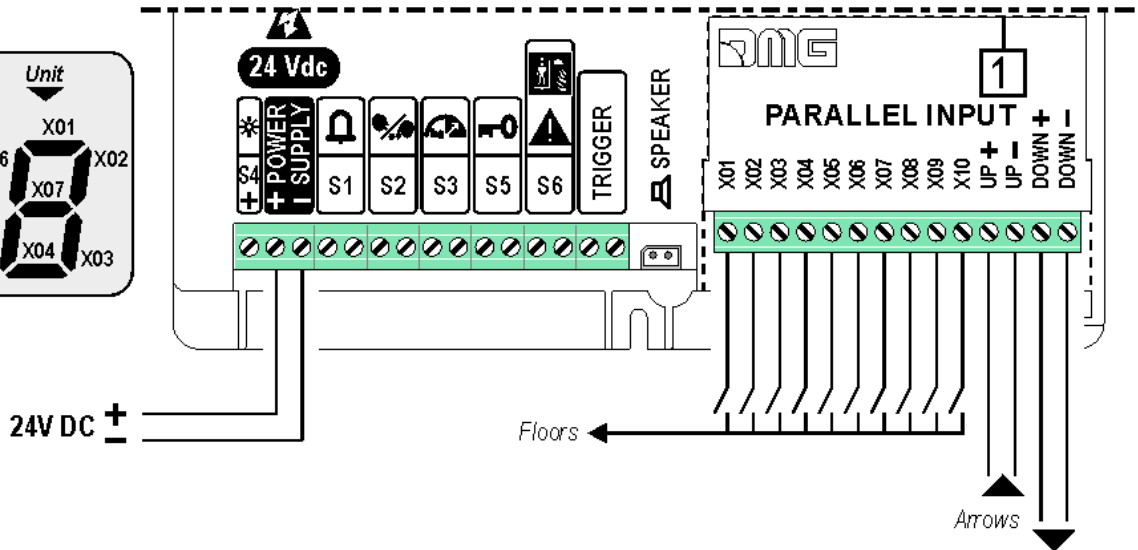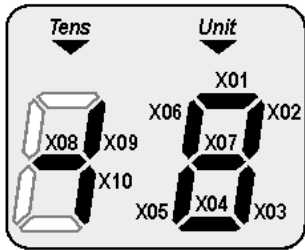


⚠️ 29 floors max. (-9, 0, 19)

**Gray / Binary**
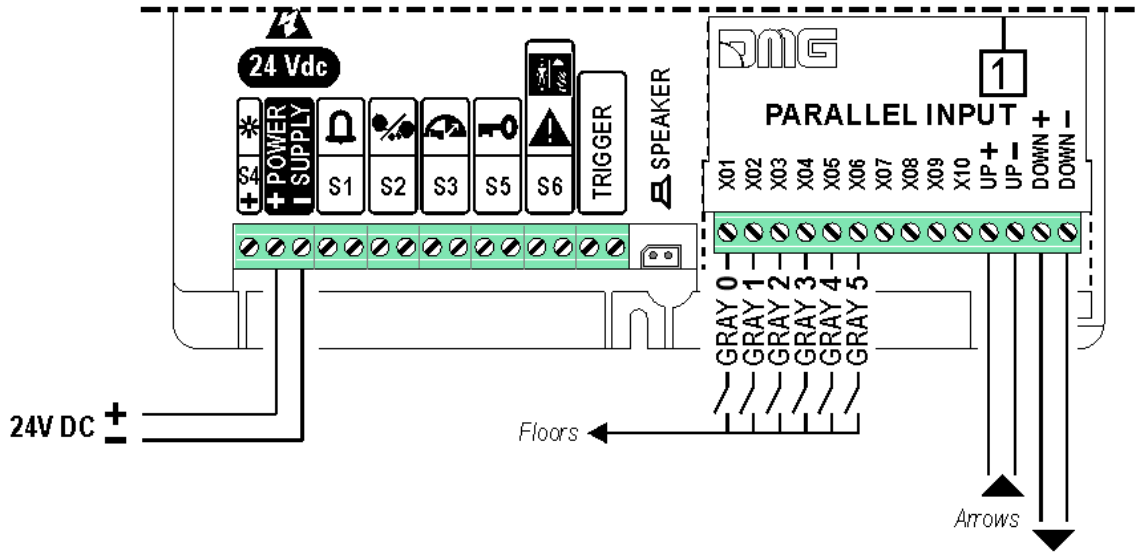
⚠️ 72 floors max. (-9, 0, 62)

**TKE/MEA/Autinor**
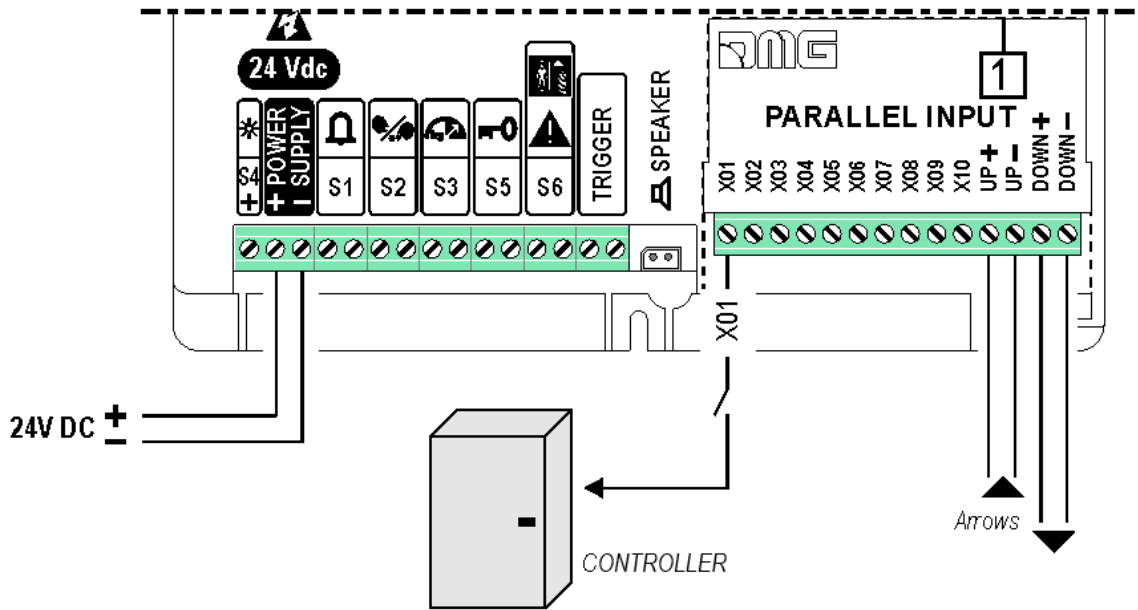


## SERVICE MESSAGE Wiring
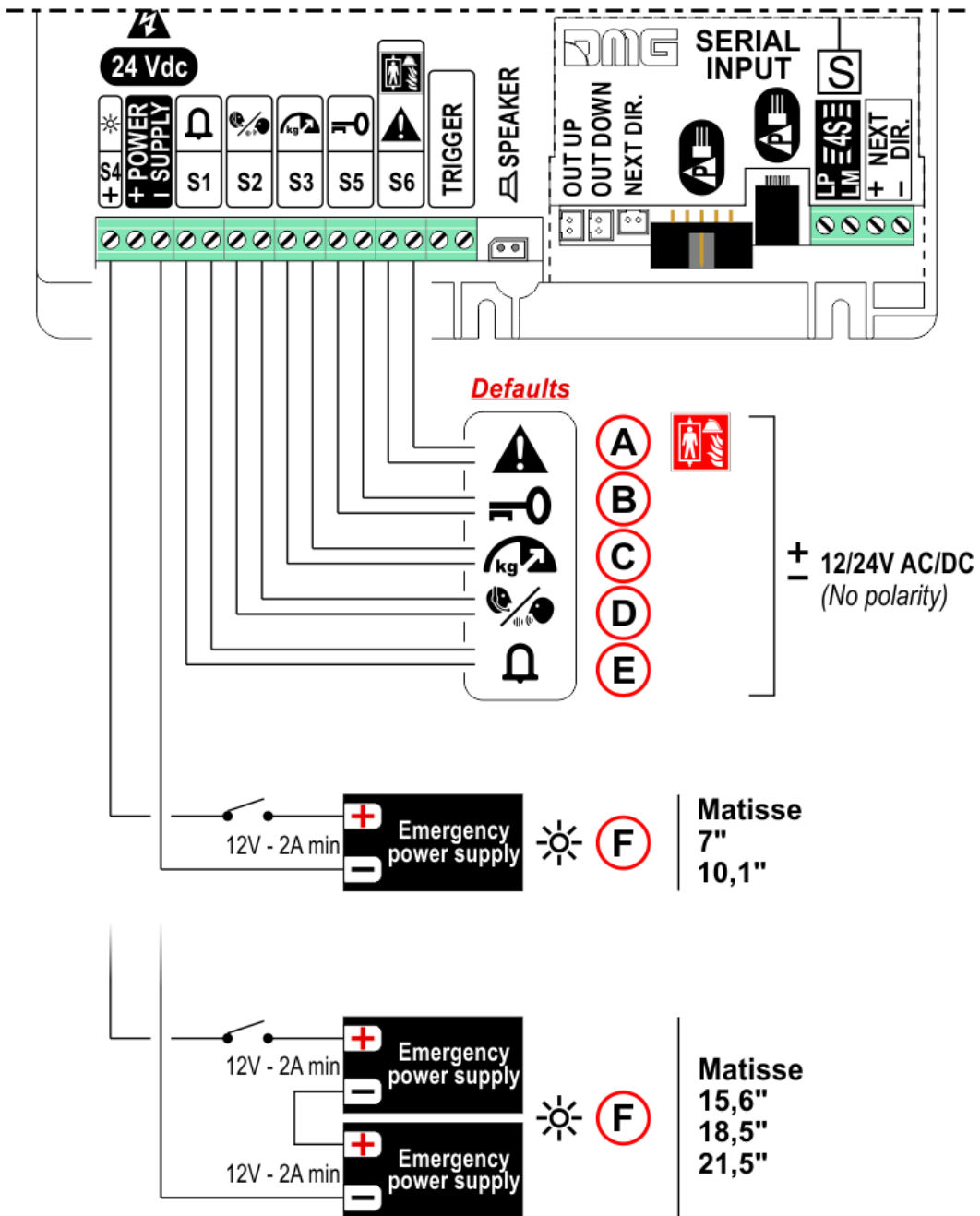
A) – S6 – Emergency Operation / Firefighters operation

B) – S5 – Reservation

C) – S3 – Overload

D) – S2 – Communication established

E) – S1 – Alarm sent

F) – S4 – Antipanic light (Make sure the batteries are charged)

ℹ️ Service messages can also be piloted, through serial bus, by the DMG controller or DEUM.M15 encoder.

## TRIGGER Wiring

This input triggers voice messages on voice sinthesyzer and gong.
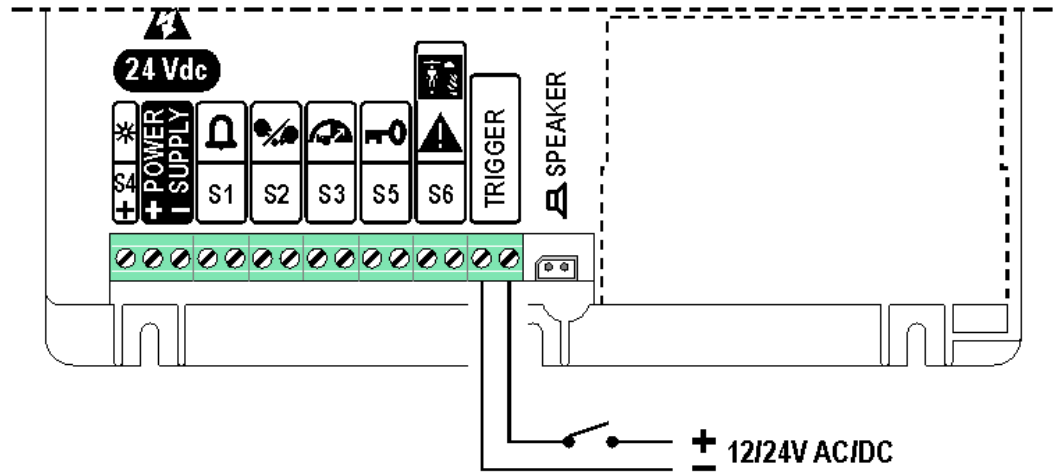


*No polarity*

⚠️ If piloting is driven by DEUM ENCODER, a direct connection between the TRIGGER command and the Encoder is suggested.

## EXTERNAL SPEAKER Wiring
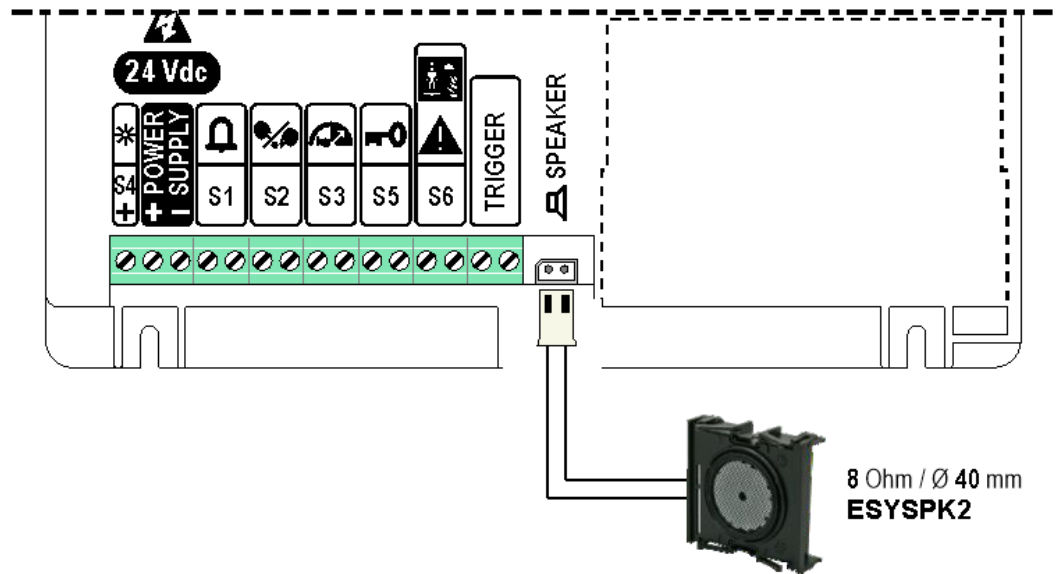


⚠️ External speaker is mandatory to play sound.

Matisse haven't any integrated speaker.

# Advanced Functions

## Network Connections

⊖ **Network Connections**
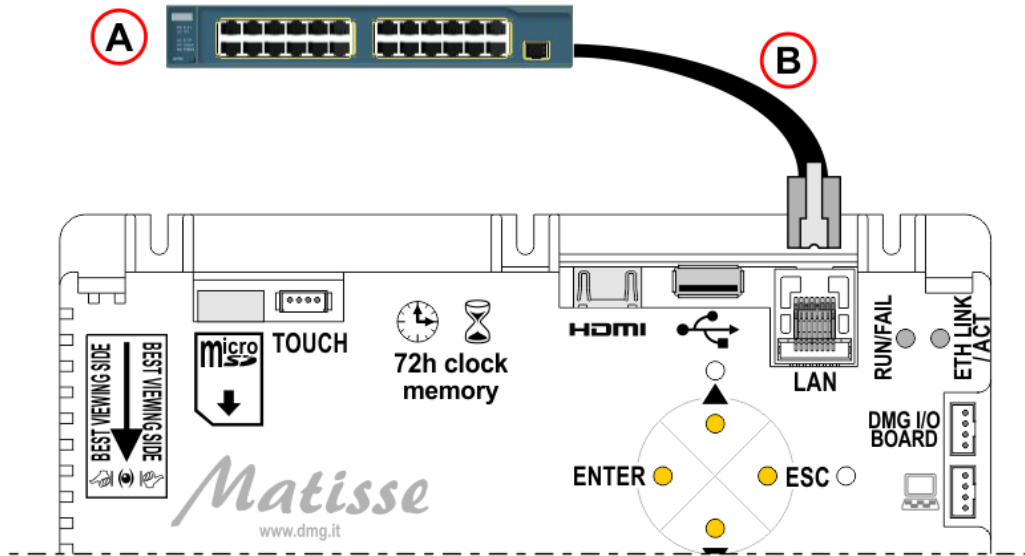
A) – Ethernet Switch/Router, ADSL Modem, 2/3/4G Modem, Wifi Access Point, etc.

B) – RJ45 Ethernet cable.

### DHCP Setting
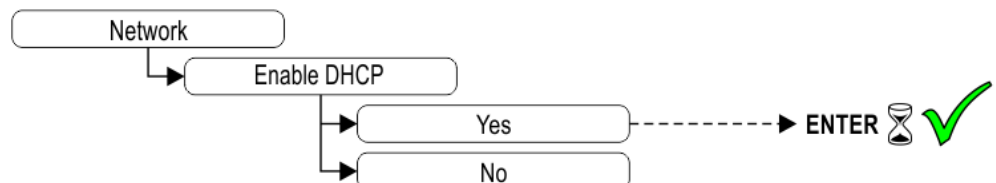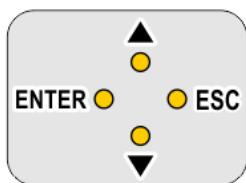


### Network setup (if DHCP disabled)
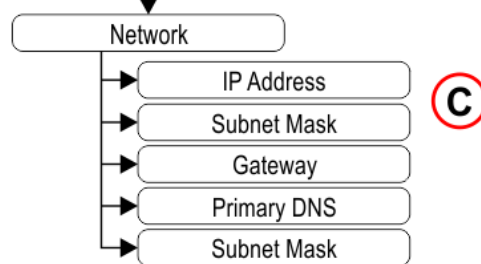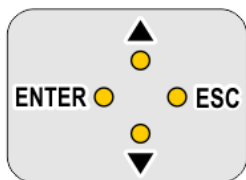


C) – To edit any IP address or subnet, please use the four sub parameters provided for each address.

### Web contents

Use "MosaicONE" online software to add Web based contents like Meteo Widget or Web View Widget.

## Videos & Music playback

⊖ **Videos & Music playback**

MATISSE has 256 MBytes of available user space. You can use a USB Stick to load music and videos on device. Use a micro SD Card to extend device storage space in case large media contents are needed. Please refer to

section "compatible Media Formats" for more details.
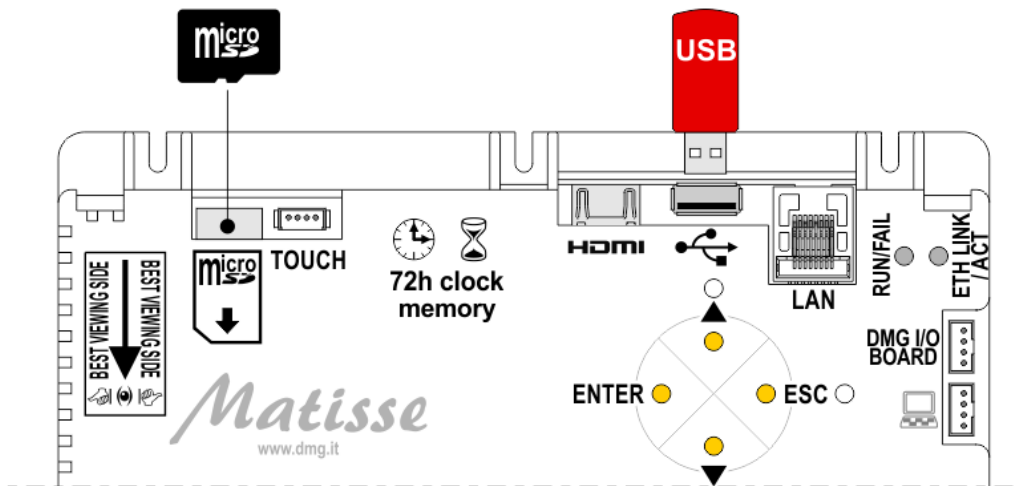


## Loading files and updates with USB



When a USB stick is plugged, the related menu page will be automatically showed.

## Advertisement videos ( + expanding storage)



You can create an initial playlist and expand it creating a folder named "adverts" on the micro SD card. Videos in the folder will be automatically loaded in the playlist.



Use "MosaicONE" online software to add an "Advertisement Video Widget" to your layout.

## Background music ( + expanding storage)



If background music player is enabled, you can expand the playlist memory creating a folder named "music" on the micro SD card. Files in the folder will be automatically loaded in the playlist.
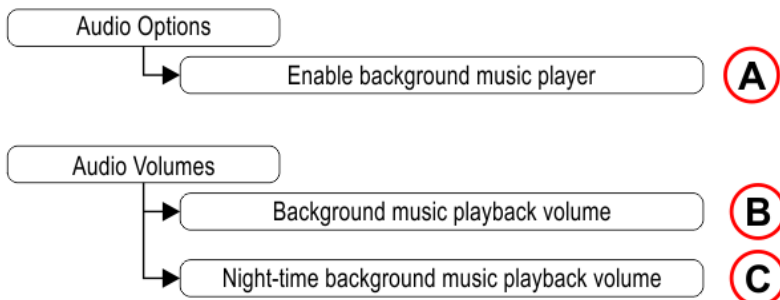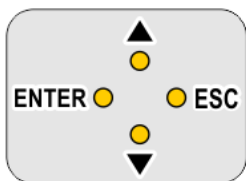
A) – Enable background music player *(see "Setting CARUSO speech synthesizer" section => "advanced features")*.

B) – Background music playback volume *(see "Setting Audio Level" section => "Detailed audio level adjusting")*.

C) – Night-time background music playback volume *(see "Setting Audio Level" section => "Detailed audio level adjusting")*.

# Connecting an external camera

## ⊖ Connecting an external camera

Matisse supports USB cameras if they are Linux UVC compatible. A list of compatible devices may be found on:

http://www.ideasonboard.org/uvc/#devices or refer to DMG help desk.
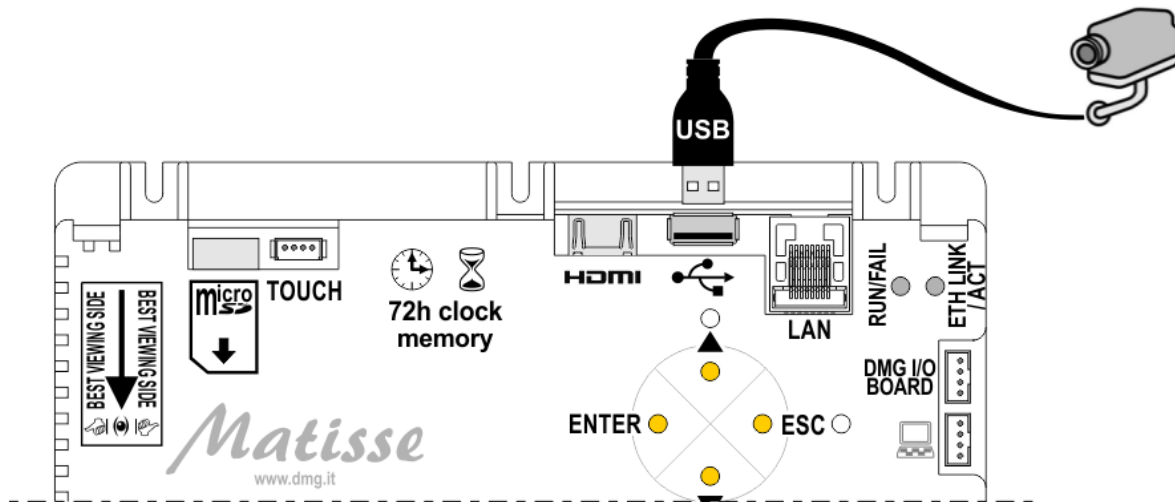


Use "MosaicONE" online software to add a "Local Camera Widget" to your layout.

# Connecting an external monitor

## ⊖ Connecting an external monitor
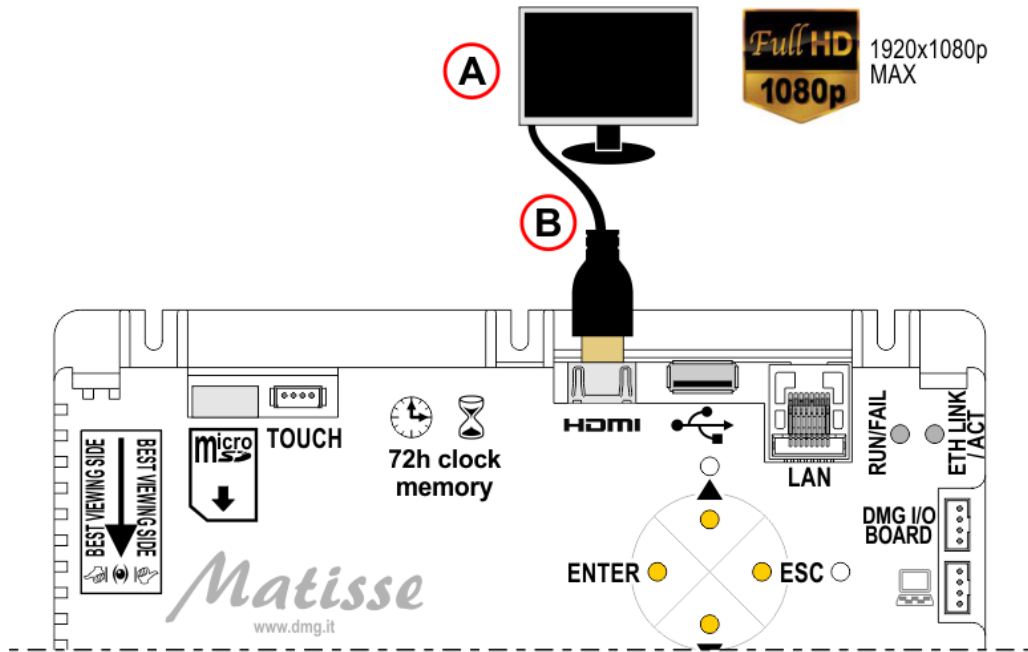
A) – HDMI Monitor/TV

B) – HDMI Cable or HDMI/DVI adapter (NOT supplied)

# Settings



| ENTER ○ | ▲ ○ ○ ▼ | ○ ESC |
|---|---|---|
| *Value setting / Menu entering* | *Browse options at current level* | *Exit / Back* |

*Navigation menu keys*

| Menu item | Menu contents |
|---|---|
| Language | Here you can change menu language on the basis of available translatikons. |
| Encoding | Elevator communication protocol selection. |
| Interface options | Parameters in this window are input protocol specific. |
| Visualizations of floor | In this window you can configure symbols associated to each floor. It is only available for input protocols associated to parallel interface |
| Audio options | Configure all parameters associated to the DMG Caruso integrated speech synthesizer. |
| Audio volumes | Here you can configure all volumes for different types of audio and video content. Every volume is splitted day-time and night-time. In the same window you can confiure the time schedulings. |
| Screen settings | Configure all parameters to set up resolution of an HDMI external monitor (if present). |
| Data & Time settings | Matisse has a built in clock. In the event of a power failure, the board will maintain the parameters relating the date and time for 72h, after which it will be essential to re-enter the parameters manually (if not connected to the network). |
| Network | Here you can configure ethernet network connections. Both DHCP and static addressing are supported. |
| User files | Here you can manage audio and video files loaded in device memory and micro SD card. |
| MosaicONE | Here you can register the device to the "Mosaic ONE" remote management system. |

| USB sticks | Here you can browse files on the USB stick you plugged in and load content on device. |
|---|---|

## Interface options

### ⊖ Setting floor offset
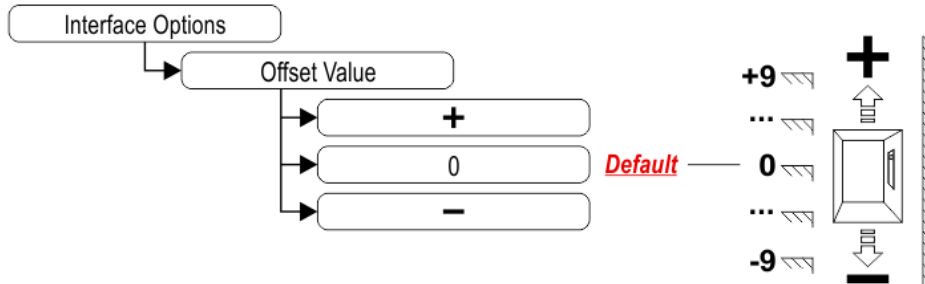


### ⊖ Setting startup screen
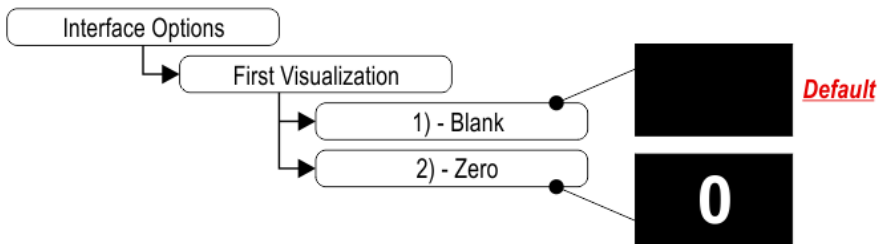


*1) – It does not display any numbers*
*2) – Lowest floor*

### ⊖ Setting common input
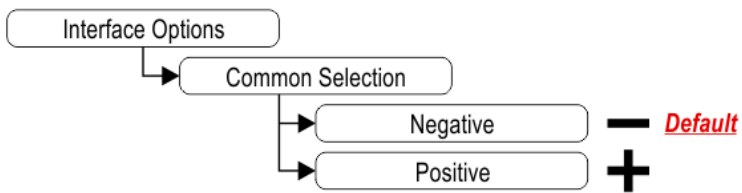


### ⊖ Setting the display delay of floor change

*The display delay helps avoiding visualization errors during floor change.*
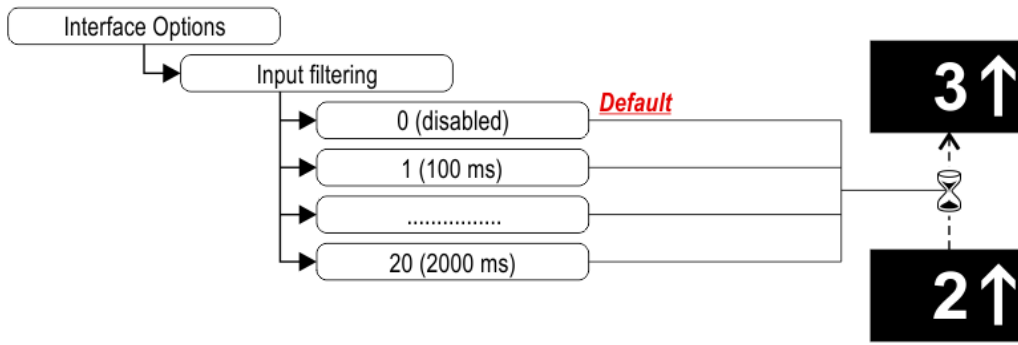
## Visualizations of floor

⊖ **Visualizations of floor**

In this screen you can assign visualization to every floor without the need of bringing the elevator car at floor to be assigned.
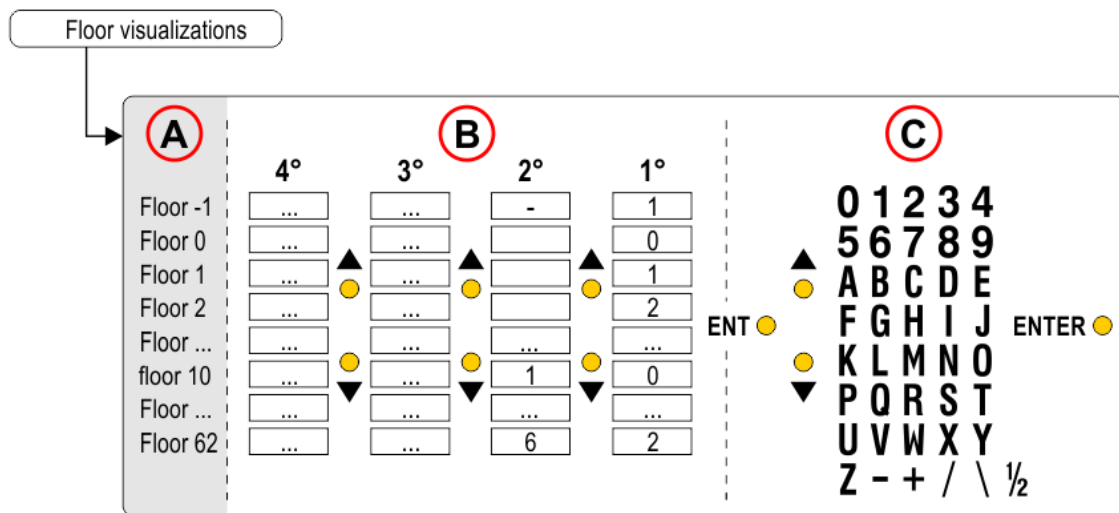


A) – Floor
B) – Symbol (1°, 2°, 3°, 4°)
C) – Available symbols

## Audio options (Setting CARUSO speech synthesizer)

⊖ **Basic programming**
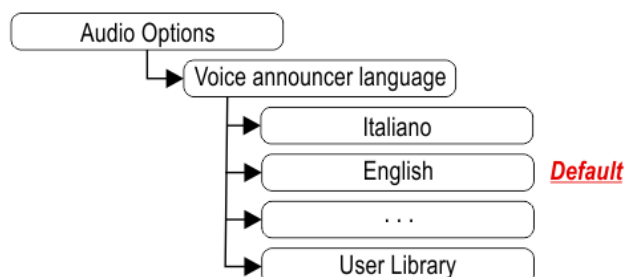


"Floor to message" association is automatic for every language.

## Advanced features

```
┌─────────────────┐
│  Audio Options  │
└─────────────────┘
   ┌─►┌──────────────────────────────────────────┐
   │  │ A) - Play Gong at floor (Triple Gong)    │
   │  └──────────────────────────────────────────┘
   ├─►┌──────────────────────────────────────────┐
   │  │ B) - Direction messages type             │
   │  └──────────────────────────────────────────┘
   ├─►┌──────────────────────────────────────────┐
   │  │ C) - Direction messages timing           │
   │  └──────────────────────────────────────────┘
   ├─►┌────────────────────────────────────────────────┐
   │  │ D) - Voice announcer second language (Automatic) │
   │  └────────────────────────────────────────────────┘
   ├─►┌──────────────────────────────────────────┐
   │  │ E) - Trigger to Floor announcement delay │
   │  └──────────────────────────────────────────┘
   ├─►┌──────────────────────────────────────────┐
   │  │ F) - Enable background music player      │
   │  └──────────────────────────────────────────┘
   ├─►┌──────────────────────────────────────────┐
   │  │ G) - Current floor First Audio message library │
   │  └──────────────────────────────────────────┘
   │     └─►┌────────────────────────────────────────┐
   │        │ G1) Current floor First Audio message file │   (L)
   │        └────────────────────────────────────────┘
   ├─►┌──────────────────────────────────────────────┐
   │  │ H) - Current floor Second Audio message library │
   │  └──────────────────────────────────────────────┘
   │     └─►┌──────────────────────────────────────────────┐
   │        │ H1) - Current floor Second Audio message file │
   │        └──────────────────────────────────────────────┘
   └─►┌──────────────────────────────────────────┐
      │ I) - Restore default audio settings      │
      └──────────────────────────────────────────┘
```

A) – Play Gong at floor (Triple Gong)

B) – Direction messages type

C) – Direction messages timing

D) – Voice announcements second language (Automatic)

*If enabled, the second language message is played after the first.*

E) – Trigger to Floor announcement delay

*Allows you to choose the delay of the message playback.*

F) – Enable background music player

G) – Current floor First Audio message library

G1) – Current floor First Audio message file

H) – Current floor Second Audio message library

H1) – Current floor Second Audio message file

I) – Restore default audio settings

L) – Allows you to modify the messages associated with the floor where the elevator car is currently located.


# Audio volumes

## Adjusting master audio level

Sets the overall device output volume.

```
┌─────────────────┐
│  Audio Volumes  │
└─────────────────┘
   ┌─►┌──────────────────────────────────────┐
   │  │ A) - Master system volume        ☼   │
   │  └──────────────────────────────────────┘
   └─►┌──────────────────────────────────────┐
      │ B) - Night-Time Master system volume ☾ │
      └──────────────────────────────────────┘
         ┌─►┌──────────────┐   🔇
         │  │    0-OFF      │
         │  └──────────────┘
         ├─►┌──────────────┐   🔈
         │  │    1-MIN      │
         │  └──────────────┘
         ├─►┌──────────────┐   🔉
         │  │    . . .      │
         │  └──────────────┘
         └─►┌──────────────┐   🔊  *Default*
            │    10-MAX     │
            └──────────────┘
```

A) – Master system volume
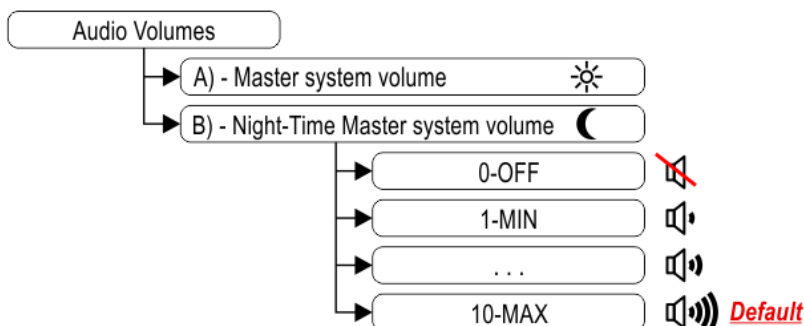
B) – Night-Time Master system volume

## Detailed audio level adjusting

```
┌─────────────────┐
│  Audio Volumes  │
└─────────────────┘
     ├──▶ A) - Voice annuoncements volume              ☼ ┐
     ├──▶ A1) - Night-time voice annuoncements volume  ☾ ┘ (A2)
     ├──▶ B) - Background music playback volume         ☼
     ├──▶ B1) - Night-time background music playback volume  ☾
     ├──▶ C) - Advertisements volume                    ☼
     ├──▶ C1) - Night-time Advertisements volume        ☾
     ├──▶ D) - Signaling videos volume                  ☼
     ├──▶ D1) - Night-time Signaling videos volume      ☾
     ├──▶ E) - Floors video announcement volume         ☼
     └──▶ E1) - Night-time floors video announcement volume  ☾
              ├──▶ 0-OFF       🔇
              ├──▶ 1-MIN       🔈
              ├──▶ . . .       🔉
              └──▶ 10-MAX      🔊  *Default*
```

A) – Voice announcements volume

A1) – Night-time voice announcements volume

A2) – Audio level adjusting of direction, floor and signaling messages.

B) – Background music playback volume

B1) – Night-time background music playback volume

C) – Advertisements volume

C1) – Night-time Advertisements volume

D) – Signaling videos volume

D1) – Night-time Signaling videos volume

E) – Video announcement volume at floors

E1) – Night-time video announcement volume at floors

## Adjusting start / end night time

```
┌─────────────────┐
│  Audio Volumes  │
└─────────────────┘
     ├──▶ A) - Night-time period start time   ☾
     └──▶ B) - Night-time period end time     ☾
              ├──▶ C) -    0 (Midnight)
              ├──▶        ...
              └──▶        23
```
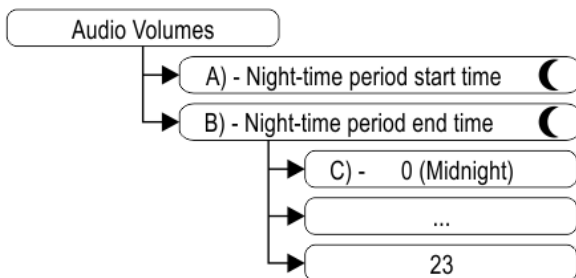
A) – Night-time period start time

B) – Night-time period end time

C) – 0 (Midnight)

# Compatible Media Formats

| Supported Video File Formats | Supported Audio File Formats | Supported Image File Formats | Supported Video Codecs | Supported Audio Codecs |
| --- | --- | --- | --- | --- |
| *.avi | *.mp3 | *.jpeg | MPEG2 | Mp3 |
| *.mts | *.wav | *.jpg | MPEG4 | AACLC |
| *.mpeg | | *.png | H263 | HE-AAC |
| *.mpg | | *.bmp | H264 | WMA10 |
| *.mp4 | | *.gif | Vc1 | FLAC |
| *.3gp | | *.mng | Vp8 | Ogg Vorbis |
| *.mkv | | | MJPEG | |
| *.m4v | | | | |
| *.mov | | | | |

![warning icon]

The device support of a certain video type does not necessarily mean that it can be correctly played. Both codecs used to encode audio and video streams inside the file must be supported.

# Available Graphic Elements

MosaicONE online software allowes customization of graphics.

| Type | Description |
| --- | --- |
| Background | Can be: an image, a sequence of images,an animation (Gif or Mng) or a video. |
| Picture | You can add an unlimited amount of static, animated or scrolling pictures to layout. |
| Text | You can add an unlimited amount of texts to layout. All text graphic features of text are customizable. |
| Signals viewer | You can visualize Signals as icon, text (fixed or scrolling) or both together. You can also associate an entirely dedicated layout to any signal. |
| Position Indicator | Visualization of elevator car position. |
| Direction Indicator | Visualization of elevator car travel direction. |
| Panel | You can create colored surfaces with configurable transparency. |
| Clock | You can add an unlimited amount of clocks with different graphics and time zones. The clock automatically switches to summer time. |
| Date and Time | You can add an unlimited amount of date and time in text format. |
| Video Advertise | You can create a rectangular window where a video playlist will be reproduced continously. |

| | |
|---|---|
| Video Signals | You can create a rectangular window where a signal associated video will be played upon signal activation. |
| Video at floor | You can create a rectangular window where a floor associated video will be played. Reproduction is triggered by when the cabin stops at associated floor (Trigger signal active). |
| Local Camera | You can create a rectangular window where an USB camera video stream will be rendered. |
| Remote Camera | You can create a rectangular window where a IP camera video stream will be rendered |
| HTML viewer (*1) | You can create rectangular window where arbitrary HTML contents will be rendered. |
| Meteo (*2) | Widget shows meteo forecasts for current and next day in a specified city (source yahoo meteo). |
| Browser (*2) | You can create a rectangular surfaces where web pages will be visualized with autoscrolling. |

(*1) – Web Internet connection might be necessary if web data sources are used.

(*2) – Internet connection required.

# Pairing with MosaicONE software

ℹ️ To see the procedure for pairing a Matisse / DSD device with the MOSAICONE cloud software, visit the link below
Procedure to pairing Matisse/DSD with MOSAICONE

# Datasheet

| | | |
|---|---|---|
| **Dimensions** | 7" | 177,8 x 144 mm (H 20,7 mm) |
| | 10,1" | 241 x 169 mm mm (H 35,5 mm) |
| | 15,6" | 232,5 x 430,5 mm (H 44 mm) |
| | 15,6" (EN81-71) | 271 x 465 mm (H 49 mm) |
| | 18,5" | 284 x 497,5 mm (H 49 mm) |
| | 21,5" | 324,5 x 564,5 mm (H 49 mm) |
| **Screen (Viewable area)** | 7" | 155 x 94 mm • 800 x 480 pixel • 65.000 colors |
| | 10,1" | 222,7 x 125,3 mm • 1024 x 600 pixel • 65.000 colors |
| | 15,6" | 193,6 x 334,2 mm • 1920 x 1080 pixel • 65.000 colors |
| | 18,5" | 230 x 409 mm • 1920 x 1080 pixel • 65.000 colors |
| | 21,5" | 268,1 x 476,6 mm • 1920 x 1080 pixel • 65.000 colors |
| **Power supply (position input)** | | 7"/10" = 24V DC ±10% (*) • 15,6"/18,5"/21,5" = 24V DC ±10%<br>(*) Only 24V rms ±10% if a rectified only (unregulated) voltage source is used.<br>USB: +5V (max 5.25V) |
| **Absorption** | | DISPLAY |

| | | 24Vdc: Max 270mA (7") • Max 330mA (10,1") • Max 150mA (Matisse CPU)<br>Max 600mA (15,6") • Max 700mA (18,5") • Max 800mA (21,5")<br>ANTIPANIC LIGHT<br>12Vdc: Max 380mA (7") • Max 440mA (10,1")<br>24Vdc: Max 240mA (7") • Max 260mA (10,1") |
|---|---|---|
| **Indicators inputs** | | S1 / S2 / S3 / S4 / S5 / TRIGGER:<br>12÷24V DC ±10% (opto-isolated)<br>impedance = 3Kohm |
| **Operating temperature** | | -20°C ÷ +60°C |
| **Hardware specifications** | RAM | 1 GByte DDR3 |
| | Storage | 300 Mbyte available internal storage + SD Card |
| | On board connectivity | Ethernet: 10/100/1000 Mbit/s; 1 x USB 2.0 Host; 1 HDMI 1.4 |
| | Audio | 1W on 8 Ohm Output speaker (External speaker is mandatory) |
| | Other features | 1 x Emergency/Battery supply input; Real Time Clock<br>4 Buttons UI navigation; |

# Video Tutorial
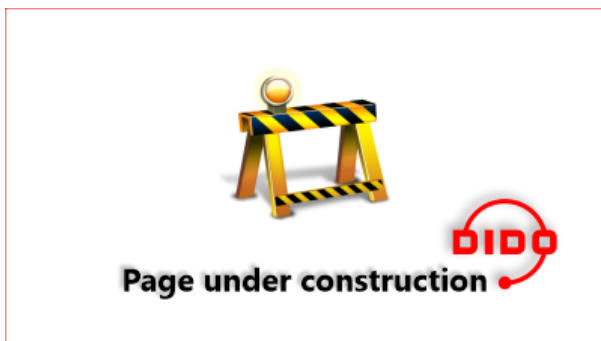


# Software

Click here to be redirect

# Firmware update
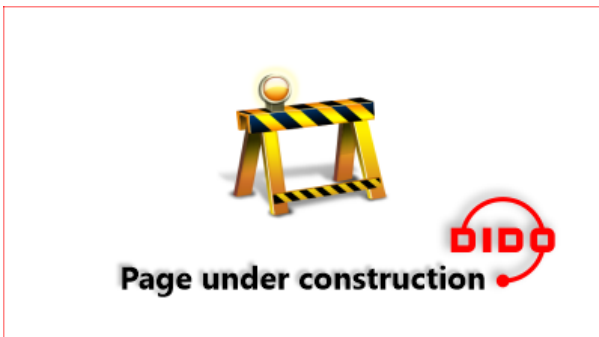


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