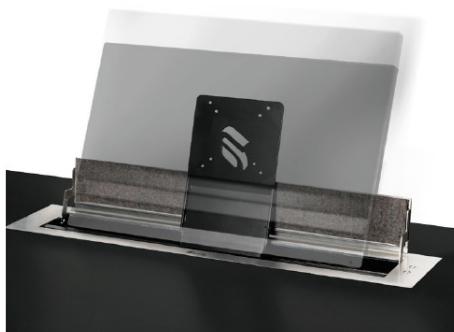




## User Guide



## ULS

Universal lift system for monitors

Enhancing communication through technology

----- Trusted since 1985 -----



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## **WELCOME**

Thank you for purchasing an Albiral product.

Our product range has been designed for an easy installation and for a maximum reliability.

Please, read this installation and operating instructions carefully and keep them in a safe place for future reference.

We remain at your entire disposal if you have any suggestions that would help us improve our products.

**Henrik Holm**

General Manager

hholm@albiral.com

## ABOUT US

### The Company

Since its registration as a brand in February 1985, Albiral has been providing professional solutions based on different technologies.

Today, the brand offers a wide range of products with proven robustness and reliability, advanced features and a contemporary and customisable design with multiple applications:

- Interpreter booths
- Reception and welcome areas
- Auditoriums
- Meeting rooms
- Conference rooms
- Crisis rooms
- Control rooms
- Training rooms
- Security
- Digital Signage

Quality, performance, durability and experience are the brand values.

## EC REGULATIONS AND SECURITY



**ATTENTION:** Do not disassemble or modify the device in any way. This symbol warns of the presence of dangerous un-insulated voltages inside some of the components, of sufficient magnitude to expose people to risk of electronic shock.



This symbol draws attention to important use and maintenance instructions in the manual that accompanies the unit.



This symbol indicates that the equipment conforms to the norms established by the European Community.

## SAFETY INSTRUCTIONS

### Plugs

- Do not dismantle any part of the monitor power connector.
- Disconnect the power plug from the AC outlet when the monitor is not going to be used for an indefinite period of time.

### Power and extensions cords

- Use the appropriate power cord with the correct plug type.
- Do not overload wall outlets or power cords.
- Make sure the total ampere passed through an extension cord does not exceed the maximum allowed by the cable used.
- Do not place anything on the power cord.
- Do not locate this product where a person may walk or trip over the cord.

## SAFETY INSTRUCTIONS



Wiring connected to hazardous voltage requires installation by qualified personnel or the use of ready-made flexible cables.



For your security, your equipment must be connected to an electrical outlet with grounding connection protection.

Since the plug is used to disconnect the device, the operating electrical outlet must be in an easily accessible place.

### Environment

- Install the equipment on an elevated, flat surface.
- Install the equipment in a ventilated area.
- Avoid exposing the equipment to:
  - Rain or water
  - Excessive heat, cold or humidity
  - Area exposed to direct sunlight
  - Dirty areas
  - Equipment generating strong magnetic fields
- Avoid placing open containers of liquid, near the equipment.
- Keep a minimum distance of 30 mm in order to have good ventilation.
- Never place above the device any sources of flames such as lighted candles, etc.
- If you are using the device in extreme weather conditions and/or tropical climates, the equipment should be installed in a room which ensures a reasonable level of temperature and humidity.
- To prevent damage the equipment must be firmly anchored to the surface, as shown on the installation instructions.

## SYSTEM DESCRIPTION

### Applications

ULS is a Universal Lift System that allows the transformation of standard screens into a retractable monitor that can be integrated sleekly in conference rooms, auditoriums or training rooms. Specially designed to fit standard monitors, ULS helps create collaborative and flexible learning spaces, increasing the audience immersive engagement.

This automated lift system becomes a smart complete solution providing a screen to review and analyse documents closely, data or presentations during lectures or conferences in a convenient and easy way.

The elegance of the ULS patented automated movements contributes to set-up a distinctive purpose-built environment and the monitors can be stored safely inside the table when not needed, leaving the surface clean and free.

ULS is compatible with most PC screens and monitor brands on the market. This motorised lift system can be used for flat screens between 15" to 24". The support to attach the monitor to the lift, follows the measurements established in the VESA standard mounting system, so a perfect adjustment is absolutely guaranteed.

### Features

- Reliable and durable motorised lift system for third party monitors.
- Patented system to raise/retract and tilt the device with only one engine.
- 20° automatic tilt.
- Smooth and silent mechanism.
- VESA standard mounting system.
- Safety system for user protection.
- Remote (RS-422) or local control.
- Up/Down buttons integrated on the cover plate.
- USB for firmware upgrade.
- Available for monitors between 15" to 24".



# SYSTEM DESCRIPTION

## Models

### ULS1

Universal patented single motor system with up-table cover plate in brushed stainless steel for standard VESA monitors from 15" to 19". Maximum monitor dimensions 475x305x58 mm. if connectivity is placed below the monitor. Maximum monitor dimensions 475x305x38 mm. if connectivity is placed at the back of the monitor.

### ULS2

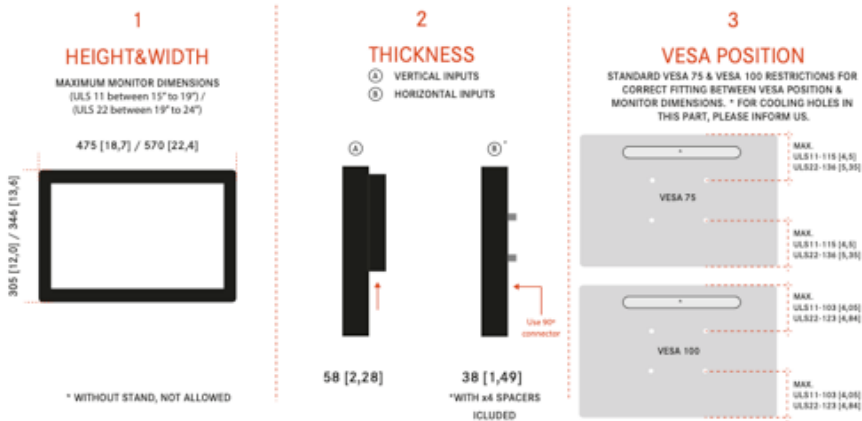
Universal patented single motor system with up-table cover plate in brushed stainless steel for standard VESA monitors from 19" to 24". Maximum monitor dimensions 570x346x58 mm. if connectivity is placed below the monitor. Maximum monitor dimensions 570x346x38 mm. if connectivity is placed at the back of the monitor.



Universal VESA monitor lift retractable system with 20° of inclination, to be integrated into meeting and conference room tables

## Universal Lift System

Ref. ULS monitor model guide



## SYSTEM DESCRIPTION

### Box Contents

Before the installation of your lift system, please check the contents of the shipping box, it must contain the following items:

- User manual
- Mounting guide
- Power supply 100-240Vac, 50-60Hz. Output 12V

### AHNET ADDRESS

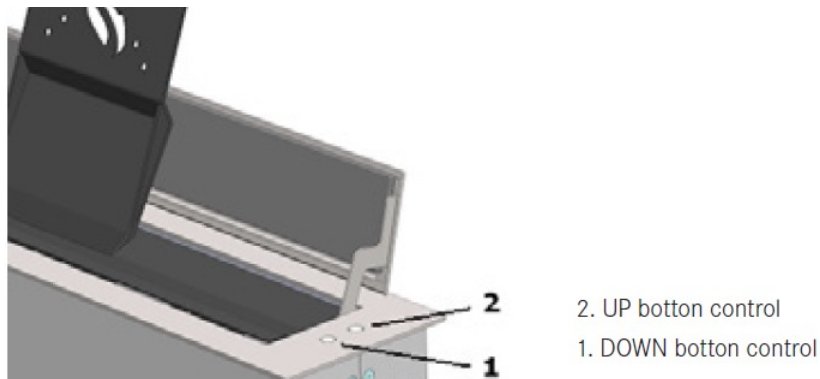
The Interactive Setup System (ISD) is located on the housing's front plate, under the unit. A LCD screen will allow to set-up the unit address on the RS422 AHnet:



- Push OK
- Change the unit address using the UP / DOWN buttons
- Push OK to save the new AHnet address

## CONTROLS

There are two buttons on the cover plate to control the up and down lift movements of the device.



### 1. Retracting the ULS

It is recommended that no objects or any part of the body are on top of the cover plate that could obstruct the retracting movement.

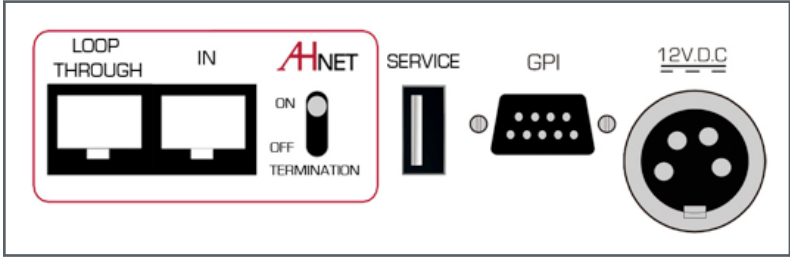
To retract the unit, press the front button (1) on the right hand side of the cover plate.

### 2. Raising the ULS

It is recommended that no objects or any part of the body are on top of the cover plate that could obstruct the raising movement.

To raise the unit, press the rear button (2) on the right hand side of the cover plate.

## INPUT CONNECTORS



**12V D.C.:** Power supply input connector. XLR-4 connector.

- 1,2: Ground
- 3,4: 12Vdc

**GPI:** Monitor external contact close control. SubD9 female.

1. GPI1 +
  2. GPI1 -
  3. GPI2 +
  4. GPI2 -
  5. GPI3 -
  6. GPI3 +
  7. N.C.
  8. +12Vdc (600mA max.)
  9. Ground:
- Use GPI1 (1:12Vdc, 2: Ground) to open the device
  - Use GPI3 (6:12Vdc, 5: Ground) to close the device

**Service:** Used for firmware upgrade.

**AHnet:** RJ45 CAT5 connector for addressable RS422 control. There is a loop through connector to use as signal RS422 output. Up to 30 monitors can be connected on the same RS422 bus.

**Termination:** Activate (ON) the termination ONLY, on the last device of the RS422 bus.

# AHNET PROTOCOL

## Communications protocol

COMMUNICATION	RS422
CONNECTION	RJ45
WIRING	CAT-5

## Speed and configuration

BAUD RATE	38400
DATA BITS	8
PARITY	NONE
STOP BITS	1

## Wiring Diagram

1. Data TX +
2. Data TX –
3. Data RX +
4. NC
5. NC
6. Data RX –
7. NC
8. NC



RJ-45

## Connection

PINS 1 & 2	The units respond
PINS 3 & 6	The units receive instructions

Protocol to control the monitor by addressable RS422 bus.  
You can connect up to 30 monitors on the same RS422 bus.  
You can use AH Interface ETR to control the RS422 bus.  
The units should have a set address and the address must start by 1.  
Maximum cable length between ends should not exceed 500 m/1640 ft.

# AHNET PROTOCOL

## AHnet protocol

Using 5 bytes communication:

BYTE 0	START BYTE
BYTE 1	ADDRESS BYTE
BYTE 2	COMMAND BYTE
BYTE 3	VALUE 1
BYTE 4	VALUE 2

## Commands

COMMAND	DESCRIPTION	RESPONSE
FA XX 01 01 00	GO UP	FB XX 01 01 00
FA XX 01 00 00	GO DOWN	FB XX 01 00 00
FA XX 04 01 00	BUTTON LOCK	FB XX 04 01 00
FA XX 04 00 00	BUTTON UNLOCK	FB XX 04 00 00
FA XX 14 00 00	INQUIRY CONTROL BYTE	FB XX 14 CB1 CB2

XX      Number of the monitor address. Up to 30 monitors for each RS422 BUS

CB1     Response in 8 bites of the monitor status

CB2     Response in 8 bites of the monitor status

# AHNET PROTOCOL

## CB1

BITE	7	6	5	4	3	2	1	0
CLOSED			1	1	0	1		
OPEN			0	1	0	1		
PROTECTION STOP								1
UNIT OK								0

## CB2

BITE	7	6	5	4	3	2	1	0
BUTTON LOCK								1
BUTTON UNLOCK								0

To send an order to all the devices, you must use the address:  
F9 Hex. (Byte1)

In this case, the units do not send a reply.

## INFORMATION ON DISPOSAL FOR USERS OF WASTE ELECTRICAL & ELECTRONIC EQUIPMENT



This symbol on the products and/or accompanying documents means that used electrical and electronic products should not be mixed with general household waste.

For proper treatment, recovery and recycling, please take these products to the designated collection points, where they will be accepted on a free of charge basis. Alternatively in some countries, you may be able to return your products to your local retailer upon the purchase of an equivalent new product.

Disposing of this product correctly will help save valuable resources and prevent any potential negative effects on human health and the environment, which could otherwise arise from inappropriate waste handling. Please contact your local authority for further details of your nearest designated collection point.

Penalties may be applicable for incorrect disposal of this waste, in accordance with national legislation.

### **For business users in the European Union**

If you wish to discard electrical and electronic equipment, please contact your dealer or supplier for further information.

### **Information on disposal in countries outside the European Union**

This symbol is only valid in the European Union. If you wish to discard this product, please contact your local authorities or dealer and ask for the correct method of disposal.



## WARRANTY TERMS AND CONDITIONS

Albiral Display Solutions warrants this product against manufacturing defects and workmanship for a period of five (5) years from the date of purchase, subject to the conditions below.

1. Mechanical parts: The engine and the product's mechanical parts are warranted against manufacturing defects and workmanship for a period of five (5) years from the date of purchase.
2. Inverter, controller, electrical, electronic boards, accessories and power supply are warranted against manufacturing defects and workmanship for a period of two (2) years from the date of purchase.
3. Labour costs: Albiral Display Solutions covers the labour costs to replace any defective parts during the validity of this warranty.
4. Transport costs:
  - 5.1. In the case that a manufacturing defect occurs within 90 days after the purchase date, both freight and insurance costs will be paid by Albiral Display Solutions.

Although Albiral Display Solutions S.L. pays for freight and insurance costs, Albiral Displays Solutions will not be responsible for any damages caused by the transportation of the goods if the customer does not inform in writing when receiving the goods.

- 5.2. After 90 days of the purchase date, the beneficiary of the warranty will pay both freight and insurance costs.

Albiral Display Solutions S.L. will not be responsible for any damages caused by transportation, when this one is paid by the customer.

5. This warranty does not cover the labour costs of handling, diagnose, removal, replacement, reinstall and/or program any product.

## WARRANTY TERMS AND CONDITIONS

6. This warranty does not apply if the fault has been caused by misuse, improper handling, electrical or mechanical abuse, abnormal operation conditions, non-authorised modifications, and inadequate transportation or as a result of atmospheric phenomenons.
7. The warranty is not valid if people other than authorised Service Centre have handled the product and if the product has been manipulated or warranty seals are removed or manipulated.
8. The beneficiary of the warranty will have to return the product with the original packaging to warranty there are no damages during transportation.
9. The warranty is not valid if the beneficiary of the warranty does not include a RMA form and a copy of the purchasing invoice.

Please note that laws vary from country to country, and the same provisions of this warranty may not apply to you.

If you have any doubts concerning the terms of this warranty, please contact:

[business@albiral.com](mailto:business@albiral.com)

+34 938 502 376

10.



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## Patents

MU17180ES00	P27178RUPC
MU17301ES00	P27178USPC
MU17322ES00	P27284DEEP
MU17413ES00	P27284EPPC
MU17445ES00	P27284ESEP
MU17854ES00	P27284GBEP
MU17868DEPC	P27284RUPC
MU17868RUPC	P27284USPC
P24821DEEP	P27715ESEP
P24821ESEP	P28089DEEP
P24821GBEP	P28089ESEP
P24821USPC	P28089ITEP
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