



# User Guide



## DynamicCourtesyBox

Motorised courtesy boxes for furniture integration

Technology Serving Desing

Danish craftsmanship  
Mediterranean soul

  
ARTHUR HOLM



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## **WELCOME**

Thank you very much for purchasing an Arthur Holm product.

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

We remain at your entire disposal if you have any suggestions.

### **Henrik Holm**

General Manager

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## **ABOUT US**

### **The Company**

Arthur Holm has its origins in the Danish furniture designer Jorgen Alex Jensen, who was active during the sixties and the seventies. His design inspiration and his concept of ergonomics have been continued by his family, who is the design force behind Arthur Holm product range. The result of combining Scandinavian design tradition with Mediterranean creativity, flexibility and emotion is a wide product range built on more than 25 years of craftsmanship.

Arthur Holm offers a professional product range where tomorrow's technology is shaped into valued materials with design flexibility and customisation, specially created to enhance communication in reception, collaboration, conference and meeting areas.

### **The art of customisation**

Arthur Holm offers a range of ingenious products whose designs are based on quality materials and the latest technology. Products which endow meeting and conference rooms with silent, ergonomic, innovative and aesthetic solutions that integrate into the furniture, hang from the walls as works of art or are used as interactive points of information.

### **The world of Arthur Holm**

Arthur Holm offers a selection of unique, elegant, versatile, flexible and ergonomic products that are being used in meeting and conference rooms, reception areas, auditoriums and public zones of leading companies throughout the world.

The numbers speak for themselves! We currently own 33 product patents, have presence in over 45 countries with products and solutions in more than 25,000 installations.

It will be our pleasure to work with you, designing your unique and personalised environment. Our broadcast electronic engineers will provide the latest technology while our design team will offer you the most exclusive appearance.

Our team puts its heart, passion and pride in all our designs.

## 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.



This symbol indicates D.C. current.

## SAFETY INSTRUCTIONS

### Plugs

- Do not dismantle any part of the device power connector.
- Disconnect the power plug from the AC outlet when the device 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 a 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.
- The power connector must be easily accessible

## 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 in the installation instructions.

# SYSTEM DESCRIPTION

## General

The CourtesyBox is an outstanding motorised solution to hide different items in the tables, keeping a clean surface. Expect the unexpected with the CourtesyBox for water and glasses or as a tissue box. The CourtesyBox can be controlled locally or remotely through R422 and the open/close button can be disabled or locked.

The CourtesyBox can also be daisy chained with all the rest of Arthur Holm motorised products using CAT6 cables for control. The Courtesy Box is created to be installed in horizontal surfaces of furniture. When the hatch is closed, it leaves the desk free of any obtrusive elements.

## Highlights

- Motorised housing to hide different items
- Maintenance free
- Personalised finishes
- Control buttons on cover plate
- Easy installation
- Compact, space optimising and elegant solution
- Silent, reliable and durable solution
- Serial control and remote diagnosis



# SYSTEM DESCRIPTION

## Available Models

MODEL	DESCRIPTION
AHCBB	Motorised enclosure for bottles and glasses. Brushed stainless steel cover plate with a push button for open and close and Control: AHnet, RS-422, AHlink.
AHCBT	Motorised enclosure for tissues. Brushed stainless steel cover plate with a push button for open and close and Controls: AHnet, RS-422, AHlink.

## Box Contents

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

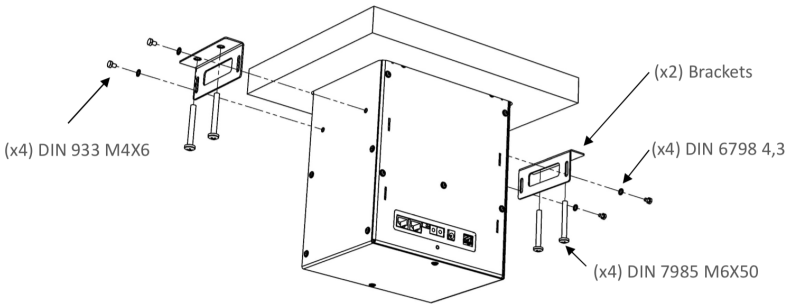
- Courtesy box unit
- Power cord
- Power supply 100-240Vac, 50-60Hz. Output 12V
- User's Guide

**Important note:** This device can only work with the power supply included in the shipping box. This power supply can not be replaced by any other rather than the original one.

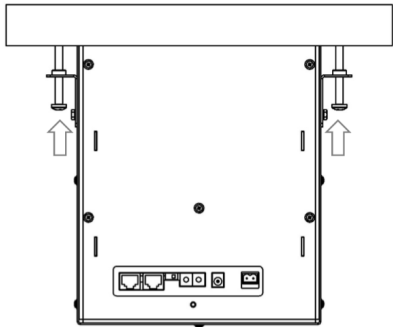
# INSTALLATION INSTRUCTIONS

## Assembly Guide for UniversalCourtesyBox Brackets

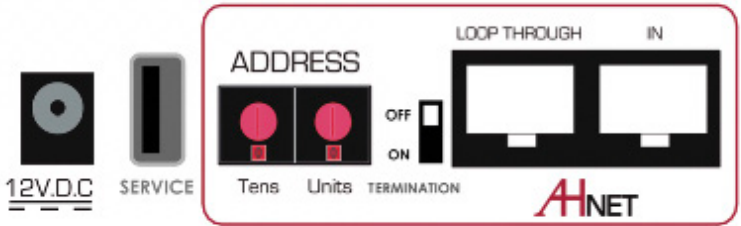
Insert the UniversalCourtesyBox through the table hole and joint the screws.



Screw the four M6x50 screws to fix the device with the table. Tighten them just to apply a light pressure against the table.



# POWER AND CONTROL



**AHnet:** RJ45 CAT5 connector for addressable RS422 control. There is a loop through connector to use as signal RS422 output. You can connect up to 30 devices on the same RS422 bus

**Termination:** Active (ON) the termination ONLY on the last devices of the RS422 bus

**ADDRESS:** Configure the AHnet unit address on RS422 bus to individually control the unit using RS422 AHnet protocol

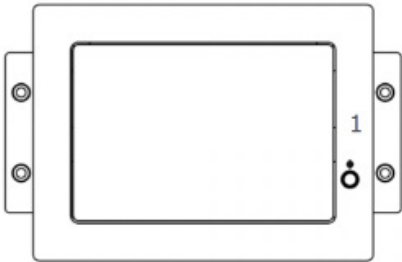
**SERVICE:** Used for firmware upgrade

**12V D.C.:** Power supply input connector

# CONTROLS

1. OPEN/CLOSE button:

Press this button to open or to close the hatch. Make sure that there are not objects or body parts that could obstruct the movements.



# AHnet PROTOCOL

## Communications protocol

COMMUNICATION	RS422
CONNECTION	RJ45
WIRING	CAT-6

## 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 unit by addressable RS422 bus.  
You can connect up to 30 devices on the same RS422 bus.  
You can use an AH ERT interface, to control the RS422 bus.  
The units should have a set address and the address must start by 1.  
Maximum cable length between ends, 500 m/1 640 ft.

## 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

# AHnet PROTOCOL

## Commands

COMMAND	DESCRIPTION	RESPONSE
FA XX 01 01 00	OPEN THE UNIT	FB XX 01 01 00
FA XX 01 00 00	CLOSE THE UNIT	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 device address. Up to 30 devices for each RS422 BUS

CB1     Response in 8 bits of the device status

CB2     Response in 8 bits of the device status

### CB1

BITE	7	6	5	4	3	2	1	0
CLOSED			1	1	0	1		
OPENED			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: F5 Hex. (Byte1)

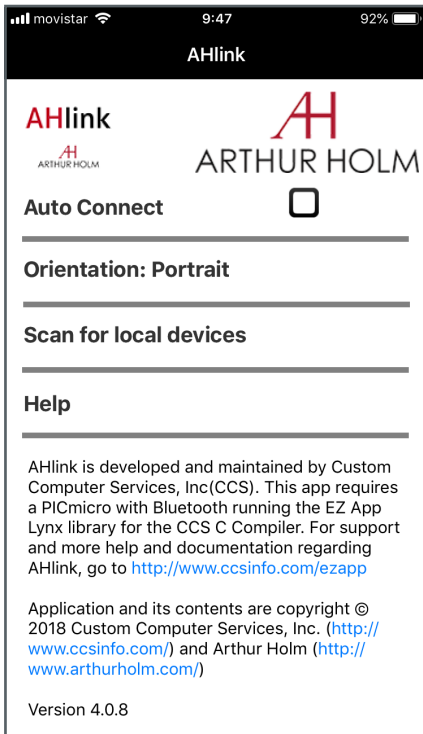
In this case, the units do not send a reply.

# AHlink

AHlink is used to control and set-up the unit.

By default, the AHLink wireless signal is deactivated. To activate it, please press and hold the Open/Close (1) button on the cover plate for 5 seconds.

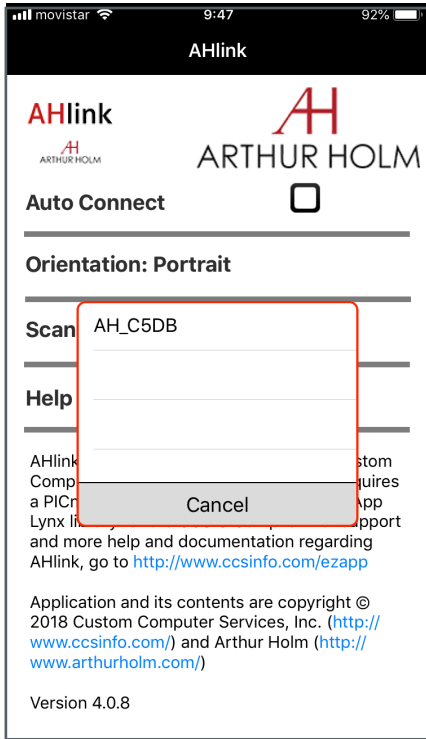
The wireless AHLink signal automatically deactivates when there is no device connected during more than 2 minutes. When the AHLink deactivates, you will hear a long Beep sound.



To control and set up your AH product with AHLink, please download it from the App Store (IOS system) or from Google Play (Android system) and execute it in your handled device.

It is recommended on to select *Auto Connect* and select *Portrait* on *Orientation*. To connect it, select *Scan for local devices*.

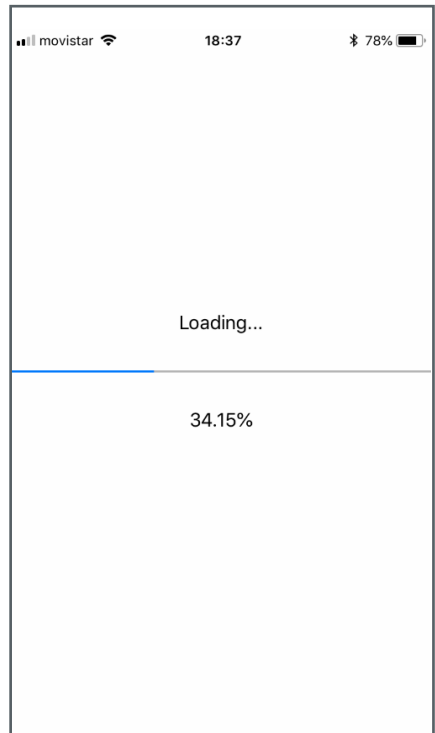
# AHlink



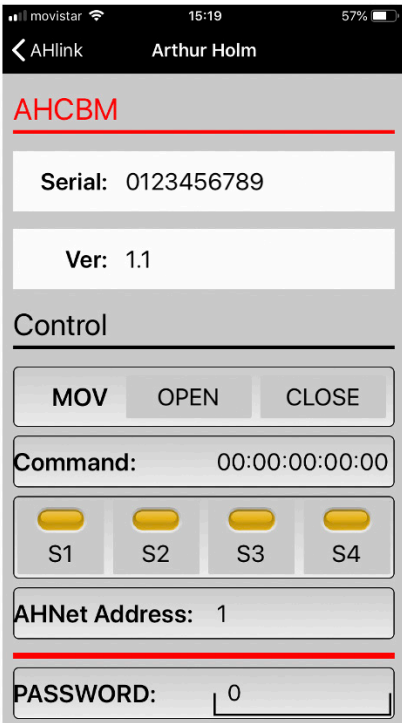
After selecting the AH device, the first page will upload on your screen. This page is used for the basic installation setup.

If your AH device does not appear on the screen, the AHLink signal might no longer be active.

The AHLink name always begins with the characters "AH" followed by the four last MAC AHLink address. You must select the AH device.



# AHlink



The first line shows the model name of the device.

SERIAL  
Serial number of the unit

VER  
Firmware version

MOV  
Controls the Open and Close of the hatch

COMMAND: Information of the last AHnet command received from RS422 port

SENSORS: Indicates sensor status.  
S1: CLOSED POSITION  
S2: OPEN POSITION

AHNET ADDRESS: Indicates the AHnet ID selected on the control board



## 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 two (2) years from the date of purchase, subject to the conditions below.

1. Electrical, electronic boards, engine, mechanical parts, accessories and power supply are warranted against manufacturing defects and workmanship for a period of two (2) years from the date of purchase.
2. Labour costs: Albiral Display Solutions covers the labour costs to replace any defective parts during the validity of this warranty.
3. Transport costs:

- 3.1. In the case that a manufacturing defect occurs within 30 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.

- 3.2. After 30 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.

4. This warranty does not cover the labour costs of handling, diagnose, remove, replace, reinstall and/or program any product, force majeure causes such as vandalism or stealing.
5. This warranty does not apply if the fault has been caused by misuse, improper handling, electrical or mechanical abuse, abnormal operation conditions, non-authorized modifications, and inadequate transportation or as a result of atmospheric phenomena.

## WARRANTY TERMS AND CONDITIONS

6. 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.
7. The beneficiary of the warranty will have to return the product with the original packaging to warranty there are no damages during transportation.
8. 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:  
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**Patents**

MU17180ES00	P27178ITEP
MU17301ES00	P27178RUPC
MU17322ES00	P27178USPC
MU17413ES00	P27284DEEP
MU17445ES00	P27284EPPC
MU17854ES00	P27284ESEP
MU17868DEPC	P27284GBEP
MU17868RUPC	P27284RUPC
P24821DEEP	P27284USPC
P24821ESEP	P27715ESEP
P24821GBEP	P28089DEEP
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