



# DynamicTalk UnderCover

Universal motorised lift system for gooseneck microphones with automated cover for veneering

Technology Serving Design

Danish craftmanship Mediterranean soul



# **WELCOME**

Thank you for purchasing an ARTHUR HOLM product.

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.

## Henrik Holm

General Manager hholm@albiral.com

## **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, huddle rooms, control rooms, 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 inmore 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.

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# **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 unit power connector.
- Disconnect the power plug from the AC outlet when the unit 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.

# **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.
- Cannot be installed at a height greater than two meters.
- 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.

# SAFETY INSTRUCTIONS

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy, and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna
- Increase the separation between the equipment and receiver
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected
- Consult the dealer or an experienced AV technician for help

## SYSTEM DESCRIPTION

#### General

DynamicTalk UnderCover is an elegant retractable system for gooseneck microphones with exclusive features. It allows an easy veneering to provide a seamless integration into furniture. It not only makes the microphone disappear within the desk surface but it also provides a pleasant light to indicate its status. A patented lighting ring safely stores and protects the microphones, making meeting and conference spaces more flexible and versatile.

DynamicTalk UnderCover has two different working modes: PA and Conference. In PA mode, a push button activates or de-activates the microphone while the LED ring indicates the status by changing colour from red to green. The system will automatically silence the microphone when retracting. In Conference mode, the microphone will be always active and can be remotely controlled via GPI and GPO.

# **Highlights**

- Patented automated cover plate for veneering
- Universal lift system for gooseneck XLR 3 pin microphones
- 360° LED lighting ring to indicate microphone status
- AH-AMMC Auto Mechanical Movement Calibration
- PA and Conference working modes
- Wireless connectivity for setup and control

#### **Box Contents**

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

- DynamicTalk
- Power cord
- Power supply 100-240Vac, 50-60Hz. Output 12V
- User Manual



**CAUTION:** Never use this equipment on horizontal position

# **SYSTEM DESCRIPTION**

# **Available Models**

MODEL	DESCRIPTION
AHDTB	Motorised microphone lift for boundary microphones and similar, controllable through network or directly on the device by a touch control sensor. Wireless set-up and diagnosis (microphone not included).

# **Options**

AHDTB
<b>UI</b> Underneath installation
CP (Min.5 units) Painted

The Dynamic Talk device is available in a special version that is prepared to be mounted from below the table with a veneer finishing on the lid

of the monitor to match the table. This special version is supplied without stainless steel cover plate and buttons.

Included in this version are all necessary brackets and a cable of 1,5m with a GPI connector for a remote control.



#### Veneer

To veneer the lid of the device the dimensions are specified in the document General dimensions.

Different materials can be used to veneer the monitor.

Maximum thickness of the veneer:

4mm [0,16"]. Maximum weight: 0,5Kg. (veneer thickness + glue < 4,2)



#### **Fixation**

Veneer can be glued or taped to the device lid.

When veneering the monitor the pressure applied must not exceed 2Kg evenly distributed on lid surface.

## Pattern Hole

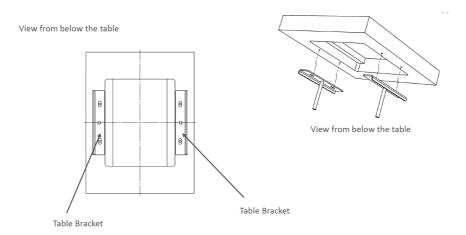
Pattern hole dimensions for milling are specified in the general dimensions for each reference.

The milling of the furniture has to be done from below.

## **Attention**

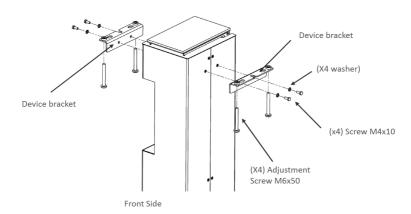
Manipulation of the product should be avoided, no stress should be applied to the product except from the instructions given in this document. Cutting, drilling, soldering, adding electrical and mechanical components can cause danger and should be avoided by all means. Not complying with these directions will result in a loss of the Arthur Holm warranty. Albiral Display Solutions S.L. shall not be liable for any loss or injury incurred as a result of modifications made to goods by anyone other than the supplier or the supplier's authorised representative with the supplier's written permission. Such modifications shall be deemed to terminate any further guarantee obligations.

# Mounting table brackets



Mount the table brackets below the table using the holes indicated on pattern hole drawing. The screws (x4) depend on the table material; the weight of the device is up to 10Kg.

# Mounting the device brackets



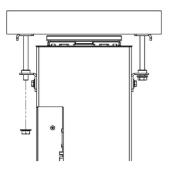
Mount the device brackets on by screwing the screws (2+2 M4x10) into the lateral threads.

Mount the vertical adjustment screws (2+2) on to the device bracket so that the tip of the screw is flushed with the upper side of the device bracket.

# Hanging the device

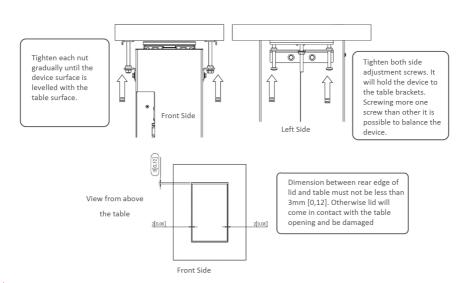


Mount one of the nuts on to one bracket as indicated on the drawing.

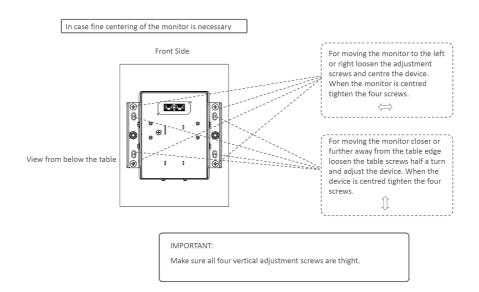


Hang the device above the nut and screw the other nut.

# Centring the device



# Fine centring of the device



# Remote control

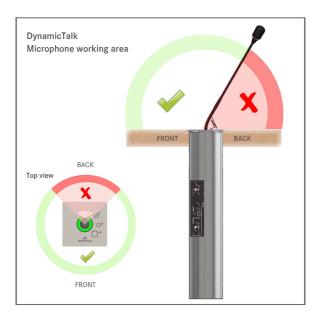


A remote control with 1,5m[4,9ft] cable length is included to operate the Dynamic2

# **PRODUCT HANDLING**

Please follow the figure below for a correct product usage of the DynamicTalk microphones.

To avoid any product malfunctions, do not attempt to bend the microphone to the incorrect angle or outside the microphone's working area, as indicated on the picture below.



#### POWER AND CONTROL



**AHnet:** RJ45 CAT6 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.

Ahnet ADDRESS: Shows the Ahnet Address configured on this unit.

**TERM ON:** Brighting when the RS422 bus termination is active. Active only the RS422 bus termination on the last unit of the bus.

**RX:** Illuminates when the unit receives a RS422 AHnet command.

#### OSD - OK +

- Changing AHnet Address. Press OK button. Change the AHnet number address using + and keys, and press OK to save the new address.
- RS422 bus termination. Press + key to activate the RS422 termination. Press key to deactivate the RS422 termination.

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

- 1.2: Ground
- 3.4: 12Vdc

**SERVICE:** USB only for service.

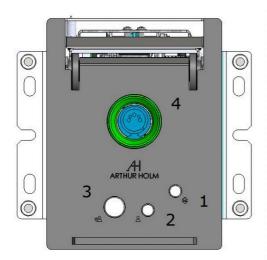
**GPI:** Unit external contact close control. SubD9 female.

- 1. GND
- 2. Command microphone UP connecting to GND. Connecting to GND more than 5 seconds, activates the AHlink signal (5 beeps sound when the AHlink signal is activated)
- 3. Command microphone DOWN connecting to GND
- Use a pulse signal to RISE and LOWER the microphone
- 4. Red LED ring brights connecting to GND (only in conference mode)
- 5. Green LED ring brights connecting to GND (only in conference mode)
- 6. GND
- 7, 8 GPO1. Contact close of the central button located on cover plate
- 8. +12Vdc (600mA max.)
- 9, 10. GPO2. Contact close of the Talk button located on cover plate

## **CONTROLS**

## **Unit movement controls**

On the upper cover plate, there are three buttons to control the functions and to external control other devices (GPO)



#### 1. UP/DOWN:

Controls the elevation and retraction of the microphone lift. Press this button for 5 seconds to activate AHlink (5 beeps sound when AHlink is activated).

#### Customised:

The central push button, is used to control external devices. The contact close button (GPO) is present on GPO connector to external control other devices. Contact close of the GPO pins 7, 8 while pressing this button.

# **CONTROLS**

## 3. TALK or GPO:

The third push button has two different functions:

- PA mode: In PA mode this button is used as MUTE function. Press the button once and the LED ring will appear in red indicating that the MUTE function is deactivated and it's ready for the user to talk to the audience. Press the button again to activate the MUTE function and silent the microphone, which will be indicated by the green LED ring. The contact close button (GPO) is present on GPO connector to external control other devices. Contact close of the GPO pins 9, 10 while pressing this button.
- Conference mode: In Conference mode the microphone is controlled by the external conference system. This button then, has no function and the contact close of the push button is present on the GPO control connector. The contact close button (GPO) is present on GPO connector to external control other devices. Contact close of the GPO pins 9, 10 while pressing this button.

# 4. Dynamic LED Ring:

The system has a LED Ring to indicate the status of the microphone: RED indicates that the MUTE function is deactivated and GREEN indicates that the MUTE is activated. When the equipment is configured to work on Conference mode, the LED Ring is externally controlled by GPI on the GPI external control connector.

## **AHnet PROTOCOL**

# Communications protocol

# Speed and configuration

		BAUD RATE	38400
COMMUNICATION	RS422	DATA BITS	8
CONNECTION	RJ45	PARITY	NONE
WIRING	CAT-6	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



RI-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 Interface Ethernet, 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/1640 ft.

# AHnet protocol

# Using 5 bytes communication:

BYTE O	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	GO UP	FB XX 01 01 00
FA XX 01 00 00	GO DOWN	FB XX 01 00 00
FA XX 02 01 00	MUTE ON (Only in PA mode)	FB XX 02 01 00
FA XX 02 00 00	MUTE OFF (Only in PA mode)	FB XX 02 00 00
FA XX 04 00 00	BUTTON LOCK	FB XX 04 00 00
FA XX 04 01 00	BUTTON UNLOCK	FB XX 04 01 00
FA XX 14 00 00	INQUIRY CONTROL BYTE	FB XX 14 CB1 CB2

Number of the DynamicTalk address. Up to 30 units can be connected for each RS422 BUS
 Response in 8 bits of the device status

CB2 Not implemented

#### CB1

BITE O	TOP POSITION	
BITE 1	DOWN POSITION	
BITE 2	(1) MUTE ON	
BITE 3	(1) BUTTON LOCK	
BITE 4		
BITE 5		
BITE 6		
BITE 7	(1) FAILURE IN THE SYSTEM	

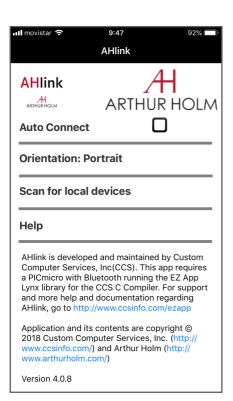
To send an order to all the devices, you must use the address: F7 Hex. (Byte1)

In this case, the units do not respond Use shielded (FTP) RJ45 cables for RS422 BUS.

AHlink is used to control and set up the unit.

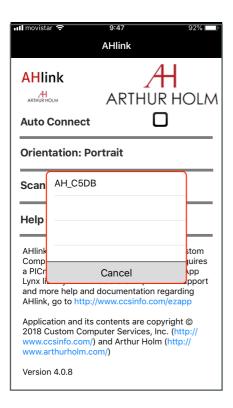
By default, the AHlink signal on the unit is deactivated. To activate the AHlink signal, press for 5 seconds the Up and Down microphone button located on cover plate, or contact close GPl2 pin to GND during 2 seconds. When the AHlink signal is activated, it sounds 5 beeps inside the unit to indicate that the AHlink signal is active on the unit.

The unit automatically deactivates the AHlink signal if there is no device (mobile or tablet) connected for more than 2 minutes. The user can also deactivate the AHlink signal using the APP on mobile or tablet. When the AHlink signal is deactivated, the sound of long beep will indicate that the AHlink is not longer available on the unit.



To control and set-up the unit using AHlink, download AHlink App from the App Store (IOS system) or from Google Play (Android system). The App is free. Execute the AHlink App on your mobile phone.

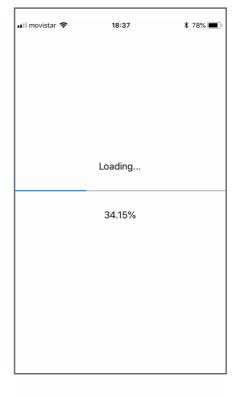
On the AHlink App options, it is recommended not to select Auto Connect and select Portrait on Orientation. To connect to the device, select Scan for local devices.



When selecting the device, the first page will upload on the mobile phone. This page is used to check the device and for basic diagnostic during the installation process.

If the device does not appear on the window, the AHlink signal is not active. To activate, press for 5 seconds the Up and Down button located on cover plate, or contact close to GND GPI pin2 for 5 seconds. You can hear 5 beeps indicating that the AHlink signal is activated.

The AHlink name always begins with AH characters and the fourth last MAC AHlink address. Select the device to control and set up the unit.





FIRST LINE, SHOWS THE MODEL NAME OF THE DEVICE

SERIAL

Serial number of the unit

**VFR** 

Firmware version

BEEP: A Beep will sound while pressing this button. Use this function to identify the unit connected

BT OFF: Switch off the AHlink signal on the device. It will close the AHlink App connection

AUTO ADJUST: This function auto adjust the speed and mechanical protection of the unit. The unit will starts to go automatically Up and Down in order to auto adjust the speed and the mechanical protection parameters

MOV

Controls the Up and Down screen movements

MIC

Controls the microphone on PA mode

RED/ GREEN/ OFF: Controls the LED ring in conference mode

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



AHNET ADDRESS: Configuration of the AHnet address of the unit password

MIC LENGHT: Microphone length configuration in steps. One step is aprox. one cm

TERM: Configuration of the RS422 termination. Activate the RS422 termination only in the last unit of the RS422 Bus

MODE: Dynamic Talk working mode. PA mode is used for standard XLR3 microphones: the microphone is controlled by the Dynamic Talk and the LED ring indicates the state of the microphone (green – MUTE/ red – TALK). In conference mode, the external conference system controls the microphone and the LED ring is controlled using the GPI connector

PASSWORD: Password needed to access the technical configuration page

# 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, 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:
  - 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
- 4. This warranty does not cover the labour costs of handling, diagnose, removal, replacement, reinstall and/or program any product.
- 5. 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 transportion or as a result of atmospheric phenomenons.

## 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:

business@albiral.com +34 938 502 376

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P27178ITEP P27178RUPC MU17180ES00 P27178USPC MU17301ES00 MU17322ES00 P27284DEEP MU17413ES00 P27284EPPC MU17445ES00 P27284ESEP MU17854ES00 P27284GBEP MU17868DEPC P27284RUPC MU17868RUPC P27284USPC P27715ESEP P24821DEEP P24821ESEP P28089DEEP P28089ESEP P24821GBEP P24821USPC P28089ITEP P28089USPC P27178DEEP P27178EPDV01 P28090EP00 P27178EPPC P31160ESES

P31160PCES

**Patents** 

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