



User manual



AHDT L

Universal motorized system for gooseneck microphones


ARTHUR HOLM

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Welcome

Thank you for purchasing an ARTHUR HOLM product.

Our product range has been designed to create the perfect meeting room, where the microphones are a part of the interior design as well as essential communication tools.

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

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 DynamicTalk power connector.
- Disconnect the power plug from the AC outlet when the microphone lift 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



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.

ENVIRONMENT

- Install the equipment on an elevated area
- Install the equipment in a ventilated area
- Avoid exposing the equipment to:
 - Rain or water
 - Excessive heat, cold or humidity
 - Areas exposed to direct sunlight
 - Dirty areas
 - Equipment generating strong magnetic fields
- Avoid placing open containers of liquid, near the equipment
- Never place any sources of flames, such as lighted candles, etc above the device
- 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



CAUTION: Never use this equipment in horizontal position

System Description

APPLICATIONS

The DynamicTalk system is a universal motorised microphone lift system remotely controllable through RS 422 or GPI with a Dynamic LED Ring for “ready to talk” and “talk” indications.

DynamicTalk is an universal XLR microphone lift. Also available in a customised version for all types of conference microphones systems.

FEATURES

- Universal microphone lift system
- Two different modes of operation: PA (public address) or conference (controlled by external conference system control)
- Up / Down mechanical function controlled by push button on cover plate, and external control by AHnet protocol (RJ45) or external contact close. The AHNET is an addressable RS422 protocol to externally control the equipment
- Dynamic LED Ring for “ready to talk” and “talk” indications
- Push button on upper cover plate to use externally (GPO)
- Push button to MUTE function in PA mode, or to use as GPO in conference mode
- In PA mode, the microphone is muted when it is down
- AHDT LS: for microphones with a maximum length of 400 mm, including connector and foam windscreen*
- AHDT LM: for microphones with a maximum length of 500 mm, including connector and foam windscreen*
- AHDT LL: for microphones with a maximum length of 600 mm, including connector and foam windscreen*

** Total microphone length must take into account the connector and foam windscreen*

BOX CONTENTS

Before the installation of your DynamicTalk, 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*

Controls

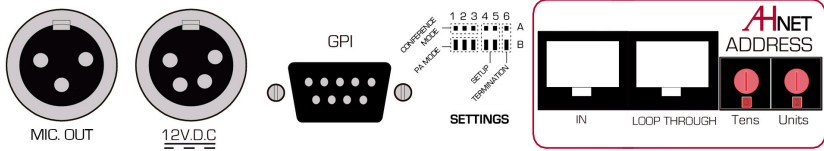
UP & DOWN MOVEMENT

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.
2. Customized: The central push button, is used to control external devices. The contact close button (GPO) is present on SubD9 connector to external control other devices.
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.
 - *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 SubD9 control connector (GPO). In this case, there are two GPO buttons available.
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 SubD9 external control connector.

Controls & Connectors



MICROPHONE OUT: XLR connector of the microphone installed in the DynamicTalk

12V D.C.IN: XLR4 connector to the power supply
1,2: Ground 3,4: 12Vdc

GPI: SubD 9 pins female connector to contact close external functions

PIN	FUNCTION
1,6	Contact close of the customized push button on upper cover plate (middle button). 100mA Max
8,9 Only in Conference mode	Contact close of the TALK push button on upper cover plate, only in Conference mode. This function does not work when the device is configured in PA mode. 100mA Max
2 Only in Conference mode	Activates the RED LED ring in conference mode, connecting to GPI ground
3 Only in Conference mode	Activates the GREEN LED ring in conference mode, connecting to GPI ground
4	Connect this pin to GPI ground to RISE the microphone
5	Connect this pin to GPI ground to LOWER the microphone
7	GPI ground

NOTE: In conference MODE, if the 2 and 3 pins are not connected to ground, the upper ring LED is off. **Use a PULSE signal to RISE and LOWER the microphone**

Controls & Connectors

Settings: 6 dip switch to configure the DynamicTalk.

DIP SWITCH	FUNCTION
1,2,3,	ON: DynamicTalk configured in PA mode. The Talk push button controls the microphone mute function OFF: DynamicTalk configured in conference mode. The talk push button has no function, the contact close is available on GPO connector and the LED Ring is controlled externally (GPI)
4,5	Only factory. Leave these dip switches off
6	Termination of the RS422 bus. Configure to ON only in the last device of the RS422 bus

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.

AHnet ADDRESS: Using the AHnet protocol, this is the number of the device into the RS422 addressable bus

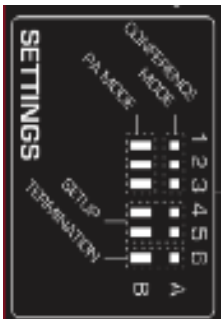
Controls & Connectors

MICROPHONE LENGTH SETTING PROCEDURE

DynamicTalk is designed to work with microphones of different lengths. Two signs to identify an incorrect setup of the microphone length are:

- The microphone do not goes down completely.
- The microphone goes down too slowly, and gets stuck inside.

The microphone length can be adjusted using the Monitor Configurator Tool, but there is also a quick procedure that doesn't require the use of a PC and cable:

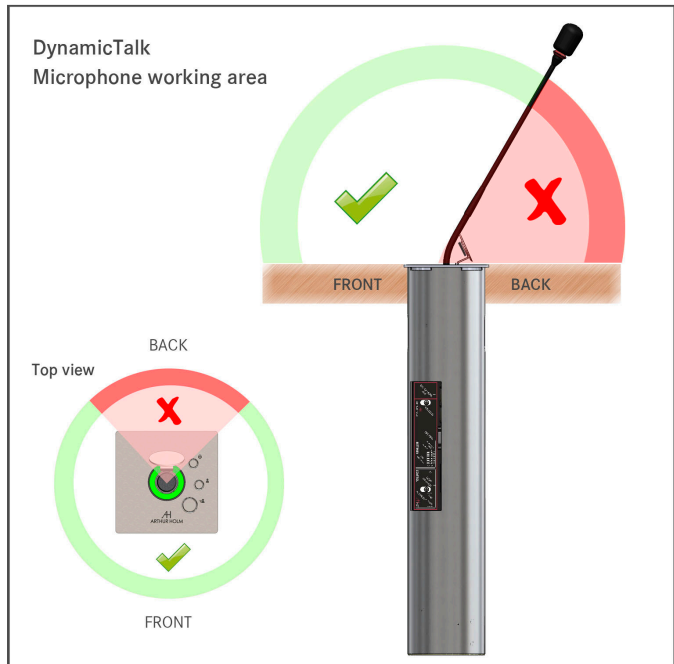


1. Disconnect the Power connector
2. Set switch 5 to ON position
3. Set the length of the microphone in the rotatory switch, in cm. For instance, if the microphone is 40cm, set the rotatory switch as: tens=4, unit=0
4. Connect to Power. There will be a 5 beep sound
5. Disconnect Power
6. Set switch 5 to OFF position
7. Set the AHnet address in the rotatory switch, the default setting is address 01 (tens=0, units=1).
8. Connect the Power connector

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.



Please note that wear to the microphone and pop screen surface can occur.

AHnet protocol

COMMUNICATIONS PROTOCOL

Communication	RS422
Connection	RJ45
Wiring	CAT-5

SPEED & 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



CONNECTION

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

Protocol to control the DynamicTalk by addressable RS422 bus.
You can connect up to 30 devices on the same RS422 bus.
You can use a 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, 500m/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 02 01 00	MUTE ON (Only on PA mode)	FB XX 02 01 00
FA XX 02 00 00	MUTE OFF (Only on PA mode)	FB XX 02 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 DynamicTalk address.
 Up to 30 monitors for each RS422 BUS
- CB1 Response in 8 bites of the device status
- CB2 Not implemented

AHnet protocol

CB1

BIT 0	TOP POSITION
BIT 1	DOWN POSITION
BIT 2	(1) MUTE ON
BIT 3	(1) BUTTON LOCK
BIT 4	
BIT 5	
BIT 6	
BIT 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 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 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 to 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.

Product Warranty

Albiral Display Solutions S.L WARRANTY - Valid from January 2016

This warranty covers the original product purchase for a period of **24 months** from the date of purchase.

GENERAL WARRANTY TERMS

A) Parts. During the above mentioned warranty period, the replacement of any electronic and mechanical parts against any defects in manufacturing. The warranty does not cover any faulty electronic and/or mechanical components arising from incorrect installation, unauthorized modification, and inadequate transport or as a result of atmospheric phenomenon.

B) Labour. Albiral Display Solutions S.L. covers labour costs for replacement of any defective parts (in accordance to paragraph A) during the period of this warranty.

C) Transport costs.

I) In the case that a manufacturing defect occurs within 30 days after the purchase date, both freight and insurance will be paid by Albiral Display Solutions, S.L. Albiral Display Solutions S.L. will not be responsible for the damages caused by transportation if the customer does not inform in writing when receiving the goods.

II) After 180 days of the purchase date, both freight and insurance costs will be paid by the customer.

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

E) The warranty is not valid if personnel other than the Authorised Service Centre have handled the product, if the product has been manipulated or warranty seals have been removed or manipulated.

F) The beneficiary of the warranty will have to return the product in its original packaging or in an appropriate package that will warrant no damages during transportation.

G) The warranty is not valid if the customer does not include a RMA form and a copy of the purchasing invoice.

Albiral Display Solutions S.L. recognizes all guaranteed user rights by all legal rules from its region, and in the absence of them, all established consumer rights by general law 26/84.

Albiral Display Solutions S.L.



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Patents

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MU 17301 ES00
MU 17322 ES00
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