for PHOENIX (XT), MENTOR and VISION 10

Instruction Manual Lighting Technologies



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1. Introduction

Welcome to the world of wireless remote controlling of show light!

The ADB HF Remote Control system provides remote control of most ADB desks from wherever you are in your venue: on stage, in the auditorium, during rigging on ladders, trusses,...

The compact and light-weight hand-held unit offers you wireless access to important functions on your lighting desk:

- · select individual channels and set a level
- · select a group and set a level
- loading of a pre-recorded memory
- dimmer test
- play a pre-recorded macro

The compact and rugged unit is very easy to handle and allows fast and intuitive access to many key desk functions to allow you to work efficiently on your lighting show. This manual will describe how to get your HF Remote Controller up and running in a minimum of time.

2. Unpacking - Delivery

Upon delivery of your equipment, open the packing carefully and examine the material. If you observe any damage, contact the shipping company immediately, and have your complaint duly recorded. You may rest assured that your equipment left the factory in perfect condition.

Check whether what you have received is in conformity with the delivery notice, and whether the notice is in conformity with your order.

In the event of any error, contact your shipper immediately to clarify the situation and receive full satisfaction.

If you find nothing wrong, replace the material in the packing and store it in a warm place, away from dust and humidity, whilst awaiting final installation.

Never leave the material on the worksite under any circumstance



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3. Generalities - Safety

The equipment is built in accordance with European safety standards and requires imperatively a safety earth connection in compliance with local regulations.

To prevent any risk of electric shock, do not remove any cover or part of the enclosure.

Access to internal parts is not required for normal operation.

Refer servicing to skilled and trained service personnel exclusively.

Disconnect from the power supply prior to opening for inspection or service.

Connection to any inappropriate power source may irreversibly damage the equipment, it is the user's responsibility to use the equipment for its intended purpose and to check the equipment connected to it.

To obtain full benefits of the safety measures, the equipment shall be installed and serviced by skilled and trained personnel exclusively.

Don't make any modification to the equipment.

ADB shall not accept any liability for material damages or injuries which may result from unauthorised modifications.

Important Notice for Power Cables

Power supply cables and connectors are an important part of your equipment and contribute to its safety.

- always use original power supply adapters only! Using any other psu may cause irreversible damage to the unit.
- always use an isolator, main circuit-breaker or main fuses to interrupt the link; never pull on the cable
- do not damage the cable or the connectors in any way, check them at each installation or at regular intervals in a permanent installation
- do not tie together power supply cables and signal cables

4. Compatible lighting consoles

The HF Remote Control system is compatible with the following ADB lighting consoles:

- PHOENIX 2/XT, PHOENIX 5/XT, PHOENIX 10/XT, PHOENIX RB/XT
- MENTOR
- PHOENIX 2, PHOENIX 5, PHOENIX 10, PHOENIX RB
- VISION 10 and VISION 10/RB with ISIS® software
- VISION 10 and VISION 10/RB with software v.2.63



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5. Installation

A full HF Remote Control system includes

- one handheld transmitter
- one active receiver unit
- a data cable

5.1. Interconnection

The interconnection is very straightforward:

- Use a standard SubD-9 extension cable to connect the Receiver to the serial port of the lighting console. A short cable is included with the receiver. To manufacture your own cable, see the wiring diagram in paragraph Data cable wiring diagram
- Connect the active receiver unit to the EIA/RS-232 serial port of the lighting console
- Provide mains power for the receiver unit



EIA/RS-232 data cable max. 15 m



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5.2. Activation in a lighting console with ISIS® software

As a precautionary measure, the factory default settings of the consoles disable external control sources such as the HF Remote Control and External Lines. You can enable / disable these external inputs with the General Configuration dialogue box.

Keystrokes

```
<MENU> <F7 {SET-UP}> <F3 {GENERAL}>
displays the General Configuration dialogue box
<> ... <ENTER>
activates the HF Remote by checking the box
<F8 OK>
```



confirms the operation and closes the dialogue box

5.3. Activation in a VISION lighting console with software v2.63

As a precautionary measure, the factory default settings of the consoles disable external control sources such as the HF Remote Control and External Lines. You can enable / disable these external inputs with the General Configuration dialogue box.

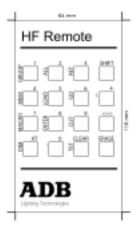
- in the menu CONFIGURATION, PERIPHERALS
- check the remote control option (Infra Red) checked (= ON)

If nothing else is specified, your system by default factory settings runs on EIA/RS-232 serial communication port 1 (normally located besides the floppy drive).



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6. Remote functions and commands



The Remote Controller gives you access to the following functions and commands

- Select a Channel
- Set channel At Value
- Select a Group
- Load a Memory
- Play a Macro
- Dimmer Test

6.1. Select a Channel

Examples of keystrokes
<1> <THRU> <1><2>
Selects the list of channels 1 to 12

<CLEAR>

Clears the last number entered in a selection

<CLEAR> <CLEAR>

Clears the selected channels

For more examples, please refer to "An Introduction tot ISIS®", Channel Control, par. 5.2.

6.2. Set Channel at Value

Keystrokes

<1> <+> <3> <+> <1><<7>

Sets channels 1 and 3 and 12 at 70%.

For more examples, please refer to "An Introduction tot ISIS®", Channel Control, par. 5.3.

6.3. Set Group at Value

Keystrokes

<SHIFT> <GROUP> <1> <AT> <7>

Sets group 1 to 70%

For more examples, please refer to "An Introduction tot ISIS®", Groups, par. 6.5.

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6.4. Load a Memory

Keystrokes

<SHIFT> <MEM> <1> <SHIFT> <LOAD>

Loads Memory 1

For more examples, please refer to "An Introduction to ISIS®", Recording and loading memories, par. 8.6.

6.5. Set Memory at Level

Keystrokes

<SHIFT> <MEM> <1> <AT> <7>

Sets channels of Memory 1 to 70%

For more examples, please refer to "An Introduction to ISIS®", Recording and loading memories, par. 8.x.

6.6. Play a Macro

Keystrokes

<SHIFT> <MACRO> <1> <SHIFT> <ENTER>

Loads and plays Macro 1.

Note: triggering of the MACRO function via the HF Remote is not yet available in ISIS® 2.2x. It will be available in ISIS® 2.2.

6.7. Dimmer Test

Keystrokes

<SHIFT> <DIM> <1> <AT> <7>

Tests dimmer 1 at 70%

7. Active receiver - LED indicators

The front panel of the receiver / active antenna features three LED indicators. They show you

• On power is On and the processor is working fine

Connect confirms communication between receiver and lighting desk

Receive a valid signal is received from the handheld remote

8. Handheld controller - Power switch

The handheld controller features 16 keys and 1 slide switch - the power switch. In order to extend battery life, power is only required while transmitting i.e. while depressing a key. The LED's in the keys will stay on for a few seconds. The slide switch is mainly used as a safety against unwanted key presses while the unit is stored in a bag, a toolbox, or your pocket.



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9. Handheld controller - Changing the battery

Because of the often rough circumstances in which the handheld unit could be used, the battery compartment is closed with two M3 screws. To replace the battery: remove the two screws at the bottom, replace the battery with a fresh one and close the lid with the same (M3 x 4 mm) screws. Please dispose of the used battery in an environmentally friendly manner. Alkaline batteries are recommended.

Receiver - Automatic main fuse

The receiver is protected by an automatic self-resetting main fuse (PTC). To reset: disconnect power and wait for 2 minutes.

11. Remote control in venues with several control desks (Wi-Fi)

Since all HF Remote Controller systems transmit on the same radio frequency, you cannot operate two HF Remote Control systems in the same HF environment. ADB's Wi-Fi Remote Control however allows control of several ADB consoles in the same venue. The Wi-Fi system is based on a Pocket PC with ADB Wi-Fi software, and one (or more) Wireless Access Points. These are networked with the lighting consoles over the Ethernet-for-lighting network. The system includes identification of the target console, and WAP access protection by user ID and password.

12. Updating the firmware

Please contact ADB's Customer Service. E-mail: support@adblighting.com

Phone: +32 27 09 32 11 Fax: +32 27 09 32 80

13. Data cable - wiring diagram

The receiver and PC are connected by means of a standard (not crossed) DB-9 extension cable. A short cable is included with the unit. The receptacle on the Receiver unit is a SubD-9F. If you wish to manufacture your own cable, then please note that only three signals are required.

The EIA/RS-232 standard mentions a max. cable length of 15 m (50 feet), but longer cable runs have been achieved using suitable data cable.

SIGNAL	To Receiver SubD-9F	To PC SubD-9M
Signal ground	pin 5	pin 5
Send to PC	pin 2	pin 2
Receiver from PC	pin 3	pin 3

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14. Technical Characteristics

Handheld remote transmitter

Outdoor range: up to 200 m (typical, in open space environments) up to 75 m (typical, environment parameters are important)

Frequency: 433,92 MHz (license free in most countries)

Aerial: helical, fixed Power output: 10 mW

The HF modules are designed and manufactured by Radiometrix (UK) and approved to

ETS 300-220-1.

Transmission speed: 9600 baud Battery: 9 Volt (6F22)

Expected operational life: 1 year

Dimensions: 115 x 60 x 20 mm (excl. aerial)

Weight: 280 g incl. battery

Active receiver

Supply voltage: 230 V and 115 V (switchable) (+/-10%) - 50 / 60 Hz

Power consumption: 3 VA

Mains Fuse: internal, automatic reset.
Signal to lighting desk: EIA/RS-232 (9600 baud)

Dimensions: 200 x 44 x 150 mm (W x H x D) (excl. aerial)
Aerial: 100 mm, hinged, on front panel of receiver

Weight: 1.4 kg

Safety standard: EN 60065

EMC standard: EN 55103-1, EN 55103-2

Spectrum: EN 300-220-3



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15. Additional sources of information

An Introduction to ISIS® 2.1x - the short manual for ISIS® software

The condensed User Manual for ISIS® 2.1x software can be downloaded from the ADB website:

www.adblighting.com > ADB products > Control desks > ISIS Software > Introduction tot ISIS 2.10.

The full User Manual for ISIS® 2.1x software

The comprehensive User Manual for ISIS® 2.1x can be downloaded from the ADB website:

www.adblighting.com > ADB products > Control desks > ISIS Software > ISIS 2.1x User Manual.

The ADB Ethernet Network Guide

The "ADB Ethernet Network Guide" can be downloaded from the ADB website. www.adblighting.com > ADB Products > Interfaces > Ethernet > select the User Manual.

ESTA and its Technical Standards Programme

Learn more about - or participate in - the ongoing standards development efforts: www.esta.org/tsp

Example: the ESTA Control Protocols Working Group covers subjects such as

DMX512-A the future successor to DMX512/1990

DMX cabling for portable units

RDM Remote Device Management (EIA-485 serial transmission)

Ethernet cabling

ACN Advanced Control Network (over Ethernet).

The process of creating a new standard includes one or several Public Reviews. Participate!



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