USERS MANUAL

Version 1.01

Studio Remote Control MK-4
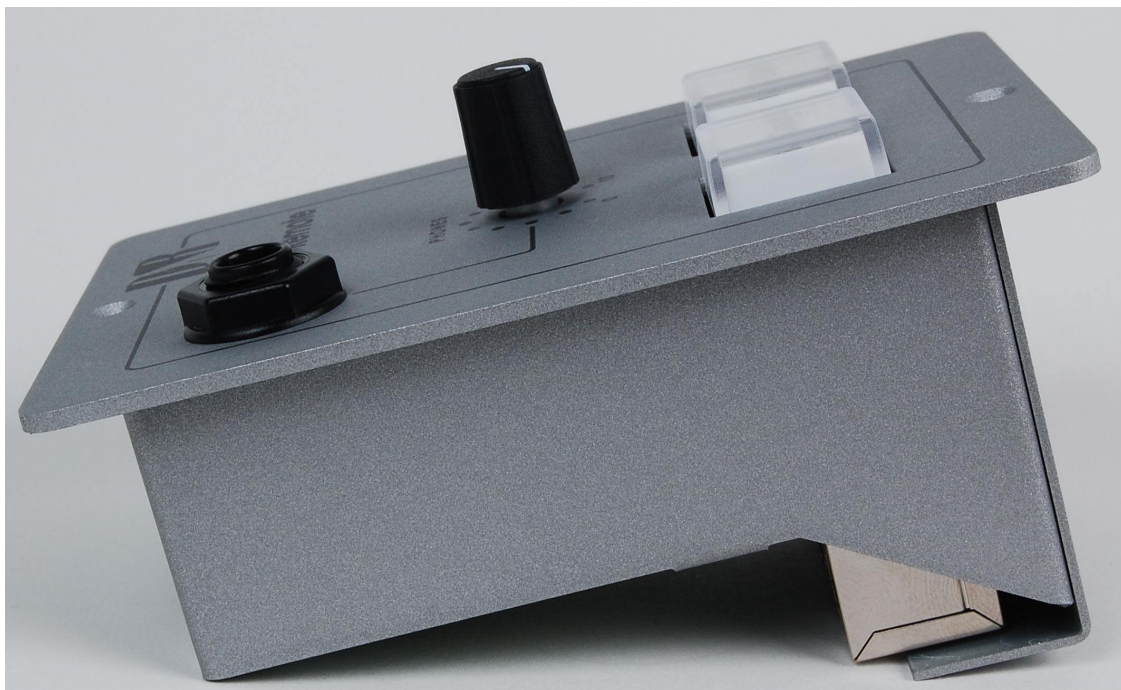
Remote/Mic Breakout and Headphones amplifier

Dear Customer,

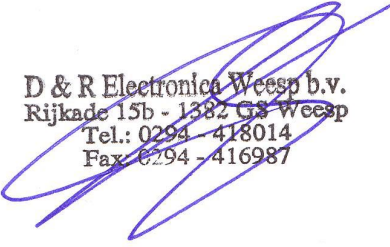Thank you for choosing the Studio remote-Unit mk4 remote and headphones-amplifier.

The Studio remote-Unit mk4 is designed by specialists in the field of radio broadcast and is intended to be used together with the broadcast consoles of D&R Electronica.

This time you are not faced with a huge manual because it is simply not necessary because of the natural recognition of all functions on the user interface. All functions are self-explanatory and you will certainly appreciate the ergonomics of this design. No digital layering just direct access to all relevant functions, as we think it should be in daily practice

We always value suggestions from our clients, and we would therefore be grateful if you could sent us your comment and/or suggestions, once you have become familiar with your Studio remote-Unit mk4. We will certainly learn from your comments, and we will very much appreciate the effort and time it will take for you to communicate your idea's and suggestions.

We are confident that you will be using the Studio remote-Unit mk4 for many years to come, and wish you a lot of success.

With kind regards,

Duco de Rijk
PRESIDENT

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STUDIO REMOTE UNIT MK4.

The Studio Remote Unit is designed to be the remote and communication interface between the mixing console and the announcer or guest. It has a built in headphone amp and 2 remote switches with RED/GREEN LED indication. The Studio Remote is the perfect solution for headphones amplifier, CHOUGH/COMMUNICATION button for announcer and/or guest and a Mic connection.
The unit can be connected directly to the D&R AirMax and Axum and via an interface with the Airlab and Airmate as well.
We shall describe all functions in detail now.

Operational & Service Manual Studio Remote mk4

REMOTE/SIGNALLING IN MIC MODE.
This useful feature has three important functions:

1. Remote Switch for Cough or Talkback or communication for showing Mic-On Red Light etc.
2. Direct Mic Connection, XLR to RJ 45
3. Headphones Amplifier is switchable between A and B level control

Wiring for the D&R AirMax or Axum:
> A shielded cat5 cable has to be connected between the Studio remote Unit and the AirMax/Axum mic-input channel that needs communication. Together with the remote control also the Mic-input is directly connected.

Using the push-button during broadcast, the announcer can temporarily mute the microphone in order to cough (where the name comes from). At the same time his microphone will be routed to the Cue system, in order to give him the opportunity to communicate with the engineer/producer.

HEADPHONES INPUT (audio inputs 2x RJ45 parallel)
Wiring for the D&R **AirLab**, **Airmate**
> The Audio-input RJ 45 connectors of the Studio remote Unit need to be wired to the master of the Airmix/Airlab, Guest or Announcer outputs or whatever suits your purpose mostly.
> A wiring schematic will be shown in this manual on another page.

Wiring for the D&R **AirMax or Axum**
> The Audio-input RJ45 of the Studio remote Unit needs to be wired to the AirMax, Axum.
> On the RJ45 connector 2 stereo-pairs of audio can be connected.
> The switch beneath the front panel between the Cough and Com switches determine whether you listen to A or B.

The Audio-Input-thru RJ45 can be used to connect more Studio remote-Units to the same Audio Input (parallel). Always use shielded cat5 cable to prevent hum.
The shield is also ground of the signal.

Power-Jack:
Connect the external power-supply (+ 9 to 12 volt) to the Power-Jack connector.

Be careful, only use the standard D&R Studio remote-Unit power-supply that is part of the delivery.
When in doubt ask your local D&R dealer or a qualified technician.
Do not connect a wrong or damage power-supply to the Studio remote-Unit to prevent you from electric shocks.
Always use a Class II power supply (without earth pin, double isolated).

Studio Remote MK4 connections:

Phones (Stereo Jack, front)		
Tip	Phones Left	> 16 Ohm
Ring	Phones Right	> 16 Ohm
Sleeve	GND	
150mW in to 16 Ohm		
75mW in to 32 Ohm		
45mW in to 64 Ohm		

Power Jack (back site) 9V DC 100mA Class II power (without earth pin)	+ —⊙— – 9 to 15 Volts DC	
Centre pin	+9V	9 to 12 V DC
Ring	GND	
The Power Jack is protect against reverse polarity connection.		

Audio Input 1/2 (Left Top & Bottom RJ45, back site) (The Top and Bottom RJ45 are connect in parallel.)		
pin	name	
1	1A	Audio-Input 1 Left, Connect to internal jumpers.
2	1B	Audio-Input 1 Right, Connect to internal jumpers.
3	2A	Audio-Input 2 Left, Connect to internal jumpers.
4	3B	nc
5	3A	nc
6	2B	Audio-Input 2 Right, Connect to internal jumpers.
7	4A	nc
8	4B	nc
shielding	Audio GND	
Always use shielded cat5 cable to prevent hum. *The pin-out is equal to the D&R AirMax and D&R Axum audio connection.*		

pin	name	
Mic + Remote (Right Top & Bottom RJ45, back site) *The Top and Bottom RJ45 are connect in parallel.*		
pin	name	
1	1A	Mic XLR pin2 (hot), Internal connect to the Mic-XLR.
2	1B	Mic XLR pin3 (cold), Internal connect to the Mic-XLR.
3	2A	nc
4	3B	Remote switch (NO) (to shielding)
5	3A	+5 Volt TTL. +5 Volt is LED RED 0 volt is LED green
6	2B	nc
7	4A	+5 Volt TTL. +5 Volt is LED RED 0 volt is LED green
8	4B	Remote switch 2
shielding		Audio GND and Switch-contact
Always use shielded cat5 cable to prevent hum. *The pin-out is equal to the D&R AirMax and D&R Axum audio connection.*		

Mic XLR (back site)	
1	Mic GND, Connect to Shielding
2	Mic hot, Connect to Mic + Remote RJ45 pin 1-1A
3	Mic cold, Connect to Mic + Remote RJ45 pin 2-1B
Always use shielded microphone cable to prevent hum.	

How to built in this unit?

The front panel has the following dimensions: **80mm width, 110mm front-back, 2mm thick**
The hole you have to drill should be **91mm front-back and 71mm left-right.**
The overall depth of the unit is: **50mm below the front panel.**

Good luck!!

EG Declaration of Conformity

We,   D&R Electronica Weesp B.V.
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        1382S Weesp
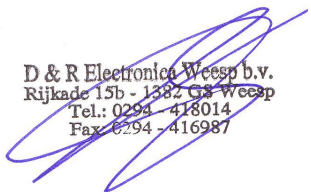   The Netherlands

Herewith take the sole responsibility to confirm that this product:

        Type designation   : **Studio remote-Unit mk4 (2011)**

        Kind of equipment   **: Remote and Headphones-Amplifier**

Which refers to this declaration, is in accordance with the following standards or standardized documents:

        EMC Directive 89/336/EEG, norm EN55103-1 (E2) EN55103-2 (E2)

        Low Voltage Directive 73/23/EEG, norm EN60065

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Duco de Rijk
President

D&R Electronica Weesp B.V.

April 2006
Weesp

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Duco de Rijk
president