

# GSM LINK

## MANUAL

v.1.02



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Dear Client,

Thank you for choosing the D&R GSM Link.

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.

We are confident that you will be using the GSM Link for many years to come, and wish you a lot of success with your operation.

With kind regards,

D&R Team

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## BACKGROUND

D&R's newest GSM-Link unit originates from many demands for a wireless connection between your GSM phone and our mixing consoles such as WEBSTATION, AIRLITE, AXUM and AXITE digital consoles. Also any other brand of mixing console that has a clean feed output can benefit from this design.

### HIGHLIGHTS

- High quality Telephone Hybrid circuit to directly connect to a phone.
- Take Phone calls and play/pause music directly on the device.
- Wireless audio with high resolution up to 16/24-bit/96kHz audio.
- Stereo line input and output.
- Direct access CONNect switch on top of the unit.

### WPC HYBRID CHANNEL

The GSM-LINK uses our high quality Telephone Hybrid circuit to enable you to make calls on your Phone during your broadcast. It also supports high quality wireless audio, so playing music on your mixer has never been easier.



### 1.1 What is a GSM-LINK

Our GSM Link provides the interface between professional audio equipment and the public wireless telephone network.

They provide protection for your equipment and the public wireless telephone lines, allowing for varying line signals and line and GSM conditions. Automatically canceling out the unwanted signal they also facilitate two-way communication to a GSM phone.

With the D&R GSM Link you can add a simple and effective wireless interface by using your personal GSM phone that your reporters can call. It is a two way communicating device that is connected to the input and clean feed of a Telco/VoIP channel of your mixing console.



The GSM-Link is built into a sturdy metal housing with internal antenna's. The table top unit has a RJ45 connector to connect to the pcb connector interface that can be mounted separately close to the in and outputs of the mixer.

The main unit is powered by a 12V 1A adapter that is part of the delivery.

## 2 GENERAL DESCRIPTION

A large ring button enables you to pick up the line from the unit itself or from your mixer when it is connected via its GPI to the telephone Hybrid. When a call comes in, it lights up green in the rhythm of the ring. When the line is picked up by pushing the button it turns into red. When it is off the connection is lost. Both levels of receive and send can be adjusted to suit your requirements in the mixer.

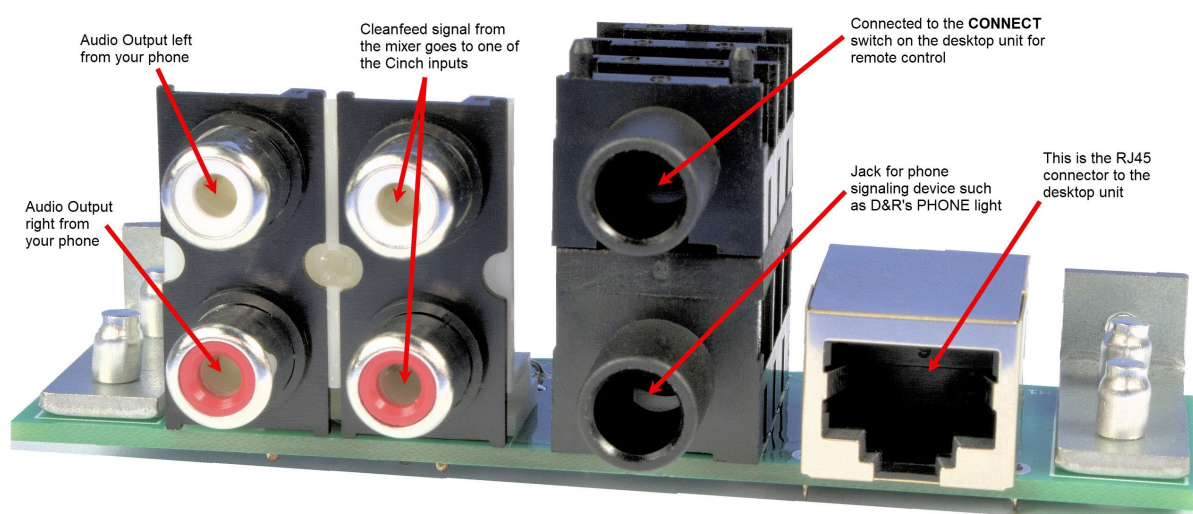
FEATURES	FEATURES
<ul style="list-style-type: none"> <li>• High quality Telephone Hybrid circuit to directly connect to a phone.</li> <li>• Take Phone calls and play/pause music directly on your mixer.</li> <li>• Wireless audio with high resolution up to 16/24-bit/96kHz audio.</li> </ul>	<ul style="list-style-type: none"> <li>• Stereo line input mixed to mono for the caller.</li> <li>• Stereo Line output.</li> <li>• Direct access CONNect and TB (Talk Back) switches in the master section.</li> </ul>

### 2.1 Front and back panel

<b>Antenna</b>	Built in antenna's assure you of an uninterrupted connection with the nearest GSM Phone.
<b>CONNECT BUTTON: (RING)</b>	Connect switch to connect and disconnect calls from the GSM network for pairing. It can be remotely driven by connecting a switch to the GPI Jack on the connector panel.
<b>Power</b>	The main unit is powered by an External 12 volt 1A adapter. (part of the delivery)



## 2.2 Connector panel



<b>RJ45</b>	This RJ45 connector connects the desktop unit with its connector panel.
<b>CINCH</b>	These 4 Cinch connectors are the in and outputs of this unit. The vertical left two are the left/right outputs for playback from Phone/Tablet. The two vertical right positioned connectors need to be connected to a clean feed signal. (only one is necessary, they are wired parallel and are mono inputs)
<b>GPO</b>	Bottom Jack connector for remote control of a phone signaling device such as D&R's Phone light
<b>GPI</b>	Top Jack is connected to the Connect switch (Ring/Hook) on the front panel.

## 2.3 Inputs and Output

### 2.3.1 RECEIVE (from caller) L+R

CINCH	TYPE	CONNECTION
Ground	Screen	Audio ground
Pin	Phase	Audio + (output)

### 2.3.2 SEND (to caller) MONO

CINCH	TYPE	CONNECTION
Ground	Screen	Audio ground
Pin	Phase	Audio + (input)

### 2.3.3 GPIO

The GPO is a potential free contact between tip and ring. Max. 60VDC/40VAC 500mA.

GPO (lower jack)	FUNCTION	CONNECTION
Tip	No	Potential free contact A
Ring	No	Potential free contact B
Sleeve	No	Not connected

To activate the GPI input connect the tip and ring together via a potential free contact / external switch.

GPI (top jack)	FUNCTION	CONNECTION
Tip	Pull down	47 ohm to ground
Ring	Pull up	+5 volt via 10kohm
Sleeve	No	Not connected

## 3 How to use the GSM link



The GSM-LINK uses our high quality Telephone Hybrid circuit to enable you to make calls on your Phone during your broadcast. It also supports high quality wireless audio, so playing music on your mixing console has never been easier.

### 3.1 Connecting to a Phone

- Once the GSM-LINK has been switched on, the GSM-LINK will be in standby mode, the LED will be off.
- Press and hold the CONN button at least for 3 Seconds to enable pairing mode. The LED will start blinking.
- On your Phone, search for "GSM\_LINK 250101-1" (year, month, date, number of a batch) . Click connect.
- When a connection is successful the LED on the GSM-LINK will stop blinking and stay on. (Green)
- If no action is taken the GSM-Link will automatically go out of pairing mode and into standby mode after 30 seconds. The led will stop blinking and go off.
- Now that the GSM-LINK and your other device have been paired, the next time the GSM-LINK is switched on the GSM-LINK will automatically search for known devices and connect to it.

### 3.2 Disconnecting a phone

- Press and hold the CONN button.
- The GSM-LINK Hybrid will disconnect from the current device and go into pairing mode.

### 3.3 Taking a phone call

- Once connected to the GSM-LINK you can now take calls on your GSM LINK (if the phone is connected)
- When you are being called the RING led will blink RED
- You can pick up the call by pressing the CONN button. The green CONN led will be lit.  
Note: the incoming call will not be heard until the CUE is pressed or the ON switch and the fader are activated, which brings the signal to the mixer.
- To hear the caller you have to push the CUE button and to bring the caller on-air push the ON switch and pull up the fader.
- When a call is active, to disconnect the call press the CONN button again. The (red) CONN led will be off.

## 4 SPECIFICATIONS | DIMENSIONS

Line input:	Balanced, 10kOhm, + 20dBu max,
Frequency response:	20Hz up to 20kHz
Output:	Balanced, 120 Ohm, + 4 dBu max
GPO:	Opto Fet 60V/550Ma, Pmax=500mW
GPI:	Pulldown to GND.
Tip:	uses opto coupler.
Frequency band:	2.4 GHz band
Antenna:	Built in
ID:	Every unit has a unique ID for identification on your phone (GSM_LINK250101-1) (production date) This number can be found on the bottom/backside of the unit

#### DIMENSIONS/WEIGHT

Left-Right:	90mm
Front to back:	110mm
Height:	32-38mm
Front thickness:	2mm
Weight:	0.50 kg
Power:	90-240volt 50/60Hz
Voltage:	12Vdc provided by mains adapter (included)
Supply Current:	< 0.5 Amp

We wish you many creative years of productivity using this quality product from:

Company	: D&R Electronica B.V.
Address	: Rijnkade 15B
Zip Code	: 1382 GS
City	: WEESP
Country	: Netherlands
Phone	: 0031 (0)294-418 014
Website	: <a href="http://www.dnrbroadcast.com">http://www.dnrbroadcast.com</a>
E-mail	: <a href="mailto:support@d-r.nl">support@d-r.nl</a>

## 5 SUMMARY

We hope this manual has given you sufficient information to use this new GSM-Link in your studio. If you require more info please contact your local dealer or send us an email at [sales@d-r.nl](mailto:sales@d-r.nl) and we will answer your email within 24 hours during weekdays.

In case you have bought this product from a previous owner, check out the dealer in your area or email our support people at [support@d-r.nl](mailto:support@d-r.nl) or our website [www.dnrbroadcast.com](http://www.dnrbroadcast.com) if you need assistance.

## 6 ELECTROMAGNETIC COMPATIBILITY

This unit conforms to the Product Specifications noted on the Declaration of Conformity. Operation is subject to the following two conditions:

- This device may not cause harmful interference
- This device must accept any interference received, including interference that may cause undesired operation. Operation of this unit within significant electromagnetic fields should be avoided. Use only shielded interconnecting cables.

## 7 DECLARATION OF CONFORMITY

Manufacturer : D&R Electronica B.V.  
: Rijnkade 15B,  
: 1382 GS Weesp,  
: Netherlands

declares that this product

Product : GSM-LINK  
Model : n.a.  
Installed options : none

passed the following product specifications:

Safety : IEC 60065 (7th ed. 2001)

EMC : EN 55013 (2001+A1)  
: EN 55020 (1998)

Supplementary Information:

The product passed the specifications of the following regulations;

: Low voltage 72 / 23 / EEC  
: EMC-Directive 89 / 336 / EEC. as amended by Directive 93/68/EEC

(\*) The product is tested in a normal user environment.  
Duco de Rijk

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