eela-audio

EA854

Studio Interface

6-way headphones amplifier

User manual

EA Broadcast / Eela Audio, Het Riet 8 A, 5431NM Cuijk, The Netherlands
http://www.eela-audio.com e-mail: sales@eela-audio.com

WARNING

Do not expose this appliance to rain or moisture. To reduce the risk of electrical shock, do not remove cover. There are no user-serviceable parts inside. Do not attempt to repair the unit yourself; this voids the right of warranty. Refer servicing to qualified personnel.

CE-Product

This product is in conformity with the requirements of the CE directives.

This product should only be installed and used in installations as specified in this manual and should only be used with the ancillary equipment and options and in the right environment according the recommendations.
The supplier will not take any responsibility of damage to or induced by this product caused by using the equipment in any not specified application or connecting items or equipment, in any way or environment other than specified.

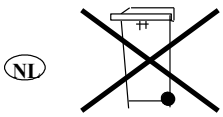
General Information

Cleaning

Clean the outside of this product with a soft cloth. Do not use any cleaning detergents like alcohol, white spirit or ammonia based fluids to clean this product. This can severely damage the finish of the product.

For waste separation:

At the end of the lifecycle of this product dispose it in accordance with local procedures for disposal of hazardous or chemical waste. Do not dispose the unit or batteries in the ordinary way, but if possible hand it in as Small Chemical Waste.



Thank you for the purchase of this *EA854 Studio Interface.* First read this manual carefully before starting to use the apparatus. Please keep this manual so you can refer to it at a later stage. Information in this manual may change with product revisions.

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Eela Audio EA854 Studio Interface:

GENERAL REMARKS:

The EA854 is a Half 19" stand alone headphone amplifier with extra facilities for use in e.g. a presenter booth. Interfacing is possible from the control room via-multi way connector and cable, carrying DC control and audio input signals.

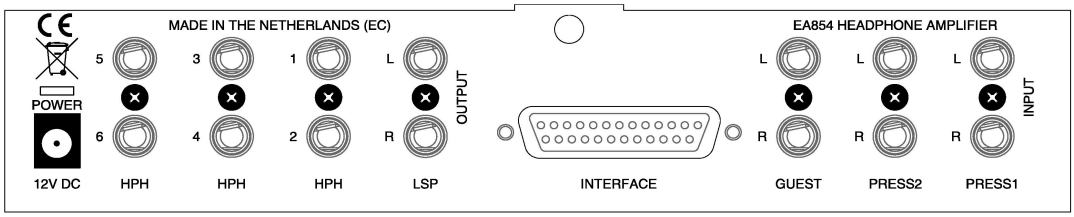
APPLICATIONS:

This unit can be used in combination with most EA On Air Mixing Consoles like the D3, D4, SRM, SBM90, S130, S340 and S440. The unit has six separate adjustable headphone outputs, two high-level loudspeaker outputs and a COUGH button with MIC ON signaling. Separate inputs for presenter and guest allow talk-back signals only to be heard by the presenter(s). The unit can be used in any application a multi input / multi output headphones amplifier is required.

OPERATION:

Operation is straight forward. One of the 3 input signals can be routed to the 6 headphones amplifiers depending on the internal settings. The volume of the headphones can be controlled individual with the volume controls on the front. A big switch on the front panel can be used as a "cough" button for the presenter. A red light in the switch can be used to indicate one or more open microphone(s), the "on-air" signal.
A standard application is the use of different signals for one or two presenters and 4 or 5 guests where the headphones for the presenter differs from that of the guests. As a guest will be distracted when hearing directions in most cases only the presenter will hear the comminication from the producer or the technician behind the mixing desk.

CONNECTIONS:



Because of its compact size the balanced inputs of the EA854 are on 6,3 mm jack connectors. Inputs are also gathered on a sub-D 25 pin connector together with the signalling connections. The pin connections are drawn elsewhere in this manual.

All the signals (incl. loudspeaker signals) to be connected with the controlroom are on this sub D-25, so in many cases a single 1 to 1 D-25 cable is all that is needed.

Loudspeaker-signals are looped trough the D-25 to the two 6,3 mm jack connectors. This connection is balanced. These signals are not processed by the EA854. The loudspeaker-outputs can be connected to a power-amplifier or to active loudspeakers.

The 3 electronically balanced inputs of the headphone-amplifiers are on L & R 6,3 mm jack connectors and are also on the D-25.

Factory standard input Headphone 1, HPH1, is connected to the PRES1 L & R inputs and can be led to a presenter-headphone-output on a mixing-console. The input-sensitivity is 0 dBu. The same for HPH2 and PRES2 L & R.
The other headphones, HPH3 to HPH6, are connected to the GUEST L & R inputs and can be led to a guest headphone output on a mixing-console.
This routing can be changed by altering the DIP switch settings on the pcb. See the block diagram on the next page.

The signalling input of the EA854 can be connected to a signalling contact on a mixing-console. The red lamp will start burning when the contact closes.

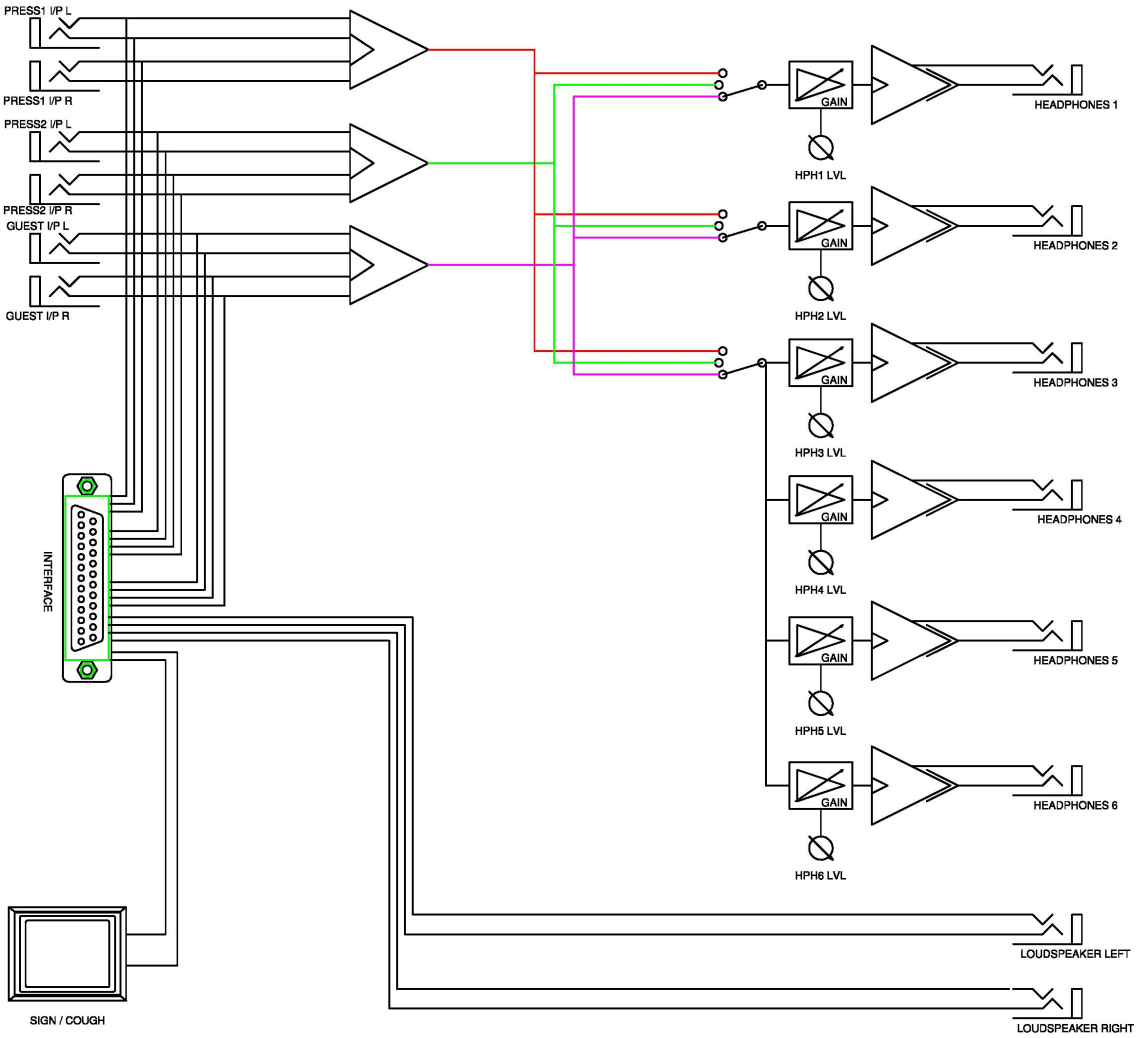
The red lamp on the front of the EA854 also functions as a cough-button. The switch-contact is led to the D-25 and can be used to mute one or more microphones. This switch is of a special low-noise type to avoid clicks as much as possible.

POWER: 12 Volts power connector. A suitable wide range adapter is included. A power switch and LED are provided on the front panel.

INSTALLATION:

The EA854 can be used as a desk-top unit or can be mounted in a 19" rack with optional rackmount kit.

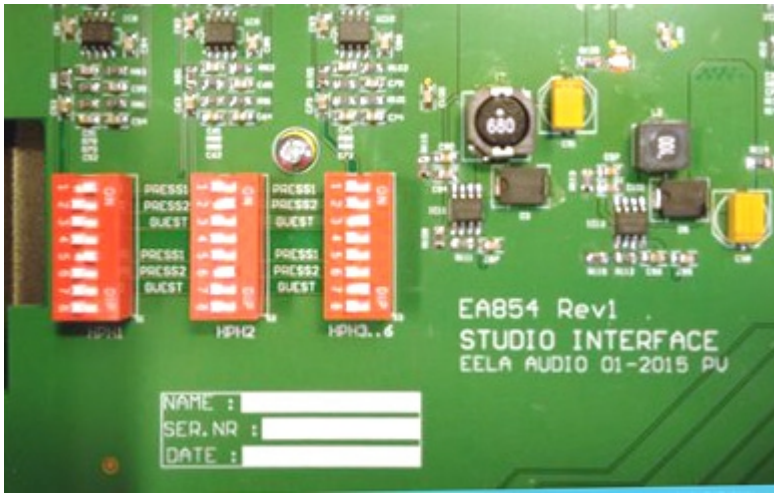
BLOCK DIAGRAM:



BLOCK DIAGRAM EA854 HEADPHONE AMPLIFIER

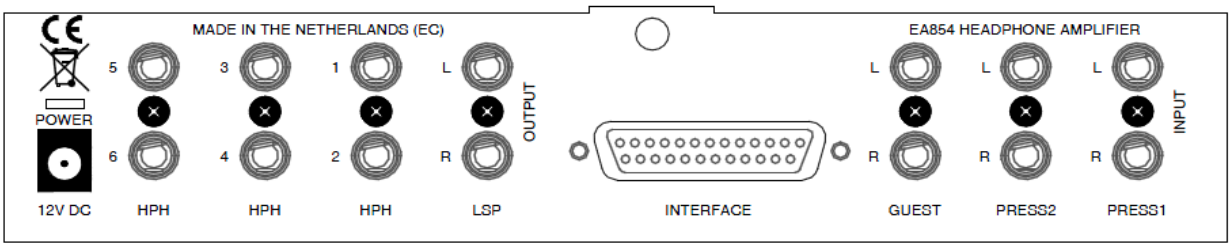
INTERNAL SETTINGS:

The Eela Audio EA854 has 3 different inputs and with DIP switches you can route these signals to the headphones outputs. Depending on your requierements you can set the system up for use with one or 2 presenters.



There are 3 blocks of DIP switches for HPH1, HPH2 and for HPH3 to 6. For each block switch 1 is for PRES1 Left, switch 2 for PRES2 Left, switch 3 Guest Left, switch 5 is for PRES1 Right, switch 6 for PRES2 Right, switch 7 Guest Right. Switch 4 and 8 are not used.

WIRING:



HEADPHONE 1..6	
T	LEFT
R	RIGHT
S	GROUND

LSP LEFT	
T	LEFT OUTPUT +
R	LEFT OUTPUT -
S	GROUND

LSP RIGHT	
T	RIGHT OUTPUT +
R	RIGHT OUTPUT -
S	GROUND

INTERFACE	
1	GROUND
2	LSP R+
14	LSP R-
3	LSP L+
15	LSP L-
4	GUEST R+
16	GUEST R-
5	GUEST L+
17	GUEST L-
6	PRESS1 R+
18	PRESS1 R-
7	PRESS1 L+
19	PRESS1 L-
8	SIGN+
20	SIGN-
9	COUGH+
21	COUGH-
10	PRESS2 R+
22	PRESS2 R-
11	PRESS2 L+
23	PRESS2 L-
24	
25	

PRESS1 LEFT	
T	LEFT INPUT +
R	LEFT INPUT -
S	GROUND

PRESS1 RIGHT	
T	RIGHT INPUT +
R	RIGHT INPUT -
S	GROUND

PRESS2 LEFT	
T	LEFT INPUT +
R	LEFT INPUT -
S	GROUND

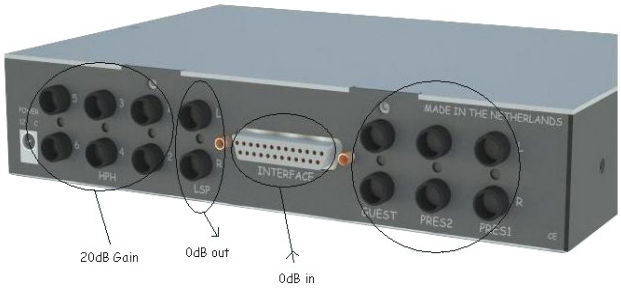
PRESS2 RIGHT	
T	RIGHT INPUT +
R	RIGHT INPUT -
S	GROUND

GUEST LEFT	
T	LEFT INPUT +
R	LEFT INPUT -
S	GROUND

GUEST RIGHT	
T	RIGHT INPUT +
R	RIGHT INPUT -
S	GROUND

Appendix

EA853 STUDIO INTERFACE SPECIFICATIONS:



Connections are "industry standard":

Input:
Electronically balanced Line input, 6,3 mm Jack

Headphones 6,3 mm Jack

A 0 dBu in will give you max 20 dBu on the headphones output.

Power supply: 12V DC, approx 1A (peak).

Our products and also this EA854 are subject to a constant process of further development and improvement. As a result information in this manual may change with product revisions.