

# PRE35 PREAMPLIFIER

PRIMARE

### **CAUTION**

TO REDUCE THE RISK OF FIRE, REPLACE WITH THE SAME TYPE AND RATING OF FUSE.

#### **ATTENTION**

UTILISER UN FUSIBLE DE RECHANGE MÊME TYPE.

## Safety compliance

This product has been designed to meet the IEC 60065 international electrical safety standard.

#### **CAUTION**

RISK OF ELECTRIC SHOCK DO NOT OPEN

#### **ATTENTION**

RISQUE DE CHOC ELECTRIQUE NE PAS OUVRIR



The lightning flash with an arrowhead symbol within an equilateral triangle, is intended to alert the user to the presence of uninsulated 'dangerous voltage' within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product.

**CAUTION:** To reduce the risk of electrical shock do not remove cover (or back). No user serviceable parts inside. Refer servicing to qualified service personnel.

**WARNING:** To reduce the risk of fire or electrical shock, do not expose this apparatus to rain or moisture.

**CAUTION:** In Canada and the USA, to prevent electric shock, match the wide blade of the plug to the wide slot in the socket and insert the plug fully into the socket.

This product is designed and manufactured to meet strict quality and safety standards. However, you should be aware of the following installation and operation precautions.

# 1. Take heed of warnings & instructions

You should read all the safety and operating instructions before operating this appliance. Retain this handbook for future reference and adhere to all warnings in the handbook or on the appliance.

### 2. Water and moisture

The presence of electricity near water can be dangerous.

Do not use the appliance near water – for example next to a bathtub, washbowl, kitchen sink, in a wet basement or near a swimming pool, etc.

## 3. Object or liquid entry

Take care that objects do not fall and liquids are not spilled into the enclosure through any openings. Liquid-filled objects such as vases should not be placed on the equipment.

### 4. Ventilation

Do not place the equipment on a bed, sofa, rug or similar soft surface, or in an enclosed bookcase or cabinet, since ventilation may be impeded. We recommend a minimum distance of 50mm around the sides and top of the appliance to provide adequate ventilation.

#### 5. Heat

Locate the appliance away from naked flames or heat producing equipment such as radiators, stoves or other appliances (including other amplifiers) that produce heat.

#### 6. Climate

The appliance has been designed for use in moderate climates.

#### 7. Racks and stands

Only use a rack or stand that is recommended for use with audio equipment. If the equipment is on a portable rack it should be moved with great care, to avoid overturning the combination.

# 8. Cleaning

Unplug the unit from the mains supply before cleaning.

The case should normally only require a wipe with a soft, damp, lint-free cloth. Do not use paint thinners or other chemical solvents for cleaning.

We do not advise the use of furniture cleaning sprays or polishes as they can cause indelible white marks if the unit is subsequently wiped with a damp cloth.

#### 9. Power sources

This appliance must be connected to a mains socket outlet using the supplied power cord. To disconnect this apparatus from power, you must disconnect the power cord. Make sure the power cord is always easily accessible.

Only connect the appliance to a power supply of the type

described in the operating instructions or as marked on the appliance.

This is a Class 1 device and **must** be earthed.

The power switch is a single-pole switch. When the switch is in the "Off" position, the appliance is not completely disconnected from the main power.

## 10. Power-cord protection

Power supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords and plugs, and the point where they exit from the appliance.

## 11. Grounding

Ensure that the grounding means of the appliance is not defeated.

### 12. Power lines

Locate any outdoor antenna/aerial away from power lines.

### 13. Non-use periods

If the unit has a stand-by function, a small amount of current will continue to flow into the equipment in this mode. Unplug the power cord of the appliance from the outlet if left unused for a long period of time.

#### 14. Abnormal smell

If an abnormal smell or smoke is detected from the appliance, turn the power off immediately and unplug the unit from the wall outlet. Contact your dealer immediately.

# 15. Servicing

You should not attempt to service the appliance beyond that described in this handbook. All other servicing should be referred to qualified service personnel.

# 16. Damage requiring service

The appliance should be serviced by qualified service personnel when:

- A. the power-supply cord or the plug has been damaged, or
- B. objects have fallen, or liquid has spilled into the appliance, or
- C. the appliance has been exposed to rain, or
- D. the appliance does not appear to operate normally or exhibits a marked change in performance, or
- E. the appliance has been dropped or the enclosure damaged.

#### 2.4G and 5G FCC Statements

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- 1. This device may not cause harmful interference, and
- This device must accept any interference received, including interference that may cause undesired operation.

Cet appareil est conforme à la section 15 des réglementations de la FCC. Le fonctionnement de l'appareil est sujetaux deux conditions suivantes :

- cet appareil ne doit pas provoquer d'interférences néfastes, et
- cet appareil doit tolérer les interférences reçues, y compris celles qui risquent de provoquer un fonctionnement indésirable.

Note: This product has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This product generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this product does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Please take attention that changes or modification not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. This equipment should be installed and operated with a minimum distance 20cm between the radiator and your body.

Cet équipement doit être installé et utilisé à une distance minimale de 20 cm entre le radiateur et votre corps.

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions:

- 1. this device may not cause interference, and
- this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radioexempts de licence. L'exploitation est autorisée aux deux conditions suivantes:

- 1. l'appareil ne doit pas produire de brouillage, et
- 2. l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Under Industry Canada regulations, this radio transmitter may only operate using an antenna of a type and maximum (or lesser) gain approved for the transmitter by Industry Canada. To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (e.i.r.p.) is not more than that necessary for successful communication.

Conformément à la réglementation d'Industrie Canada, le présent émetteur radio peut fonctionner avec une antenne d'un type et d'un gain maximal (ou inférieur) approuvé pour l'émetteur par Industrie Canada. Dans le but de réduire les risques de brouillage radioélectrique à l'intention des autres utilisateurs, il faut choisir le type d'antenne et son gain de sorte que la puissance isotrope rayonnée équivalente (p.i.r.e.) ne dépasse pas l'intensité nécessaire à l'établissement d'une communication satisfaisante.







The CE symbol indicates that this Primare product complies with the EMC (Electromagnetic Compatibility) and LVD (Low Voltage Directive) standards of the European Community.

The WEEE symbol indicates this Primare product complies with the European Parliament and Council Directive 2002/96/EC concerning Waste Electrical and Electronic Equipment (WEEE). This product must be appropriately recycled or processed in accordance with these directives. Consult your local waste disposal authority for guidance.

The RoHS symbol indicates that Primare products are designed and manufactured to comply with the Restriction of Hazardous Substances (RoHS) as stated in the European Parliament and Council Directive 2002/95/EC.

### Copyright and acknowledgments

Copyright © 2018 Primare AB. All rights reserved.

Primare AB Limstensgatan 7 21616 Limhamn Sweden

http://www.primare.net

Issue: PRE35/2 (20/11/2018)

The information in this guide is believed to be correct as of the date of publication. However, our policy is one of continuous development and so the information is subject to change without notice, and does not represent a commitment on the part of Primare AB.

Primare is a trademark of Primare AB.

This guide was produced by Human-Computer Interface Ltd. http://www.interface.co.uk

# **CONTENTS**

Welcome!	6	Technical specification	13
Getting Started	7	Analogue inputs	13
1 Unpack the PRE35	7	Analogue outputs	13
2 Connect to a power amplifier	7	Wireless output	13
' '	7	Performance	13
3 Connect inputs 4 Connect power	7	General	13
	·	Additional information	12
Back-panel connections	8	Phase	12
Using the remote control	9	Burn-in	12
Selecting PRE35 mode	9	RS232 and trigger	12
Fitting the batteries	9	Using the PRE35 with a CD35	12
Using the PRE35	10	Error messages	12
Front panel controls	10	Factory reset	12
Changing the volume	10	Index	1.5
Selecting a source	10		
Changing the display brightness	10		
Configuring the settings	11		
Using the settings menus	11		
INPUT SETTINGS	11		
AUDIO SETTINGS	12		
GENERAL SETTINGS	12		

# WELCOME!

Congratulations on selecting your new PRE35 Preamplifier
This user guide describes the features and explains how to set up the preamplifier for the best sound quality and ease of operation in order to allow for the most enjoyable reproduction of sound from all your sources.

For additional support and assistance please contact your local authorized Primare dealer, or visit our website at www.primare.net.



# GETTING STARTED

# 1 Unpack the PRE35

Your PRE35 is supplied with:

- This User Guide
- Mains cable
- IR cable
- Trigger cable
- C25 remote control with batteries
- AC Polarity Pen

If any of these items are missing please contact your supplier. We recommend you retain the packaging in case you need to transport the unit at a later date.

Note that the PRE35 is supplied with a protective film on the display glass. Remove the film for a clearer whiter display.

# 2 Connect to a power amplifier

The PRE35 is designed to be connected to a power amplifier with either balanced or unbalanced inputs.

If the power amplifier provides balanced inputs, such as the Primare A35.2:

 Connect the PRE2 or PRE3 L and R outputs from the PRE35 to the L and R balanced inputs in the power amplifier, using high quality XLR cables.

If the power amplifier only provides unbalanced inputs:

 Connect the PRE1 L and R outputs from the PRE35 to the L and R inputs on the power amplifier, using high quality RCA cables.

# Fixed-level analogue output

The PRE35 also provides a fixed-level analogue output on the LINE output on RCA connectors, to allow you to connect to active speakers or an analogue recorder.

# 3 Connect inputs

You can connect up to two balanced sources and up to three unbalanced sources to the inputs on the back panel.

## **Balanced** inputs

Connect balanced sources, such as the Primare CD35
 CD player, to balanced inputs A1 and A2 using high quality XLR cables.

## **Unbalanced** inputs

 Connect unbalanced sources to the unbalanced inputs A3, A4, and A5 using high quality RCA cables.

# 4 Connect power

 Plug one end of the mains cable supplied with the PRE35 into the power connector on the back panel, and connect the other end to a wall socket.

If this cable is not suitable for your power outlets please contact your supplier for an alternative cable.

**Note**: See *Phase*, page 14, for information about getting the best sound from your PRE35.



**WARNING:** Always disconnect the PRE35 from the mains power before connecting or disconnecting any cables.

 Switch on the PRE35, using the switch on the back panel.

The standby indicator will light up on the front panel.

# To switch on from standby

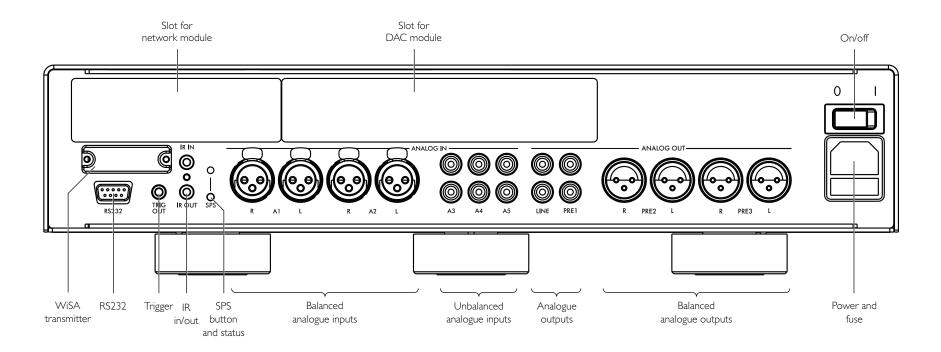
• Press  $\Theta$  on the front panel or remote control.

The display shows:

**PRIMARE** 

# **BACK-PANEL CONNECTIONS**

The following diagram explains the function of each of the connectors on the back panel:



# USING THE REMOTE CONTROL

# Selecting PRE35 mode

The remote control can operate any associated Primare products you have in your system.

## To make the remote control operate the PRE35

Press the PRE AUX button once.

# To make the remote control operate another product

 Press the AMP AV, CD SC, or PRE AUX button as appropriate.

Press once to select the product on the top line of the button, or twice to select the product on the second line.

The indicators at the top of the remote control light when pressing a button to show which mode the remote control is in.

# Fitting the batteries

Before using the remote control you need to insert the two AAA cells supplied with the C25.

- Open the cover on the back of the remote control by pressing the back cover gently near the centre of the remote control, and sliding it towards the edge of the remote control.
- Insert the two batteries, with the polarity as indicated on the bottom of the battery compartment.
- Replace the cover and push until it clips into place.



**Note:** Replace only with 1.5V alkaline cells type AAA or equivalent.

When disposing of old batteries please be considerate to the environment.



# USING THE PRE35

# Front panel controls

#### Selector

Selects an input. In the settings menus navigates between settings.

## Standby ()

Switches the PRE35 to standby, or switches it on from standby.

### Menu 🗉

Displays the settings menus or exits from the menus.

### Select ←

In the settings menus selects a setting or saves an edited setting.

#### Back &

In the settings menus navigates back or cancels editing a setting.

### Volume

Changes the volume.

# Changing the volume

The PRE35 allows you to vary the volume from 0 (silence) to 99 (maximum).

# To change the volume

 Rotate the VOLUME control on the front panel, or press the + or - buttons or the ▲ or ▼ buttons on the remote control.

The current volume setting is shown on the front panel; for example:

**VOL 28** 

# Selecting a source

The PRE35 provides a choice of 5 inputs. Initially these are labelled as shown in the following table, but you can give them your own aliases to suit the sources in your system; see *ALIAS*, page 11.

Label	Description
A1, A2	Balanced analogue on XLR
	connectors.
A3-A5	Unbalanced analogue on RCA
	connectors

#### To select a source

 Turn the SELECTOR until the source is indicated on the front panel display; for example:

#### Α1

 Alternatively, press the ◀ or ▶ buttons on the remote control to step between sources, or press one of the buttons 1 to 5 on the remote control to select the corresponding source directly.

# Changing the display brightness

## To change the front panel display brightness

 Press the **DIM** button on the remote control to step through the three levels of illumination and blank.

If you turn the display off it will be restored briefly when you operate any control.

The display automatically dims after ten minutes; you can adjust this delay in the settings menus; see *GENERAL SETTINGS*, page 12.

# CONFIGURING THE SETTINGS

# Using the settings menus

You can view and change the PRE35 settings from the front panel or remote control.

# To display the settings menu

Press the button on the front panel, or the MENU button on the remote control.

The settings menu is displayed:



## To step between settings

 Turn the SELECTOR control on the front panel, or press the ▲ or ▼ buttons on the remote control.

The current setting is shown highlighted.

## To change a setting

 Press the ← button on the front panel, or the SELECT button on the remote control.

The current value is shown highlighted.

 Turn the SELECTOR control on the front panel, or press the ▲ or ▼ buttons on the remote control, to change the value of the setting.

As you change it the new value is shown in the menu.

## To navigate back or cancel editing a setting

 Press the button on the front panel or remote control.

# To exit from the settings menu

## **INPUT SETTINGS**

The **INPUT SETTINGS** menu allows you to customise the inputs to suit the sources in your system:



### **INPUT**

Initially the **INPUT SETTINGS** shows the settings for the currently selected input. Alternatively the **INPUT** option allows you to step between all the inputs. The subsequent options will change according to the input.

#### **ALIAS**

Allows you to give the source a name; eg RADIO.

 Highlight the ALIAS item, then press the SELECT button on the remote control.

The **RENAME INPUT** menu is displayed:



- Press the ← button on the front panel, or the SELECT button on the remote control, to select it.

After adding each character you have the options:

### ADD NEW CHARACTER CONFIRM 'A' CLEAR ALIAS

where CONFIRM shows the alias you have entered so far.

- Select ADD NEW CHARACTER to add the remaining letters, up to a maximum of six characters.
- Select CONFIRM when you have entered the alias you want.

#### **STATUS**

Choose between **ENABLED** (default) or **DISABLED** to specify whether the input is enabled.

#### **AUTO SENSE**

Choose between: **SELECT** to automatically select an input containing an audio signal if the PRE35 is on; **WAKE+SELECT** to automatically wake up the PRE35 from standby, if necessary, and select an input containing an audio signal; and **OFF** (default) to disable automatic switching.

#### **VOLUME**

Choose between **VARIABLE** (default) or **FIXED** to specify whether the input should have variable or fixed gain.

**FIXED** is OdB gain, equivalent to volume setting 66, and will overrule **MAXIMUM VOLUME** in **AUDIO SETTINGS**.

Selecting **FIXED** will show a loud-volume warning. Select **YES** to proceed or **NO** to cancel the fixed gain setting.

Fixed gain functions as an SSP (Surround Sound Passthrough) allowing the PRE35 to be used as an amplifier in a multi-channel system setup

### **INPUT GAIN**

Choose between: -30dB to -1dB, 0dB (default), or +1dB to +30dB to set the gain for the selected input.

If the gain is set too high on an input clipping may occur, and the message:

#### **DECREASE INPUT GAIN**

will be displayed. In this case reduce the gain until the warning message is not displayed.

## **AUDIO SETTINGS**

The **AUDIO SETTINGS** menu allows you to customise the balance and start-up volume, and the maximum and mute volume.



#### BALANCE

Allows you to adjust the balance between OOLR-9 (far left), OOLROO (centred, default) and -9LROO (far right).

#### **STARTUP VOLUME**

Sets the general startup volume to between 0 and 60. The default is 20.

#### **MAXIMUM VOLUME**

Sets the maximum volume limit between 0 and 99. The default is 99.

#### **MUTE VOLUME**

Sets the volume when unit is muted. You can choose between 0 (default) and 30.

If the current volume is lower than the specified **MUTE VOLUME**, the volume will be set to 0 when pressing mute.

## **GENERAL SETTINGS**

The **GENERAL SETTINGS** menu allows you to configure the general operation of the PRE35:



### **SHOW INPUTS**

Choose between **ALL** (default), to show all inputs, or **WITH SIGNAL**, to show only inputs that have a signal.

#### FRONT PANEL

Choose **LOCKED** to lock the front panel buttons and knobs, or **UNLOCKED** (default) to use them.

To unlock the front panel buttons use the remote control to select this menu, or remove power from the PRE35 for a few seconds.

#### **AUTO-DIM**

Allows you to choose the delay for dimming the display after no user interaction, between: **AFTER 1MIN**, **AFTER 5MIN**, **AFTER 10MIN** (default), or **OFF**.

#### **LED BRIGHTNESS**

Displays the **LED BRIGHTNESS** menu to allow you to set the display brightness to between 1 and 5 for each display dimming level:

**DIM HIGH** (default 3), **DIM MID** (default 2), **DIM LOW** (default 1), or **DIM OFF** (default 1).

#### STANDBY SETTINGS

Displays the **STANDBY SETTINGS** menu to allow you to specify the standby settings.

**AUTO-STANDBY** automatically switches the PRE35 to standby if there is no user interaction or audio from the current source for a specified delay: **AFTER 10MIN**, **AFTER 15MIN**, **AFTER 20MIN** (default), or **OFF**.

#### **FACTORY RESET**

Resets the PRE35 to the factory default settings.

You are prompted to confirm. Select **YES** to proceed or **NO** to cancel.

#### FIRMWARE VERSIONS

Displays the **FIRMWARE VERSIONS** menu to allow you to view the versions of firmware installed.

# TECHNICAL SPECIFICATION

# **Analogue inputs**

**Balanced** inputs

 $2 \times XLR$ ,  $30k\Omega$  impedance

**Unbalanced** inputs

 $3 \times RCA$ ,  $15k\Omega$  impedance

# **Analogue outputs**

**Preamplifier output** 

2x XLR,  $380\Omega$  impedance

 $1 \times RCA$ ,  $100\Omega$  impedance

Line output

 $1 \times RCA$ ,  $100\Omega$  impedance

# Wireless output

1x Wireless stereo output using WiSA® technology (future software upgrade)

# **Performance**

Gain

Preamplifier output: 16.5dB

Line output: OdB

Speaker output: 42.5dB

Analogue frequency response

20Hz - 20kHz: ±0.1dB

Distortion

THD + N: < 0.002%, 20Hz - 20kHz

Signal to noise

>100dB (AES17 filter)

## General

Control

C25 system remote control

RS232 IR in/out

Trigger out

**Power Consumption** 

Off: 0W

Standby: 0.3W Operating: <28W

**Dimensions** 

 $430 \times 420 \times 106$  mm (w x d x h) with knobs and

connectors

 $430 \times 382 \times 106$  mm (w x d x h) without knobs and

connectors

Weight

11 kg

Colour

Black or titanium

# ADDITIONAL INFORMATION

These instructions help you get the best possible sound from your PRE35.

# **Phase**

The phase of the AC supply can make a significant difference to the sound.

Use the Polarity Pen supplied with the PRE35 to verify which pin is live on your AC power cable.

Ensure that the live pin of the AC power cable is connected to the left-hand pin of the power connector, viewed from the back panel:



## Burn-in

Your Primare will start to sound best after an initial burn-in of approximately 24 hours.

You will notice a further smaller improvement in sound quality for at least another 3 days' playing.

# RS232 and trigger

The RS232 input allows you to connect the PRE35 to a controller system. Use a twisted (null modem) cable. For more information contact Primare at info@primare.net or visit www.primare.net.

The Trigger output allows the PRE35 to switch on other devices, such as a CD32.

# Using the PRE35 with a CD35

Your PRE35 is an ideal companion to the Primare CD35 CD Player. For best results link the two products together as follows using the two cables supplied with the PRE35:

## To connect the trigger cable

The Trigger cable ensures that the CD35 switches on, or to standby, when you operate the  $\theta$  button on the front panel of the PRE35.

 Connect the Trigger cable from the PRE35 TRIG OUT to the CD35 TRIG IN.

# **Error messages**

The following error messages on the front panel display indicate an error condition:

#### **DECREASE INPUT GAIN**

Clipping has occurred on an input. Decrease the input gain; see *INPUT GAIN*, page 11.

### **DC ERROR**

Try the following

 Power off PRE35 and disconnect the speaker connections.

If this solves the problem, check the speaker wiring.

If the problem persists

Power off PRE35 and disconnect all input connections.

If this solves the problem, there is a DC offset on one of the inputs.  $\,$ 

If the problem persists

Contact your dealer for service arrangements.

# **Factory reset**

Press and hold the  $\Theta$  standby button on the front panel to display the main firmware version number.

Press and hold the  $\Theta$  standby button on the front panel for 10 seconds to perform a factory reset of the PRE35.

You can also do a factory reset from the Prisma app, or from the **GENERAL SETTINGS** menu; see *GENERAL SETTINGS*, page 12.

# INDEX

Front panel controls 10

A	G	R	
Alias (settings menus) 11	General settings menu 12	Remote control 9	
Analogue inputs and outputs 8		Fitting batteries 9	
Audio settings menu 12	least transmission 11	RS232 input 8, 14	
Auto-dim (settings menus) 12	Input (settings menus) 11		
Auto sense (settings menus) 11	Input gain (settings menus) 11	\$	
	Inputs, connecting 7	Settings menus 11	
В	Input settings menu 11	Show inputs (settings menus) 11, 12	
Back panel 8	IR input 8	Sources	
Balance (settings menus) 12		Connecting 7	
Balanced inputs 8	L	Selecting 10	
	LED brightness (settings menus) 12	Standby settings (settings menus) 12	
C	M	Startup volume (settings menus) 12	
Clipping 11	Maximum volume (settings menus) 12	Status (settings menus) 11	
D	Menus		
DAC module 8	Audio settings 12	Т	
Display brightness, changing 10	General settings 12	Technical specification 13	
	Input settings 11	Trigger outputs 8	
E	Mute volume (settings menus) 12		
Error messages 14	,	<b>U</b> Unbalanced inputs and outputs 8	
_	N		
<b>F</b>	Network module 8	V	
Factory reset 14		Volume (settings menus) 11	
Factory reset (settings menus) 12	P	Volume, changing 10	
Firmware (settings menus) 12	Phase 14	. c.co, changing 10	
Front panel (settings menus) 12	Power, connecting 7		

