the box

Six Mix

active speaker

th•mann
MUSIC IS OUR PASSION

user manual

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1 General information

This user manual contains important information on the safe operation of the device. Read and follow all safety notes and all instructions. Save this manual for future reference. Make sure that it is available to all persons using this device. If you sell the device to another user, be sure that they also receive this manual.

Our products and user manuals are subject to a process of continuous development. We therefore reserve the right to make changes without notice. Please refer to the latest version of the user manual which is ready for download under *www.thomann.de*.

1.1 Further information

On our website (*www.thomann.de)* you will find lots of further information and details on the following points:

Download	This manual is also available as PDF file for you to download.
Keyword search	Use the search function in the electronic version to find the topics of interest for you quickly.
Online guides	Our online guides provide detailed information on technical basics and terms.
Personal consultation	For personal consultation please contact our technical hotline.
Service	If you have any problems with the device the customer service will gladly assist you.

1.2 Notational conventions

This manual uses the following notational conventions:

Letterings

The letterings for connectors and controls are marked by square brackets and italics.

Examples: *[VOLUME]* control, *[Mono]* button.

1.3 Symbols and signal words

In this section you will find an overview of the meaning of symbols and signal words that are used in this manual.

Signal word	Meaning
DANGER!	This combination of symbol and signal word indicates an immediate dangerous situation that will result in death or serious injury if it is not avoided.
CAUTION!	This combination of symbol and signal word indicates a possible dangerous situation that can result in minor injury if it is not avoided.
NOTICE!	This combination of symbol and signal word indicates a possible dangerous situation that can result in material and environmental damage if it is not avoided.

Warning signs	Type of danger
	Warning – high-voltage.
	Warning – danger zone.

2 Safety instructions

Intended use

This device is designed for sound reinforcement. Use the device only as described in this user manual. Any other use or use under other operating conditions is considered to be improper and may result in personal injury or property damage. No liability will be assumed for damages resulting from improper use.

This device may be used only by persons with sufficient physical, sensorial, and intellectual abilities and having corresponding knowledge and experience. Other persons may use this device only if they are supervised or instructed by a person who is responsible for their safety.

Safety

DANGER!

Danger for children

Ensure that plastic bags, packaging, etc. are disposed of properly and are not within reach of babies and young children. Choking hazard!

Ensure that children do not detach any small parts (e.g. knobs or the like) from the unit. They could swallow the pieces and choke!

Never let children unattended use electrical devices.

DANGER!

Electric shock caused by high voltages inside

Within the device there are areas where high voltages may be present. Never remove any covers.

There are no user-serviceable parts inside.

Do not use the device if covers, protectors or optical components are missing or damaged.

DANGER!

Electric shock caused by short-circuit

Always use proper ready-made insulated mains cabling (power cord) with a protective contact plug. Do not modify the mains cable or the plug. Failure to do so could result in electric shock/death or fire. If in doubt, seek advice from a registered electrician.

CAUTION!

Possible hearing damage

The device can produce volume levels that may cause temporary or permanent hearing impairment. Over an extended period of time, even levels that seem to be uncritical can cause hearing damage.

Decrease the volume level immediately if you experience ringing in your ears or hearing impairment. If this is not possible, keep a greater distance or use sufficient ear protectors.

NOTICE!

Risk of fire

Do not block areas of ventilation. Do not install the device near any direct heat source. Keep the device away from naked flames.

NOTICE!

Operating conditions

This device has been designed for indoor use only. To prevent damage, never expose the device to any liquid or moisture. Avoid direct sunlight, heavy dirt, and strong vibrations.

Only operate the device within the ambient conditions specified in the chapter 'Technical specifications' of this user manual. Avoid heavy temperature fluctuations and do not switch the device on immediately after it was exposed to temperature fluctuations (for example after transport at low outside temperatures).

Dust and dirt inside can damage the unit. When operated in harmful ambient conditions (dust, smoke, nicotine, fog, etc.), the unit should be maintained by qualified service personnel at regular intervals to prevent overheating and other malfunction.

NOTICE!

Power supply

Before connecting the device, ensure that the input voltage (AC outlet) matches the voltage rating of the device and that the AC outlet is protected by a residual current circuit breaker. Failure to do so could result in damage to the device and possibly injure the user.

Unplug the device before electrical storms occur and when it is unused for long periods of time to reduce the risk of electric shock or fire.

NOTICE!

Possible damage due to installation of a wrong fuse

The use of different types of fuses can cause serious damage to the unit. Fire hazard!

Only fuses of the same type may be used.

NOTICE!

Danger of short circuit

Switching on phantom power will damage the device if unbalanced XLR cables are connected.

Only turn on phantom power when exclusively balanced XLR cables are connected.

3 Features

- Powered 2-way speaker with 4-channel mixer
- 6" woofer, 1" tweeter (Neodym)
- Output power 2 × 70 W (RMS)
- Frequency range 55 Hz … 20 kHz
- three mono input channels with built-in 2-band equalizer and individually switchable FX (Line, MIC)
- one stereo input channel with built-in 2-band equalizer (line)
- switchable phantom power
- Standby function
- built-in WAV / MP3 player (playback sources: USB, Bluetooth, micro SD card)
- Housing with four M4 rigging points

4 Installation and starting up

Unpack and check carefully there is no transportation damage before using the unit. Keep the equipment packaging. To fully protect the product against vibration, dust and moisture during transportation or storage use the original packaging or your own packaging material suitable for transport or storage, respectively.

NOTICE!

Possible staining

The plasticiser contained in the rubber feet of this product may possibly react with the coating of your parquet, linoleum, laminate or PVC floor and after some time cause permanent dark stains.

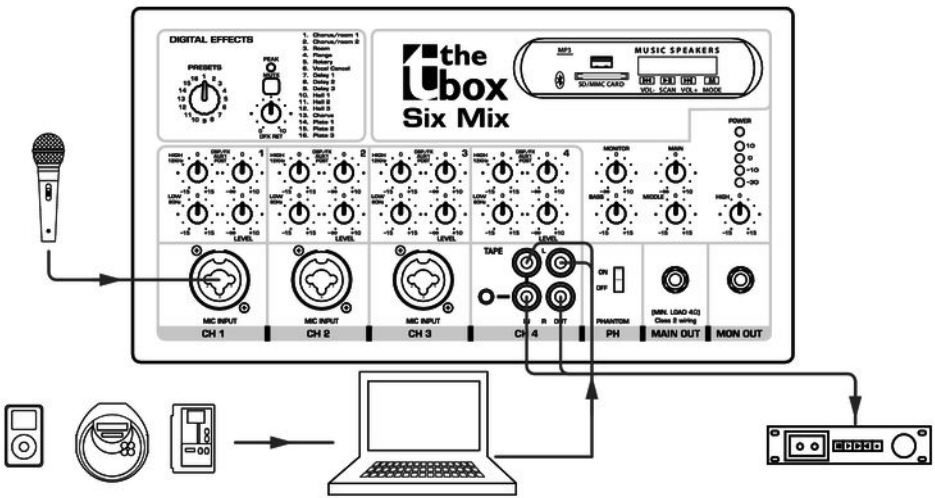
In case of doubt, do not put the rubber feet directly on the floor, but use felt-pad floor protectors or a carpet.

Before power-up and before connecting or disconnecting audio cables, set all volume controls of the unit to zero to avoid damage to the connected speakers and devices.

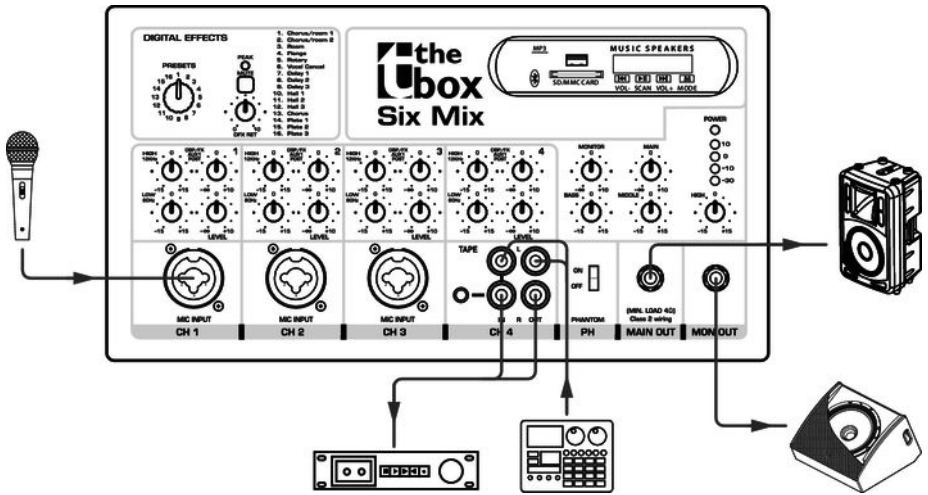
Bluetooth pairing

After power-up, the device is visible to other Bluetooth devices under the name *'Six Mix'* and can be paired with them.

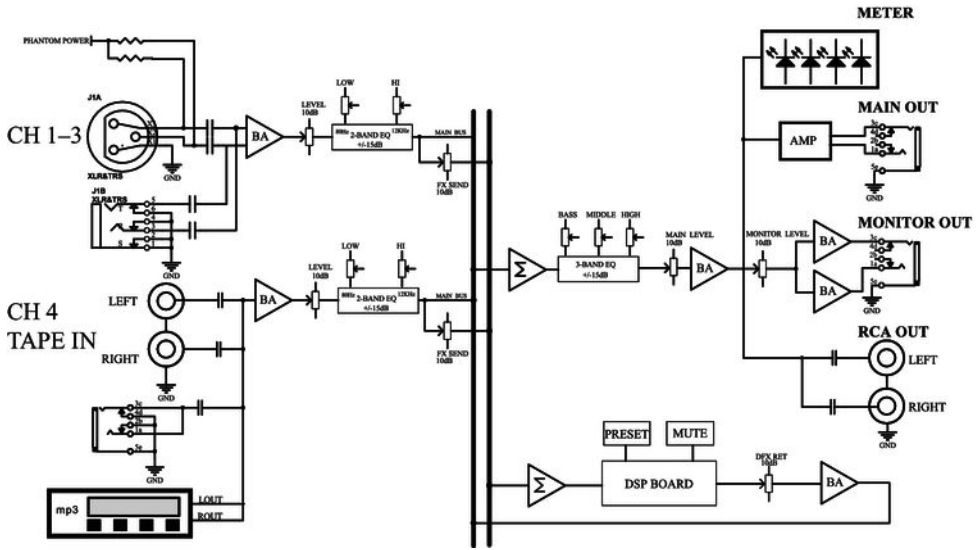
Connection example 1



Connection example 2

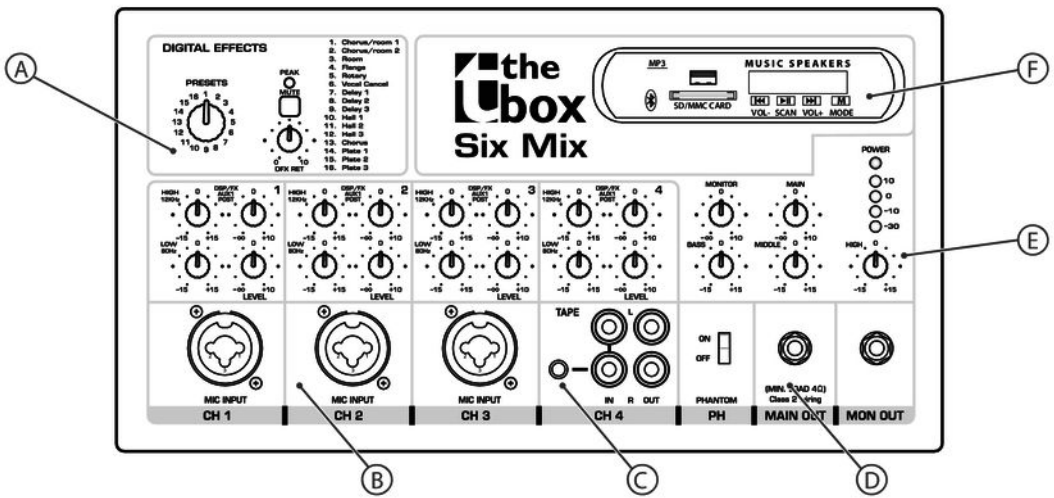


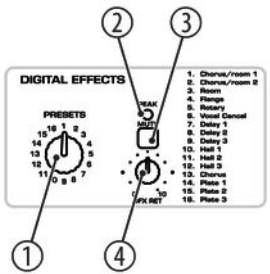
Block diagram



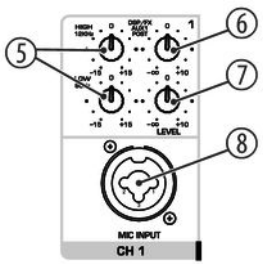
5 Connections and controls

Control panel (overview)

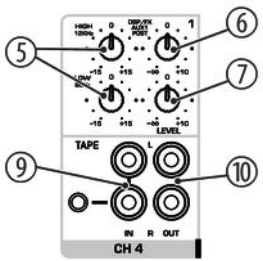




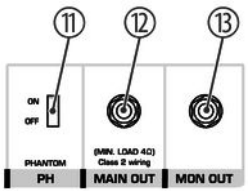
A	*[DIGITAL EFFECTS]*
1	*[PRESETS]* Rotary switch to select an effect from the list on the right
2	*[PEAK]* Indicates overload. If the LED flickers or is lit, the input signal level is too high The LED also lights up when the effects are muted.
3	*[MUTE]* Button to mute the effects
4	*[DFX RET]* Control to adjust the output signals effects portion



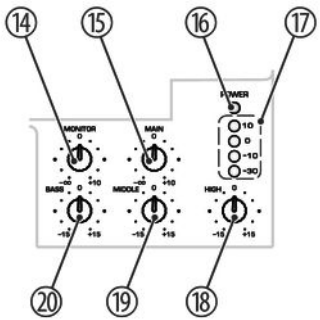
B	*[CH 1], [CH 2], [CH 3]*
5	*[HIGH]* Equalizer: Control for adjusting the high frequencies (above 12 kHz) of each channel in a range of –15 … +15 dB *[LOW]* Equalizer: Control for adjusting the high frequencies (below 80 Hz) of each channel in a range of –15 … +15 dB
6	*[DSP/FX AUX1 POST]* Control for adjusting the signal portion of the respective channel for the AUX bus
7	*[LEVEL]* Separate volume controls for each channel
8	*[MIC INPUT]* Microphone inputs for channels CH1 … CH3 Only microphones may be connected to these inputs. When using condenser microphones, use pushbutton *[PHANTOM]* (11) to turn on phantom power



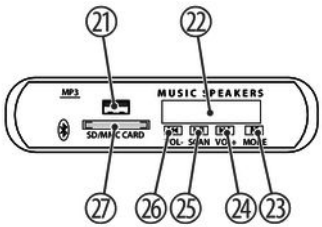
C	*[CH 4]*
5	*[HIGH]* Equalizer: Control for adjusting the high frequencies (above 12 kHz) of the channel in a range of –15 … +15 dB *[LOW]* Equalizer: Control for adjusting the low frequencies (below 80 Hz) of the channel in a range of –15 … +15 dB
6	*[DSP/FX AUX1 POST]* Control for adjusting the signal portion of the channel for the AUX bus
7	*[LEVEL]* Volume control for the channel and the Bluetooth playback
9	*[TAPE IN]* Line inputs for channel 4 (3.5 mm jack and RCA sockets)
10	*[TAPE OUT]* Line output carrying the stereo output signal (Main) at line level



D	
11	*[PH]* Push button to turn on / off phantom power for the XLR microphone inputs of channels CH1 … CH3 The phantom power leads to damage to the device if unbalanced cables are connected. Only switch on phantom power while exclusively balanced cables are connected.
12	*[MAIN OUT]* 1/4" output jack (stereo) for connecting passive speakers
13	*[MON OUT]* 1/4" output sockets (stereo) for connecting the unit to an external amplifier or an powered speaker box.



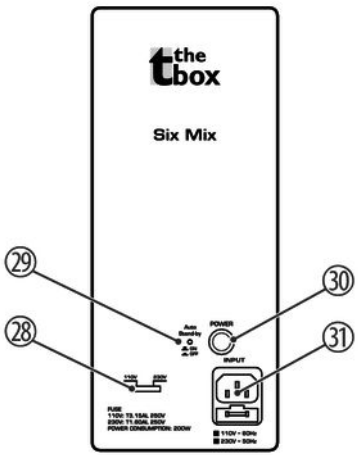
E	
14	*[MONITOR]* Control to adjust the monitor volume
15	*[MAIN]* Overall output volume control
16	*[POWER]* Power indicator. This LED lights when the unit is powered and turned on
17	*[10]* … *[–30]*: Output signal strength indicator If the LED *[10]* is flashing, the level is too high and the amplifier could start clipping. If none of the LEDs are lit even though a signal is present, the level is too low. For optimum sound, the level should be set so that the LEDs *[-10]* and *[0]* light up.
18, 19, 20	*[HIGH]*, *[MIDDLE]*, *[BASS]* EQ controls for the overall output signal (main).



F	
21	*[USB]* USB port for external player.
22	Display
23	*[M] / [MODE]* Operating mode selection ■ *'LINE'*: Audio data playback of SD card. ■ *'bt'*: Playback of audio data received via the Bluetooth interface. ■ *'USB'*: Playback of the audio data from the device connected to the USB interface or from the card in the SD / MMC card slot.
24	⏭ / *[VOL+]* Normal keypress: Skip to the next audio track. Button pressed for about 2 seconds: Increase volume.
25	⏯ / *[SCAN]* Start / stop playback

F	
26	⏮ / *[VOL–]* Normal keypress: Skip to the previous audio track. Button pressed for about 2 seconds: Decrease volume.
27	*[SD/MMC CARD]* Slot for an SD or MMC card

Rear panel



28	Voltage selector
29	*[Auto Stand-by]*
	[ON] The device switches to standby mode when no audio signals are received.
	[OFF] The device remains in normal operation when no audio signals are received.
30	Main switch. Turns the device on and off
31	IEC chassis plug for mains connection, with fuse holder

6 Technical specifications

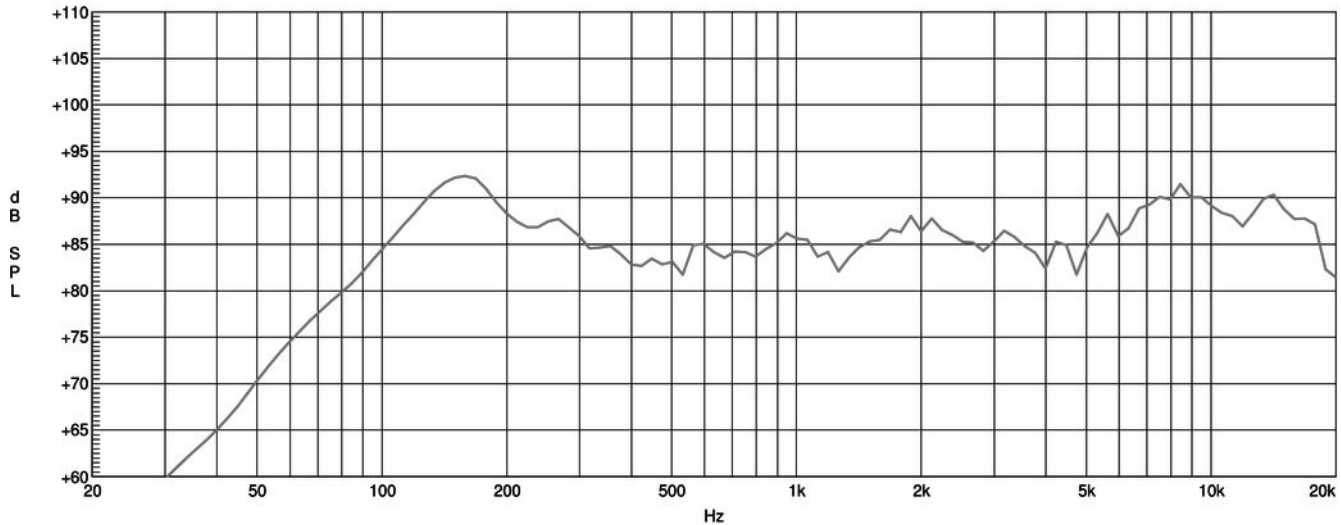
Speaker	Two-way system with 1" driver (Neodym) and 6" woofer
Input connections	3 × XLR / 1/4" combo socket (mono, Mic In)
	1 × 3.5 mm jack (stereo, Tape In)
	1 × pair of RCA sockets (L/R, Tape In)
	1 × USB
Output connections	1 × 1/4" jack (mono, Main Out)
	1 × pair of RCA sockets (L/R, Tape Out)
	1 × 1/4" jack (mono, Mon Out)
Output power	140 W (RMS)
Frequency range	75 Hz … 20 kHz (–6 dB)
Crossover frequency	2,4 kHz
Slew rate	8 dB/octave

Sound pressure level (max.)	110 dB	
Power consumption	200 W	
Operating supply voltage	110 / 230 V ~ 50/60 Hz	
Fuse	110 V: 5 mm x 20 mm, 4 A, 250 V, slow-blow 230 V: 5 mm x 20 mm, 2 A, 250 V, slow-blow	
Dimensions (W × H × D)	200 mm × 320 mm × 220 mm	
Weight	5.8 kg	
Ambient conditions	Temperature range	0 °C…40 °C
	Relative humidity	50 %, non-condensing

Further information

Multifunctional housing	Yes
Woofers	1 × 6"
Tweeter 1" and above	Yes
Microphone input	Yes
Line input	Yes

Frequency response



7 Plug and connection assignment

Introduction

This chapter will help you select the right cables and plugs to connect your valuable equipment in such a way that a perfect sound experience is ensured.

Please note these advices, because especially in 'Sound & Light' caution is indicated: Even if a plug fits into the socket, an incorrect connection may result in a destroyed power amp, a short circuit or 'just' in poor transmission quality!

Balanced and unbalanced transmission

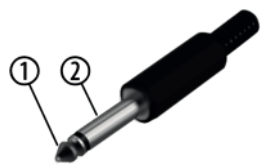
Unbalanced transmission is mainly used in semi-professional environment and in hifi use. Instrument cables with two conductors (one core plus shielding) are typical representatives of the unbalanced transmission. One conductor is ground and shielding while the signal is transmitted through the core.

Unbalanced transmission is susceptible to electromagnetic interference, especially at low levels, such as microphone signals and when using long cables.

In a professional environment, therefore, the balanced transmission is preferred, because this enables an undisturbed transmission of signals over long distances. In addition to the conductors 'Ground' and 'Signal', in a balanced transmission a second core is added. This also transfers the signal, but phase-shifted by 180°.

Since the interference affects both cores equally, by subtracting the phase-shifted signals, the interfering signal is completely neutralized. The result is a pure signal without any noise interference.

1/4" TS phone plug (mono, unbalanced)

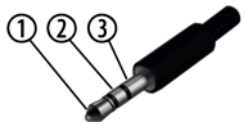


1	Signal
2	Ground, shielding

1/4" TRS phone plug (mono, balanced)

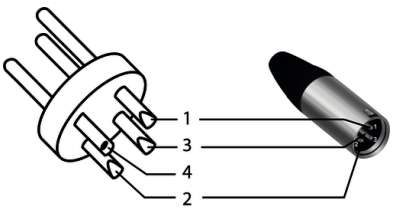
1	Signal (in phase, +)
2	Signal (out of phase, –)
3	Ground

Three-pole 1/8" mini phone jack (stereo, unbalanced)



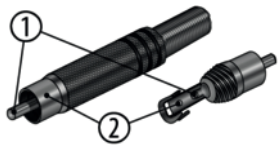
1	Signal (left)
2	Signal (right)
3	Ground, shielding

XLR plug (balanced)



1	Ground, shielding
2	Signal (in phase, +)
3	Signal (out of phase, –)
4	Shielding on plug housing (option)

RCA connection



Drawing and table indicate the pin assignment of an RCA plug.

1	Signal
2	Ground, shielding

8 Protecting the environment

Disposal of the packaging material

For the transport and protective packaging, environmentally friendly materials have been chosen that can be supplied to normal recycling.

Ensure that plastic bags, packaging, etc. are properly disposed of.

Do not just dispose of these materials with your normal household waste, but make sure that they are collected for recycling. Please follow the notes and markings on the packaging.

Disposal of your old device

This product is subject to the European Waste Electrical and Electronic Equipment Directive (WEEE) in its currently valid version. Do not dispose with your normal household waste.

Dispose of this device through an approved waste disposal firm or through your local waste facility. When discarding the device, comply with the rules and regulations that apply in your country. If in doubt, consult your local waste disposal facility.

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