

TRS-218A Datasheet



TRS-218A is Self Powered, 3.6 kW subwoofer with full system DSP and networking integration and control. Designed for large venues and outdoor events, the TRS-218 can be used singularly or in multiples in both horizontal or vertical orientation using Ohm's TRS stacking system which ensures secure stacking of multiple units. Ground stacking is also possible with TRS 212 Point source, Vela and Cora line array systems.

Amplification, DSP and networking integrated into one TRS 218-A subwoofer, which includes 3.6 kW of class D amplification, AES in/out, 2 User definable DSP outputs to provide processing for other compatible self-powered products such as TRS-212A and Cora-A without the need for additional DSP's. Integrated multiband Peak and RMS Limiter for internal channels and outputs, thermal limiter and protection on Amplification for total system protection.

With integrated network capabilities, each TRS-218A can be controlled remotely. Delay, crossover, Full FIR-DSP with linear phase X-over and linear phase loudspeaker equalization featuring dual input channels and two additional DSP-controlled Line outputs and EQ functions are implemented by our proprietary pro-A-sync software via Ethernet or with the on board touchscreen LCD display.

Using two of our proprietary 18" cast aluminium chassis drivers coupled with a hybrid horn/reflex design, this cabinet has a frequency response of 29 Hz to 110 Hz (-10 dB) at an astounding 141 dB SPL (peak).

TRS-218A can be used singularly or in multiples in both horizontal and vertical orientations. Two Pre-DSP outputs make daisy chaining large systems possible.

The robust enclosure has a HEX design front grill, hardwearing Polyurea paint finish and three bar handles on each side. Integrated rubber feet are located on underside of the enclosure for securing in multiple ground stack positions on additional TRS-218/A subwoofers. Cups are countersunk into the top of the enclosure to lock in additional TRS-218/A, TRS 212/A.

Available separately is a TRS-218 dolly-board enabling easy, single person movement between venues.

The rear aluminium connection plate has Symmetrical XLR input with 2 x parallel link out, dual channel AES-Input with active buffered AES link out and two post DSP XLR outputs and a powerCON® TRUE1 input and link.

Key Features:

- Tough Polyurea coating
- Reticulated weatherproof foam covered powder-coated Zintec steel grills
- Dual layer thermal relief driver technology
- Aerospace grade 7075-T6511 aluminium flying points
- TRS Interlocking stacking system
- Heavy duty recessed steel handles
- Touring grade cabinets
- Integrated Class D Power module
- World-wide voltage compatibility
- Module power efficiency of 89%
- Ethernet Connectivity
- touchscreen LCD display
- Full FIR-filtered DSP with linear phase outputs
- Fully integrated Look-Ahead and RMS limiters
- Rebated Baltic Birch Plywood construction
- Full input and output protection modes
- 32 bit floating-point signal processing
- Analog Devices Sharc processor
- Wide dynamic range 128dB(A) input converter
- Genuine Neutrik® Signal and Power connectors

Technical Specifications

Design

2 x 18" Active Subwoofer with integrated FIR-DSP, Reflex Tuning

Internal Power Amps

3600 w

Internal DSP

Full FIR-DSP with linear phase X-over and linear phase loudspeaker equalization

Featuring dual input channels and two additional DSP-controlled Line outputs

Sensitivity Chassis 1w/1m

105 dB

Max. SPL

138 dB cont. / 141 dB peak (frequency dependent)

Frequency Response (± 3 dB)

33 Hz – 100 Hz

Usable Frequency Range (-10 dB)

29 Hz – 110 kHz

Dispersion

Omni

SYSTEM OPERATION

System Controller

Integrated FIR-DSP with touchscreen-control and usb control port

Input connection

Symmetrical XLR input, 2 x 10 K ohm Impedance with parallel link out, dual channel AES-Input with active buffered AES link out

Protection

Integrated multiband Peak and RMS Limiter for internal channels and outputs, thermal limiter and protection on Amplifier

PRODUCT FEATURES

Components

2 x 18" Low Frequency Driver

Crossover

-

Connectors

2 x analog in XLR, 2x Analog input link XLR, 2 analog out XLR, AES-in XLR and AES- out XLR, 1 x powerCON® True1 connector in and line

Dimensions (H x W x D mm)

584.3 x 1156 x 746

Weight (kg)

94

Shipping Weight (kg)

97(1 cabinet per carton)

Colour

Black

Options

Available in white or RAL colours on request

Rigging

Foot and cup stacking system.

HARDWARE

Fitted as Standard

Foot and cup stacking system, large bar handles.

Optional

TRS-218 Dolly-board

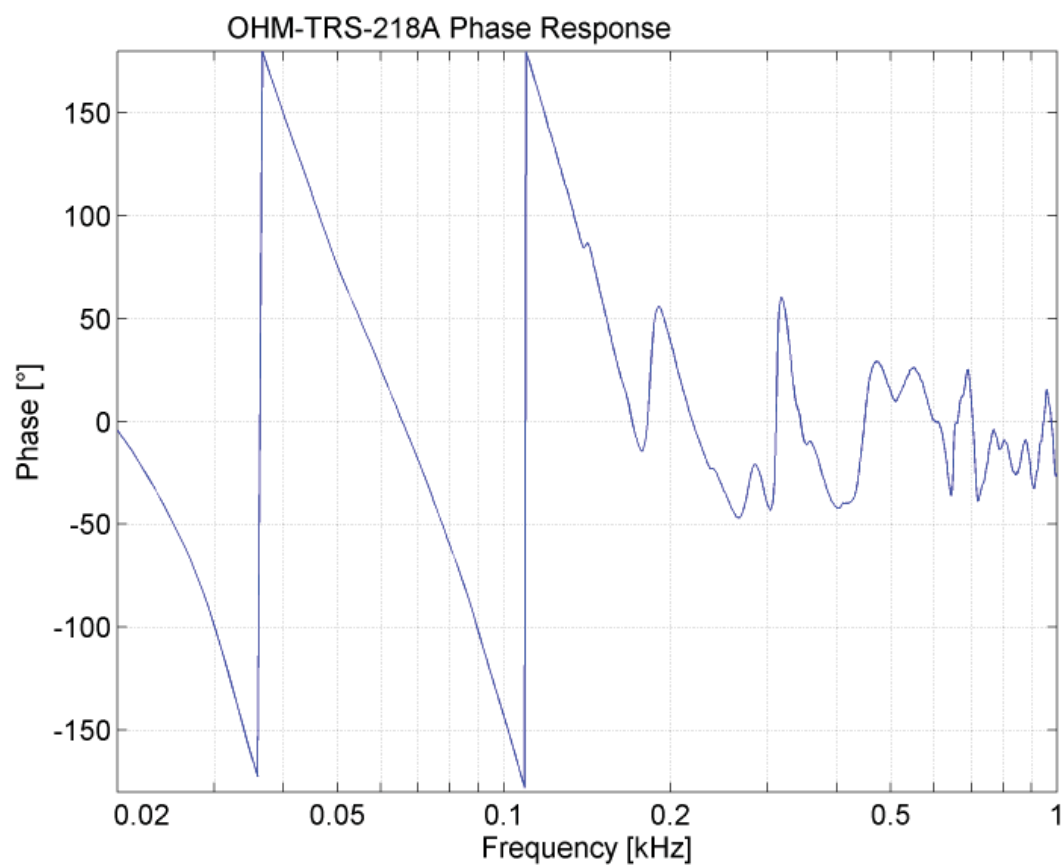
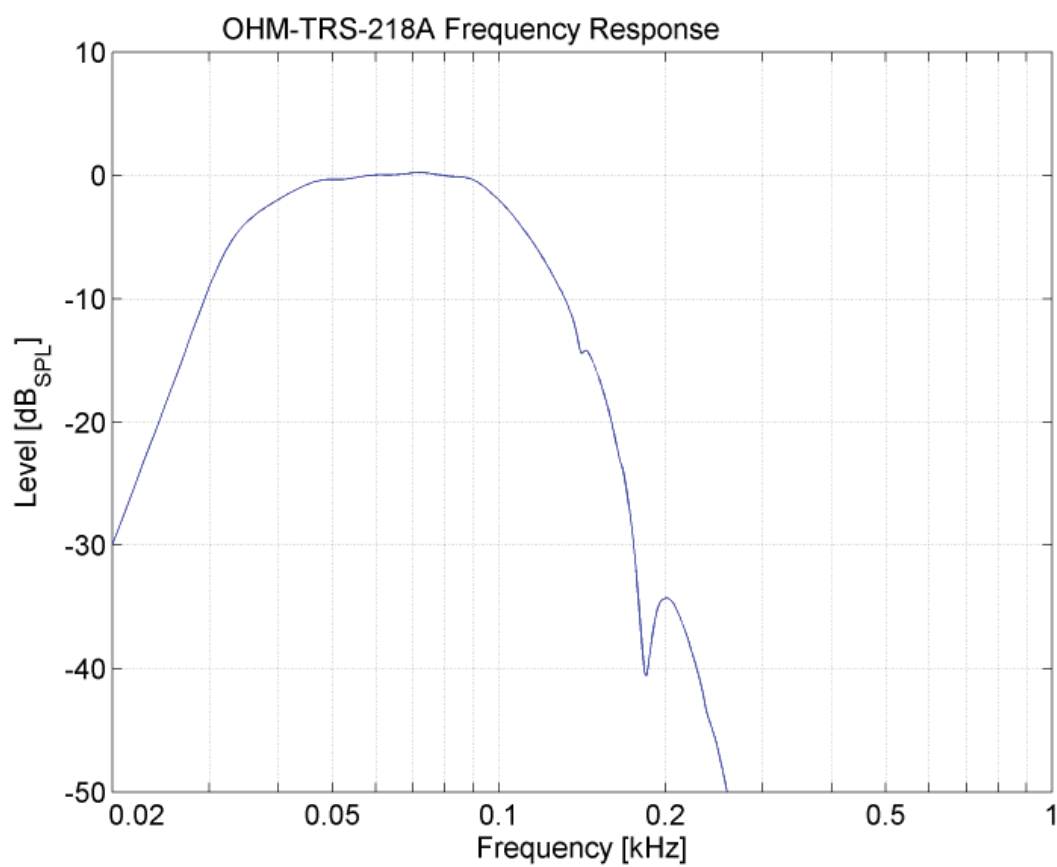
Additional Descriptive Data

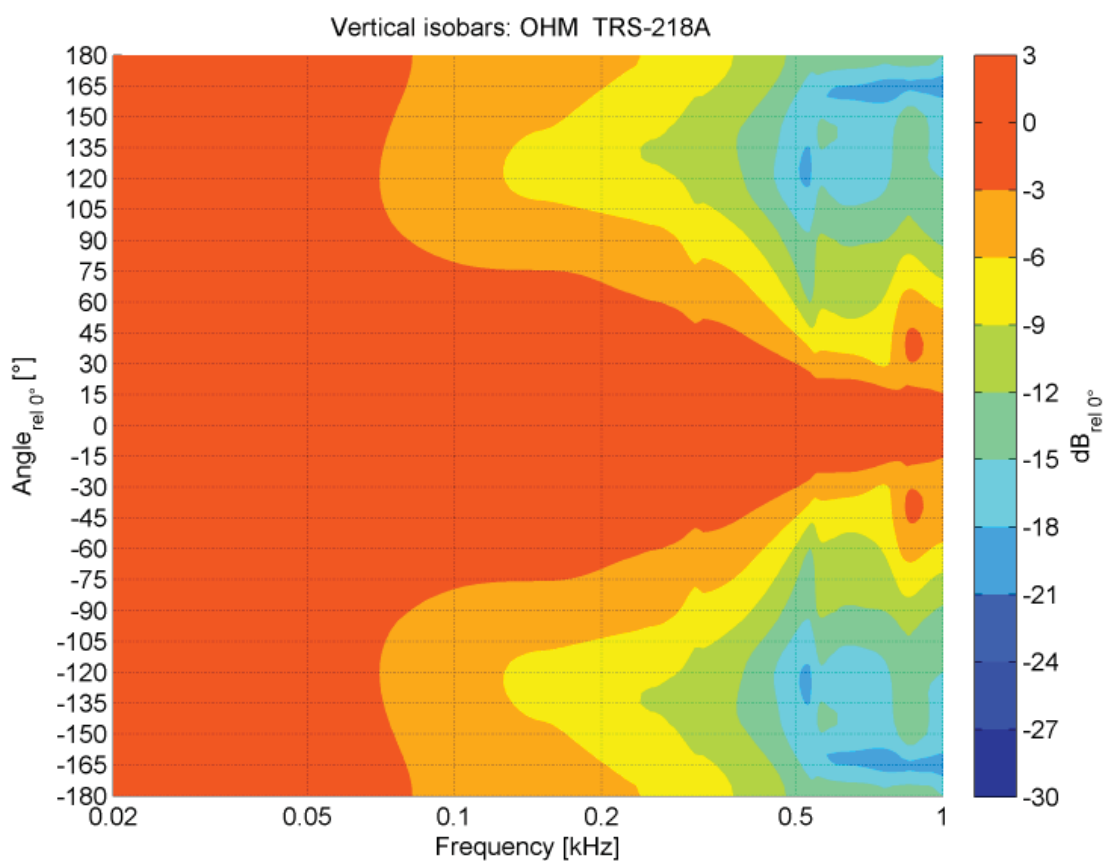
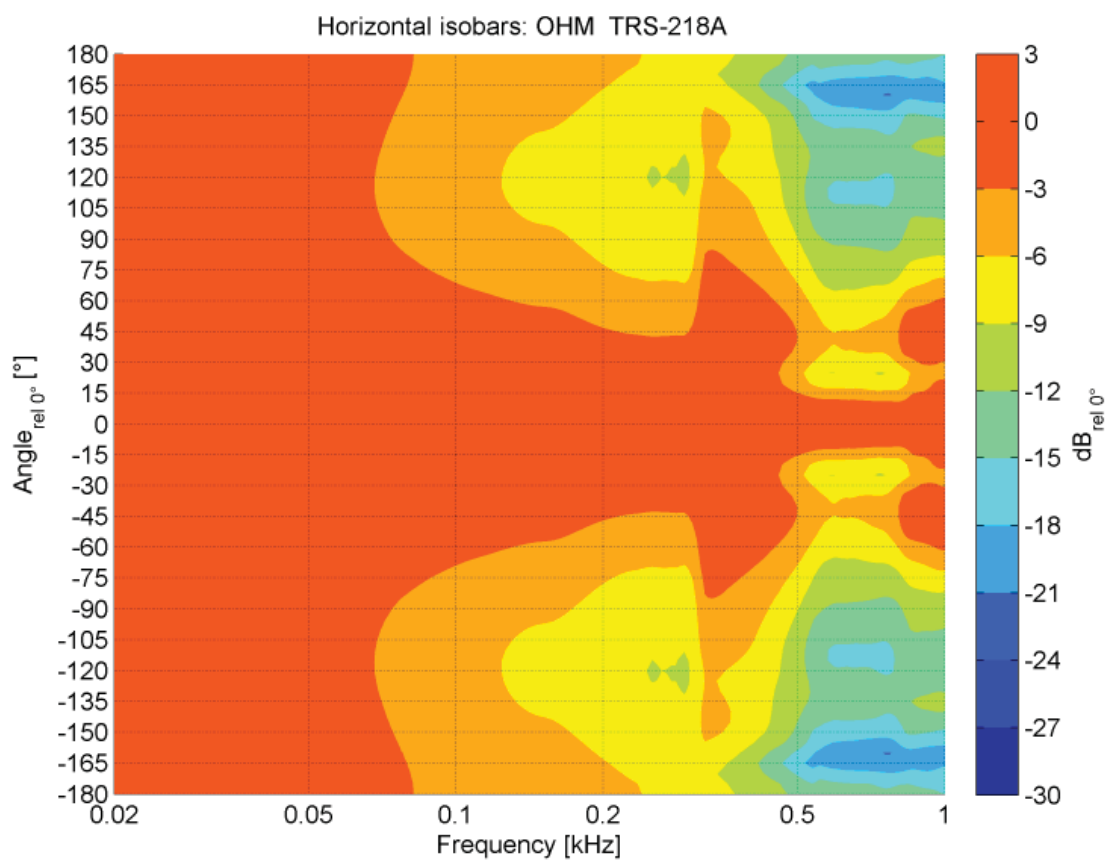
Birch plywood construction, with durable scratch resistant black polyurea textured paint finish, kick-proof steel grill and internal black foam with Ohm logo.

Recommended filter settings are available on the website ohm.co.uk/downloads

* All presets from the OHM library.

TRS-218A Measurements

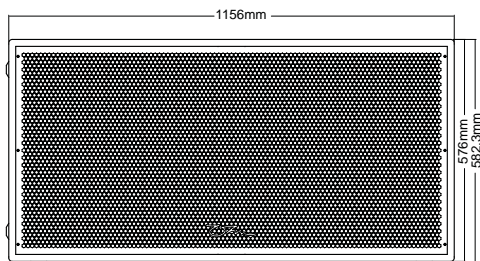




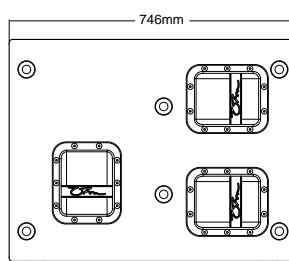
All Measurements are executed by the IFAA Institute for Acoustics in Aachen, Germany
measurement conditions 4Pi environment for full range cabinets, 2Pi environment for subwoofers.

TRS-218A Dimensions

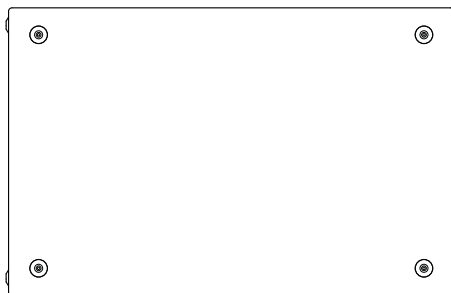
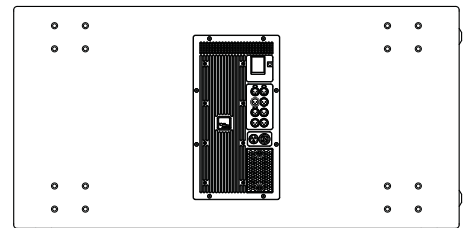
Front



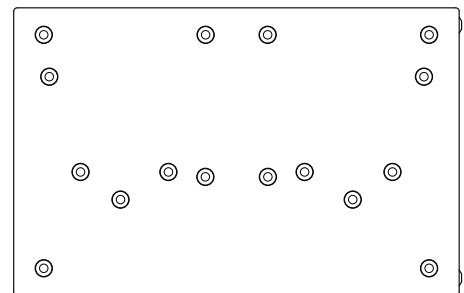
Side



Back



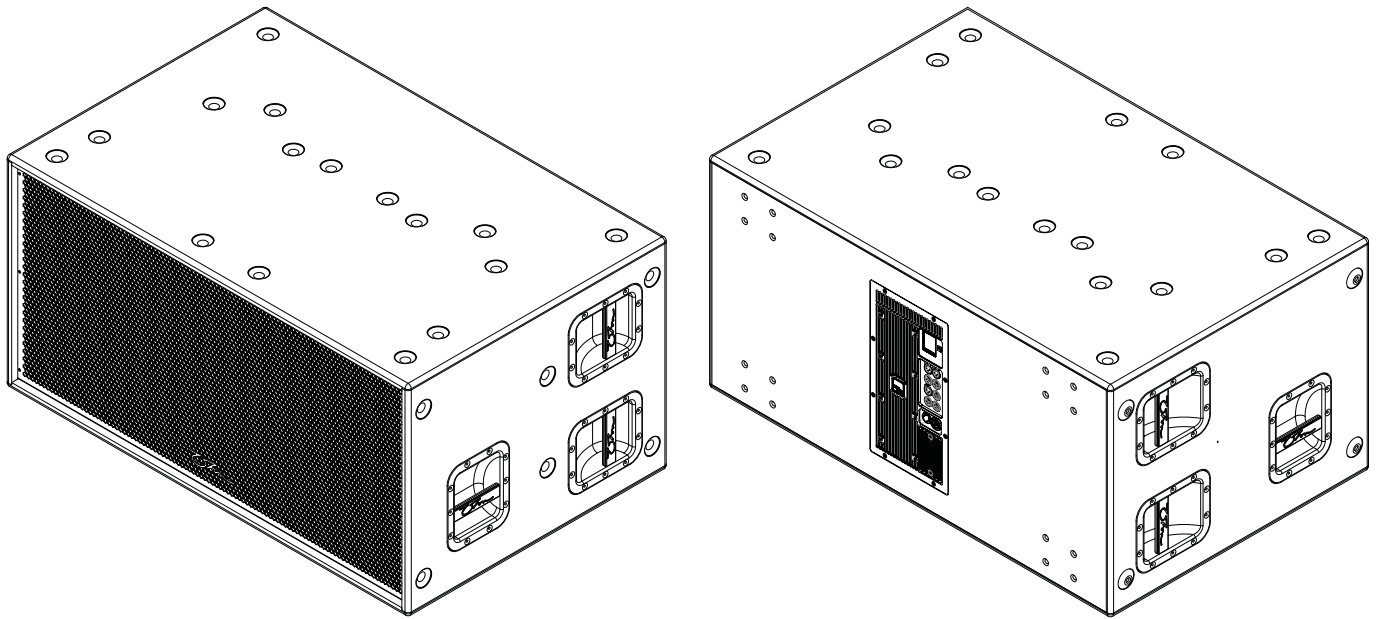
Bottom



Top

Further technical drawings for architectural requirements are available in DXF and DWG format for download on the website.

TRS-218A 3D View



Accessories and Spare Parts

- Foot and cups stacking system
- Large bar handles
- TRS-218 steel grill assembly
- TRS-218A Amplifier
- 2 x 18" low frequency driver
- Steel OHM Logo
- TRS-218 dolly-board

Architects' & Engineers' specifications:

2-Way dynamic loudspeaker in a multi purpose enclosure design, housing 2 x 18" proprietary OHM low mid bass driver, internally and externally ventilated double sided high temperature voice coil. Integrated active amplifier. Constructed from different multi-laminated wood, eco-friendly scratch resistant paint, skid-proof rubber feet and cup system, ergonomic carry handle, kick proof steel grill finished with internal reticulated foam and Ohm logo.

Technical Data:

Frequency Response: 26 Hz – 110 kHz (-10dB), 31 Hz – 100 Hz (± 3 dB), Continuous SPL: 138 dB/1m, Peak SPL 141 dB/1 m, Maximum Output: 3600 Watt LF, Dispersion Omni. Connectors: 2 x analog in XLR, 2x Analog input link XLR, 2 analog out XLR, AES-in XLR and AES- out XLR, powerCON® True1 connector in and link. Dimensions (H x W x D): 584.3 mm x 1156 mm x 746 mm, Weight: 94 kg. Options: Durable scratch resistant black textured paint finish. RAL colours available to order.

Safety Instructions

Professional speaker systems are able to produce sound pressure levels that could harm your health.

Never stand directly in front of loudspeakers for long periods. Whilst not immediately apparent to the listener, sound pressure levels in excess of 90dB@1m can be hazardous to the hearing.

Please refer to the following advice when setting up or dismantling OHM speaker systems.

1. Be sure to leave adequate distance between speakers and the public. Refer to your local authority for Health and Safety guidance when using loudspeaker systems.
2. Be sure to have safe and stable ground for your speakers, particularly when using speaker stands.
3. When stacking speaker systems, ensure they are secured to prevent individual speakers from falling down or moving around.
4. Only use OHM mounting hardware, as this has been specified and approved by AURAL LTD, OHM (UK) LTD for use with OHM speakers.
5. When flying speakers, appropriate materials and techniques must be employed in order to safely suspend enclosures, taking care to allow for specified enclosure weight.
6. Please observe any special instructions that appear on specific loudspeaker data-sheets.
7. Check your speaker hardware and flying material regularly for any visual or mechanical failure. Replace damaged or suspect items when necessary.

Safety Instructions Cont.

8. Only use OHM DSP Solutions. Only technicians authorised by AURAL LTD, OHM (UK) LTD are qualified to program digital controllers. Take note of recommended controllers as specified on the datasheets. Do not use OHM loudspeaker systems without the correct controller. If a system fails due to incorrect controller use, warranty is void.

9. Protect your speakers and electronics from freezing and do not expose them to humidity, water or rain without protection.

OHM loudspeakers and electronics are covered against defects in workmanship or materials for a period of two (2) years from original date of purchase. At the discretion of AURAL LTD, OHM (UK) LTD, the defective item will be repaired/replaced with no charge for materials or labour. The item is to be adequately packed and dispatched, pre-paid, to an OHM authorised distributor/service centre. Unauthorised repair shall void the warranty. The OHM warranty does not cover cosmetics or finish and does not apply to any item which in OHM's opinion has failed due to user abuse, accident, modifications or any type of misuse.

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