

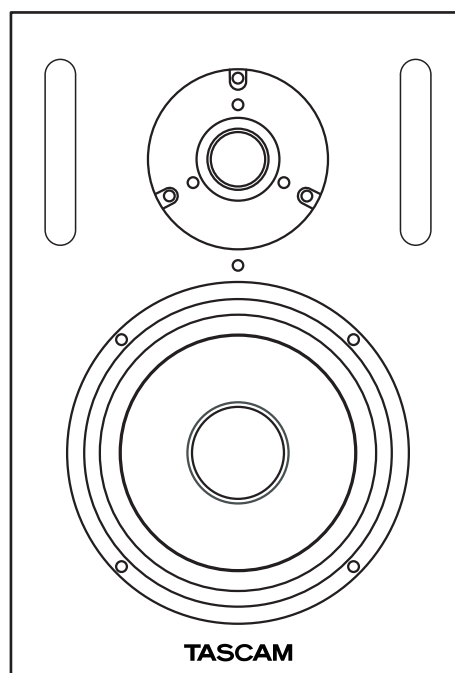
# TASCAM

## TEAC Professional Division

D00896110A

# VL-X5

## BI-AMPLIFIED NEARFIELD STUDIO MONITOR



## OWNER'S MANUAL



CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



The lightning flash with 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 appliance.

This appliance has a serial number located on the rear panel. Please record the model number and serial number and retain them for your records.  
Model Number \_\_\_\_\_  
Serial number \_\_\_\_\_

**WARNING: TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.**

## Important safety instructions

- 1 Read these instructions.
  - 2 Keep these instructions.
  - 3 Heed all warnings.
  - 4 Follow all instructions.
  - 5 Do not use this apparatus near water.
  - 6 Clean only with dry cloth.
  - 7 Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
  - 8 Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
  - 9 Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
  - 10 Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
  - 11 Only use attachments/accessories specified by the manufacturer.
  - 12 Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
- Do not expose this apparatus to drips or splashes.
  - Do not place any objects filled with liquids, such as vases, on the apparatus.
  - Do not install this apparatus in a confined space such as a book case or similar unit.
  - The apparatus draws nominal non-operating power from the AC outlet with its POWER switch in the off position.
  - The apparatus should be located close enough to the AC outlet so that you can easily grasp the power cord plug at any time.
  - An apparatus with Class I construction shall be connected to an AC outlet with a protective grounding connection.



- 13 Unplug this apparatus during lightning storms or when unused for long periods of time.
- 14 Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

## IMPORTANT (for U.K. Customers)

### DO NOT cut off the mains plug from this equipment.

If the plug fitted is not suitable for the power points in your home or the cable is too short to reach a power point, then obtain an appropriate safety approved extension lead or consult your dealer.

If nonetheless the mains plug is cut off, remove the fuse and dispose of the plug immediately, to avoid a possible shock hazard by inadvertent connection to the mains supply.

If this product is not provided with a mains plug, or one has to be fitted, then follow the instructions given below:

**IMPORTANT:** The wires in this mains lead are coloured in accordance with the following code:

**GREEN-AND-YELLOW:**EARTH

**BLUE** : NEUTRAL

**BROWN** : LIVE

**WARNING:** This apparatus must be earthed.

As the colours of the wires in the mains lead of this apparatus may not correspond with the coloured markings identifying the terminals in your plug proceed as follows:

The wire which is coloured GREEN-and-YELLOW must be connected to the terminal in the plug which is marked by the letter E or by the safety earth symbol or coloured GREEN or GREEN-and-YELLOW.

The wire which is coloured BLUE must be connected to the terminal which is marked with the letter N or coloured BLACK.

The wire which is coloured BROWN must be connected to the terminal which is marked with the letter L or coloured RED.

When replacing the fuse only a correctly rated approved type should be used and be sure to re-fit the fuse cover.

IF IN DOUBT – CONSULT A COMPETENT ELECTRICIAN

For U.S.A

## TO THE USER

This equipment 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 equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment 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.

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

### CAUTION

Changes or modifications to this equipment not expressly approved by TEAC CORPORATION for compliance could void the user's authority to operate this equipment.

# Table of contents

Introduction .....	5
Features .....	5
Supplied accessories .....	5
Environmental precautions .....	5
Installation .....	6
Placing the VL-X5 .....	7
Rear panel .....	8
Specifications .....	10
Block diagram .....	10

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## Introduction

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Thank you for your purchase of the TASCAM VL-X5.

Objectivity, its all about pro studio monitor requirement. It's not an optional, you have to have a objectivity. If you can't hear from TASCAM studio monitors, sorry it's not really there.

The VL-X5 is not like any other reference monitors in the business. You will see you've been cheated from your best-friend-a-like monitors after you just taste VL-X5. If you need pure and clear like a mirror performance for your precious recording or don't want to loose objectivity of your mix, you will need VL-X5.

It's barely nothing added or removed. Custom designed 0.75" natural silk dome tweeter provides not only smooth wave producing for clear sound but improving cooling function for enhanced power handling than normal metal or plastic tweeters. 5-1/4" low frequency driver and deeply designed enclosure produced natural, powerful and rich bass for pure bottom of your sound. Flat frequency response up to 22 kHz is perfect for your mastering environment where more sampling rates and bits are exist or needed. ASC(Acoustic Space Control) for fine room tuning.

Before connecting and using the unit, please take time to read this manual thoroughly to ensure you understand how to properly set up and connect the VL-X5, as well as the operation of its many useful and convenient functions. After you have finished reading this manual, please keep it in a safe place for future reference.

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## Features

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- HF30 W / LF60 W Active Bi-amplified Near Field Studio Monitor System.
- 20 mm (0.75") Natural Silk Dome Tweeter.
- 210 mm (5-1/4") Woofer.
- LF cut 500 Hz function
- 1.5 dB Boost and Cut SW's for 150 Hz or 800 Hz LF Controls (DIP Type).
- 1.5 dB Boost and Cut SW's for 3 kHz or 8 kHz HF Controls (DIP Type).
- Separate Enclosure for Built-in Amplifier.
- ASC (Acoustic Space Control) for Fine Room Tuning Needs.
- Magnetic Shield Enclosure for Desktop Operation.
- Deep and Rich Natural LF Sound.
- Perfectly Matched Dual Power Amp (60W LF and 30W HF) for each Drivers.
- Low Frequency Ports delivering Amazing Bass response.

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## Supplied accessories

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In addition to this manual, the VL-X5 has been packed with the following:

- Power cord
- Warranty document

Should any of these items be missing, or if you encounter any damage, please contact your TASCAM supplier.

This unit was packed in its carton with special materials in order to prevent any damage during shipment.

Please save the carton and packing materials in the event you need to transport the unit in the future.

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## Environmental precautions

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The VL-X5 may be used in most places, but to maintain top performance and prolong operating life, do not place it in the following locations.

- On an unsteady surface, or where there is frequent vibration or resonance
- Near a window or where it can be exposed to direct sunlight
- Near heating or air conditioning vents, or in very hot or cold places
- Places with high humidity or poor ventilation
- Next to tuners, televisions or video decks, as this could cause noise or affect video images

## Installation

### 1 Precautions

#### Handling

Do not grab the speaker driver unit : the VL-X5 is packaged in box fitted tight, so your attention is required when taking speakers out of the box. To avoid the possible damage to the speaker units, hold both sides of the speaker to pull it out of the box. The units should not be touched to avoid damage even after it is out of the box.

Recommend to use high quality balanced or unbalanced cable for input connection.

Turn off the power of the VL-X5 and turn the Volume control of the VL-X5 to minimum before making the connection.

#### Connection

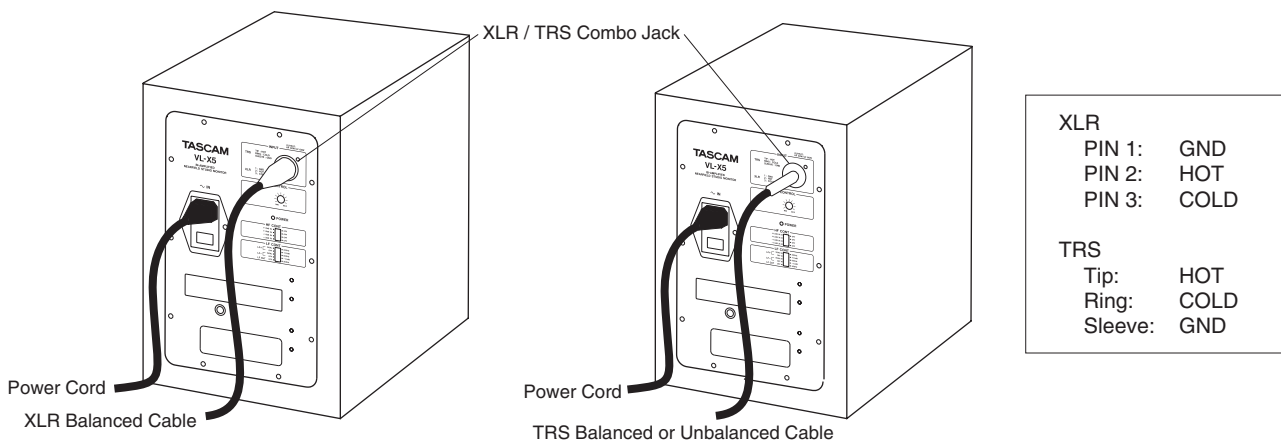
Connect XLR balanced or TRS balanced/unbalanced input of the VL-X5 to the output terminal of the audio equipment.

#### FUSE Protection

An additional mains fuse is provided in the IEC power inlet on the back of the VL-X5, which can only be removed with the power cord unplugged. This must be replaced by a fuse of the same type and ratings (refer to rear panel).

### 2 Connection

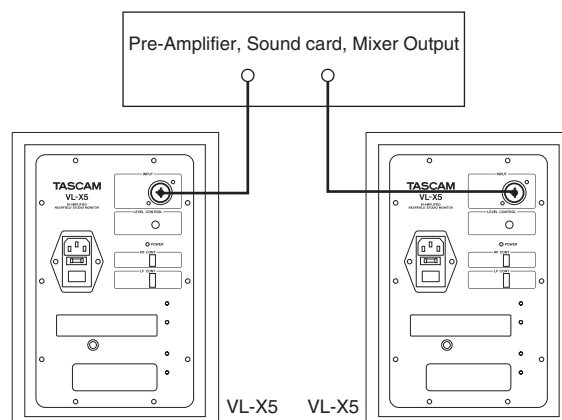
Assure that the power switch of VL-X5 is turned off and volume control of VL-X5 is turned to minimum. Connect male side of XLR balanced cable, TRS balanced cable, or TS unbalanced cable to the input connector of the VL-X5.



### 3 Connecting to the audio equipment

Before connecting, make sure its power is turned off.

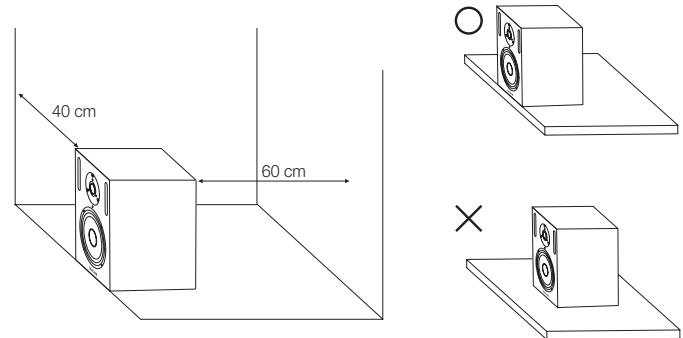
Plug the XLR balanced, TRS balanced or TS unbalanced cable to the corresponding output connectors of the audio equipment.



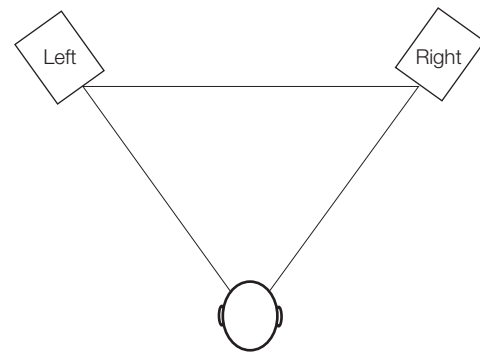
## Placing the VL-X5

Placing the speakers is one of the most important procedures to monitor correct sound. To monitor with VL-X5 at its maximum capability, appropriate listening environment and correct placement are required. Please, refer to the following to place the VL-X5 correctly.

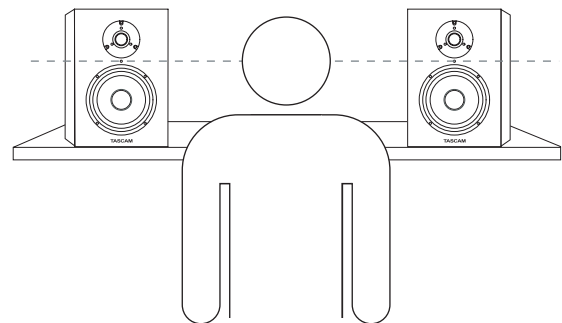
- 1 VL-X5's set up position is 60 cm (Recommendation 100 cm) to the back and 40cm (Recommendation 60 cm) to the side.



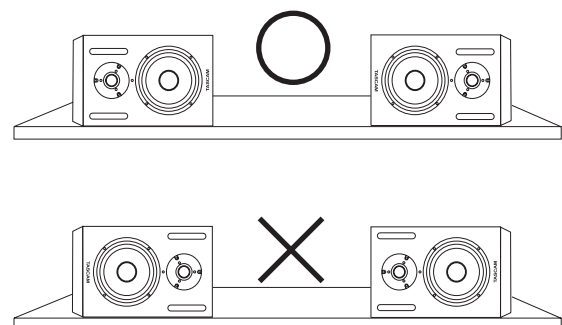
- 2 Basically, two units and the listener should align to from a regular triangle.



- 3 The height of units, more precisely, the top of the woofer should come up to where your ears are in normal listening environment.



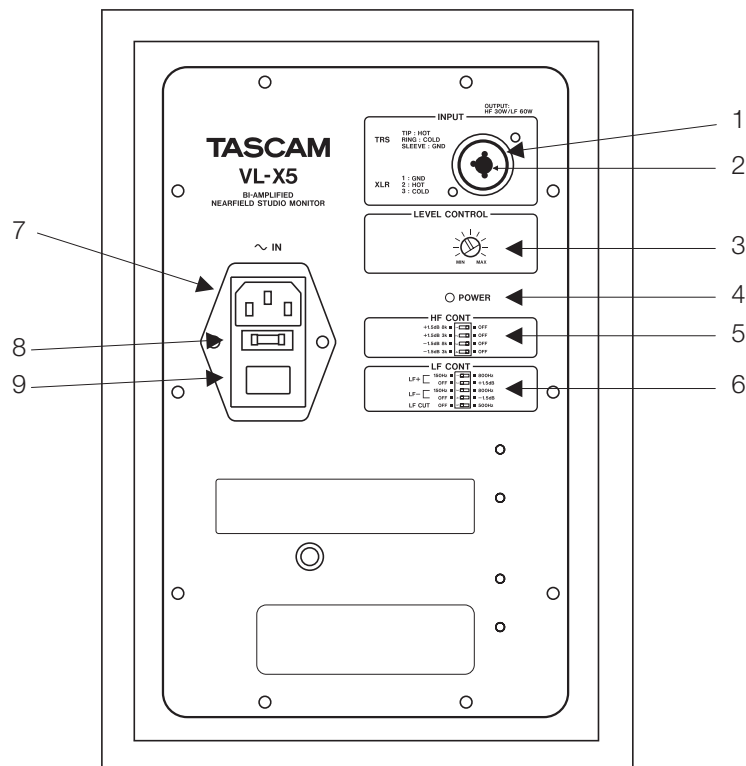
- 4 Recommend Place the VL-X5 horizontally. If you Placing VL-X5 horizontally, refer to the following diagram.



### NOTE

*DO NOT place any obstacles that may block the flow of air, which is medium of the sound, or create reflected sound, especially, the material of high reflection tendency including glass, mirror or metal. Place those materials away from the path of the sound from VL-X5.*

## Rear panel



### 1 XLR INPUT

This jack accept XLR input connection, wire either balanced or unbalanced. The signal of XLR INPUT is summed together with TRS INPUT through a balanced input amplifier. So, either may be used as an input or mixed together. Input specifications apply to both inputs. The INPUT CONNECTIONS wiring chart of XLR connector is following:

- Pin 1: GND**
- Pin 2: HOT**
- Pin 3: COLD**

### 2 TRS INPUT

This jack accepts a TRS connector, wire either balanced or unbalanced. For balanced wiring, a 3-conductor TRS plug is necessary. The INPUT CONNECTIONS wiring chart of TRS connector is as following:

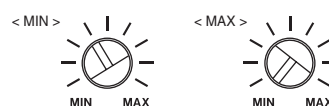
- Tip: HOT (+)**
- Ring: COLD (-)**
- Sleeve: GND**

Unbalanced wiring works with either a 2 or 3-conductor TRS connector. A 2-conductor TRS plug automatically ground the minus signal input, whereas a 3-conductor TRS plug wired unbalanced provides the option of leaving the minus open or grounded. We recommend that you grounded the unused input.

The TRS INPUT is summed together with XLR INPUT through a balanced Input amplifier. So, either may be used as an input or mixed together. Input specifications apply to both inputs.

### 3 VOLUME Control

Use the Volume Control to set the output sound pressure from VL-X5 to proper level required.



### 4 POWER LED

When power of VL-X5 is on, the LED will be light up. When power of VL-X5 is off, the LED will be turned off.



## 5 ACOUSTIC SPACE CONTROL SWITCH (HF Control)

For HF control, you can choose two different modes.

### 1) For ~ 8 kHz

8 kHz controller is set up at 2 ~ 3 meter of hearing position from factory.

And optimum hearing position can be adjustable for longer or shorter distance.

ex) ~2 m distance increase, +1.5dB switch on

~0.5 m distance decrease, -1.5dB switch on

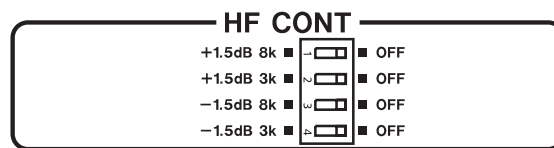
### 2) For ~3 kHz

This controls HF gain, so it is useful for sound checking in studio.

For impact and heavy sound in music and movie, +1.5 dB switch on.

For soft and mild sound, -1.5 dB switch on.

Your optimums sound can be made by using these two HF controllers together.



## 6 ACOUSTIC SPACE CONTROL SWITCH (LF Control)

LF control is useful to set VL-X5 for its maximum performance regardless of conditions of room and sound check. 150 Hz/800 Hz are adjustable by +1.5 dB or -1.5 dB step and for under 500 Hz, there is -12 dB roll off function per octave.

### 1) 150 Hz control

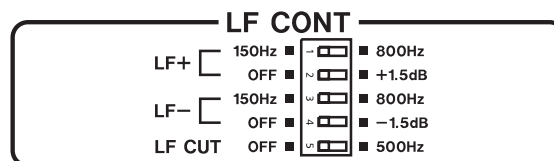
VL-X5's set up position is 60 cm (Recommendation 100 cm) to the back and 40 cm (Recommendation 60 cm) to the side. However, if it has to be set up below the recommended set up distance due to important reason, -1.5 dB switch on to decrease the reflecting sound and LF can be volume up by +1.5 dB switching on in the venue which has high absorbability of sound.

### 2) 800 Hz control

This can be apply just like 150 Hz controller and your optimum sound of mid and low frequency range can be made by using 150 Hz and 800 Hz controller

### 3) LF CUTTT 500Hz

This function is useful when only LF is boost up and can be use to check only over mid range sound.



## CAUTION

Control switch is sensitive. Therefore be careful not to damage.

## 7 POWER RECEPTACLE

For plugging in detachable 3-circuit line cord.

## 8 EXT.FUSE HOLDER

For external main fuse.

An additional mains fuse is provided in the IEC power inlet on the back of the VL-X5, which can only be removed with the power cord unplugged. This must be replaced by a fuse of the same type and ratings (refer to rear panel).

## 9 POWER SWITCH

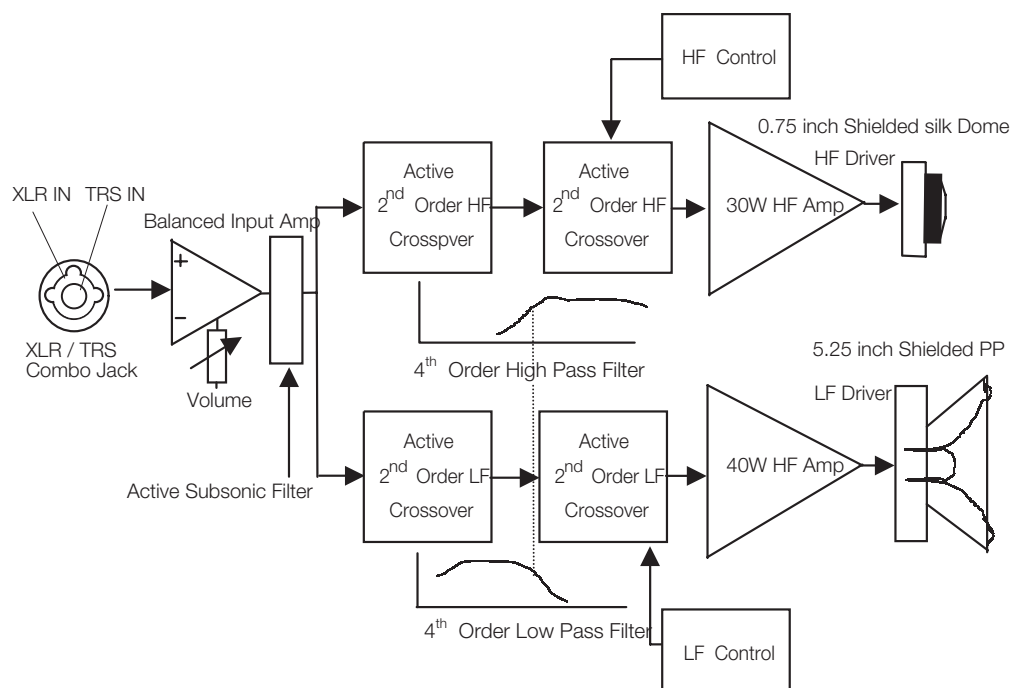
When you push the power switch to 'I', the VL-X5 will be turned on. When you push the switch to 'O', the VL-X5 will be turned off.

# Specifications

## Specifications

Frequency Response (1 W @ 1 m)	+/-3 dB	45 Hz ~ 22 kHz
Axial Sensitivity (dB SPL, 60 W @ 1 m)		103
LF amplifier power (RMS)		60 W
HF amplifier power (RMS)		30 W
LF driver		5.25 inch
HF driver		0.75 inch soft silk domes
Crossover frequency		3 kHz
HF control	+/-1.5 dB	3 kHz / 8 kHz (DIP type switch)
LF control	+/-1.5 dB	150 Hz / 800 Hz (DIP type switch)
Low-cut frequencies		40 Hz / 500 Hz (12 db OCT)
System Configuration		2way near-field studio reference monitors
T.H.D		0.01 % (40 W 1 kHz 8 ohms)
Input connectors		One XLR / TRS Combo
Input Level		200 mV 10 k ohms
Power requirements	USA/Canada U.K./Europe/Australia	100 V - 120 V (50 Hz / 60 Hz) 200 V - 240 V (50 Hz / 60 Hz)
Power consumption		20W
Cabinet		MDF
Color		Dark black wood
Dimension (W x H x D mm)		198 x 291 x 290
Weight		7 kg

## Block diagram





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TEAC Professional Division

# VL-X5

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