



M&K SOUND®

MPS2520P PROFESSIONAL MONITOR

# OPERATION MANUAL

**MPS2520P**  
**PROFESSIONAL MONITOR**

***The Choice of Professionals®***

**M&K SOUND®**

M&K Sound · Denmark · [www.mksound.com](http://www.mksound.com)

***The Choice of Professionals®***

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Please record the following information for your records:

Serial Number:	
Date of Purchase:	
Dealer Name:	
Dealer Address:	
City/State/Zip:	
Country:	
Invoice Number:	

## Important Safety Instructions

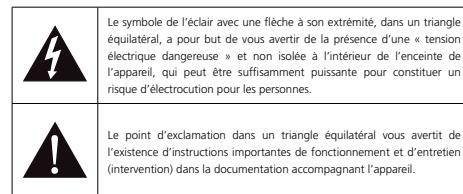
- 1) Read these instructions.
- 2) Keep these instructions.
- 3) Heed all warnings.
- 4) Follow all instructions.
- 5) Do not use this apparatus near water.
- 6) Clean only with dry cloth.
- 7) Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
- 8) Do 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 blade 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.



	Le symbole de l'éclair avec une flèche à son extrémité, dans un triangle équilatéral, a pour but de vous avertir de la présence d'une « tension électrique dangereuse » et non isolée à l'intérieur de l'enceinte de l'appareil, qui peut être suffisamment puissante pour constituer un risque d'électrocution pour les personnes.
	Le point d'exclamation dans un triangle équilatéral vous avertit de l'existence d'instructions importantes de fonctionnement et d'entretien (intervention) dans la documentation accompagnant l'appareil.

## Consignes de sécurité importantes

- 1) Lisez ces instructions.
- 2) Conservez ces instructions.
- 3) Observez tous les avertissements.
- 4) Suivez toutes les instructions.
- 5) N'utilisez pas cet appareil à proximité de l'eau.
- 6) Utilisez uniquement un chiffon sec pour le nettoyer.
- 7) Ne bloquez pas les ouvertures de ventilation. Installez conformément aux instructions du fabricant.
- 8) Ne l'installez pas à proximité de sources de chaleur telles que des radiateurs, des bouches de chaleur, des poêles ou d'autres appareils (amplificateurs compris) produisant de la chaleur.
- 9) Ne pas contourner le dispositif de sécurité de la polarisation ou la prise de type mise à la terre. Une fiche polarisée a deux lames avec une plus large que l'autre. Une mise à la terre Type fiche comporte deux lames et une troisième broche de mise à la terre. La lame large ou la troisième broche sont fournies pour votre sécurité, ta sécurité. Si la fiche fournie ne rentre pas dans votre sortie, consultez un électricien pour le remplacement de la prise obsolète.
- 10) Protégez le cordon d'alimentation, surtout au niveau des fiches, des prises et des points où il sort de l'appareil, pour éviter qu'on ne marche dessus ou qu'on ne le pince.
- 11) Utilisez uniquement les accessoires spécifiés par le fabricant.
- 12) Utilisez uniquement avec le chariot, le socle, le trépied, la table ou le support spécifié par le fabricant ou vendu avec l'appareil. En le fabricant ou vendu avec
- l'appareil. Cas d'utilisation d'un chariot, faites attention lorsque vous déplacez l'ensemble chariot / appareil de ne pas le renverser.
- 13) Débranchez cet appareil lors d'orage avec foudre ou lorsque vous ne l'utilisez pas pendant des périodes prolongées.
- 14) Faites-le réparer et entretenir par un personnel de service qualifié. Il est nécessaire de faire réparer l'appareil lorsqu'il a subi des dommages quelconques du type suivant : cordon ou fiche d'alimentation abîmé, liquide renversé ou objets tombés dans l'appareil, exposition de l'appareil à la pluie ou à l'humidité, mauvais fonctionnement ou chute.
- 15) La température ambiante lors de l'utilisation ne doit pas dépasser 35 degrés Celsius.
- 16) Afin de réduire les risques d'électrocution, n'ouvez pas l'équipement. Pour des raisons de sécurité, seul du personnel d'entretien qualifié est autorisé à l'ouvrir.
- 17) ATTENTION: Pour réduire le risque d'incendie ou d'électrocution, n'exposez pas cet appareil à la pluie ou à l'humidité. De plus, l'appareil ne doit pas être exposé à dégouttement ou aux éclaboussures et aucun objet rempli de liquide, tel qu'un vase, ne doit être posé sur l'appareil.
- 18) La fiche d'alimentation CA sert de principal dispositif de déconnexion et doit toujours être capable de fonctionner correctement.
- 19) Ce produit doit être utilisé sur une surface ouverte
- 20) Aucune source de flamme nue, telle, que des bougies allumées, ne doit être placé sur l'appareil.
- 21) L'appareil est adapté pour une utilisation dans les climats tropicaux.



## 2. INTRODUCTION

Congratulations and thank you for purchasing the MPS2520P This M&K Sound Professional powered monitor is designed to provide many years of accurate and problem free operation.

We encourage you to read this owner's manual, as there is a great deal of information provided here to help you get the best possible performance from your new M&K Sound Professional monitor.

If you still have questions about your powered monitor after you have read this manual, please contact your M&K Sound dealer or visit [WWW.MKSOUND.COM](http://WWW.MKSOUND.COM)

## 3. VOLTAGE SELECTOR & POWER CORD

Adjacent to the AC power cord receptacle on the back of the monitor you will find a voltage selector switch pre-set at the factory for the proper local voltage.



The voltage input can be changed to the correct local voltage by sliding the selector to correct position.

**Before changing voltage** make sure the correct fuse value is present in the fuse holder.

For USA, Canada, Taiwan and Japan voltage 100/120 Volt, set voltage selector to 115Volt.

For Europe, the UK and Asia voltage 220/240 Volt, set voltage selector to 230Volt

Always check to make sure that your Monitor is set to your **Country's voltage**. If you have questions about this, contact your M&K Sound dealer.

## DETACHABLE POWER CORD

Your new monitor is provided with a detachable power cord.

**ALWAYS attach the cord to the monitor first, BEFORE plugging it into the AC wall socket.**

## 4. DESIGN & SET UP GUIDANCE

M&K Sound design philosophy is that, accurate and lifelike sound and music reproduction takes place when your ears, in effect, become the recording microphones. Our monitors are designed to allow you to hear precisely what the microphones heard, placing you as close or as far away from the sound source as the recording engineer placed the microphones. To achieve this, your 2520P monitors are designed and engineered to specifically produce a lively sound imaging in front of themselves.

The monitor design is featured with a true Bi-Amp design providing 200watt RMS amplifier power for the midrange-woofers and 180watt RMS amplifier for the tweeter array, to ensure high sound quality and a wide dynamic range. The 2520P offers extraordinary accuracy and flatness in both the frequency and phase domains, that assures critical listeners of precision monitoring, for extended lengths of time without any fatigue.

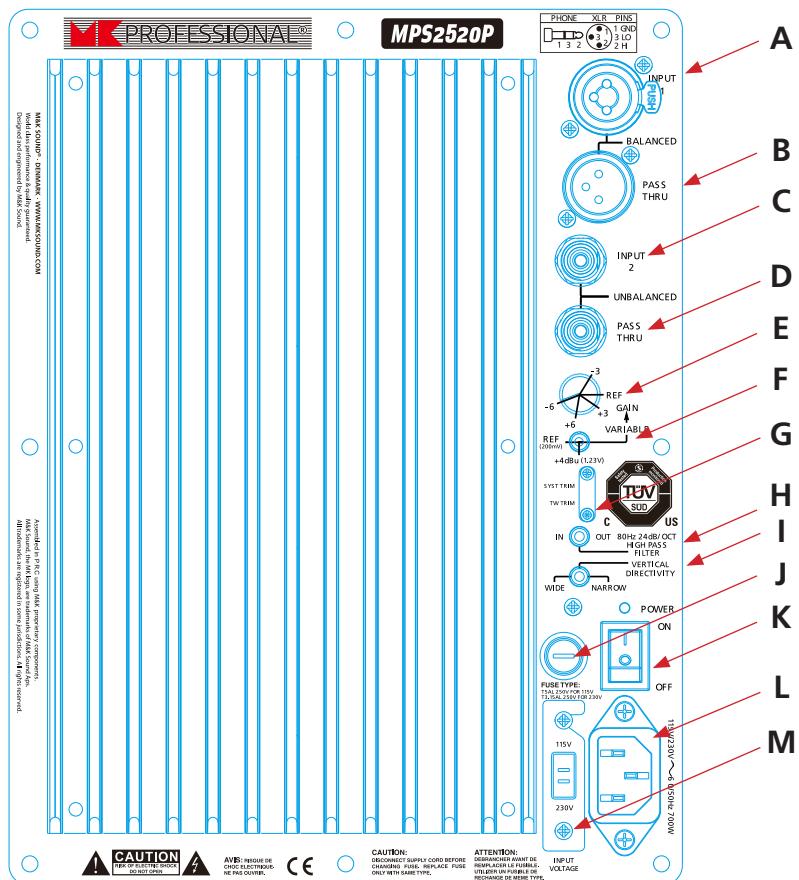
The 2520P are especially designed for high quality stereo and multi-channel mixing, in combination with M&K Sound powered subwoofers and Bass management controller BMC-1.

Placing the 2520P for direct on-axis response in the listening position, provide the most accurate sound image. Use the recessed LED light on front as the perfect "on-axis guide", as when the LED light becomes fully visible, the speaker is placed perfectly on axis for the listening position

Recommendable spacing between the speakers are app 2-3 meter (6.5-10 Feet) with a listening distance of, 1,5-3 meter (5-10 Feet). In these ranges the speaker will perform with high precision and great imaging.

## 5. INPUT & CONTROLS

- A Balanced XLR & 6.3 mm Jack input
- B Balanced XLR & 6.3 mm Jack output (pass thru)
- C Unbalanced input RCA
- D Unbalanced output RCA (pass thru)
- E Variable volume control
- F Input sensitivity switch
- G System and tweeter level trim
- H Hiig pass filter selector
- I Wide/narrow directivity selector
- J Fuse holder
- K Main Power switch
- L Main Power socket
- M Main Voltage selector



A		<b>Balanced Input XLR / 6.3 mm Jack.</b> Balanced input for connection to professional mixing equipment, soundcards & studio monitor controllers. 
B		<b>Balanced Pass Thru Output XLR / 6.3 mm Jack</b> Balanced pass Thru output connection for linking up subwoofers or additional monitors 
C		<b>Unbalanced Input RCA.</b> Unbalanced input for connection to Hi-Fi preamps, TV set, or general small portable sound devices.
D		<b>Unbalanced Output RCA</b> Unbalanced Pass Thru output connection for linking up subwoofers or additional monitors
E-F		<b>Input selection switch and variable gain control</b> 7Switch position "REF" are calibrated for 90dB of acoustic output at one meter with drive signal 200mV. Use switch position REF when connecting 2520P to surround receivers, 2 channel preamps or surround processors.  Use switch position "+4dBu" for connection to professional mixing consoles or monitor controllers.  Switch position "Variable Gain" offers variable gain from -6dB to +6dB relative to the reference position. Reference denotes the position that should be used when operating this monitor with +4dBu input signal. This control is only effective when the "Input Gain Switch" is set to the position "Variable Gain"
G		<b>System &amp; Tweeter section trim</b> System and tweeter trim pots for "output level" calibration. Using the trim pots will impact the factory preset frequency response and output level and shall only be calibrated by qualified engineers.
H		<b>High Pass Filter selector</b> Select position "in" to activate the build in 80Hz high pass filter. Activate the "high pass filter" when operating 2520P together with subwoofers, and no separate bass management control are in use.  Select position "out" to deactivate the "80Hz high pass filter" when 2520P are used together with a separate bass management control unit.

(See also page 9 for additional information)

I		<b>Wide / Narrow directivity selector</b> Select "Wide Mode" when 2520P are to be used as a "free-standing" speakers in near to mid field positions.  Optional select "Narrow Mode" to activate vertical directivity control for nearfield listening, if placing 2520P direct on mixing consoles or close to reflecting surfaces.
J		<b>Main Power on/off</b> Turns the system on/off. Status LED are present on front and back of speaker.
K		<b>Fuse holder</b> Fuse type T5AL 250Volt for 110 / 120 Volt Fuse type T3.15AL 250 volt for 220 / 240 Volt Caution! Always disconnect power cord before changing fuse, Replace fuse only with same type.
L		<b>Main Power socket</b> Use the included power chord for the main power connection.
M		<b>Voltage selector 115 / 230 Volt.</b> <b>Caution!</b> Always disconnect power cord and check the fuse has correct value before changing the input voltage.

## 6. OPERATION & BASS MANAGEMENT

The 2520P monitor are specially designed to be used in combination with M&K Sound subwoofers, both in setups with "external" bass management control units or without.

Using 2520P with the M&K Sound BMC-1 Bass management controller for 2 channel or multi-channel mix setup, will provide the most correct set up conditions for 2520P and subwoofer(s). The M&K Sound BMC-1 Bass Management controller offers professional balanced connections for high pass and low pass filtering, with individual channel level calibration for 2.1 or 5.1 setups for direct connection to 2520P monitors and M&K Sound subwoofers.

2520P High pass filter shall be set to position "OUT" when used together with M&K Sound Bass management controller, and subwoofer crossover setting shall be "BY-PASSED" - as the Bass management control unit will handle correct filtering for signals send to monitors and subwoofers.

When using the 2520P without a bass management control unit, the 2520P High pass filter shall be activated to "IN" position" to cut off low frequency bass content from the monitors.

Connecting the M&K Sound subwoofers using the 2520P "Pass Thru" outputs create good "bass logic" when either using 1 or 2 M&K Sound subwoofers, as M&K Sound subwoofers are featured with dedicated input sockets for mono sub signals and Left and Right input signals.

In case of using 1 sub, the Left & Right main signal outputs from a mixer or monitor controller shall be connected to the 2520P inputs for respective Left & Right speakers inputs, and by using the 2520P "Pass Thru" output socket – the main signals will be carried on to the subwoofers and summed internally in the subwoofer. The use of both Left & Right inputs on the subwoofer, will provide correct bass output by "one subwoofer" in a given system setup.

In case of using two subs, the main Left & right signal outputs from a mixer or monitor controller will also by using the "Pass Thru" connectors on the 2520P – route each main channel signal from source to each subwoofer, which logically shall be connected to the subwoofers mono input socket.

In setups without a dedicated Bass Management controller, the subwoofers internal crossover filter setting is the crucial feature to adjust for perfect match to the 2520P monitors. Typically, it will be subwoofer crossover setting in the range between 100-120, Hz that will make good summation between a pair of 2520P monitors and subwoofers.

When using 2520P together with other types of "studio monitor controllers" or HiFi preamps featured with dedicated subwoofer output connections, then make sure to firmly check how these operate for sub bass content.

Some units just have their left and right channels summed into a common "sub out" channel, while the main channels at the same time provide full frequency bandwidth to their respective left and right channel outputs.

In such setups the 2520P is recommended to operate with high pass filter activated ("IN" position) alike setups without External Bass Management" - to make sure the Bass response of the 2520P will be properly filtered.

If the studio monitor controller or HiFi preamp itself offers both high pass and low pass filtering, the 2520P shall be set to operate with High pass filter "out", as then the monitor controller or HiFi preamp will handle the crossover filtering between the subwoofer and 2520P monitor.

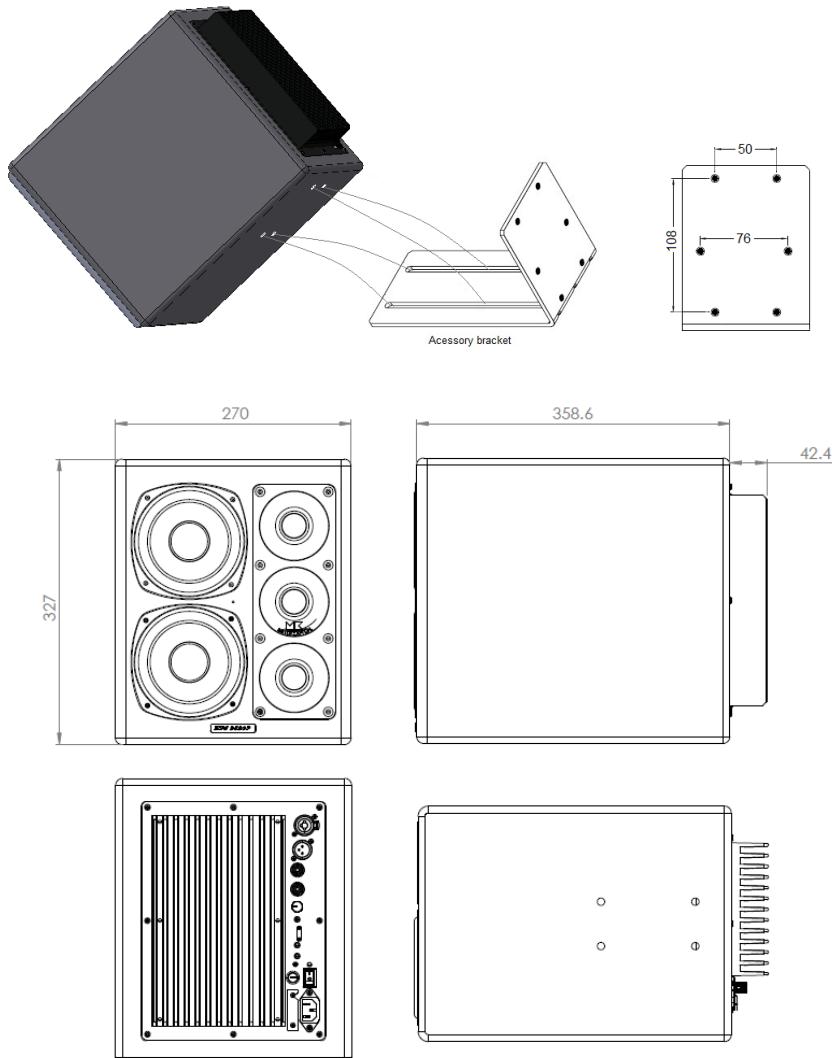
Using the 2520P with modern surround sound amplifiers or processors, the Bass management control will be present by the surround sound "equipment", and the 2520P shall also in such setups operate with High pass filter in "OUT" position.

Modern surround amplifiers, processors and monitor controllers are according to their build in decoding processors for various surround sound formats and crossover filter options, not always made with same designs, and some products may offer more features than others.

Normally the basic options for proper Bass management control will be present in such dedicated equipment, but always check the actual unit for their technical specifications, to make sure proper Bass management control is possible to make, when using the 2520P monitor and M&K subwoofers in such setups.

## 7. ACCESSORY BRACKET & LINE DWG

For mounting MPS2520P on speaker stands, use the included L-bracket for adaption to either floor stands or wall mount brackets. The Included L-bracket shall be attached to the speaker by using the included 1/4 inch x 20 screws.



## 8. TECHNICAL SPECIFICATIONS

Amplifier power bass-midrange .....	200watt RMS/400watt peak
Amplifier power high frequency.....	180watt RMS/360watt peak
Bass-midrange .....	.2 x 5.25" Glass fibre
High frequency drivers.....	3 x 1,1" soft fabric dome
Frequency response .....	80-12KHz +/-1dB / 12-20KHz +/-2dB
Total Harmonic distortion .....	0.002% into 4 ohms LF Channel / 0.03% into 4 ohms HF channel
Signal to noise ratio.....	100dB
AC power consumption.....	Standby/Average/Max 17W, 45W, 360W
AC line voltage.....	115VAC/60Hz 5A - 230VAC/60Hz 3.15A
Input impedance unbalanced.....	11Kohm / balanced 22Kohm
Input sensitivity unbalanced.....	100mV 90dB 1m / balanced 200mV 90dB 1m
Max output level .....	110dB/100Hz
Max input .....	24dBu balanced
High pass filter.....	Fixed 80 Hz (24dB)
Vertical directivity control.....	Wide/Narrow – 50/30 Deg
Dimensions H X W X D.....	.32.7 x 27 x 40.1 cm / 12.8 x 10.6 x 15.8"
Weight .....	18 kg/39.6lbs
Finish.....	Black Satin