

# Reference Series

Professional Reference **Sub-Woofers**  
For Home Cinema,  
Audiophile Specialists & Studios



*Natural Bass Impact Unparalleled in the Entertainment Environment*

## Table of Contents

Safety Instructions	.....	page 2
Introduction	.....	page 3
Display Menu	.....	page 4 - 6
Memories	.....	page 7
Connectivity	.....	page 7
Set-up Hints & Tips	.....	page 8
Model specification Table	.....	page 9
Hints & Tips	.....	page 10
Smart Remote introduction	.....	page 11
Warranty/ Box contents	.....	page 16

# ACOUSTICS

## CAUTION

RISK OF ELECTRIC SHOCK  
DO NOT OPEN

Caution: To Reduce Risk of Electric Shock,  
Do Not Remove Amplifier.  
No User Serviceable Parts Inside.  
Refer Servicing to Qualified Personnel.

**CAUTION:**  
TO PREVENT ELECTRIC SHOCK, MATCH WIDE BLADE  
OF PLUG TO WIDE SLOT. FULLY INSERT.

**ATTENTION:**  
POUR EVITER LES CHOCS ELECTRIQUES,  
INTRODUIRE LA LAME LA PLUS LARGE DE LA FICHE  
DANS LA BORNE CORRESPONDANTE DE LA PRISE ET  
POUSSER JUSQU'AU FOND.

## "WARNING"

"TO REDUCE THE RISK OF FIRE OR ELECTRIC  
SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN  
OR MOISTURE."

## SAFETY INSTRUCTIONS

1. Read Instructions - All the safety and operating instructions should be read before the appliance is operated.
2. Retain Instructions - The safety and operating instructions should be retained for future reference.
3. Heed Warnings - All warnings on the appliance and in the operating instructions should be adhered to.
4. Follow Instructions - All operating and use instructions should be followed.
5. Water and Moisture - The appliance should not be used near water - for example, near a wet basement, or near a swimming pool, and the like.
6. Carts and Stands - The appliance should be used only with a flight case or stand that is recommended by the manufacturer.
7. Wall or Ceiling Mounting - The appliance should be mounted to a wall or ceiling only as recommended by the manufacturer.
8. Ventilation - The appliance should be situated so that its location or position does not interfere with its proper ventilation. For example, the appliance should not be situated such that may block ventilation openings; or, placed in a built-in installation, such as a bookcase or cabinet that may impede the flow of air over the amplifier panel and or heatsink fins.



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

9. Heat - The appliance should be situated away from heat sources such as radiators, heat output devices, or other appliances that produce heat.
10. Power Sources - The appliance should be connected to a power supply only of the type described in the operating instructions or as marked on the appliance.
11. Grounding or polarization - Precautions should be taken so that the grounding or polarization means of an appliance is not defeated.
12. 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, convenience receptacles, and the point where they exit from the appliance.
13. Cleaning - The appliance should be cleaned only as recommended by the manufacturer.
14. Nonuse Periods - The power cord of the appliance should be unplugged from the outlet when left unused for a long period of time.
15. Object and Liquid Entry - Care should be taken so that objects do not fall and liquids are not spilled onto the enclosure paying particular attention to the amplifier panel.
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 been spilled onto 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

## Power Supply

- \* When unplugging the AC adaptor from the outlet, be sure to grasp the adaptor. Attempting to unplug it by pulling on the AC cable may damage the wiring or the mains socket on the amplifier.
- \* Always power-down amplifier and switch off before making any connections.
- \* It is **dangerous** to use any power cable that is **cut** or **frayed**. If the power cable is damaged, stop using it immediately, and have it repaired.
- \* Do not plug in or unplug the AC adaptor with wet hands. Doing so may result in dangerous electric shock.
- \* Do not remove the amplifier or touch any parts inside. Doing so may result in a dangerous electric shock, and could damage the delicate electronic circuits. The voltages inside the amplifier are very dangerous.
- \* Do not let water or other liquids, flammable materials, or metal objects such as pins get inside any of the input sockets. These things can cause an electrical shock or short circuit the amplifier, and damage it. If the amplifier should become wet, unplug the AC adaptor from the AC outlet at the wall first, and contact the manufacturers directly. **There are NO user serviceable parts inside.**

## Introduction

Firstly Thank you and congratulations on choosing an MJ Acoustics *Reference* series Active Sub-Bass System - a compact active lower octave loudspeaker, designed for stereo and multi-channel use to provide you outstanding performance with the ultimate in control. The use of a Subwoofer is essential to provide a proper balanced spectrum of sound.

**Please take a few moments to read this manual. The advice offered will enable you to get the very best performance from your *Reference* series subwoofer.**

Your *Reference* Series may be shipped from the factory in standby mode. This can be confirmed by the presence of a single dot on the right-hand side of the rear display when first powered on. The *Reference* series features a critically shaped rigid impregnated paper cone bass driver providing transparent and dynamic bass registers. Using our specially designed enclosure, dedicated amplifier and twin active crossover filter systems you have purchased the ultimate Active Sub-Bass System. By adding the *Reference* Series powered sub-bass system to your audio equipment you will have the benefits of improved transparency and a fully dynamic sound stage.

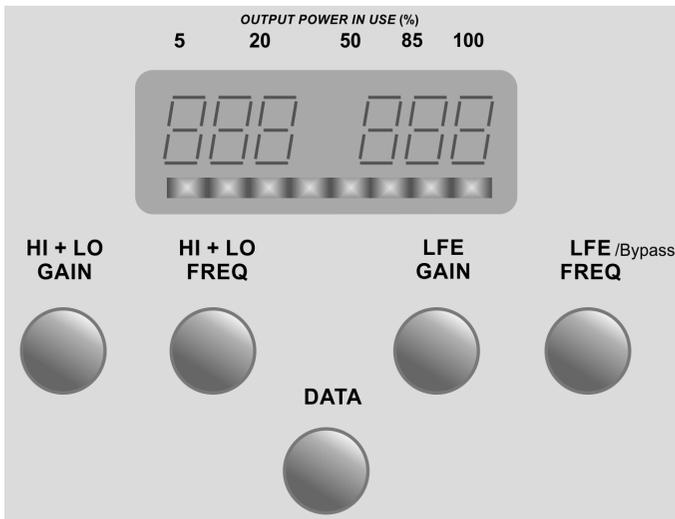
When setting up your MJ Acoustics Sub bass system please visit the support section on our website and navigate to setup my sub bass system, for useful set up hints and tips. This will allow you to get the best out of your new MJ Acoustics sub bass system, we strongly recommend you spend the time to read all the information on our website to obtain the best results for your listening environment.

[www.mjacoustics.co.uk/support/setup-my-sub-bass-system/](http://www.mjacoustics.co.uk/support/setup-my-sub-bass-system/)

### Location

Avoid using the “*Reference* Sub-bass system” in the following locations:

- \* Locations of extreme low or high temperatures, or extreme changes in temperature.
- \* Sources of heat such as near commercial heaters, fires or other sources of heat.
- \* Unstable locations or where the unit can fall due to vibration.
- \* Locations with moisture or dust.
- \* Locations where electrical voltage varies.



Incorporated within this model is our 3rd generation DAMP® offering full digital adjustments of all features but with that all important analogue feel. All the system functions and adjustments can be made using a single data rotary control knob. In addition to the main Data rotary control we provide a further 4 rotary controls for instant access to FREQ and GAIN for the twin independent crossovers. These 4 rotary controls also provide the means to select and store 4 user pre-sets. Use of the controls could not be simpler. For the Data control push to select menu item and turn to adjust. User pre-sets can be selected by a single short push on the appropriate rotary control and a push and hold for storing new settings. (See page 7 memories)

Your "*Reference* Series" has twin sophisticated Digitally Accurate Microprocessor controlled crossover circuits (D.A.M.P. 3rd generation), which incorporate a digital display so that the upper response limit can be set in musically accurate variable increments between 20hz and 120hz. An LFE bypass facility is activated at the upper end of the Lro level controls setting which allows the input signal to bypass the filter circuit with a fixed 200hz roll-off. The LFE bypass is used where an already filtered signal is offered to the low level input sockets. An example of this would be a sub output from a dedicated control pre-amplifier such as found in a Home Cinema system. With twin crossovers you have the ability to set the crossover point independently for the High Level/ Line Level inputs and the LFE/CEN inputs. Accurately setting your system up for Audiophile Multi-channel Music and Home Cinema has never been easier.

There are separate Crossover and Gain controls for HI/LO and LFE level inputs, an LFE bypass setting and audibly transparent "Dynamic Intelligent Protection" (*D.I.P.*) circuit, which monitors the output stages for clipping and limits the cone movement if the amplifier is being over-driven. A professional Speakon connector is standard for the "*Reference*" stereo High Level input utilising an approved touch proof design to cater for potentially high voltages that can be connected to it. The "*Reference*" also offers unbalanced Line-Level gold plated RCA connectors to cater for LO,LFE and CEN inputs.

## Display Menu

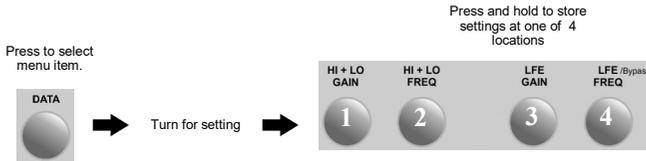
Display Menu	Description	Factory Default	Range
<b>H-L</b>	Gain adjustment for RCA & Speakon inputs	<b>OFF</b>	<i>OFF, -99 to 0</i>
<b>Hro</b>	Frequency adjustment for RCA & Speakon inputs	<b>120hz</b>	<i>20 to 120hz</i>
<b>LFE</b>	Gain adjustment for LFE & CEN inputs (via RCA)	<b>OFF</b>	<i>OFF, -99 to 0</i>
<b>Lro</b>	Frequency adjustment for LFE & CEN inputs (via RCA)	<b>120hz</b>	<i>20 to 120hz</i>
<b>Pha</b>	Phase adjustment	<b>0°</b>	<i>0° to 180°</i>
<b>Bri</b>	Display Brightness	<b>5</b>	<i>1 to 5</i>
<b>APO</b>	Auto Power Off function in minutes	<b>30</b>	<i>1, 5, 10, 20, 30</i>
<b>Etr</b>	External 12v Trigger input polarity setting	<b>Positive</b>	<i>Positive or Negative</i>
<b>Aon</b>	Auto Power on sensitivity	<b>4</b>	<i>001 to 009</i>
<b>Dto</b>	Display Timeout	<b>OFF</b>	<i>Off / On</i>
<b>Pos</b>	Generic name from selected list	<b>P-1</b>	<i>p-1 / L / C / R</i>
<b>Grp</b>	Name of the group this subwoofer is within	<b>1</b>	<i>1 - 9</i>
<b>Reg</b>	Shows if your subwoofer has been registered	<b>No</b>	<i>No - Yes</i>

**H-L** (High and Low Level Attenuation) This function parameter setting allows adjustment of the gain from the inputs received via the Speakon and RCA line level left and right connectors. This parameter enables adjustment of gain and thus sound pressure output produced in relation to the input from sources connected to these inputs. The adjustment range is from -98 to 0 incremented in single dB digit steps. This highly accurate gain adjustment enables precise matching of gains when using a multiple subwoofer set-up.

**Hro** (High Roll Off) This function parameter setting allows adjustment of the roll off (crossover) from the inputs received via the Speakon and RCA line level left and right connectors. This parameter enables high frequencies to be filtered out above the displayed setting with a 24dB slope from sources connected to these inputs. The adjustment range is from 20hz to 120hz incremented in single hz digit steps. This highly accurate roll off adjustment enables precise matching of crossovers when using a multiple subwoofer set-up.

**LFE** (LFE & CEN Level Attenuation) This function parameter setting allows adjustment of the gain from the LFE & CEN input received via the RCA line level LFE & CEN connectors. This parameter enables adjustment of gain and thus sound pressure output produced in relation to the input from the LFE & CEN output of your AV amplifier. The adjustment range is from -98 to 0 incremented in single dB digit steps. This highly accurate gain adjustment enables precise matching of gains when using a multiple subwoofer set-up.

**Lro** (LFE & CEN Level Roll Off) This function parameter setting allows adjustment of the roll off (crossover) from the LFE & CEN input received via the RCA line level connectors. This parameter enables high frequencies to be filtered out above the displayed setting with a 24dB slope from sources connected to these inputs. Most but not all AV decoders offer an adjustable pre filtered output for the LFE content. Offering this fully adjustable setting for the LFE crossover gives a more flexible use for this input and enables the user to make adjustments over a wider frequency band and result in better integration possibilities. Selecting above 120hz results in the "LFE bypass" circuit option. The LFE bypass circuit sets the crossover to 200hz and only gain is adjustable. The adjustment range is from 20hz to 120hz & bypass, incremented in single digit Hz steps. This highly accurate roll off adjustment enables precise matching of crossovers when using a multiple subwoofer set-up.



Repeated pressing of the data rotary control scrolls through the menu options as follows:

**H-L — Hro — LFE — Lro — Pha — bri — APO — Etr — Aon — Dto — Pos — Grp — Reg**  
 Settings can be made at each menu option by turning the rotary control. A further push moves to the next menu item. At any time settings can be stored in one of 4 user pre-set locations which are then accessed by short push down on the corresponding pre-set button (as numbered above).

**Pha** (Phase) With the *Reference* Series sophisticated microprocessor controlled and monitored crossover circuit (D.A.M.P.) comes an adjustable phase control. Setting the phase in musically accurate infinitely variable increments between 0° and 180°. This control is used to enable accurate and musical integration when placed in your audio system. By adjusting this control almost infinite placement combinations can become possible. Most people will not experience phasing. The effects of which are only apparent to the ear if your main speakers produce the same frequency note at the same volume level as the subwoofer. For example, if your main speakers produce a note of 40hz at an equivalent volume level to the subwoofer, also producing 40hz, and the phase of each is out by 180° then they cancel each other out resulting in a reduction of bass at this frequency. To remedy this you adjust the phase control on the subwoofer to bring them both into phase. As a rule of thumb setting the system to be in phase is achieved when the bass output at the listening position is at its loudest. Changes of phase setting can be used to accommodate various positions of the cabinet in your room in order to achieve the best integration balanced with aesthetic enjoyment.

**Bri** (Brightness) This function parameter setting allows adjustment of the background display brightness. The settings are 1 to 5 with 5 being the brightest.

**APO** (Auto Power Off) This function parameter setting allows adjustment of the auto power off time delay. The settings are 1min to 30mins(default) and incremented by rotating the Data button. When auto power off is activated the DATA control must be pressed to bring back on manually. This occurs automatically when audio frequencies above the Aon threshold level are present (see Aon).

**Etr** (External 12v Trigger) This function parameter setting allows external trigger input polarity to be altered. The settings are **-\_-** and **\_ \_-**. The *Reference* Series can be put to sleep and woken via this voltage monitoring circuit.

**Aon** (Auto On) sensitivity of the auto on circuit can be increased or decreased between 001 (most sensitive) and 009 (least sensitive).

**Dto** (Display Timeout) When selected the display will shut off after 7secs. Use of the remote data rotary will bring the display back on.

**Pos** (Position name) This menu is relevant to the use of multiple sub-bass systems. When using the Smart Remote APP your device screen will show the name(position) of the sub-bass system in operation.. It is a means by which the user can distinguish between each unit. The name is not related to actual position in the listening room but careful choice of the available names can prove useful in this regard. Selection choice is P-1, L, C, R, P-2 through 9 (please refer to Smart Remote instruction manual for more details)

**Grp** (Group Selection) This setting enables sub-bas systems to be linked by group in order for the very best integration results in a multi sub-bas system. (please refer to Smart Remote instruction manual for more details)

**Reg** (Registration) This setting is for information only and will show if the sub-bass system has been registered by means of the Smart Remote APP directly with the factory. Once confirmed as registered the unit will display a YES.

## Memories



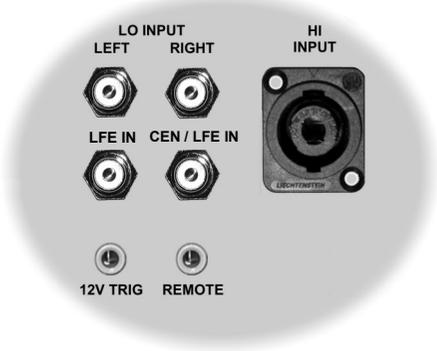
4 user pre-sets can be stored. Holding the button down for a few seconds stores the settings for that pre-set (stor is displayed momentarily). The individual settings can be recalled by a single short press of the corresponding control button. The last selected setting is kept in non volatile memory. Even if the power is disconnected all settings remain as those last used.

## Connectivity

### LO INPUT LEFT & RIGHT (RCA / Line Level)

You can connect an unbalanced RCA input direct from a mixing desk or line level pre-amplifier with or without a sub output. Either mono or stereo input detail may be used. When connecting from an A/V amplifier using the sub out or LFE out, the RCA lead used should be connected to the LFE IN on the

*Reference* Series. The CEN/LFE IN connector enables you to connect an additional LFE signal from the pre-amp or a Centre channel signal from the pre-amp.



### HI INPUT (Speakon)

For connection directly in parallel from the speaker outputs of the main audio system in order for the filter circuit to extract the information required to output the required bass frequencies. The maximum amplifier that can be connected is 750watts measured in PEC standard and only when connected in parallel with the speakers. **It is not recommended** to connect direct to an amplifier output unless in parallel with a speaker. Damage may occur if you do, to the input circuit of the filter stage. A Special Interface is required when the power amplifier connected has floating speaker negative terminals. **(NB SEE WARNING leaflet on separate sheet)**

### 12v TRIG (3.5mm Socket)

This jack connection is used to remotely sleep and wake the control board circuits and amplifier stages. Please note that this only functions if the power switch is in the on position. Connect the lead (not provided) from the device controlling the system on/off function to this socket. The unit will wake from a sleep state upon a trigger of voltage. The menu item Etr can be used to set whether the unit should waken or go to sleep when monitoring either a positive trigger signal voltage or a negative trigger signal voltage. Refer to your system controller instruction manual to determine the setting that should be applied in the menu.

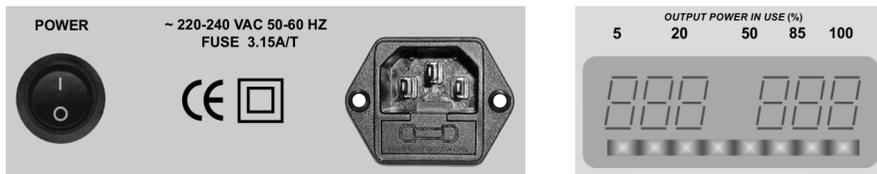
### REMOTE (3.5mm Socket)

This jack is used to connect the MJ Acoustics infra red eye (optional). This unique feature provides for remote control of all functions but is primarily beneficial for the selecting of user pre-set stored data which can be selected for different program sources. The remote eye sensor housing must be located in line of sight with the ir remote transmitter. This socket should only be connected to the remote RM1 Eye which provides un-modulated signal data to the processor. For the best remote experience the use of the Smart Remote app on a smart device such as a tablet or phone is recommended. Total out of sight control is achieved irrespective of cabinet location.

### Output Meter

On the display window there is a series of LED's which light-up as power output is increased. This is intended as a guide only and provides an indication of how hard the system is working.

## POWER



The digital display on the rear panel shows that the unit is powered and the amplifier is ready for use. Please note that the display will remain lit for a short while following switch-off whilst the power is dissipated from the internal power supply. The fuse is located below the main input connector. The fuse should only be replaced, when required, with one of the same type and rating as installed.

### NOTE

If the sub bass system is to be in sleep mode for extended periods then it is advised that the system main power switch is turned off. This will ensure the complete isolation of mains power to the circuits and result in zero power consumption. Please ensure that the system is powered off via the power switch when making and disconnecting all input cables.

## SET-UP HINTS & TIPS

Connect your subwoofer to your audio system using the low level phono interconnect supplied to the LFE input or the supplied high level lead. Both connections can be made simultaneously. Please refer to the separate instructions for the high level lead connection.

***Please ensure:***

***All control settings are as follows:  
gains at OFF, 0° phase, and 120hz frequency contour  
on first power-up.*** (Default factory setting)

### Music Material

After powering up the sub, audition a piece of music you are familiar with and set the main audio system volume to your normal listening level. Slowly increase the appropriate gain control on your *Reference* Series to read -40. You should now be experiencing sub-bass in your overall mix. How much bass output is determined by the setting of the gain control relevant to each input.

Now adjust the relevant frequency contour until you hear the subwoofer output the bandwidth of bass frequencies your main speakers lack. For example, most large main speakers start to roll off the bass output at around 40hz – 80hz so this is where the subwoofer should take over.

### Movies

After powering up the sub, audition a movie you are familiar with and set the main audio system volume to your normal listening level. Slowly increase the LFE gain control on your *Reference* Series to read -40. You should now be experiencing the LFE channel. How much output is determined by the setting of the gain control relevant to the LFE input.

Now adjust the LFE frequency contour until you hear the subwoofer output the LFE bandwidth. In the case of LFE the setting to start at is 80hz.

Further fine tweaking can be made as you become more familiar with the controls and adjustments. Visit our detailed setup procedures on our web site.

	Ref 200	Ref 210	Ref 400	Ref 1 Mk 4
10" DRIVER	X	X		X
12" DRIVER			X	
NON LOADED TUNED PORT				X
REFERENCE GRADE COMPONENT MATCHING	X	X	X	X
GOLD PLATED RCA SOCKETS	X	X	X	X
DIGITAL DISPLAY	X	X	X	X
POWER OUTPUT METER	X	X	X	X
SMART REMOTE	X	X	X	X
SPEAKER LEVEL CONNECTION (SPEAKON)	X	X	X	X
STEREO LINE LEVEL Left + Right	X	X	X	X
INPUT RCA sockets all Gold Plated	X	X	X	X
LFE & CEN INPUT RCA	X	X	X	X
D.A.M.P 3rd GENERATION	X	X	X	X
TWIN X-OVERS	X	X	X	X
TWIN GAIN	X	X	X	X
USER MEMORY PRESETS	X	X	X	X
12V TRIGGER INPUT & Auto on/off	X	X	X	X
HIGH GRADE MOSFET OUPUT DEVICES	X	X	X	X
CLASS A/B 150W RMS320W PEAK				
CLASS A/B 200W RMS 430W PEAK	X			
CLASS A/B 250W RMS 500W PEAK		X	X	X
<b><u>OPTIONAL ACCESSORIES</u></b>				
IR REMOTE CONTROL	X	X	X	X
<b><u>CABINET DIMS / WEIGHTS</u></b>				
WIDTH(MM)	300	280	345	300
HEIGHT(MM)	355	605	383	815
DEPTH(MM)	300	295	345	300

For a more detailed insight in to the full specification of each model please visit [www.mjacoustics.co.uk](http://www.mjacoustics.co.uk) and navigate to the downloads page and download the pdf full specification sheet.

**Amplifier** Resulting from continued extensive development design, the twin MOSFET amplifiers provide the engine to power the perfectly matched ultra long throw woofers. The power supply has been designed to provide the requirements of Instant High Current incorporated in all *Reference* Series. We use Double Insulated Toroidal transformers designed specifically for this audio application. To aid this the capacitors used are large bucket type with a ripple current of 10 Amps each and selected because of their high temperature and minimal loss characteristics. The transistors used are the Lateral Metal Oxide Semiconductor Field Effect type and specifically designed for this audio application.

**Crossover** *D.A.M.P.* (*Digitally Accurate MicroProcessor*)  
Digitally Accurate Microprocessor controlled crossover circuit (D.A.M.P.). Your "*Reference* Series" has the ultimate in sophisticated crossover circuits. Twin Digitally Accurate Microprocessor controlled crossover circuits (D.A.M.P.), incorporate twin digital displays so that the upper response limit can be set in musically accurate variable increments between 20hz and 120hz. An LFE bypass facility is activated at above 120hz of the LFE controls (**Lro**) selectable parameter with a fixed 200hz roll off. All functions are controlled and monitored via microprocessor. This development has enabled the complete and highly accurate settings to become part of user pre-set memories which will enable the user to store desired settings for different music sources and or music genre's. The control of all these functions can be made even more flexible by the use of Smart Remote. For the best user experience we suggest making full use of the Smart Remote feature. (See next page for details)

**D.I.P.** (*Dynamic Intelligent Protection*)  
This circuit monitors the output and the input of the amplifier and ensures that no clipping occurs. Additionally the microprocessor monitors all thermal activity and ensures that the amplifier output stages remain within safe working area specifications. This is a complex and highly integrated circuit which continually monitors specific areas and makes the appropriate action should the need arise.

**Sleep** (*auto power off*)  
This circuit monitors the inputs and wakens the circuits from sleep when a signal is present. Depending on the stored setting for the APO menu item the circuits will fall into sleep mode when lower signal levels are present for the set time. Settings are: 1 - 5 - 10 - 20 - and 30 mins. Sleep and wake-up can also be activated by external trigger from other equipment. Additionally using the remote, either Smart Remote App power button or ir remote sleep button will activate sleep.

**NOTE:**  
If the unit is placed into sleep manually by using the remote sleep button then it will remain in sleep mode indefinitely until brought back to active service by pressing the sleep button on the remote once again. Please be aware that the Auto On feature is not active under these circumstances. Auto on will only activate a wake state when the unit has been placed in sleep by APO.

**Note:1 Store Your Settings!**  
Be sure to store your settings as you make adjustments so that they can be recalled in the future. By doing this you can save settings which are best suited for your own tastes of music or movie content.

**Resetting Factory Default Data:**  
Should you wish to reset the system back to factory default state then turn the power off and hold down the DATA button and power up. All settings will be returned back to Factory Default.

## REMOTE CONTROL

### Introducing — SMART REMOTE

MJ Acoustics **SMART REMOTE (SR)** is an app for tablet or smartphone. **SR** employs wireless communication technology for use with those subwoofers in the MJ Acoustics range that have **SR** enabled hardware. No requirement for router connection but with total autonomous communication between subwoofer and smart device is achieved using Bluetooth LE data transmission support.

#### What can it do?

**SR** offers communicate with one or more MJ Sub-Bass Systems bidirectionally, enabling the app to display the exact settings the subwoofer is using. Changes made via the smart device screen are employed instantly and can be made in real-time whilst listening to your choice of material. A fantastic way to set up and fine tune your Sub-Bass System for the purest of HiFi integration. The full compliment of features remains available to the user along with a number of key additional features.

- Each subwoofer can be given a name.
- Each subwoofer can be placed in a Group
- Each subwoofer can be muted, either singularly or in Groups.
- Each Group can be adjusted for gains simultaneously.
- Real Time Analyser (RTA) provided to show the effects of the frequency spectrum.

Real Time Analyser Sensitivity and Frequency Range settings.

With these additional features and the already industry leading feature set, you are assured of the purest integration and the ability to achieve this from your listening position.

To download the full smart remote manual please visit [www.mjacoustics.co.uk](http://www.mjacoustics.co.uk) and navigate to the smart remote page.



**(Optional Accessory)** The remote RM1 system comes in two parts to provide optimum flexibility.



#### **RM1 (Optional Accessory)**

Provides for full remote control of all functions and enables the user to setup the entire listening sound stage without moving from the listening position. Once settings are stored, user pre-sets are easily selectable by pressing one of the P1 - P4 buttons. This remote function can also be used at the same time as Smart Remote further enhancing the user experience. If multiple Sub-Bass systems are deployed then the included Smart Remote is highly recommended.



#### **Remote Eye (Optional Accessory)**

The Infrared Eye in the shape of a small mouse is placed at a location desirable for line of sight and the jack plug inserted into the panel marked as "Remote".

## WARRANTY

MJ ACOUSTICS warrants to the original purchaser only, that this product is free from defects in material and workmanship under normal use within five years from date of purchase, in the United Kingdom only, provided that registration is submitted to M J Acoustics within 28 days from date of purchase. All parts, except the external cabinet finish are warranted as stated from date of purchase. Under this warranty M J Acoustics agrees to repair any defect or at the company's discretion, replace the faulty component(s) without charge for parts and labour provided the unit is returned carriage paid both ways. Defective parts will be replaced if in the sole judgement of MJ ACOUSTICS they be deemed defective over and above that considered to be normal wear and tear.

This warranty does not apply to equipment showing abuse, misuse, neglect or damage or to parts that in the judgement of MJ ACOUSTICS are not defective or have been used for purposes outside the scope of its design, nor does it extend to any equipment which may have been tampered with, altered or repaired outside an authorised MJ ACOUSTICS service station, and on which the serial number has been defaced, modified or removed. This warranty is in lieu of any other warranty expressed or implied and there is no other warranty or warranties valid for your purchase. No one is authorised to assume any liability on behalf of MJ ACOUSTICS or impose any obligation on it in connection with the sale of any equipment other than as stated in this warranty and outlined above.

MJ ACOUSTICS' liability, for any defective product, is limited to repair or replacement of the product, at our sole option. MJ ACOUSTICS shall not be liable or responsible, under any circumstances, for such indirect or consequential damages as from interrupted operations or other causes howsoever related. Additionally the Reference Series subwoofer is not intended for use in a commercial environment and the warranty applies for domestic use only.

If your unit requires service it should be sent to MJ ACOUSTICS service department, any shipping charges are the responsibility of the owner, this includes return shipping charges. SERVICE DEPARTMENT:- MJ Acoustics, Service Department, 9 Venture Court, Bolness Road, WISBECH, Cambridgeshire. PE13 2XQ.

To validate your warranty extension to 3 years, go to [www.mjacoustics.co.uk](http://www.mjacoustics.co.uk) and navigate to the support page to register your MJ Acoustics subwoofer.

## BOX CONTENTS



Vibration feet inserts x 4  
(place on base of feet to provide additional friction on smooth floor surfaces)



Subwoofer x 1



IEC mains Lead EU Only