Owner's manual

English - Version 1.7 - November 2013

Montana by PointSource   **Montana Sound Unit**

Safety Instructions

Be sure all the safety and operation instructions should be read before the Montana Sound Unit is connected to the main supply and operated.

This symbol, alerts the user to the presence of uninsulated dangerours voltage inside the enclosure – voltage that may be sufficient to constitute a risk of shock.

This symbol, alerts the user to important operating and maintenance instructions in the accompanying the Montana Sound Unit, guidelines and owner's manual.

CAUTION:
To remove the risk of electrical shock, do not remove the cover. No user serviceable parts inside. Refer servicing to qualified personal.

WARNING:
To reduce the risk of fire or electrical shock, do not expose this product to rain or moisture.

Important general safety instructions:

1) Read Instructions:
   All the safety and operation instructions should be read before the product is operated.
2) Retain Instructions:
   The safety and operating instructions should be read and retained for future reference
3) Heed Warnings:
   All warnings on the product and in the operating instructions should be adhered to.
4) Follow instructions:
   All operation and user instructions should be followed.
5) Water and Moisture:
   The product should not be used near water (e.g. near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement, or near a swimming pool etc.)
6) Ventilation:
   The product should be situated so that its location or position does not interfere with the its proper ventilation. For example the product should not be situated on a bed, sofa rug, or similar that may block the ventilation openings, or placed in a build-in installation, such as a bookcase or cabinet that may impede the flow of the air through the ventilation openings.

7) Heat:

The product should be situated away from heat sources such as radiators, heat registers, stoves, or other products (including amplifiers) that produce heat.

8) Power Sources:

The product should be connected to a power supply only of the type described in the operating instructions or as marked on the product.

9) Grounding or Polarization

Precautions should be taken so that the grounding or polarization means of a product is not defeated.

10) 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 the cords and the plugs, convenience receptacles ad the point where they exit from the product.

11) Cleaning:

The product should be cleaned only as recommended by the manufacturer.

12) Non-Use Periods:

The power cord of the product should be unplugged from the outlet when left unused for a long period of time.

13) Object and Liquid Entry:

Care should be taken so that objects do not fall and liquids are not spilled into the enclosure through openings.

14) Damage Requiring Service:

The product should be serviced by qualified service personnel when:

    a. The power-supply cord or plug has been damaged

    b. Objects have fallen or liquid has been spilled into the product.

    c. The product has been exposed to rain.

    d. The product does not appear to operate normally or exhibits a marked change in performance.

15) Servicing:

The user should not attempt to service the product beyond that is described in the operating instructions. All other servicing should be referred to qualified service personnel.

16) Lighting:

For added protection for the product during a lightning storm or when it is left unattended and unused for a long period of time, unplug it from the wall outlet.

17) Overloading:

Do not overload wall outlet, extension cords or integral convenience receptacles as this can be result in risk of fire or electric shock.

18) Battery Disposal:

When disposing of used batteries, please comply with governmental regulations or environmental public instructions rules that apply in your country or area.

Caution:

- **Danger of explosion if battery is incorrectly replaced.**
- **Replace only with the same or equivalent type**
- **Batteries (battery pack or batteries installed) must not be exposed to excessive heat such as sunshine, fire or the like.** ⚠**WARNING**

⚠ **WARNING**
- **Do not ingest battery, chemical Burn Hazard**

19) The remote control supplied with this product a coin/Button cell battery. If the coin/Button cell battery is swallowed, it can cause severe internal burns in just 2 hours and can lead to death.
20) Keep new and used batteries away from children, if the battery compartment does not close securely, stop using the product and keep it away from children.
21) If you think batteries might have been swallowed or places inside any part of the body, seek immediate medical attention.
22) **Where the mains plug or an appliance couple is used disconnect device shall remain readily operable.**

CE declaration of conformity

The conformity of the designated product with the provisions of Directive number 73/23/EEC (LVD) is proved by full compliance with the following standards:

Standard number	Date of issue	Test type
EN60065	2002	General requirements
		Marking
		Hazardous radiation
		Heating under normal conditions
		Shock hazards under normal operating conditions
		Insulation requirements
		Fault conditions
		Mechanical strength
		Parts connected to the mains supply
		Components
		Terminal devices
		External flexible cords
		Electrical connections and mechanical fixings
		Protection against electric shock
		Stability and mechanical hazards
		Resistance to fire

The conformity of the designated product with the provisions of Directive number 89/336/EEC (EMC) is proved by full compliance with the following standards:

Standard number	Date of issue	Test type
EN55013	2001	Conducted emissions
EN55013	2001	Absorbed emissions
EN55020	2002	Immunity

Waste Electrical and Electronic Equipment (WEEE) Directive

Directive 2002/96/EC of the European Parliament and of the Council

The symbol (right) is shown on this product. It indicates that the product should not be disposed of with regular household waste, but should be disposed of separately.

Electrical and electronic equipment can contain materials that are hazardous to the environment and human health and therefore should be disposed of at a designated waste facility or returned to your retailer for the appropriate recycling to take place (see www.linn.co.uk for further information).

If you wish to dispose of this product and the product still functions, please consider recycling/reusing it by donating it to a charity shop, selling it or part-exchanging it with your retailer.

Acknowledgements

FCC STATEMENT
This device complies with part 15 of the FCC rules and Industry Canada Licence-exempt RSS standard(s). Operation is subject to the following to conditions:

1) This device may not cause harmful interference, and
2) This device must accept any interference received, including interference that may cause undesired operation.

DÉCLARATION DE LA FCC
Cet appareil est conforme à la section 15 des réglementations de la FCC. Le fonctionnement de l'appareil est sujet aux deux conditions suivantes :

1) cet appareil ne doit pas provoquer d'interférences néfastes, et
2) cet appareil doit tolérer les interférences reçues, y compris celles qui risquent de provoquer un fonctionnement indésirable.

Manufactured under license under U.S. Patent Nos: 5,956,674; 5,974,380; 6,487, 535 & other U.S. and worldwide patents issued & pending, DTS, the Symbol, & DTS and the Symbol together are registered trademarks & DTS Digital Surround and the DTS logos are trademarks of DTS, Inc. DTS, Inc. All Rights Reserved.

Manufactured under license from Dolby Laboratories.
Dolby and double-D symbol are trademarks of Dolby Laboratories.

Caution:
This device complies with Part 15 of the FCC Rules / Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

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

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

Under Industry Canada regulations, this radio transmitter may only operate using an
antenna of a type and maximum (or lesser) gain approved for the transmitter by
Industry Canada. To reduce potential radio interference to other users, the antenna
type and its gain should be so chosen that the equivalent isotropically radiated power
(e.i.r.p.) is not more than that necessary for successful communication.

*Conformément à la réglementation d'Industrie Canada, le présent émetteur radio peut
fonctionner avec une antenne d'un type et d'un gain maximal (ou inférieur) approuvé
pour l'émetteur par Industrie Canada. Dans le but de réduire les risques de
brouillage radioélectrique à l'intention des autres utilisateurs, il faut choisir le type
d'antenne et son gain de sorte que la puissance isotrope rayonnée équivalente
(p.i.r.e.) ne dépasse pas l'intensité nécessaire à l'établissement d'une communication
satisfaisante.*

MPE Reminding
To satisfy FCC / IC RF exposure requirements, a separation distance of 20 cm or more should be
maintained between the antenna of this device and persons during device operation.
To ensure compliance, operations at closer than this distance is not recommended.

*Les antennes installées doivent être situées de facon à ce que la population ne puisse
y être exposée à une distance de moin de 20 cm. Installer les antennes de facon à ce
que le personnel ne puisse approcher à 20 cm ou moins de la position centrale de l'
antenne.
La FCC des éltats-unis stipule que cet appareil doit être en tout temps éloigné d'au
moins 20 cm des personnes pendant son functionnement.*

Only for detachable antennas:

This radio transmitter (identify the device by certification number, or model number if Category II) has been approved by Industry Canada to operate with the antenna types listed below with the maximum permissible gain and required antenna impedance for each antenna type indicated. Antenna types not included in this list, having a gain greater than the maximum gain indicated for that type, are strictly prohibited for use with this device.

WIFI Antenna:
Gain of antenna: 2.0dBi max.
Type of antenna: Omni-directional
Impedance of antenna: 50ohm

Le présent émetteur radio (identifier le dispositif par son numéro de certification ou son numéro de modèle s'il fait partie du matériel de catégorie I) a été approuvé par Industrie Canada pour fonctionner avec les types d'antenne énumérés ci-dessous et ayant un gain admissible maximal et l'impédance requise pour chaque type d'antenne. Les types d'antenne non inclus dans cette liste, ou dont le gain est supérieur au gain maximal indiqué, sont strictement interdits pour l'exploitation de l'émetteur.
Antenne WIFI
Gain d'antenne: 2.0dBi maximal
Type d'antenne: Omni-directionnel
Impédance d'antenne: 50ohm

Table of Contents

Package Contains

Please control that all listed items are in the package and inspect they are all intact.

1) 1x Montana Sound Unit
2) 1x Remote Control
3) 1x Battery (CR2025 3V Lithium)
4) 1x AC Power Cord
5) 2x WiFi antennas
6) 1x DAB+/FM antenna
7) 1x Owner's Manual

Overview of front and rear panel

Front panal:
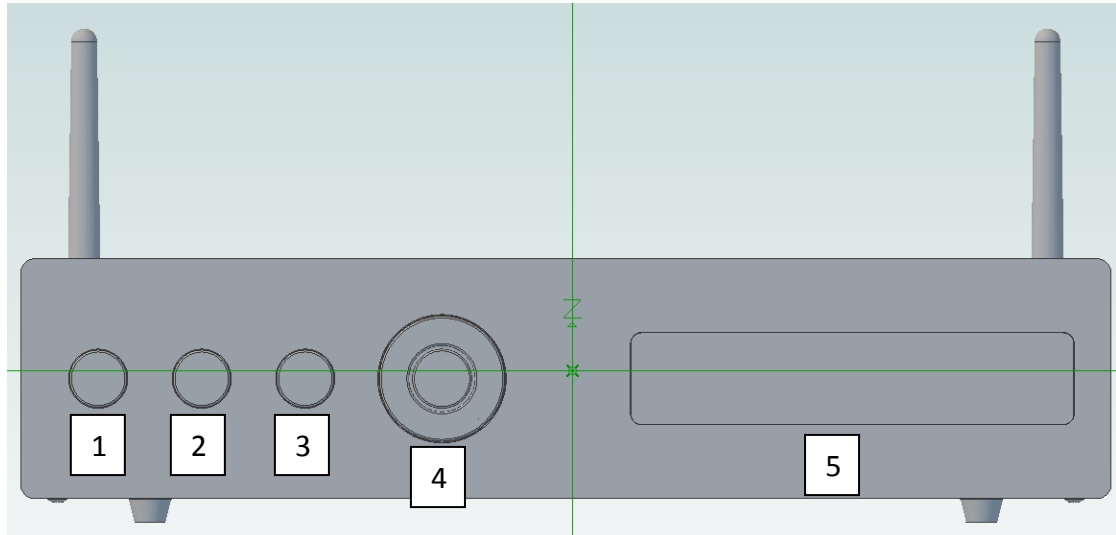
1) Power on/off
2) Input select
3) Return (when using the menu**/select** wheel)
4) Menu/select
5) Display

Rear Panal:
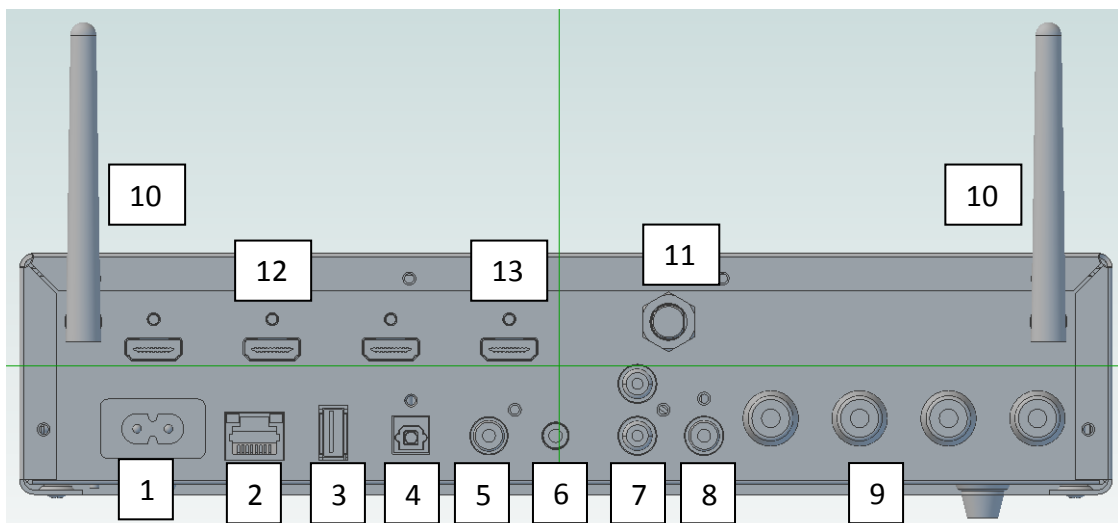
1) AC Power cord connection
2) LAN network connector
3) USB2.0 connector (Share, dock, 5V for charging iPad)
4) Optical **(Digital)**

5) Coaxial (Digital)
6) Mini jack connector (AUX1 analog)
7) Phone connectors Red&White (AUX2 analog)
8) Subwoofer Pre-out (purple Phone connector)
9) Left/Right Speaker terminals
10) 2x Antenna connectors for WiFi
11) Antenna connector for DAB and FM antenna
12) HDMI 3x input connectors
13) HDMI 1x Output connectors

Remote Control

The remote control has 6 buttons. The basic operations are:

- **On/Off**
  Used to turn the MSU on and off. If Sleep mode is activated in the menu, it controls Sleep On/Off.

- **Input**
  Change the input on the MSU.

- **Volume**
  Turn up/down the volume. Hold to make continuous adjustment.

- **Radio**
  Change the radio program on input FM and DAB.

- **Tone**
  Change the tone/EQ of the sound between 7 presets.

- **Mute**
  Toggle mute on/off.

To navigate the remote control

The remote control contains only 6 buttons, 2 small with only single press function and 4 bigger buttons with up and down function.

Power
The first red power button is used to turn on and off the sound unit.

Functions in Sleep and CEC mode
- If CEC or Sleep is activated the MSU will enter sleep mode when the power button is pressed.
- When holding down the "power button" 3sec the MSU will turn off.

Input
The second button is input select. The used always need to select manually from where the sound comes from (Wifi, CD, BluRay, PlayStation ect.). When pressing "up" or "down" through the inputs they will show in the sound unit display.

Volume
For turning the volume up and down.

> Important! The volume steps are divided into 100 steps.
> They are very small to support all external mobile devices.
> When adjusting the volume you can keep the volume
> button down and the adjustment goes faster

Radio
The main function of the radio button is to select the pre-stored Radio stations. But the button also works:

- In FM input mode to scan the FM range
- In DAB input mode to scan and store the DAB stations
- In WiFi mode to shift from wireless network and wireless direct and back

> Important! The function of the Radio button is depending
> on the selected input and the time the button is pressed
> down!

Functions in FM input mode:
- If the input mode is FM the button works to select the pre-stored FM stations by pressing "up" and "down".
- When holding down the "upper" button 3sec it is possible to scan the FM frequency band and search for next nearby station. The found station can only be permanently stored by

using the Menu/select button on the sound unit (see section how to pre-store FM stations).

Functions in DAB input mode:
- If the input mode is DAB the button works to select the pre-stored DAB stations.
- If holding down the "upper" button 3sec (Repeat up to 3 times) it is possible to scan the DAB frequency band and the found DAB stations will be automatically stored.
- First time pressing the RadioUpperKey after scanning the DAB stations will be organized.

Functions in WiFi mode:
- If the input mode is in WiFi the radio button has an different function. Then it is possible to switch between the WiFi home network and WiFi direct where the sound unit create its own network.
- To switch between the home network (WiFi N.) and the Montana sound units own network (WiFi D.) then press RadioUpperKey 3sec for direct connect and RadioDownKey 3sec for WiFi home network.

<div style="border:1px solid blue; color:blue; text-align:center; font-weight:bold;">

Important! To ensure correct WiFi connection when changing from WiFi D. to WiFi N. then turn "off" and "ON" the MSU after changed WiFi connection.

Note: Only 2.4GHz network is supported!

</div>

Tone
Press "up" or "down" to select the pre-set preferred tone genre such as Pop, Rock, Jazz, Classic ect.

Mute
For quickly muting the sound without turning off the sound unit or turning down the volume which takes time.

To navigate the remote control
- The two small buttons power and mute is simple press down function.
- The 4 bigger buttons Input, Volume, Radio and Tone have press "up" and "down" function.
- The volume bottom has the feature when keep pressing on the volume bottom it is possible to turn the volume "up" or "down" fast.
- The RadioKey has multiple functionally depending on the selected input and the time pressing on the key. The time separation between normal press function and long press function is 3sec.

VOLUME
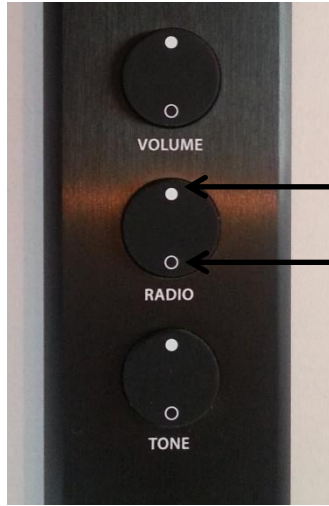
Radio Up 3 seconds

Radio Down 3 seconds

RADIO

TONE

Change battery in the remote control

- Press in the bottom of the remote control and release to "click out" the battery holder
- Grap the battery holder and take it out of the remote control
- Remove the used battery
- Insert new battery. Put the plus side of the battery downwards in the battery holder, so the "plus" signs on the battery and battery holder face each other.
- Put the battery holder back into the remote control until it says "click" then release
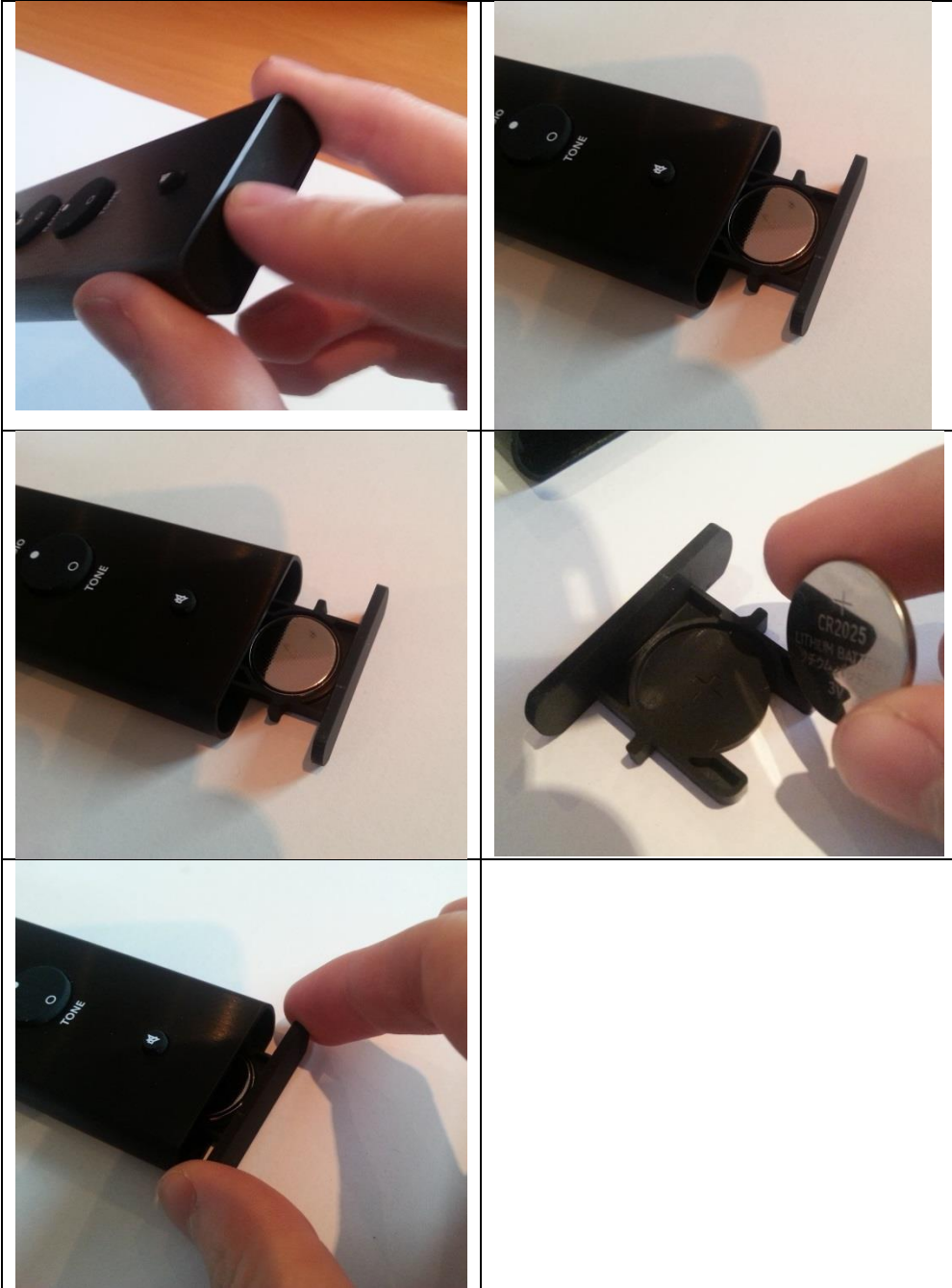
Montana Sound Unit Menu Structure

Setup Menus

How to navigate the setup menus

The main menu contains of 6 different headers

Tuner
For storing FM tuner frequencies into presets which can be selected from the remote control.

Tone Genre
For changing the tone of the sound to one of the equalizer pre-settings.

Tone Control
For adjusting the amount of bass and treble.

Input Level
For adjusting the individual levels of the inputs.

Speaker Setup
For configuring the unit to the front loudspeakers and a subwoofer.

System Setup
For adjusting general system settings such as HDMI, Start Up Level, Auto Shutdown and WiFi connection.

Main menu	Sub menu
Menu → Tuner	...
Tone Genre	...
Tone Control	...
Input Level	...
Speaker Setup	...
System Setup	...
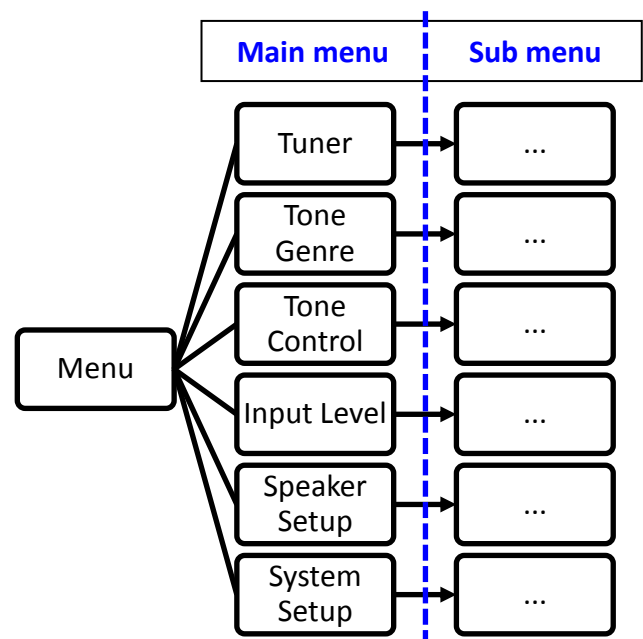
To navigate in the setup menus

- On the front panel press 'Menu/select' button in the middle of the 'selection wheel' to enter the setup menus.

- Use the 'selection wheel' to move around in the menus.
- Use the 'select' button in the middle of the 'Menu/select wheel' to enter submenus.
- Use the 'selection wheel' to change settings. The changes take effect immediately.
- Use the 'return' button on the left of the Menu/select button to exit submenus.

Tuner

Important! The Tuner setup can only be accessed when the input is set to FM.

Presets

Use Presets to choose between the the 10 presets, which can store FM stations.

Frequency

Change the current FM frequency by turning the wheel.

Store

Used to store the current frequency to the a preset. After Store is chosen, the wheel can be used to choose to which preset the frequency should be stored. Press "Menu/Select" to confirm.

Erase Memory

Erases the stored frequencies in the presets. This removes both stored channels on FM and DAB.

Main menu	Sub menu	Configuration
	Presets	FM 01 - 10
	Frequency	87.5kHz - 108kHz
Tuner	Store	Store 01 - 10
	Erase Memory?	Reset all?
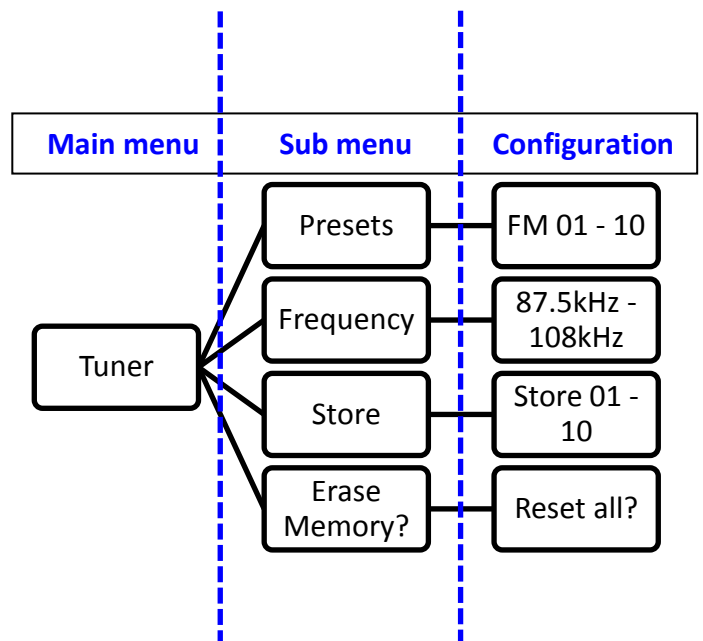
Tone Genre

An equaliser is used to change the tone of the sound. The MSU has 7 equalizer pre-sets named after different music genre. These are

- Neutral (Default)
- Pop
- Rock
- Classic
- Jazz
- Blues
- Club

These can also be changed directly from the remote control by pressing "Tone" up or down.

```
                    ┌──────────┐
                    │ NEUTRAL  │
                    └──────────┘
                    ┌──────────┐
                    │   POP    │
                    └──────────┘
                    ┌──────────┐
                    │   ROCK   │
                    └──────────┘
┌────────────┐      ┌──────────┐
│ Tone Genre │──────│ CLASSIC  │
└────────────┘      └──────────┘
                    ┌──────────┐
                    │   JAZZ   │
                    └──────────┘
                    ┌──────────┐
                    │  BLUES   │
                    └──────────┘
                    ┌──────────┐
                    │   CLUB   │
                    └──────────┘
```

Tone Control

The bass and treble can be adjusted from -10dB to +10dB, with 0dB being neutral.

```
┌──────────┐     ┌─────────┐     ┌───────────┐
│   Tone   │─────│ Treble  │─────│ +/- 10dB  │
│ Control  │     └─────────┘     └───────────┘
└──────────┘     ┌─────────┐     ┌───────────┐
                 │  Bass   │─────│ +/- 10dB  │
                 └─────────┘     └───────────┘
```
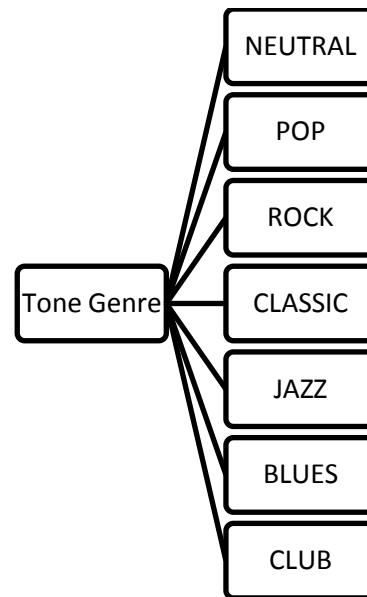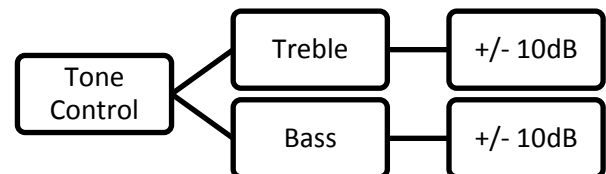
Input Level

The sensitivity level can be adjusted for each source input from -10dB to +10dB. This can be used to amplify a low output source to match the sound level of the other inputs or to attenuate a high output source.

```
                 ┌─────────┐     ┌───────────┐
                 │  Wifi   │─────│ +/- 10dB  │
                 └─────────┘     └───────────┘
┌─────────────┐  ┌─────────┐     ┌───────────┐
│ Input Level │──│ HDMI 1  │─────│ +/- 10dB  │
└─────────────┘  └─────────┘     └───────────┘
                     ⬇
                 ┌─────────┐     ┌───────────┐
                 │ ARC-TV  │─────│ +/- 10dB  │
                 └─────────┘     └───────────┘
```
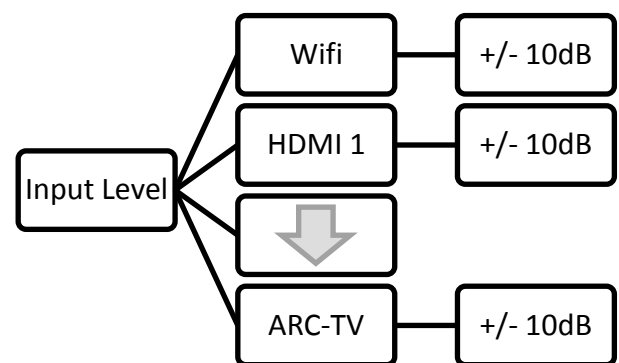
Speaker Setup

Crossover

When adding a subwoofer it is necessary to set the crossover frequency between front speakers "left" and "Right" and the subwoofer. The crossover can be adjusted from 40Hz to 220Hz. This will both control the subwoofer high frequency cut-off and the low frequency cut-off of the speakers.
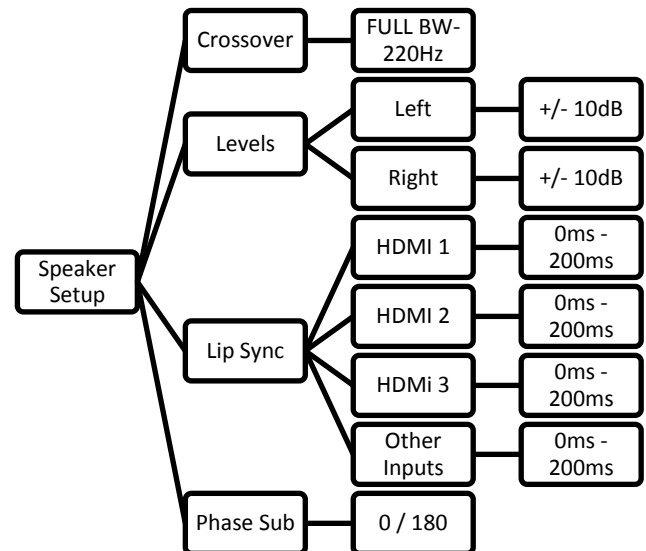
Levels

The output level for the front speakers can be adjusted from -10dB to +10dB. This can be used to move the "center" of the sound field. E.g. if the left speaker is placed further away from the wanted center position than the right speaker, increase the level of the left speaker until the wanted center position is achieved.

```
                    ┌──────────┐      ┌─────────────┐
                    │ Crossover│──────│ FULL BW-    │
                    └──────────┘      │ 220Hz       │
                                      └─────────────┘
                                      ┌─────────┐   ┌──────────┐
                                      │  Left   │───│ +/- 10dB │
                    ┌──────────┐      └─────────┘   └──────────┘
                    │  Levels  │
                    └──────────┘      ┌─────────┐   ┌──────────┐
                                      │  Right  │───│ +/- 10dB │
                                      └─────────┘   └──────────┘
      ┌──────────┐                    ┌─────────┐   ┌──────────┐
      │ Speaker  │                    │ HDMI 1  │───│ 0ms -    │
      │ Setup    │                    └─────────┘   │ 200ms    │
      └──────────┘                                  └──────────┘
                                      ┌─────────┐   ┌──────────┐
                                      │ HDMI 2  │───│ 0ms -    │
                    ┌──────────┐      └─────────┘   │ 200ms    │
                    │ Lip Sync │                    └──────────┘
                    └──────────┘      ┌─────────┐   ┌──────────┐
                                      │ HDMi 3  │───│ 0ms -    │
                                      └─────────┘   │ 200ms    │
                                                    └──────────┘
                                      ┌─────────┐   ┌──────────┐
                                      │ Other   │───│ 0ms -    │
                                      │ Inputs  │   │ 200ms    │
                    ┌──────────┐      └─────────┘   └──────────┘
                    │ Phase Sub│──────┌─────────┐
                    └──────────┘      │ 0 / 180 │
                                      └─────────┘
```

Lip Sync

This feature is used to delay the audio signal in HDMI signals. The video processing is sometimes slower than audio processing which can lead to that the audio and video signal are not synchronised. The audio signal can be delayed from 0ms to 200ms in steps of 10ms to match the video signal.

Tip: It is often most easy to adjust the audio signal to the video signal by looking at lips and listen to when the spoken words is heard.

Phase Sub

When a subwoofer is connected it is important that the subwoofer and the front speakers play in phase. This means that when the bass driver in the front speakers move outwards the subwoofer moves outwards also. When the subwoofer is placed closely to one of the front speakers the phase should be set to 0 degrees. If the subwoofer is placed far from the front speakers a better bass might be obtained by setting the phase to 180 degrees.

Tip: Place the subwoofer and the front loudspeakers in their wanted position. Place yourself in the listening position and play a song with a lot of bass. Then make a friend change the setting back and forth between 0 and 180 degrees. The setting given the most bass it the best setting.
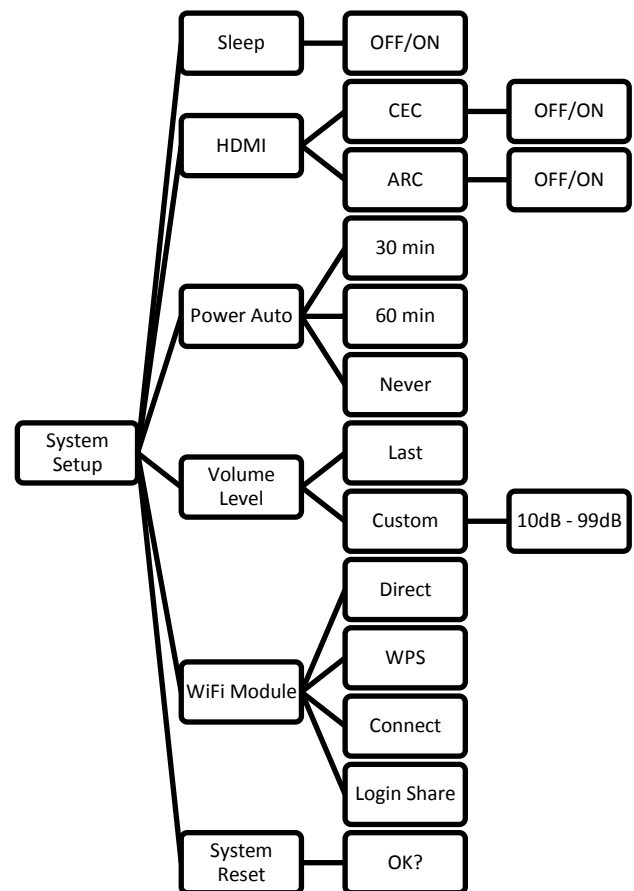
System Setup

HDMI
Under the HDMI setting CEC and ARC can be switched on/off.

Consumer Electronics Control (CEC) is an HDMI feature which allows one device to be controlled from another device. If the MSU is connected to a TV which supports CEC then volume control can be controlled from the television. Turning on and off the television will also turn on/off the MSU depending on the settings on the television.

Audio Return Channel (ARC) is an HDMI feature which allows audio to be sent back from the TV to the MSU through the HDMI output cable from the MSU. When the MSU is connected to a TV with ARC through an HDMI cable the video signal are send to the TV. When watching TV the audio signal is send back through the same HDMI cable to the MSU so the TV sound is played through the MSU instead. This way only one cable is needed between MSU and TV.

```
System Setup
  ├─ Sleep ─────── OFF/ON
  ├─ HDMI ─┬─ CEC ─── OFF/ON
  │        └─ ARC ─── OFF/ON
  ├─ Power Auto ─┬─ 30 min
  │              ├─ 60 min
  │              └─ Never
  ├─ Volume Level ─┬─ Last
  │                └─ Custom ── 10dB - 99dB
  ├─ WiFi Module ─┬─ Direct
  │               ├─ WPS
  │               ├─ Connect
  │               └─ Login Share
  └─ System Reset ── OK?
```

Power Auto
This controls how the MSU works when no input signal is detected. The MSU can be set to shut down after 30 or 60 minutes of inactivity. Chose 'Never' if you do not want the MSU to shut down unless you do it yourself.
Setting the MSU to 'Sleep' means that the MSU will enter a sleep mode when pressing the turn off button on either the MSU or remote control. 'Sleep' mode means that the display and amplifier shuts down to minimise power consumption when not used but the WiFi network connection is on. This allows the MSU to be turned on from the MSU iPhone App.

Volume Level
This sets the volume level when the MSU starts up. It can either be set to Last or Custom. When Last is chosen the volume level at last shutdown will be used when turning on again.
Custom is used to manual chose the start-up volume level in the range 10 to 99.

WiFi Module 2.4GHz
The MSU can connect to WiFi networks or create its own when needed. When choosing 'Direct' the MSU will create its own network which devices can connect and stream to without use of

password.

Setting up the MSU to the WiFi can be done in various ways:

- **Login Share** – Select "Login Share" in the sound unit menu. Then take you portable device (mobile phone) which already contain the WiFi network data you wish to share with the sound unit.
  - **It is only possible to use the share function with an iOS device**
  - It is important you have selected the WiFi network under settings on you mobile phone then insert the cable from your phone to the USB connector on the back side of the sound unit.

  A menu on your phone pops up asking if you like to share your network data. Press yes and wait a few seconds. The network data from the phone is then stored in the sound unit and is now connected on you WiFi Home network.
  When "WiFi N" is displayed, complete the process by pressing return bottom to come back to the mail menu and turn off the sound unit and on again.

- **Connect** – The MSU can be configured to a WiFi network with a device connected to the MSU on its own network. See section "WiFi setup methods" in appendix 1 and name your sound unit via computer or tablet.

- **WPS** (WiFi Protected Setup) – If you have a router with WPS then click on the WPS button on the router and chose WPS on the MSU. This connecs the MSU to the home network without use of passoword.
  - Important using this function the password of the network cannot be saved.

When the MSU is connected to WiFi it can be switched back and forth between a Direct network and the home WiFi. To choose different home WiFi choose 'Connect'

System Reset
The MSU can be reset to default settings by choosing 'System Reset'.

Setup and use of the Radio (FM and DAB)

Scan DAB stations

Follow the instructions below to scan for DAB stations

1. Change input to "DAB"
2. Press and hold Radio Up on the remote for 3 seconds. The MSU will scan for all DAB stations available **(Memory Max 30 stations)**
3. When the MSU is done scanning pressing Radio Up will rearrange the stations in to ascending order.
4. Toggle between the stations afterwards by using the Radio Up/Down button on the remote.

Store FM presets

Follow the instructions below to set up the presets channels.
There are 10 presets channels which a given FM station can be saved to.

5. Change input to "FM"
6. Press and hold Radio Up/Down on the remote for 3 seconds. The MSU will search for the next radio station.
7. When the MSU has found a radio station it will ask whether the station should be stored or not.
    o Store -> Use the wheel to change the presets which to the station should be stored. Click the "Menu/Select" button on the MSU to confirm.
    o Not store -> Use the Radio Up/Down button again to continue the search or wait 5 seconds until the frequency is shown again.
8. Repeat step 2-3 for each radio station that is to be stored.

Tip: If the frequencies of the wanted FM stations are known the Tuner menu can be used instead:

1. Change input to "FM"
2. Use the Menu/Select to enter the Tuner setup.
3. Go to "Frequency" and use the wheel to find the FM stations which you want to store.
4. Go to "Save" and press on the menu/select again to confirm.
5. Use the wheel to change the preset which the frequency should be saved to. Use the menu/select button to confirm
6. Repeat step 3-5 for each radio station that is to be stored.

Daily FM use

Use the "Radio Up" and "Radio Down" button on the remote control to change between the different stored presets.

To listen to a radio station which is not stored as a preset, hold "Radio Up" or "Radio Down" for three seconds. The MSU will scan and find the next radio station. Skip the Store-option. Press and hold 3 seconds again to find another station

Specifications for Montana Sound Unit:

Dimensions	Montana Sound Unit 2.0
Sound Unit Dimensions (WxHxD)	295x71.3x235 (Height incl. feet)
Net Weight	3.8kg
Amplifier Specifications	
Rated Power at 4 ohm	100W
Signal / Noise Ratio better than	-74.5dB
Total Harmonic Distortion (1W/1kHz)	0.045%
Total Harmonic Distortion (100W/1kHz)	0.181%
IMD (SMPTE) – Left 1W (7kHz/60Hz)	0.19%
IMD (SMPTE) – Right 1W	0.18%
IMD (SMPTE) – Left 100W	0.145%
IMD (SMPTE) – Right 100W	0.156%
IMD (CCIF) – Left 1W (19.5kHz/1kHz)	0.005%
IMD (CCIF) – Right 1W	0.0025%
IMD (CCIF) – Left 100W	0.014%
IMD (CCIF) – Right 100W	0.035%
Others	
Standby power consumption	=<0.5W
Sleep mode power consumption	**???**
On power consumption	**???**
WiFi module	**2.4GHz (5GHz is not supported)**
Main support bit rate	24bit / 48kHz

Appendix 1:

WiFi Setup methods

Share:

In Apple devices a feature is incorporated which allows for sharing the information for connecting to the WiFi home network to other devices.

1. Connect a WiFi-connected iOS device (iPad, iPhone) to the USB input on the MSU through an Apple USB Cable (not supplied).
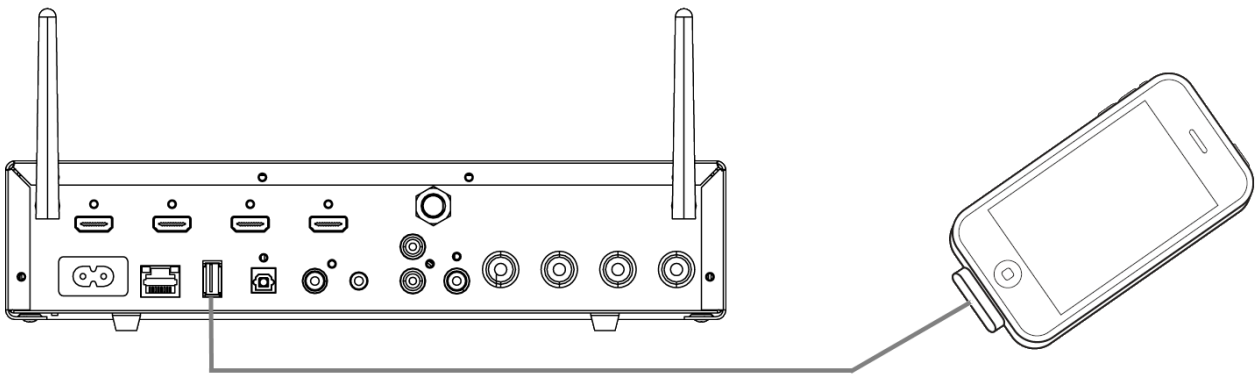
2. Press in the middle of the Menu/Select wheel on the MSU to enter the Menu and go to System Setup ("SysSetup"). Choose the "WiFi" and then select "Share" by pressing the middle of the Menu/Select wheel.

Menu ➡ SysSetup ➡ WiFi ➡ Share

3. A "Share Wi-Fi Settings" dialogue box appears on the iOS device, tap "Allow".

Share Wi-Fi Settings?
Do you want to share your Wi-Fi settings so this accessory can connect to the Wi-Fi network?

Ignore   Allow

4. Complete the process by pressing return bottom to come back to the mail menu and turn off the sound unit and on again.
5. The sound unit is now connected to your home network and you can stream and play music from your phone or tablet or steam music from the internet.

WiFi Protected Setup (WPS)

Your home network router must have a WPS button in order for this to work. To determine whether your router has WPS consult the manual of the router or your internet provider in case the router was provided by them.

1. Press the WPS button on your router (model dependent). Note that the "WPS" symbol can vary.

2. Select input "WiFi" on the MSU either by the Input button on the MSU or the Remote Control. The Sound unit display should show "WiFi"

3. Press in the middle of the Menu/Select wheel on the MSU to enter the Menu and go to System Setup ("SysSetup"). Choose the "WiFi" and then select "WPS". The MSU will start connecting to the home network. The display will blink "Link" doing the process.

   Note: This step can also be completed on the remote control by pressing and holding "Radio Down" button for three seconds.

4. When "WiFi N" is displayed, complete the process by pressing return bottom to come back to the mail menu and turn off the sound unit and on again.

5. The sound unit is now connected to your home network and you can stream and play music from your phone or tablet or steam music from the internet.

> Important! The Sound Unit cannot store the Network settings in this mode

Setup WiFi from the Direct Network

The MSU can create its own network to which devices can connect to allow direct streaming music without use of a home network. This can be used to configure the MSU to connect to the home network.

1. Select input "WiFi" on the MSU either by the Input button on the MSU or the Remote Control
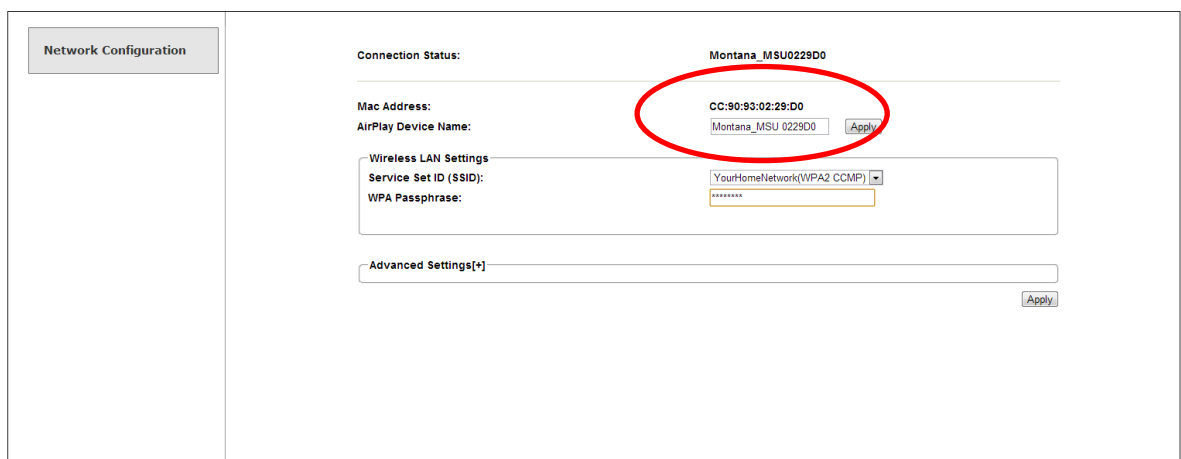

2. Press in the middle of the Menu/Select wheel on the MSU to enter the Menu and go to System Setup ("SysSetup"). Choose the "WiFi" and then select "Direct". The MSU will generate its own network. The display will blink "Link" doing the process.

   Note: This can also be completed on the remote control by pressing and holding "RadioUpperKey" down in 3 seconds.

3. When "WiFi D" is displayed, the MSU has created a network named "Montana_MSUxxxxxx" where "xxxxxx" is an unic id-number for the given MSU.

4. Connect to the "Montana_MSUxxxxxx" network from a device with WiFi, e.g. PC, Mac, smartphones, tablets or computers.

5. Open an internet browser (e.g. Internet Explorer, Chrome, Safari) and in the URL adresse enter: "192.168.1.1". This will open the network configuration page on the MSU.

6. You can change the default sound unit network name from "Montana_MSUxxxxxx" to some name that makes more sense like "TV living room", "Kitchen", "Bedroom" etc. after changing the name press "Apply"

Note: The name shown in AirPlay and DLNA can be changed here too. Write the desired name under "Airplay Device Name" and click apply next to.

7. Recall the Montana Webpage to change "Wireless LAN Settings"
8. Under the "Wireless LAN Settings" choose your home network name and enter the password below

9. When done click "Apply" down in the right corner. The MSU will now connect to the WiFi home network. First it will show "LINK" while searching for the network.

Montana

10. When "WiFi N." is displayed, complete the process by turn Off and On again the sound unit
. The sound unit is now connected to your home network and you can stream and play
music from your phone or tablet or steam music from the internet.

Appemdix 2.

Connections

Connect Speakers

Connect a set of loudspeakers as shown below. An active subwoofer can be added and should be connected to the purple connection on the MSU into the input on the subwoofer.

Right

Left

Sub

Line in /
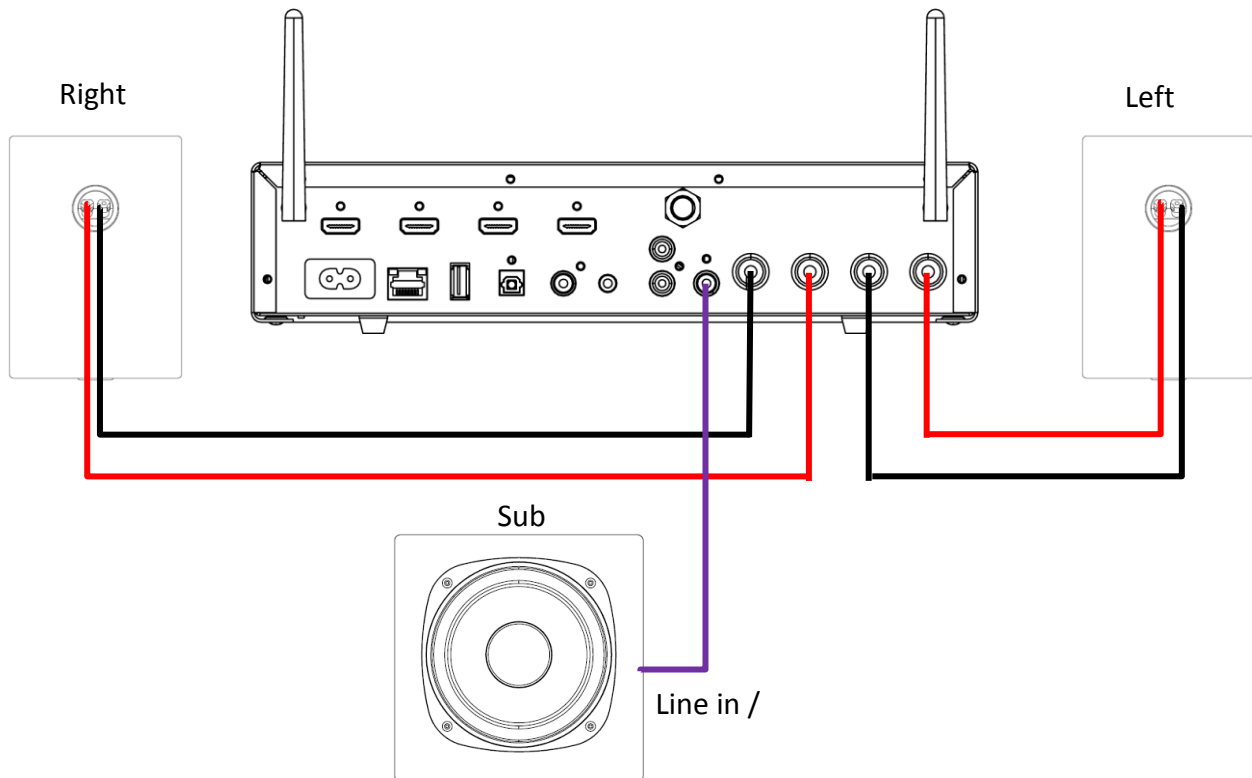
Connecting the MSU to other components

HDMI OUT: Connect the MSU to a TV through HDMI OUT with an HDMI cable. If your television supports ARC (Audio Return Channel) then connect the HDMI Cable into the HDMI port which says ARC on the TV. This allows sound to be transported from the TV to the MSU without using other cables.

Note: If your TV does not have ARC, then either connect it to one of the AUX inputs or digital inputs depending on the make and model of your TV.

HDMI 1-3: Connect any device which uses HDMI. This be gaming consoles such as PS3 and Xbox360, BluRay Players, DVD Players and PC.

Network (Ethernet): Connect a Ethernet Cable from your router to the MSU if you do not have WiFi or want a wired connection.

USB: Can be used to connect an iPad, iPhone or iPod through the Apple USB cable. An Apple docking station can also be connected.

Digital: There are one Optical and one Coaxial input. Can be used to connect the audio from components with digital outputs such as TVs without HDMI ARC, DVD players without HDMI and CD players.

Analog: There are two analog inputs. AUX 1 is used to connect audio from mobile phones, tablets and PCs without HDMI. AUX 2 is used to connect analog sources such as CD players and older video devices without HDMI and digital output.