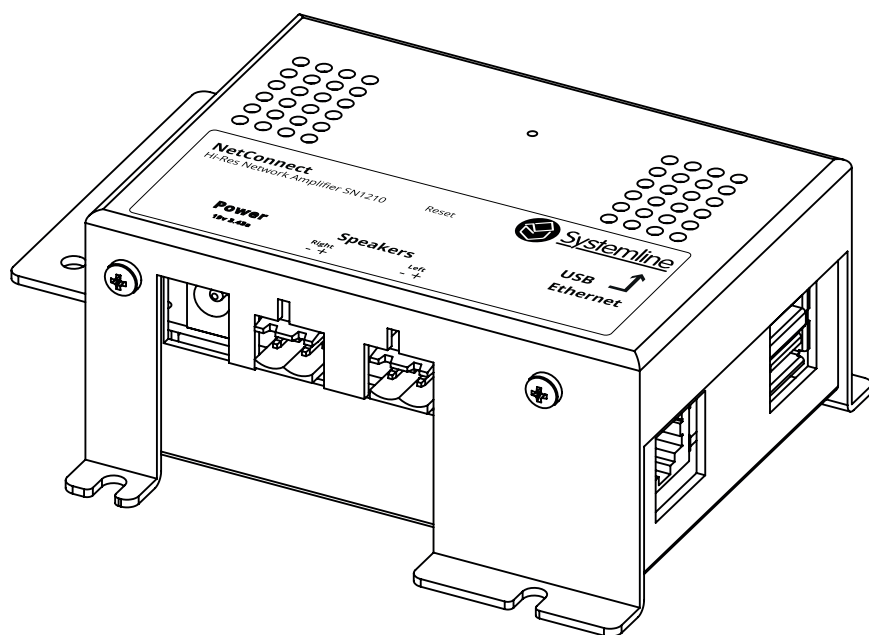




## Instruction manual



# NetConnect Amplifier

## 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 polarised or grounding-type plug. A polarised plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
11. Only use attachments/accessories specified by the manufacturer
12. Use only with the cart, stand, tripod, bracket or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
13. Unplug this apparatus during lightning storms or when unused for long periods of time.
14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally or has been dropped.

## WARNINGS

To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.

This apparatus shall not be exposed to dripping or splashing and no objects filled with liquids, such as vases, shall be placed on the apparatus.

Apparatus with CLASS1 construction shall be connected to a MAINS socket outlet with a protective earthing connection.

## Instructions de sécurité importantes

1. Veuillez lire ces instructions.
2. Veuillez conserver ces instructions.
3. Veuillez prendre connaissance de tous les avertissements.
4. Veuillez suivre toutes les instructions.
5. N'utilisez pas cet appareil a proximite de l'eau.
6. Nettoyez uniquement avec un chiffon sec.
7. N'obstruez pas les grilles de ventilation. Suivez attentivement les instructions du fabricant lors de l'installation.
8. N'installez pas cet appareil a proximite d'une source de chaleur telle que des radiateurs, des bouches d'air chaud, des fours, ou tout autre appareil (y compris des amplificateurs) produisant de la chaleur.
9. Ne supprimez pas la securite apportee par la prise polarisee ou de type B. Une prise polarisee possede deux broches, dont une plus large que l'autre. Une prise de type B possede deux broches et une fiche terre. La broche la plus large ou la fiche terre sont la pour votre securite. Si la prise fournie ne convient pas, adressez-vous a un electricien pour une mise aux normes de votre installation electrique.
10. Evitez de marcher sur le cordon d'alimentation ou de le pincer, en particulier, a l'extremite du cordon, de la prise et a la sortie de l'appareil.
11. Utilisez uniquement des accessoires specifiques par le fabricant.
12. Utilisez uniquement les chariots, pieds, tripodes, supports ou les tables recommandes par le fabricant ou vendus avec l'appareil. Si vous utilisez un chariot, faites tres attention lors du transport de l'appareil et evitez de le faire tomber pour ne pas vous blesser.
13. Debranchez cet appareil en cas d'orage ou lorsque vous ne vous en servez pas pendant une periode prolongee.
14. Pour toute reparation, adressez-vous a un professionnel. Faites reparer cet appareil pour des dommages de n'importe quelle nature : cordon d'alimentation abime, liquide ou objet introduit dans l'appareil, exposition a la pluie ou a l'humidite, fonctionnement inhabituel, chutes diverses.

### AVERTISSEMENT

Afin de diminuer les risques d'incendie ou de choc electrique, conservez cet appareil a l'abri de la pluie et de l'humidite.

Evitez toute eclaboussure et ne posez pas d'objets contenant des liquides, comme des vases, sur cet appareil.

L'appareil de construction de CLASS1 doit être connecté à une prise secteur dotée d'une protection par mise à la terre.

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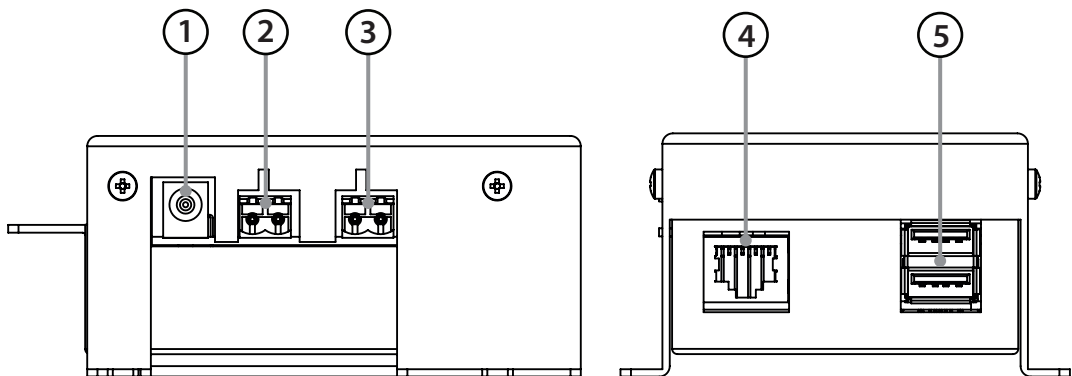
## 1.0 NetConnect pack contents

- 1.1 NetConnect x 1
- 1.2 Power supply x 1
- 1.3 Mains cable
- 1.4 Quick start guide
- 1.5 IMO speaker plugs x 2

## 2.0 Introduction

NetConnect is an all-in-one network music amplifier controlled by the Systemline 7 app. NetConnect can be installed in a zone, connected to a pair of speakers of choice, a local power supply and ethernet connection (obtained from a dedicated cable or powerline adaptor). Multiple NetConnects can be used as a standalone Systemline 7 system, one being configured as the 'master'. It is a reliable, simple to install solution that can be deployed in many ways, and its HIRES audio capability ensures the very best sound quality. NetConnect can also be used with an S7NetServer, as part of a standard S7 system. Most streaming services are supported with the added ability to play music back from a USB drive, and one touch control from the powerful S7 app.

## 3.0 Connections



### 1. Power Input

NetConnect requires an 18v, 2.8amp (minimum) power supply, supplied.

### 2. Left Speaker

Left IMO speaker plug

### 3. Right speaker

Right IMO speaker plug

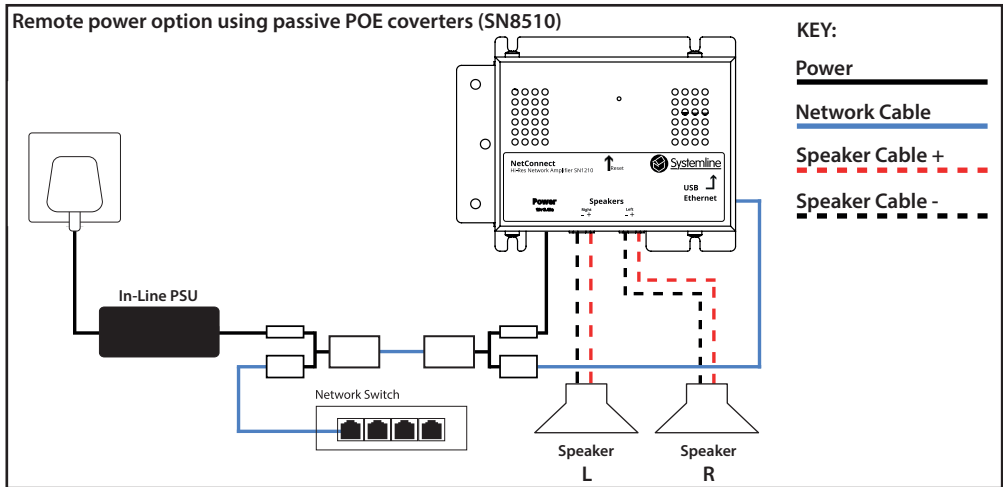
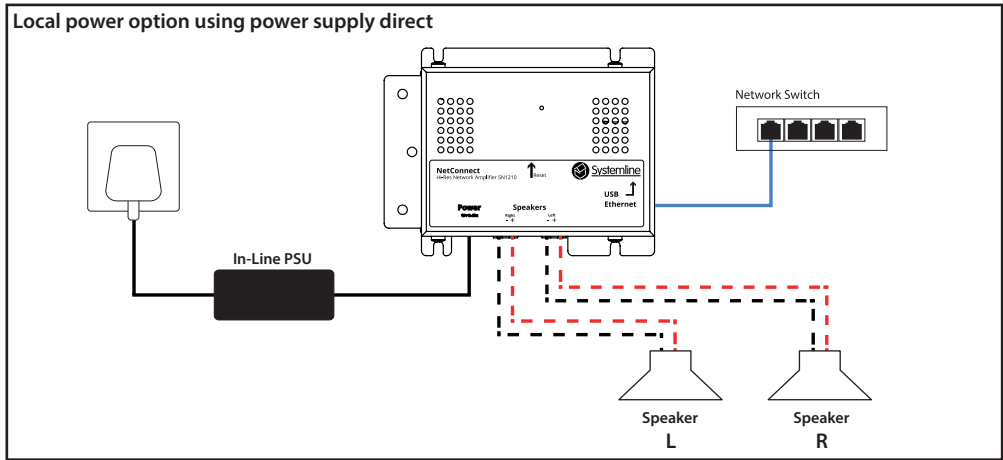
### 4. Network Input

RJ45 connection for network this must be used for control via your S7 App.

### 5. USB x 2

Only one at a time can be used. FAT32, 1.2amp.

## 4.0 Wiring Diagram



## 5.0 NetConnect Setup - First Steps Connections

*Note: Only one NetConnect should be plugged in to the Network at a time during set up*

1. Insert (RJ45) LAN connection from network switch/router, requires a network patch cable not supplied.
2. Terminate and Insert speaker connections using the supplied green IMO plugs making sure that the polarity is correct (- & +) at the speakers and NetConnect.
3. Connect the power supply using the direct or remote method as indicated above
4. Make sure that the lights on the Network connection are flashing then wait for 2 or 3 mins for the NetConnect to become stable and available on your network

## 6.0 NetConnect Configuration Quick Start

1. Open a Web browser on a PC or Mac
2. In the web bar at the top type *http://netconnect/*
3. Quick Start page: this is where you decide if the NetConnect should be in *Master* or *Slave* mode. If multiple NetConnects are being used as a standalone installation then only one NetConnect should be in *Master* mode as this acts as a server and a zone player and will serve all other NetConnects in the installation that are set to *Slave* mode. If you are using NetConnect with the S7 NetServer then all NetConnects should be in *Slave* mode as the S7 NetServer is the server.
4. Zone Name: This is where you decide what zone name you want to appear in the app usually associated with the room that NetConnect is installed in.
5. Time Zone (only in master mode): this option must be set in master mode if you are going to use the S7 app alarm features.

## 7.0 NetConnect Advanced Settings

1. Select *Advanced Setup*.
2. Enter default username: *admin* and password: *password* the first page you see will be the overview page.

## 8.0 NetLink Configuration – Quick Start

1. **Serial Number** : this is the number that was given to the NetConnect on the production run
2. **NetConnect Mode** : This indicates if the NetConnect you are logged into is in Master or Slave mode
3. **USB Music Connected** : Indicates if a USB drive has been connected. With NetConnect in master mode you can connect one USB drive to the USB connections on the side, NetConnect will automatically scan any music stored on the drive and make it available in MyMusic in the S7 app. Slave units are not compatible with this option.
4. **Firmware Code** : In the box you can put a custom code for beta releases if authorised to do so.
5. **Check for Update** : Pressing this button lets you check for updates if you do not have access to the app.
6. **Firmware Available** : You will be notified if new software is available next to this text, don't forget that the S7 App will also prompt the user if there is new software available.

## 9.0 Factory Setup

1. **Mac Address** : This is a unique address given to a device in order for it to access the internet and cannot be changed for more info visit: [https://simple.wikipedia.org/wiki/MAC\\_address](https://simple.wikipedia.org/wiki/MAC_address)
2. **Additional Web Port** : This setting is only adjusted if you want to use port forwarding to access the NetConnect remotely. We would not suggest this is used unless you have advanced understanding of networking default is port 80.
3. **Username and Password** : Here you can set a specific username and password – beware the reset button will erase these settings.
4. **Save** : Saves any settings you do on the page.

5. **Set Factory Defaults** : This sets NetConnect back to factory defaults and erases all user settings.
6. **Reboot** : Reboots/Restarts NetConnect.

## 10.0 Network Setup

1. **DHCP Enabled** : With this setting selected NetConnect will obtain its IP address from the router and fill out the information in the boxes below automatically. This setting is what we would suggest you leave it on. Static IP address should only be set if you have advanced understanding of networking.
2. **IP address** : If you must put the NetConnect on a static IP address then enter the IP address in this field : consult your network administrator in order to do this.
3. **Subnet Mask** : This is only required if you are setting a static IP address. It is usually 255.255.255.0, however some networks may be running on a different Subnet so check with your network administrator
4. **Gateway** : This is usually the IP address of your router and is only required if you are setting a static IP address - consult your network administrator in order to do this.
5. If you are using a 3rd party control system such as KNX or Lutron then a static IP address may be required in case the router assigns a different IP address for NetConnect.

## 11.0 Factory Setup

1. **Operation Mode** : The drop down box allows you to be able to switch between master and slave mode:

*Master* – In this mode the NetConnect acts as a server and a zone player, this mode should only be used if you are using multiple NetConnects in a standalone installation, There is only a requirement for one NetConnect to be in master mode, all other NetConnects in a standalone installation must be in slave mode. Master turns the Logitech Media Server (LMS) on, this enables you to listen to stored music and gives you access to Deezer Spotify etc.

*Slave* – this mode would be used for any secondary NetConnects in a standalone installation, or when a S7 NetServer is being used.

2. **Link to LMS** : The LMS is the server that we use in NetConnect or the S7 NetServer. We have developed NetConnect so that the LMS should never need to be accessed however selecting the hyperlink in blue will take you to the servers web page for advanced users.
3. **Get IP Automatically** : This box should remain ticked this will make any slave or master NetConnects obtain the IP address of the Master or NetServer that has the LMS installed.
4. **NetServer/Master IP** : This IP address box should always be green with the Master or NetServers IP address listed. A green box indicates that the NetConnect has found the NetServer or NetConnect master unit. If the box is red, the NetConnect cannot find the LMS, check that you have one NetConnect in master mode or that your NetServer is switched on.
5. **Save** : Saves any settings you do on the page
6. **Factory Settings** : Sets the page settings back to factory default.



## 12.0 Zone Setup

1. **Zone Name** : This is where you can call your zone a name, usually associated with the area that NetConnect and the speakers are located e.g. 'Mollies Room' or 'Kitchen' etc.
2. **Live Control** : In this area you can confirm that NetConnect is operating correctly over the Network.
3. **Standby On/Off** : Pressing this button switches NetConnect on and off.
4. **Volume** : When Netconnect is on and playing something, the + and – buttons allow the audible volume to be adjusted.
5. **Balance** : Allows you to make sure that you have left and right correctly wired and that you have full signal in each.
6. **Main Settings** : These settings relate to options in the zone
7. **Maximum Volume** : Here you can limit the maximum volume for a specific zone. Steps are from 0-30, 30 being the maximum.
8. **Alarm Volume** : This is where you can select the wake up alarm volume. This can also be altered in the S7 App. Steps are from 0-30, 30 being the maximum.
9. **Turn On Volume** : You can enter the stored volume that you want you zone to turn on at, for example in a garden area where there is a lot of open space you may want the turn on volume to be higher than in a Kitchen where there is usually less space. Steps are from 0-30, 30 being the maximum.
10. **Save** : Saves any changes you make on the page
11. **Factory Settings** : Sets the page settings back to factory default.

## 13.0 Using a USB Hard/Thumb drive (master mode only)

We would recommend a solid state USB drive is used for good reliability formatted in FAT32. Don't forget, if you are formatting a drive with data on it the data will be erased.

Insert your USB hard/thumb drive into your PC/Mac and transfer your music onto the drive. NetConnect does not look at the folder structure on the USB drive, it looks at the information built into each individual file, this is called an ID3 tag. For more information on ID3 tags please go to <https://en.wikipedia.org/wiki/ID3>

Once your music has been transferred to the hard/thumb drive, safely remove it from your PC or MAC and insert it into either of the 2 USB slots on the NetConnect that is in master mode. NetConnect will scan the drive inserted and once finished the music will be available to view and play from *My Music* in the S7 App.

Stored music is not compatible with NetConnects in slave mode.

**Note: Only one USB drive can be used at a time maximum current is 1.2A**

## 14.0 Remote Power (optional extra) SN8510

The remote power adapters give the ability to send power and network down one CAT 5/6 cable. This means that the power supply and network connection can be located elsewhere (less than 50M).

## 15.0 Troubleshooting

### No stored music appearing in App:

1. Check that you have a USB drive attached to the NetConnect that is in master mode and that the USB drive is in the correct format as indicated in section 13.0.
2. Check that the music has successfully transferred from your PC or Mac onto the drive.

### Cannot find NetConnect on the network:

1. Check that the lights are active on the network port on NetConnect - orange = solid, green = flashing. If they are not then check that the network connection is active. This can be done by trying another cable or connecting NetConnect directly into your router.
2. Has NetConnect been a static IP address? If so the wrong information could have been entered, set NetConnect back to factory default indicated in section 16.0.

### No audio coming out of speakers:

1. Make sure that the speakers are terminated correctly at both the speaker end and at the NetConnect end. There must be NO individual strands between positive and negative connection at either end as this will cause a short circuit. The amplifier section will go into protect mode. Prolonged short circuit can cause damage to the amplifier. This will not be covered under warranty.
2. Do you have an internet connection? NetConnect streaming services will only work with an active internet connection. Best way to test is to plug a USB drive in with some music into NetConnect in master mode, then go to *My Music* in the app and try again.

### Deezer is not working:

1. Make sure you have entered the correct account details in Systemline7 app> Deezer>Account Settings - this must be your Deezer registered email address and Deezer password. If you are still having issues we suggest that you log into Deezer <https://www.deezer.com/en/> using a web browser and check your registered Deezer email address and password.

### Cannot find all the zones via the S7 app:

#### *Net Connect installation only:*

1. Only one unit in a complete NetConnect installation should be in master mode. The rest of the NetConnects should be switched to slave mode. If they are all in master mode, this can cause issues.

#### *NetConnects installed with S7 NetServer:*

1. All NetConnects installed with a S7 NetServer should be in slave mode If they are all in master mode, this can cause issues.
2. Restart the app by double pressing the Apple Home button on an iOS device and closing the app down. Info on this can be found on Apple's website <https://support.apple.com/en-gb/HT201330> Info on how to do this on Android will depend on your Android device manufacturer. Try <https://www.wikihow.tech/Force-Quit-Apps-on-Android>

3. Check that the lights are active on the network port on NetConnect - orange = solid, green = flashing. If not, refer to 'Cannot find NetConnect on the network' above.

#### **Can't rename a zone:**

1. When renaming a zone the information has to be sent via the WiFi network from the device you are using to rename. (iOS only) Go to the closest WiFi access point or WiFi router, open the S7 app press the zone you want to rename and make sure it is at the top of your list. Now press the i button to the right of the zone name, select *change zone name* and enter in the required name followed by *Done*.

For any further help please email [systemline.support@armourhome.co.uk](mailto:systemline.support@armourhome.co.uk) or check our website [www.systemline.co.uk](http://www.systemline.co.uk).

## **16.0 Factory Default**

On the top of NetConnect you will find a recessed button, using a pin or a paper clip inserted through the hole press the button in until you see a faint light flashing rapidly through the top of the unit, (look through the holes on the right towards the middle of the unit) release the button when the lights are flashing and wait for the NetConnect to reboot.

***Note: This will erase all user account settings for any streaming services.***

# 17.0 Specification

Features		
Audio	>192kHz/24bit	Network (Gigabit recommended)
Favourites/Pre-sets	Changeable in the S7 app	
Control options	TCP/IP, S7 App	

Voltage		
Standby consumption	<0.5W	
Mains voltage	19v – 3.43A	External Power supply

Audio		
Power	35W	4 ohms
Total Harmonic Distortion	<0.1%	@ 1000Hz
Noise	-80dBV	A weighted
Frequency response	20Hz-20kHz ±1dB, -3dB @ 45kHz	@ 96kHz

Connections		
Inputs	Network (RJ45)	
Outputs	2x Speaker L&R (IMO)	
Control	TCP/IP via Network or S7App	
USB (Format - FAT32)	x2 (only one at a time)	1.2A

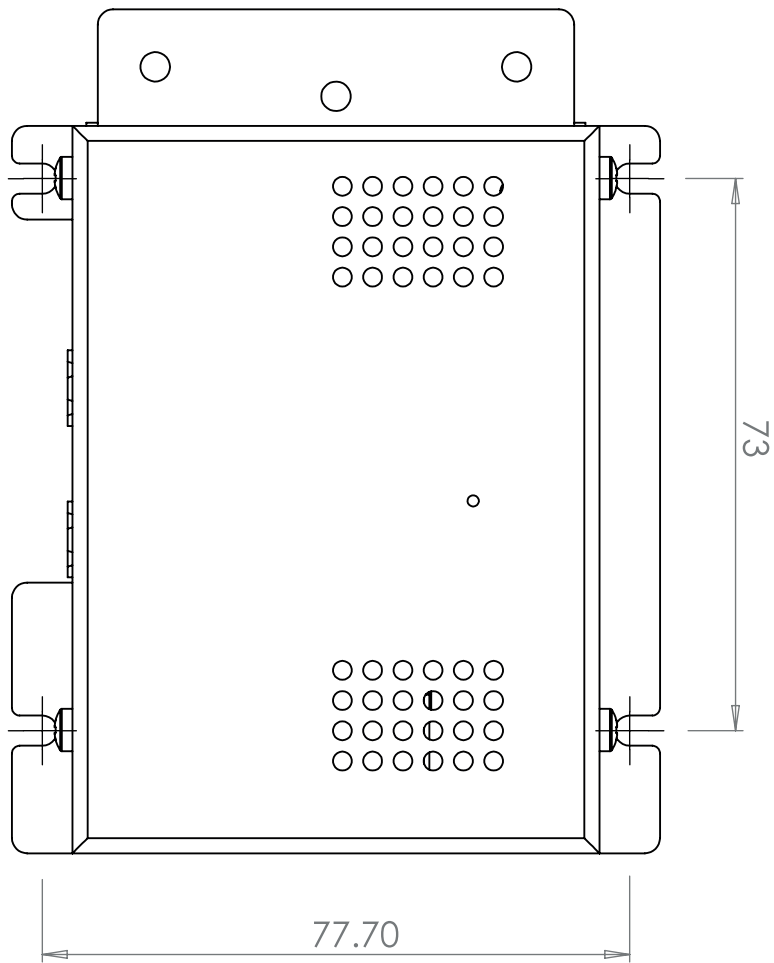
General		
Dimensions	46x114x85mm (HxWxD)	
Net Weight	0.5kg	

# Mounting guide page

*Note: Diameter of the marked holes is 4mm.*

*Note: If you print off this page as a template please check that the sizes are to the correct scale BEFORE you start drilling.*

*Note: All measurements are in millimetres.*



SCALE 1:1



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