



# **Richmond Sound Design Ltd.**

## ***PERFORMANCE FOR THE LONG RUN***

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## **IBOX-701 Mounting and Power Connections**

### **Overview**

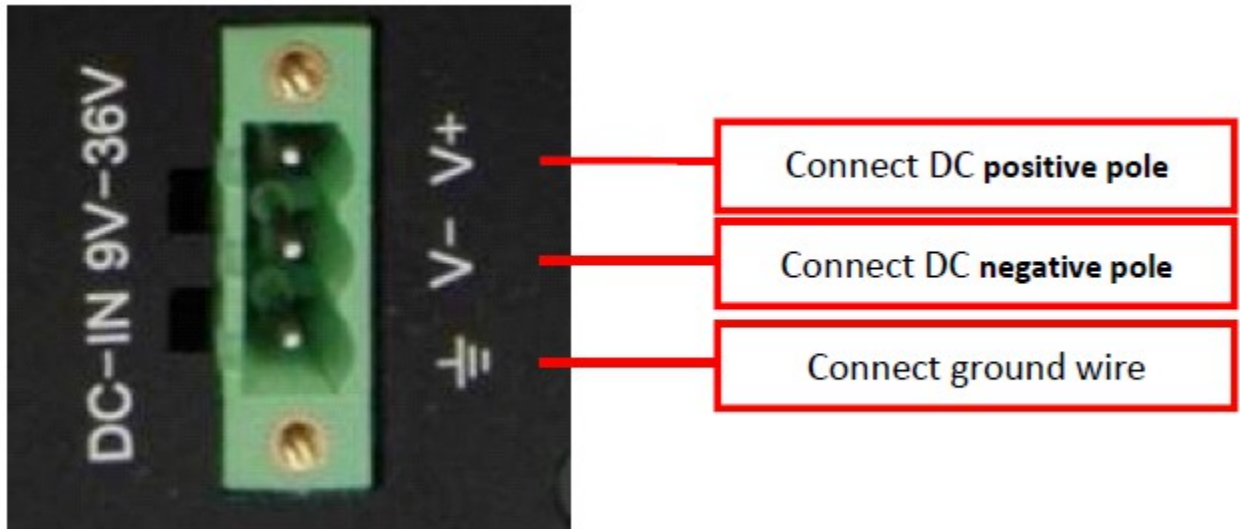
The IBOX-701 is a functional replacement for the earlier ARK-3400 and ARK-3403 units, but the mounting footprint and power connector are slightly different.

A mounting plate adapter can easily be made to mount the IBOX-701 to the existing mounting holes, or alternately new holes can be drilled into the base plate, at user discretion.

The IBOX-701 works from the same 24V power source as the earlier units and draws the same amount of power, but it uses a 3-pin power connector rather than the 4-pin power connector used by the older units. An appropriate 3-pin connector is supplied with each unit. A 4-pin to 3-pin adapter could be made, but for much greater reliability we recommend replacing the existing 4-pin connector in the vehicle with the supplied 3-pin connector.

## Power Connections

The IBOX-701 uses a 3-pin connector with the connections as shown in the following image. These markings are clearly shown on the front of the case around the power connector, and can be used for reference when making power connections.



Please note the following paragraph copied from the IBOX-701 user manual:

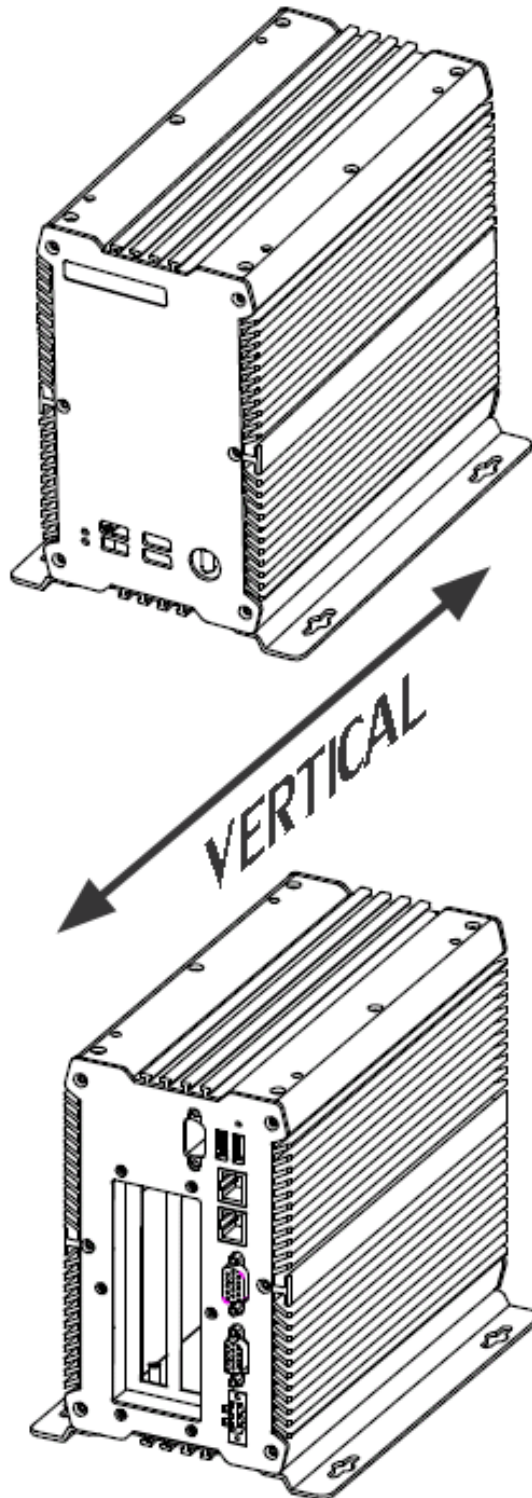
### 2、 Power Supply: support Wide-Voltage DC 9~36V DC input

- **Note:** It can't support positive pole and negative pole inversely connect protection, Please make sure the positive pole and negative pole are connected right and please use the multimeter to check the voltage before there is electricity.

Connecting the power incorrectly to the unit will void the warranty. Please check the power connector for proper polarity on the correct pins before powering up the new units for the first time.

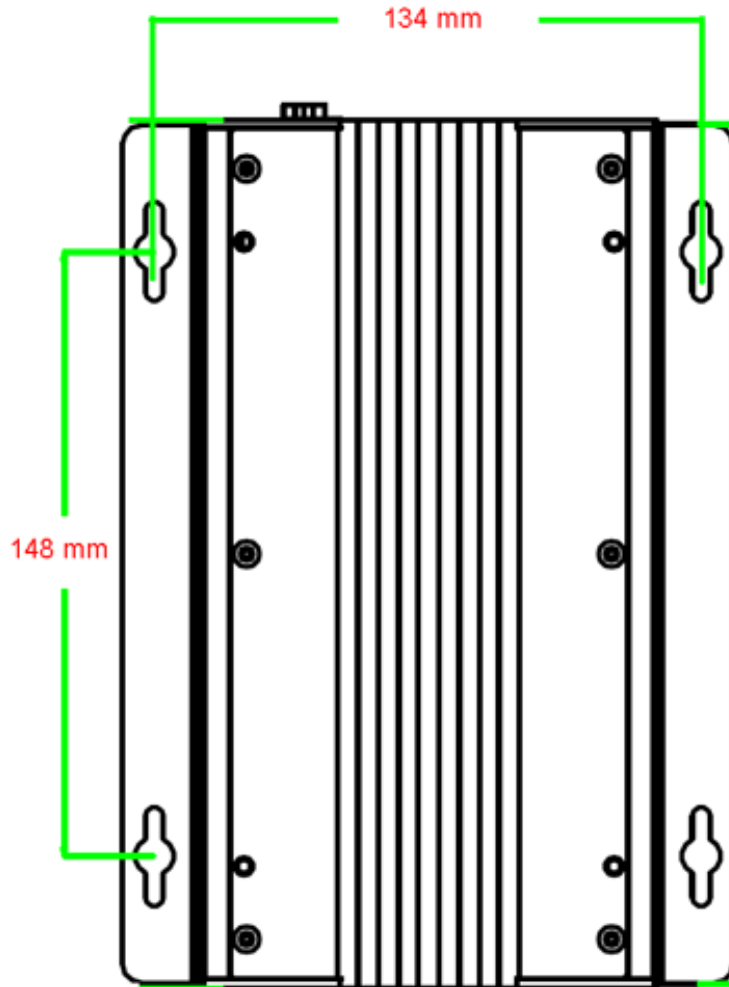
## Mounting Direction

The IBOX-701 has heat sink fins on all sides, running from one end of the unit to the other. For proper heat dissipation, these fins must be mounted **vertically** so that ambient air can flow vertically by convection, cooling the unit. Mounting the fins horizontally will interfere with proper cooling and reduce the life of the unit.



## Mounting Layout

The IBOX-701 Has the following mounting layout for the two supplied brackets:



The unit may be mounted either end up, and either of the narrow faces may be used as the base. To most easily access the connectors while mounted in the vehicle, we recommend mounting the end with the connectors on top. This should also provide more strain relief for the audio and GPIO cables.

The ARK-3400 units have a mounting hole pattern of 134 mm horizontally by 243 mm vertically if mounted with the heatsink fins vertically. An adapter mounting plate could easily be fabricated to adapt these mounting locations. Alternately, longer mounting brackets could be fabricated in place of the supplied mounting brackets to use the original mounting holes.