

User Guidance for MTD421-A1

Product name: In-vehicle Multimedia Host

Model Name: MTD421-A1

Manufacturer: BYD Auto Industry Company Limited

1. Basic Specification

Chipset: RK3588

Operating system: Android12

Supply: 12V rated voltage, 9V-16V input supply.

Operating Temperature: -30°to 70°Celsius

2. Function

Multimedia Center

- Music player
- Video player

Connection

- BT 5.2
- WIFI 2.4G/5G 802.11a/g/b/n/ac

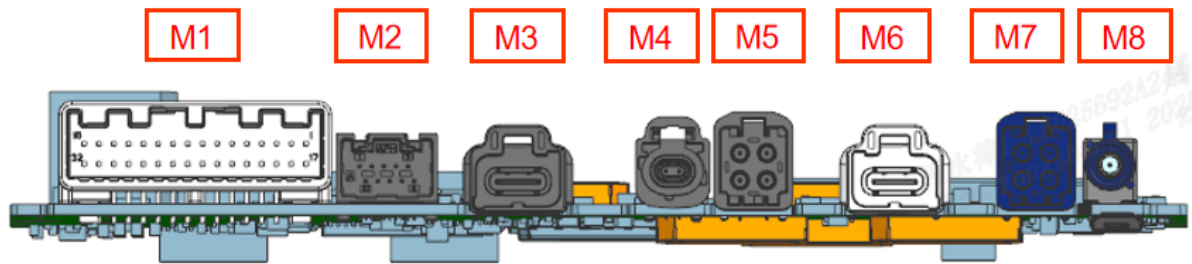
Others

- Application Market

3. Connector

The following table shows the headunit connectors with signal

information and description



M1 Main Connector/Power

M2 CAN

M3 DP IN

M4 Ethernet

M5 display

M6 DP OUT

M7 Display

M8 Debug

4. Interface connection

The In-vehicle Multimedia Host is the on-board terminal of the export vehicle, The vehicle start host automatically starts to work.

M1 Main Connector/Power

M2 CAN

M3 DP IN

M4 Ethernet

M5 display

M6 DP OUT

M7 Display

M8 Debug

Text Debug interface is an interface for testing, which is not applicable to the actual vehicle.

5. General Information

Temperature ranges

Component	T_{uL}	T_{uB}	T_{oB}	T_{oL}	T_R
Head unit	-40°C	-30°C	+70°C	+85°C	+23°C

T_{oL}	Maximum storage temperature
T_R	Room temperature
T_{uL}	Minimum storage temperature
T_{oB}	Maximum operating temperature for components with overload protection/low-temperature protection
T_{uB}	Minimum operating temperature for components with overload protection/over-temperature protection

Voltage ranges



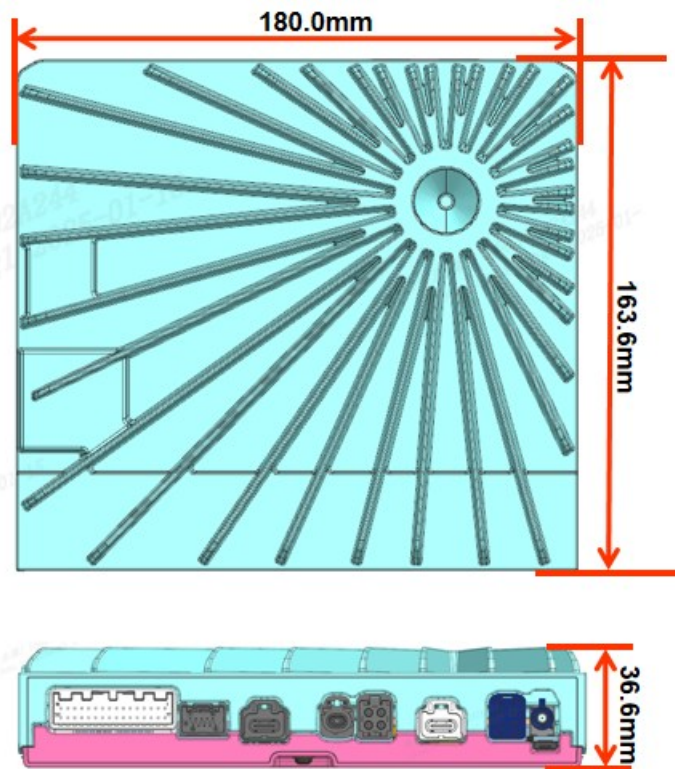
Component	U_{Bmin}	$U_{B,max}$	U_B	Spec
Head unit	+9.0V	+16V	+12V	For functions that must retain their performance.

U_{Bmin}	Lower operating voltage limit
U_B	Nominal Operating voltage
U_{Bmax}	Upper operating voltage limit

6. Installation

Space size requirements

package size :

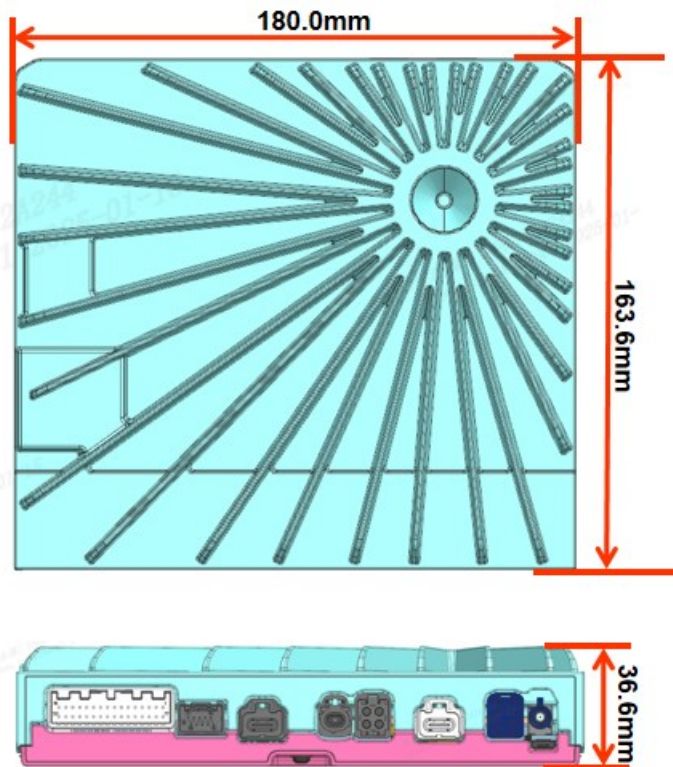


7. Pictures head unit

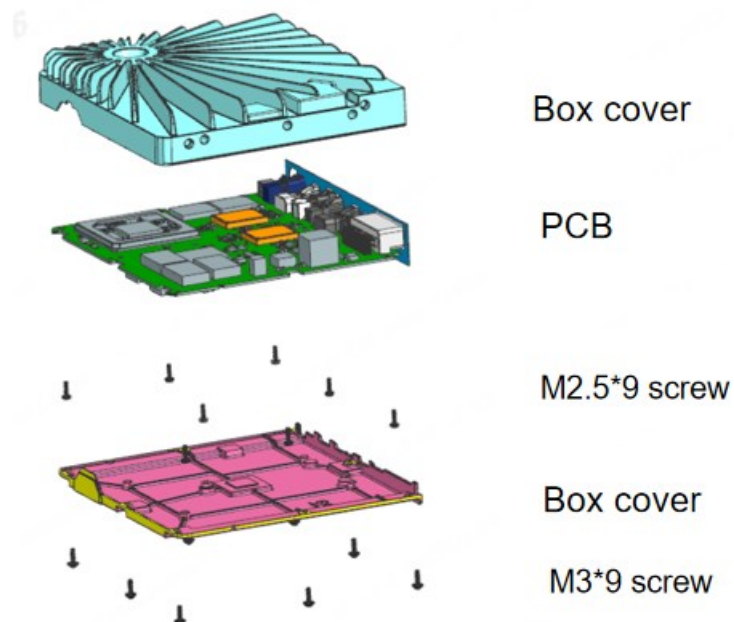
The following picture shows the explosions view of the headunit.

Dimension

package size:



Explosion View



8. Regulation information:

Europe - EU Restrictions



This equipment needs to be marked with the symbol and can be used throughout the European community.

Information to be supplied to the users:

802.11a Restrictions:

In all EU member states, operation of 5150-5350MHz is restricted to indoor (includ inside road vehicles use case) use only.

Caution: Exposure to Radio Frequency Radiation.

To comply with RF exposure compliance requirements, for mobile configurations, a separation distance of at least 20 cm must be maintained between the antenna of this device and all persons.

Operation Mode	Frequency Range (MHz)	Maximum EIRP (dBm)
2.4G(BR/EDR)	2400 ~ 2483.5 MHz	10.07
2.4G(BLE)	2400 ~ 2483.5 MHz	6.93
2.4G(Wi-Fi)	2400 ~ 2483.5MHz	19.35
5G(Wi-Fi)	5150 ~ 5250, 5470 ~ 5725 MHz	22.59
5.8G(Wi-Fi)	5725 ~ 5850 MHz	13.45

RED Declaration of Conformity:

Hereby, <BYD Auto industry Company Limited> declares that this In-vehicle Multimedia Host [Model: MTD421-A1] is in compliance with the essential requirements and other relevant provisions of Directive 2014/53/EU. The declaration of conformity may be consulted at www.bdy.com.

FCC Compliance Statements

§ 15.19 This device complies with part 15 of the FCC Rules. 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.

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

§ 15.105 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.

Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator and your body. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Note: The antenna is fixed and installed by the car factory before leaving the factory, and users cannot easily disassemble it.