



# 麦凯拉水晶系列多媒体旋钮 安装流程说明

## Mankaleilab Crystal Series iDrive Multimedia Knob Installation Process Description

适 用 车 型 : Applicable Models :	BMW 1 (F20, F21) 2013-2018	BMW i8 (i12, i15) 2014-2020
	BMW 2 (F22, F23) 2014-2019	BMW 5 (G30, G38) 2018-2020
	BMW 3 (F30, F35) 2013-2019	BMW 6GT (G32) 2017-2020
	BMW 3GT (F31, F34) 2013-2019	BMW X3 (G01, G08) 2018-2020
	BMW 4 (F32, F33, F36) 2013-2020	BMW X4 (G02) 2016-2020
	BMW 5 (F10, F18) 2013-2017	
	BMW 5GT (F11) 2013-2017	
	BMW 6 (F12, F13) 2011-2014	
	BMW 7 (G12) 2016-2020	
	BMW X3 (F25) 2013-2016	
	BMW X4 (F26) 2013-2016	
	BMW X5 (F15) 2013-2018	
	BMW X6 (F16) 2013-2019	

**MANKALEILAB**

[www.mankaleilab.com](http://www.mankaleilab.com)

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# ! 危险警告 WARNING

安装前必须断电，否则后果自负！

THE POWER MUST BE CUT OFF BEFORE INSTALLATION, OTHERWISE YOU WILL BEAR THE CONSEQUENCES!

确保整车蓄电池负极已断开

MAKE SURE THE NEGATIVE ELECTRODE OF THE CAR'S BATTERY IS DISCONNECTED.

禁用12V车载网络

DISABLE 12V VEHICLE NETWORK.

否则有短路危险！！

OTHERWISE, THERE IS A DANGER OF SHORT CIRCUIT!

· 确保没有任何充电器连接到发动机室内 的外部启动接线柱上

MAKE SURE THERE ARE NO CHARGERS CONNECTED TO THE EXTERNAL STARTING POSTS IN THE ENGINE ROOM.

· 对于具有附加车载网络（48V车载网络，高压车载网络）的车辆，务必在断开12V车载网络电池之前禁用这些网络

FOR VEHICLES WITH ADDITIONAL ON-BOARD NETWORKS (48V ON-BOARD NETWORK, HIGH-VOLTAGE ON-BOARD NETWORK), BE SURE TO DISABLE THESE NETWORKS BEFORE DISCONNECTING THE 12V ON-BOARD NETWORK BATTERY.







# 安装流程说明

## INSTALLATION PROCESS DESCRIPTION

**使用塑料撬棒撬开原车的多媒体旋钮上盖**

Use a plastic crowbar to pry open the car's original multimedia knob cover.





## 安装流程说明

## INSTALLATION PROCESS DESCRIPTION

**向上拿起多媒体旋钮上盖，然后手指夹住FPC排线，然后将上盖底部的排线锁打开，向下取出FPC排线**

Lift the upper cover of the multimedia knob up, then clamp the FPC cable with your fingers, then open the cable lock at the bottom of the upper cover, and remove the FPC cable down.







# 安装流程说明

## INSTALLATION PROCESS DESCRIPTION

**撕开原车多媒体旋钮背面的贴纸（背面的四颗螺丝不要取出），将背面中心位置的橡胶塞使用小工具或者夹具取出**

Tear off the sticker on the back of the car's original multimedia knob (do not remove the four screws on the back) and use a gadget or clip to remove the rubber stopper in the center of the back.





# 安装流程说明

## INSTALLATION PROCESS DESCRIPTION

### 使用螺丝起子拧出中心位置的T8螺丝

Use a screwdriver to unscrew the T8 screw in the center position.





# 安装流程说明

## INSTALLATION PROCESS DESCRIPTION

**抽出原车多媒体旋钮的旋转核心组件**

Pull out the rotating core parts of the original multimedia knob.







## 安装流程说明

## INSTALLATION PROCESS DESCRIPTION

使用配置的小螺丝起子撬开白色固定圈，取出小组件，将中间  
的黑色内轴部分向外推出

Use the configured small screwdriver to pry open the white retaining ring, remove the widget, and push out the black inner shaft in the middle.







## 安装流程说明

## INSTALLATION PROCESS DESCRIPTION

使用小螺丝起子将内圈标记的三个位置的3个小卡扣向上翘起后，通过旋转到特定的位置后（查看旋转前后的两个图片的旋转方向），取出原车的银色装饰圈

Use a small screwdriver to loosen the three small buckles in the three positions marked by the inner ring, and remove the original silver decorative ring of the car by rotating to a specific position (see the rotation direction of the two pictures before and after rotation).





## 安装流程说明

## INSTALLATION PROCESS DESCRIPTION

**使用小刀将原车旋转部件外围多余的橡胶部分削除**

Use a knife to cut off the excess rubber on the periphery of the rotating parts of the original car.







## 安装流程说明

## INSTALLATION PROCESS DESCRIPTION

**将MANKALEILAB的银色下环套入原车旋转部件下方并且对准卡扣位置，然后旋转银色环使其与原车旋转部件锁紧**

Insert the silver lower ring of the Mankaleilab under the original rotating part of the car and align it with the snap position, then rotate the silver ring to lock it with the original rotating part of the car.





## 安装流程说明

## INSTALLATION PROCESS DESCRIPTION

**用小螺丝起子撬开并拆下原车的金属卡扣**

Pry open and remove the original metal snap from your car with a small screwdriver.







## 安装流程说明

## INSTALLATION PROCESS DESCRIPTION

**将内轴放入旋钮部件中并且按压使其扣紧**

Place inner shafts into knob parts and press them to lock them tight.





## 安装流程说明

## INSTALLATION PROCESS DESCRIPTION

**将内轴的FPC排线孔对准金属卡扣平面放入然后向下按压使金属卡扣使其扣紧**

Align the FPC wire hole of inner axis into metal snap plane and press downward pressing metal buckle to fasten it tightly.







# 安装流程说明

## INSTALLATION PROCESS DESCRIPTION

**将FPC排线穿过旋转部件的FPC孔**

FPC cable through the FPC hole inside rotating parts.





# 安装流程说明

## INSTALLATION PROCESS DESCRIPTION

按照图片顺序依次安装组件

Install components sequentially in order of installation instructions.







## 安装流程说明

## INSTALLATION PROCESS DESCRIPTION

**拧紧T8螺丝，然后堵上橡胶塞子**

Tighten the T8 screw and plug rubber plug.





## 安装流程说明

## INSTALLATION PROCESS DESCRIPTION

撕开旋钮上盖电路板的黑色薄膜，保留手写板部分的黑色覆膜。  
撕开后如留有大量残胶需要清理干净。

Rip off the top lid of knob black film but keep black film covering part of handwriting function part. After tearing apart the top layer film if the black plastic film surface of handwritten function part leaves plenty of residual glue needs cleaning clean.



Clean up the glue residue.





## 安装流程说明

## INSTALLATION PROCESS DESCRIPTION

### 取下原车旋钮上盖的透明导光圈

Remove the transparent light guide ring on the cover of the original multimedia knob of the car.

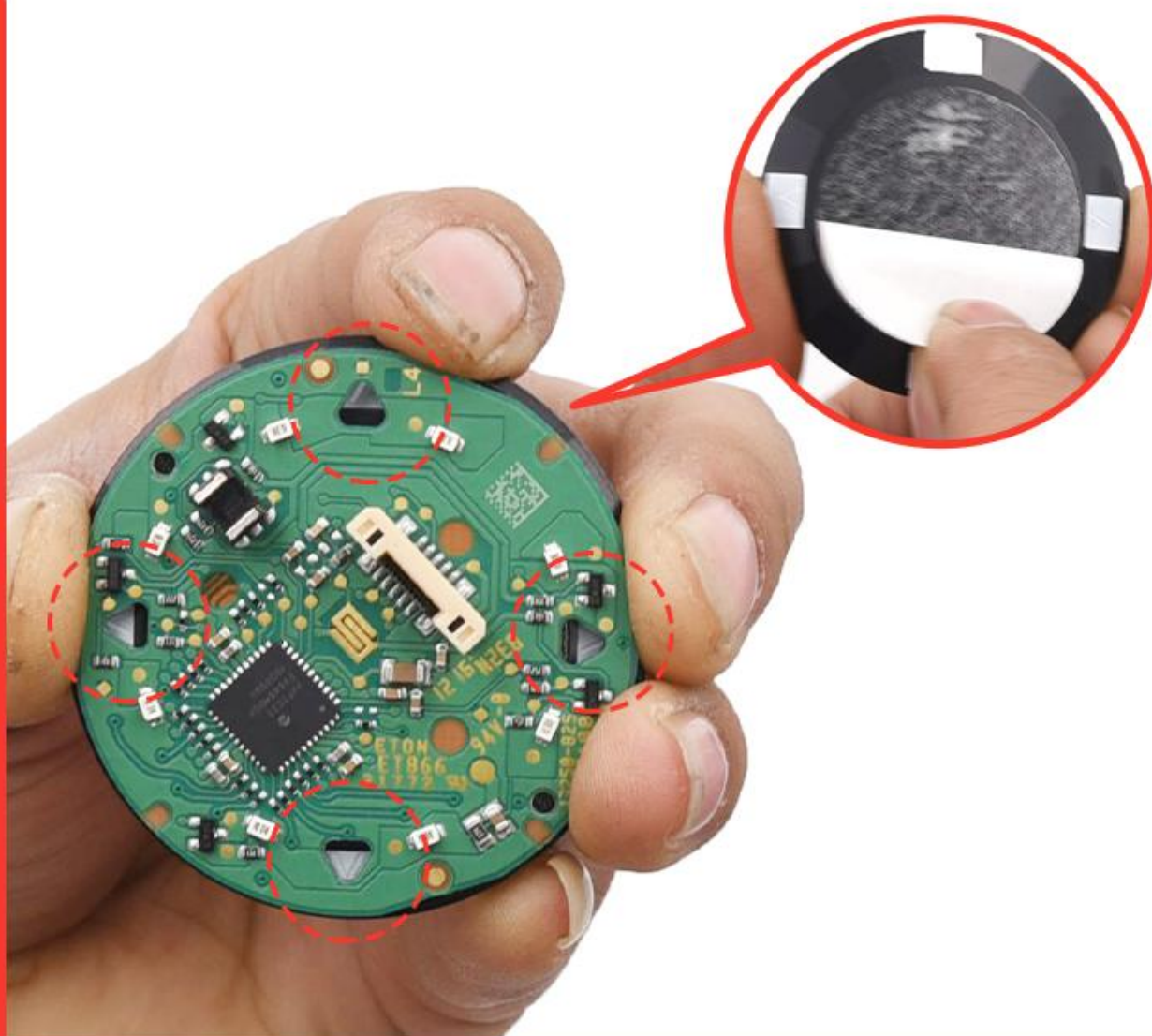


## 安装流程说明

## INSTALLATION PROCESS DESCRIPTION

撕开MANKALEILAB的水晶部件的3M双面胶，然后将水晶部件背面的四个方向箭头与电路板的四个方向孔位对齐并且粘贴在一起

Tear off the 3M double-sided glue of the MANKALEILAB crystal part, then align and paste the four direction arrows on the back of the crystal part with the four direction holes of the circuit board.







# 安装流程说明

## INSTALLATION PROCESS DESCRIPTION

**将导光圈对准电路板的卡位进行安装固定**

Align the light guide ring with the clamping position of the circuit board to install and fix.





# 安装流程说明

## INSTALLATION PROCESS DESCRIPTION

**插入FPC排线，并且在插入后关闭排线锁**

Insert the FPC cable and close the cable lock after insertion.







# 安装流程说明

## INSTALLATION PROCESS DESCRIPTION

在MANKALEILAB水晶旋钮的上环中找到一个有凸点的缺口位置，然后将这个位置对准“OPTION”按键的侧面并且按入

Find a raised notch in the upper ring of the MANKALEILAB crystal multimedia knob, then aim this position at the side of the "OPTION" button and press it.





## 安装流程说明

## INSTALLATION PROCESS DESCRIPTION

**向下按压并扣紧水晶多媒体旋钮的上环**

Press down and fasten the upper ring of the crystal multimedia knob.







# 安装流程说明

## INSTALLATION PROCESS DESCRIPTION

**将背部标签重新贴好，完成安装**

Reattach the back label to complete the installation.

