

1/16 SCALE 2.4GHz RADIO CONTROLLED BATTLE TANK

# M2A2 BRADLEY INFANTRY FIGHTING VEHICLE

AUTOMATIC ELECTRIC GUN SYSTEM INSTALLED. PERFECT ACTIONS RADIO CONTROL BATTLE TANK



M2121

## 使用说明书 INSTRUCTION MANUAL

NEW ACCESSORIES  
REALISTIC SMOKING FUNCTION  
MORE THAN 1 TANK CAN BE  
OPERATED AT THE SAME TIME



前置双LED大灯  
FRONT PARKING LIGHT



全比例遥控  
FULL-SCALE RC FUNCTIONS



仿真冒烟可开关控制  
THE SIMULATED SMOKE EFFECT CAN BE SWITCH ON/OFF



红外线对战功能  
INFRARED BATTLE FUNCTION



炮台320°/360°旋转  
THE TURRET ROTATES 320/360 DEGREES



炮管上下升降  
GUN WITH ELEVATING GEAR



仿真发动机启动声、发动机声、机关枪声、炮声、带仿真动作、声音  
可以调节、音效模式切换  
SIMULATIVE ENGINE, MACHINE-GUN AND GUN SOUND EFFECTS.  
EMULATIVE ACTIONS WITH ADJUSTIVE VOLUME AND SWITCHABLE  
SOUND EFFECTS

Shantou TongDe Craft Products Co.,Ltd.

Address: No.2-3 Lane 2 Jinyuan Road, JinMing Industrial

Area 515041 Shantou, Guangdong, China

Telephone: 86-754-88617726 E-mail: 83172033@qq.com

http://www.stplane.com http://stplane.en.alibaba.com



## 警告(Warning)

- ※ 本产品含有小零件请勿让三岁以下儿童玩耍；本品含电气元件，不得入水或在潮湿环境下使用；请勿折断遥控天线，以免造成伤害；电池充电器应定期检查其电线、插头、外壳和其他部件是否损坏，发现损坏时应停止使用，直至修复完好。
- ※ 本产品所包含的电子控制系统，电机，充电器，电池，喇叭等电子元器件都经过我司的安全设计和测试，使用者不得随意更换为非我司出品的配件，如使用者随意更换改装而导致产生非安全事故或者隐患，本公司不承担任何责任。
- ※ Choking Hazard! This product contains micro-parts. Not suitable for children under 3 years old. Electrical components should be kept dry at any time. Do not attempt to break antennas, This may cause serious to a child or adult. Battery charger, wires, plugs, Hull and other components are required regular check. In case of Fault, Please switch tank off until it have been repaired.
- ※ The electronic control system, motor, charger, battery, horn and other electronic components contained in this product have passed the safety design and test of our company. Users are not allowed to replace the accessories of this product with the accessories not produced by our company at will. If this product is re-equipped at will by the user and causes non safety accident or hidden danger, our company won't take any responsibility for this.

## 注意事项(Caution proceeding)

- 1、可拆卸的小零件要放好，千万不可让小孩吞食。
  - 2、如操作场地有电波干扰，请另选场地操作。
  - 3、遥控器电源低电时，请立即停止操作。
  - 4、对拆除的包装物，请不要随地丢弃，以免污染环境。
  - 5、请将你的遥控模型存放在干燥、阴凉的地方。
  - 6、不要置于近火和高温、潮湿的地方储存。
  - 7、当电池被水浸湿，请将水分充分的擦拭干净。
1. Disassembly micro-parts should be stored safely, and avoid eating it by children.
  2. If electric disturbance be detected, Please switch tank off and transfer to another area.
  3. Remote Control will not operate correctly When the battery is running low. Please dispose the used battery.
  4. Deal with the package cautiously, and avoid polluting the environment.
  5. Place the Model Tank in dry and cool.
  6. Do not place the Model Tank near heat, or in damp.
  7. Keep the battery dry.

## 电池使用注意事项(Battery use caution proceeding)

- 1、车体使用一组7.2V / 7.4V可充电电池组；
  - 2、安装或更换电池时请注意极性；
  - 3、充电电池只能在成人监护下充电，且须用本产品所配套的充电器充电，否则会有危险；
  - 4、不可混用新旧或不同型号的电池；
  - 5、电源端子不应短路；
  - 6、非充电电池不可充电；
  - 7、请不要将坏的电池、电池组分解或扔到火中、水里，以免发生意外；
  - 8、充电器的额定输入电压必须与当地的家用电压相符；
  - 9、在充电过程中，充电器和电池出现微温，属于正常现象。
1. Main Tank body uses a set of 7.2V / 7.4V rechargeable batteries;
  2. Please pay attention to correct polarity when replacing batteries;
  3. Rechargeable batteries should be charged under adult supervision, and must be used with this product matching charger to charge, otherwise there will be danger;
  4. DO NOT use a mix of old and new or different types of battery;
  5. DO NOT short circuit any terminals;
  6. DO NOT attempt to recharge non rechargeable batteries;
  7. DO NOT put batteries into a fire or into water;
  8. The rated input voltage battery charger MUST be suitable for your mains power voltage;
  9. During charging it is quite normal for the charger and batteries to heat up.



**注意**  
Caution

## (使用说明书)使用前详阅本说明书

(Operating instructions) Please read through this manual before use.

这辆RC(遥控)战车坦克是由无线电控制的模型,而非玩具,要小心使用,否则会误伤,请详阅下列各点,理解透彻后再作游戏。

The RC(Radio controlled) Battle Tank is not a toy but a model. It controlled by radio signal. So you should read the instructions and recommendations carefully prior to operating.

Failure to follow the instructions and recommendations in this owner's manual may result in bodily injury.



**不可在马路等有汽车的地方行走**  
Do not play the tank on the roads.

为避免交通事故,不可在马路上行走,也不要在水洼地、沙地等难以行走之处玩,以免发生故障。  
Never run RC Tanks on the roads.  
Never run RC Tanks in crowded areas.  
Never run RC Tanks on waterpits, sands or carpet.



**防止小儿误吞零件**  
Keep out of reach of small children

不可把小零件和塑料球给小儿玩,以免误吞。  
Children must not be allowed put any parts in their mouths or pull vinyl bags over their head.



**不可把手伸入车轮和履带**  
Do not put hands into the wheels or the caterpillars.

不可把手伸入车轮或履带以免误伤,小孩要特别小心,当拿坦克时不可靠在手轮以免由于误操作而受伤害。  
Do not put the hands into the wheels or the caterpillars to avoid hurts. Do not touch the wheels or the caterpillars when holding the tank to avoid hurts by misoperation.



**注意**  
Caution

错误使用,改造和分解而造成的伤害、事故,本公司概不负责,且不负责改造、分解后商品的修理。

We will not be responsible for any hurts or accidents caused by user's abuse, dismantling or modifying.  
The Following will void your warranty: Physical abuse, Use of poor quality BBs, Disassembly, Internal upgrades.

- ◆ 使用说明书妥善保管好,丢失时可向本公司邮购。
- ◆ 不可强行分解和改造,否则会造成故障和危险,绝对不可以。
- ◆ 坦克和遥控器浸入水中或弄湿时可能会出现故障,这时要禁止使用,并拆下电池,与本公司的售后服务部联系。
- ◆ 不可把坦克和遥控器置于阳光强烈照射处,否则会变形和误操作。
- ◆ Keep the manual properly. If it be losted, please contact us through social media, Email etc.
- ◆ Never try to dismantle or modifying RC Tanks, Otherwise it will cause danger, and make cause danger at the same time.
- ◆ Keep RC tanks and Transmitter far from liquid and keep dry. If RC tanks and Transmitter get wetted, then stop running and remove the batteries. Contact us if it necessary.
- ◆ Keep RC tanks and Transmitter far from sunshine, Otherwise It will be deformed or can not operate correctly.

**警告** Warning

**注意** Caution

**若无视里面的警告,自行进行错误操作,会发生误伤和诱发故障。绝对要遵守各注意事项。**  
Please read and understand the instructions before operating the model, and avoid Hurts and malfunctions.



**注意**  
Caution

**本战车用于室内竞技,在户外时不可在下述场景使用。**

**This battle tank is for indoor use only! Please avoid the following misuses.**

该战车制作精密,需小心,不可乱碰撞;不可让灰尘、小石等侵入车子内部和齿轮。(遥控器也同样,否则即使在保修期间也由顾客负担!)  
RC Tank is a precision product. Please prevent dust, rocks entering into hulls and transimiler. Otherwise it will make the warranty void.



车子跌落,碰撞等强烈的冲击会造成故障。

Violent shocks caused by fall or bump may lead to malfunction.



不可在有积水的地方行走(遥控器也不可弄湿)

Do not play the tank in a place where it could easily get wetted. (The remote controller should also be kept dry.)



户外的沙地、凹凸不平处,灰尘多的地方也不可行走。

Do not play the tank on sands or other uneven surfaces or in a place with too much dust.



不可在草地、沼泽地等阻力大的地方行走。

Do not play the tank on lawn or other places that may cause excessive resistance.

## 注意 Caution

◆需另购的物品(遥控器电池)  
Articles to be purchased (controller's batteries)

◆AA电池4粒(用于遥控器)  
4x AA Batteries (For controller)

### 电池的注意事项 Battery-related caution

不可使用破损电池, 以免发生短路危险。X  
Do not use broken batteries to avoid short circuit.



使用工具时注意安全。

Keep yourself safe when using tools.



## 警告(Warning)

尊敬的用户:

本产品是配置一种环保节能的锂电池作为供电电源, 请您在使用中严格遵守使用规则, 这样您的锂电池才能正常使用。

- 1、首次使用锂电池组时须先充满电再使用。
- 2、每次使用后(不论使用时间长短)都应取出电池重新充电, 保持电池处于带电状态。
- 3、当使用电池达到电量极限时, 须尽快充电, 如在电池过放电情况下, 搁置不充, 会严重损伤电池的寿命及性能或导致电池永久性损坏。
- 4、电池组不能使用处于极热环境中, 如阳光直射或热天的车内, 否则, 电池组过热, 这样就会影响性能、缩短电池组的使用寿命。
- 5、环境温度会影响放电容量, 环境温度超标准环境时(25°C±5°C), 放电容量会有所降低。
- 6、电池组在充放电过程中, 如果出现异味、异常声响, 请立即停止充电或放电。

Dear users:

This product is equipped with an eco-friendly and energy-saving lithium battery as the power supply. Please strictly abide by the instructions while using it, so that your lithium battery can work normally.

1. Before the first use, the lithium batteries must be fully charged.
2. The battery should be recharged after each use (no matter how long it was used) to keep the battery charged.
3. When the battery is about to run out, it should be recharged as soon as possible. If the battery is not recharged in case of over-discharge, the battery cycle life and performance will be seriously damaged or the battery will be permanently damaged.
4. Batteries cannot be used in extremely hot environments, such as under direct sun light or in a car in hot weather. Otherwise, the overheated batteries will affect the performance and shorten the cycle life.
5. Ambient temperature will affect the capacity of electric discharge. When ambient temperature exceeds the standard environment (25°C±5°C), the capacity of electric discharge will decrease.
6. During the charging and discharging of the batteries, if an abnormal odor or sound appears, please stop the charging or discharging immediately.

## 电池注意事项(Caution)

- 1、电池充电时, 务必使用本套材内专用的USB充电线, 以免造成危险!
  - 2、请小心维护电池, 按标准充电时间为电池充电, 以延长使用寿命, 避免不当使用而造成电池损坏。
  - 3、勿将正负极接反! 勿将电池组投入水中或将其弄湿!
  - 4、禁止在火源或极热条件下给电池组充电! 勿在热源(如火或加热器)附近使用或贮存电池组! 如果电池泄漏或发出异味, 应立即将其从接近明火处移开。第一次使用电池, 需将电池充满电后再使用。
  - 5、勿将电池组投入火中或给电池组加热!
  - 6、禁止用导线或其他金属物体将电池组正负极短路!
  - 7、禁止用钉子或其他尖锐物体刺穿电池组壳体, 禁止锤击或脚踏电池组!
  - 8、禁止以任何方式分解电池组和电池!
  - 9、禁止将电池组置于微波炉或压力容器!
1. When the battery is getting charged, please use the special USB cable of this material to avoid danger!
  2. Please take good care of the battery pack. Before charging, please charge the battery pack according to standard charging time to prolong its service life, avoid damage of battery caused by improper use.
  3. Do not reversely connect the positive and negative poles! Do not put the battery pack in to the water or wet them!
  4. Do not charge the battery pack under fire or extremely hot environment! Do not use or store battery pack near heat sources, such as fire or heaters! If the battery leaks or smells, please remove it immediately from the place that is close to the open fire. Before the first use, the battery should be fully charged.
  5. Do not put the battery pack into the fire or heat them!
  6. Do not use wires or other metal objects to short-circuit the positive and negative poles of the battery pack!
  7. Do not use nails or other sharp objects to pierce the battery pack shell; do not hammer or pedal the battery pack!
  8. Do not disassemble the battery pack or the battery in any way!
  9. Do not put battery pack in microwave ovens or pressure vessels!

## ★ 安装零件前务必检查是否正确操作

Please check the functions of RC tank before installing accessories.

万一无法正确操作, 请联系售后服务部或所购买的商店。

If you find the tank cannot function properly, please contact our after-sales service center or the shop that sold it to you.



**注意**  
Caution

**装上了零件的商品不能更换, 这时被认作是修理。**

If the accessories has been installed, RC tank can not be exchanged. Only repair service is available.



**警告**  
Warning

**若电池正负极接反, 会引起漏液和故障, 要小心。**

Please do not install anode and cathode of battery reversely. Other it will make batteries leak.

## 充电: 平衡充充电(选购) Charging: Balance charger charging(Additional purchase)



※双插头电池:无内置智能保护板 Two-plugs battery:No intelligent protective board

① 将充电器插头插入电源插座, 这时充电器上的绿灯(电源/充电指示灯)亮起。再将充电器电源输出插头连接到充电电池接头, 此时充电器上的绿灯变成红灯, 表示正在充电。当充电器上的红灯变成绿灯时, 则表示充电电池电量已充满, 此时充电结束。充电时间大约为2小时。

② 充电完毕, 把充电器插头拔出。

① Insert the charger plug in to the socket, then the green light on the charger (power/charge indicator) light. Then connect the will charger power output to the rechargeable battery connector. At this time the green light on the charger become the red light. When the red light on the charger turn into a green light the power is full no more charging. It takes about 2 hours.

② Charging is over, unplug the charger

### 注意 Caution

① 充电器的额定输入电压必须与当地的家用电压相符;

② 充电时, 充电器和电池会微热属正常;

③ 在插入或拔出充电器时, 要注意手指不能接触到充电器的端子;

④ 插头连接时, 务必认清正负极。

① The rated input voltage battery charger with the home must be in line voltage;

② When charging, it is normal that the transformer and the battery may get mild heat.

③ During the insertion or removal of transformer, please pay attention that the finger should not be contacted to the end of the transformer;

④ The plug connection, must recognize the positive and negative pole

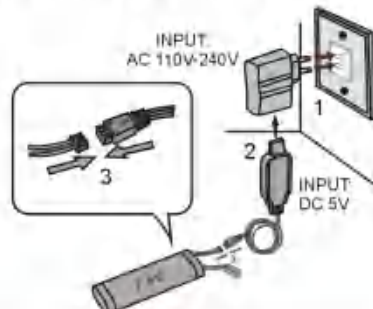
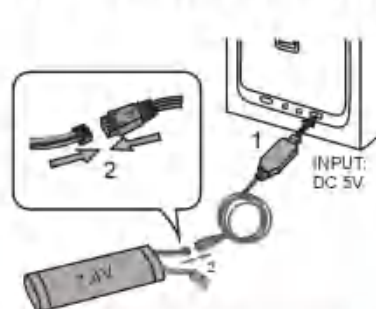
## 充电: USB充电线充电(标配) Charging: USB charger line charging (Standard)

① 将USB充电线插入电脑的USB插口(如图), 或插入手机充电器的USB插口(如图), 此时USB充电线电源指示灯红灯亮起。

② 再把电池的插头与USB充电线的充电插头按正确极性对接(如图), 此时USB充电线充电指示灯绿色灯闪烁, 进入充电状态, 约4小时后充电指示灯绿色灯变为长亮, 此时充电完成。

① Insert the USB cable into the USB socket of the computer or plug into the cell phone charger USB socket. (as shown) At this time, the indicator of the USB cable red light is on.

② Connect the battery plug with the USB charging plug according to the correct polarity (as shown) At this time, the green light of USB charging indicator start flashing. This is the charging state. About 4 hours later, the green charging indicator will turn on from flashing, charging completed.



**警告**  
Warning

1. 本电池内置智能保护板。

2. 本USB充电线为本产品中的7.4V带保护板锂电池专用的, 严禁为其它任何电池充电, 否则造成危险, 后果自负!

1. Built-in battery intelligent protective board.  
2. This USB charging wire is special for 7.4V lithium batteries with protective plate. It is forbidden to charge any other batteries, otherwise it will cause danger and the company won't bear the consequences!

## 电源开关和充电插口 Power switch & Charging socket



电源开关  
Power switch



充电插口  
Charging socket

7.4V 电池  
7.4V battery

电池仓  
battery holder

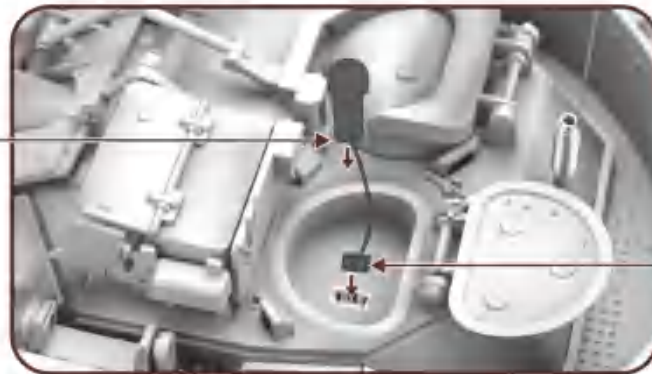
## 红外线接收器安装方法 How to install an infrared receiver unit

如下图，购买2辆或以上带有红外线对战系统的坦克并按图示方法，将红外线接收器插头按正确方向连接到坦克炮台上指定的插座上，同时也将红外线接收器固定到指定的磁吸位置上。

Operation requires the use of two or more tanks with a Battle System. Connect the infrared receiver unit's plug to specified sockets on the turret, then put the infrared receiver unit on the specified magnetic position.

第二步：把红外线接收器固定在磁吸位置上

Step 2: Put the infrared receiver unit on the specified magnetic position.



第一步：把红外线接收器插头按正确极性插入插座中

Step 1: Connect the infrared receiver unit's plug to sockets on the turret

## 冒烟装置的使用方法 How to use smoke generator

本坦克车出厂时，已添进少许烟雾剂。在第一次使用前，不需添加烟雾剂。可以使用时间约1小时左右。（但有时使用不到1小时，当闻有烧焦味时，这表示烟雾剂快用完，必须马上添加烟雾剂，否则会损坏冒烟装置。）以后每次使用累计超过1小时，都必须再添加2毫升烟雾剂。

A little bit of Smoke Oil have been oiled to smoke generator When Tanks leave the factory. So that you need not oil for the first operation. The original amount of smoke oil can be used about 1 hour (but sometimes perhaps it run less than 1 hour. When the oil is going to run out, You will smell something burning. It means that You need oil the smoke generator immediately. You just need only 1 drop, Over filling will not allow the smoke generator to heat coil generate smoke.)



冒烟口  
exhaust

加油烟口  
Adding oil inlet

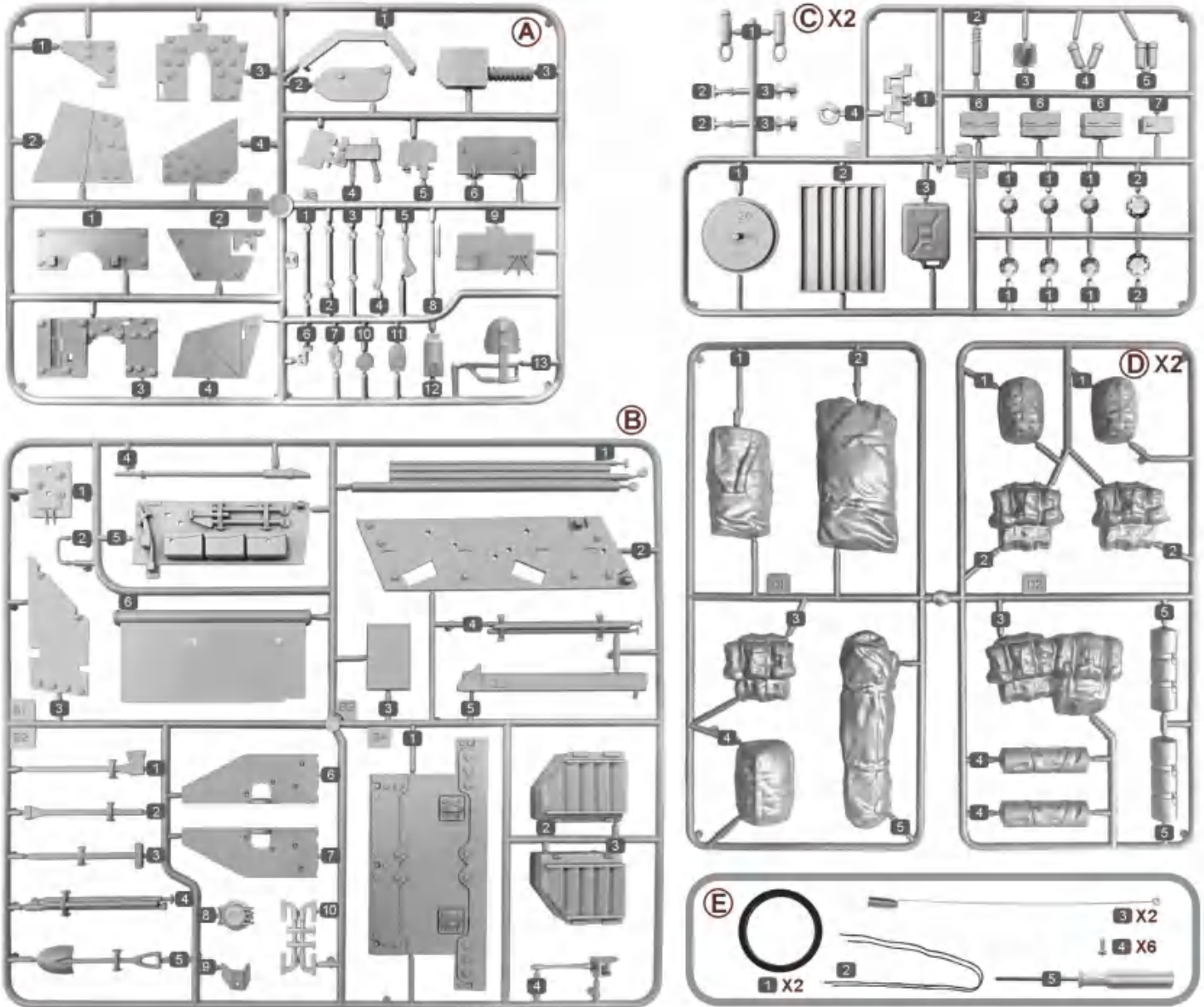


### 注意事项 Cautions

- 1、当电池低电时，冒烟效果将不明显或失效，应及时为电池组充电；
  - 2、当电池足电时，发现烟量减少应及时添加烟雾剂，以防损坏冒烟装置。
- 1.The smoke generator will stop running When the charge drop too low. Please recharge batteries immediately.
- 2.If very little smoke be produced, It means that you need oil the smoke generator immediately. Otherwise the smoke generator will be damaged.

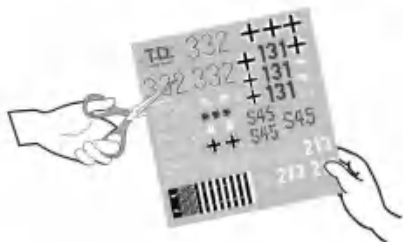
## 附属零件的安装 How to install accessories

### 附属零件 APPENDANT PARTS



## 部队番号贴纸的贴法 How apply the Decals on your Tank

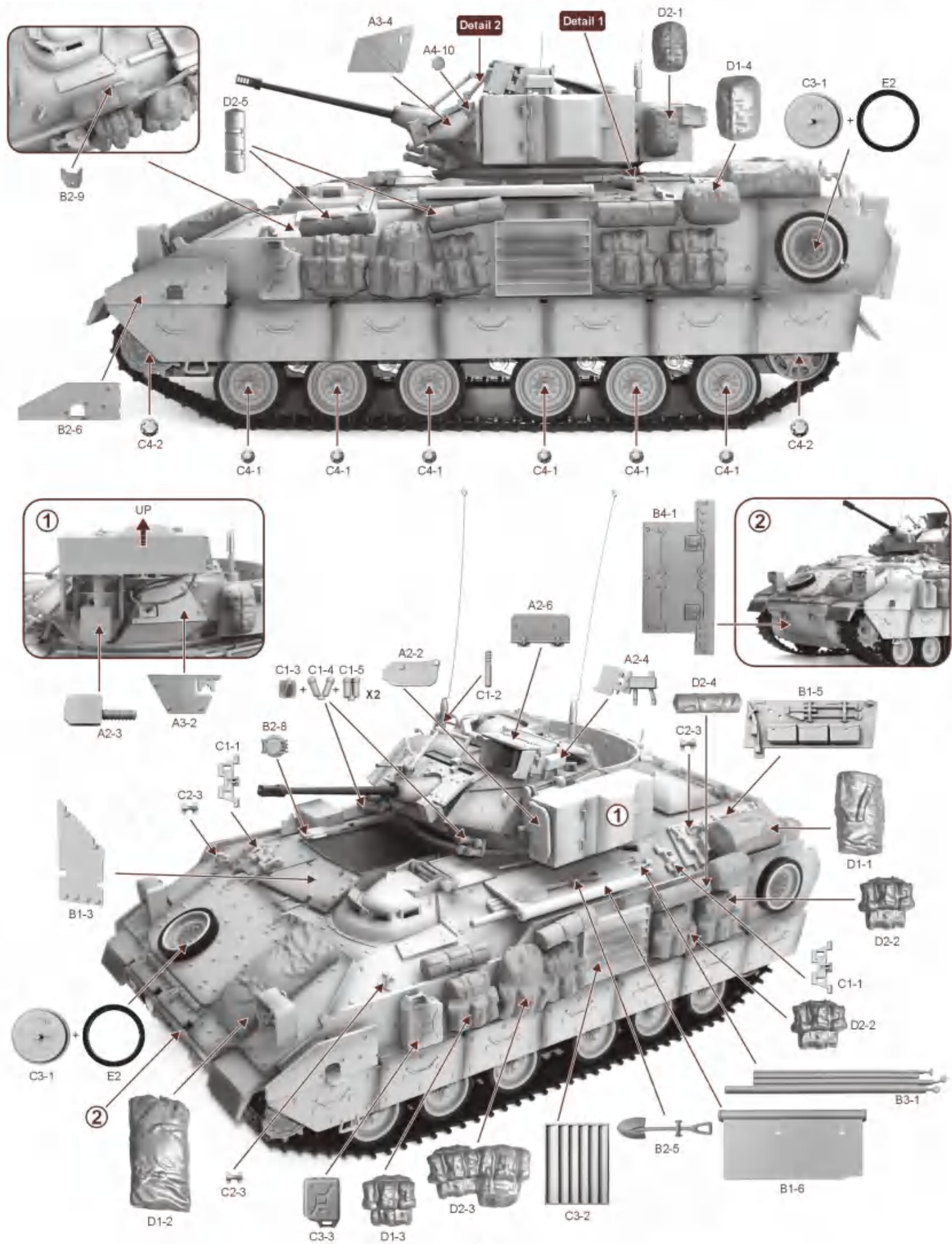
- 1、先将要贴的标志用剪刀从贴纸剪出来，然后撕掉底纸。  
Please cut the logo that required pasting from the sticker by using the scissor and then tear off the backing pager.
- 2、把标志贴到所需的位置，然后再从贴纸的一边到另一边用手的拇指均匀地紧压，让标志充分紧贴。  
Move the decal around to get a good placement, and get it exactly where you want to be it.
- 3、待十五分钟后，再撕下透明膜。  
After wait for 15 minutes, then tears down the transparent film.



# 附属零件的安装 HOW TO INSTALL APPENDANT PARTS

**注意 Caution**

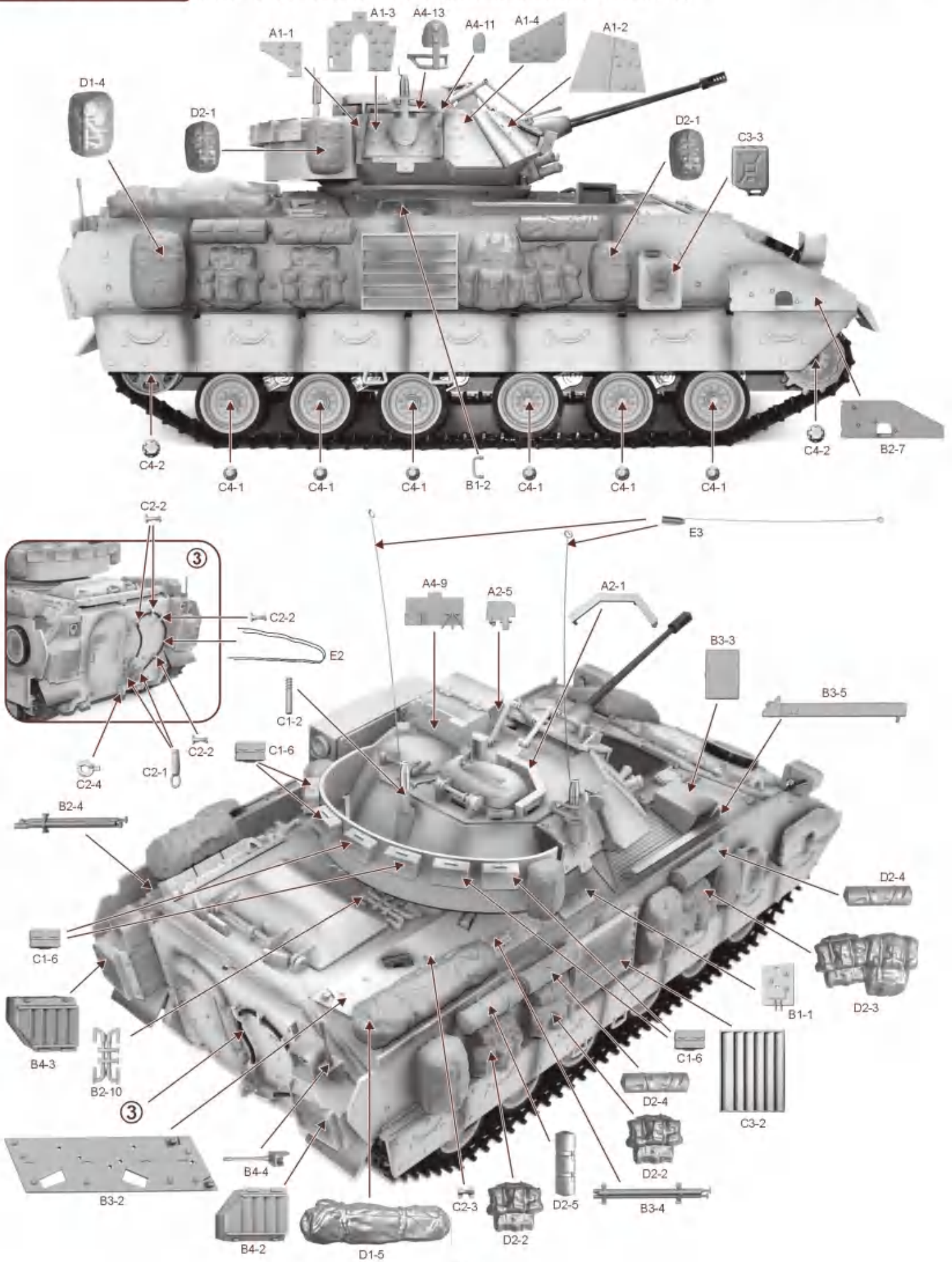
安装自装部件时, 若部位孔位太过松动请自行用瞬间粘着剂粘合; 若部位孔位狭窄, 请自行用工具处理。  
Tools are required for construction, such as cement and Diamond file.





## 附属零件的安装 HOW TO INSTALL APPENDANT PARTS

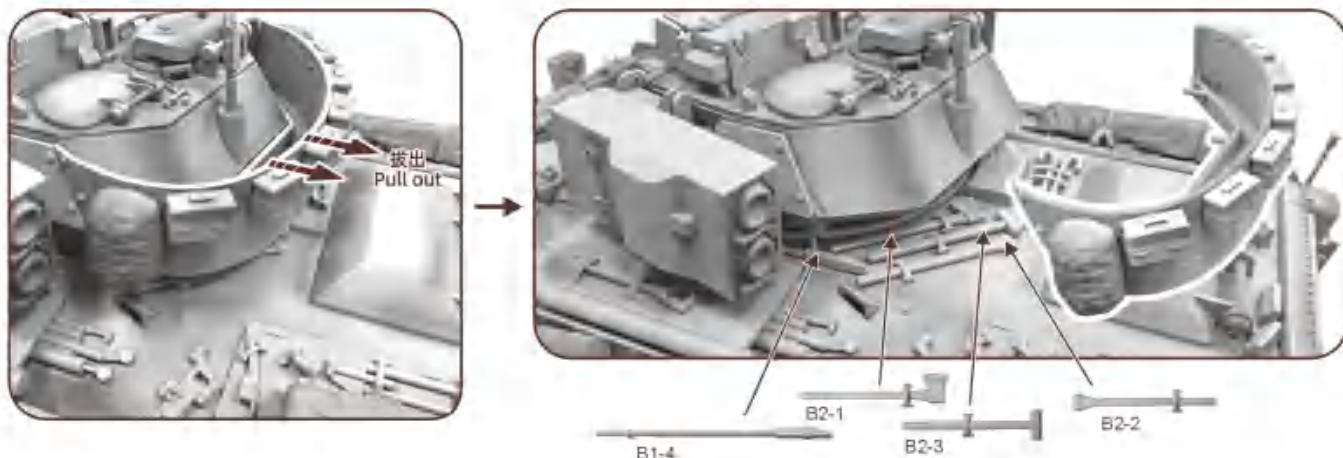
**注意 Caution** 安装自装部件时, 若部位孔位太过松动请自行用瞬间粘着剂粘合; 若部位孔位狭窄, 请自行用工具处理。  
Tools are required for construction, such as cement and Diamond file.



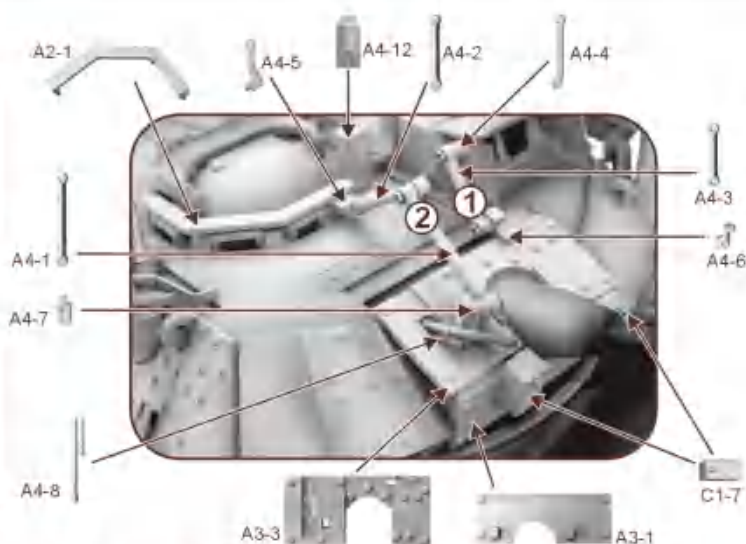
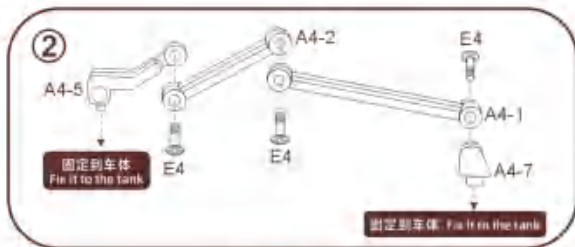
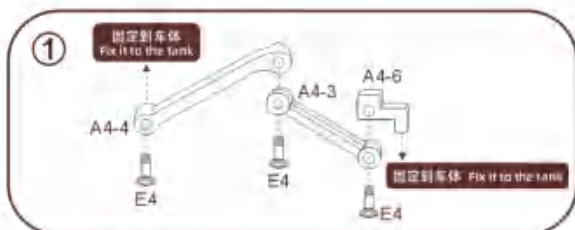
## 附属零件的安装 HOW TO INSTALL APPENDANT PARTS

**注意 Caution** 安装自装部件时,若部位孔位太过松动请自行用瞬间粘着剂粘合;若部位孔位狭窄,请自行用工具处理。  
Tools are required for construction, such as cement and Diamond file.

Detail 1



Detail 2

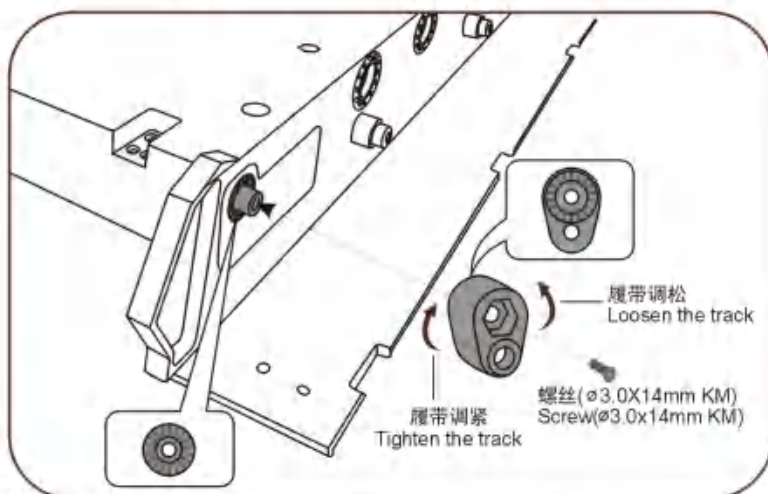


\* 先将第一部分和第二部分安装完成后,再安装到车体上。 \* After the first and the second part are installed, install them to the tank body.

\* A4-1~A4-7之间用螺丝连接,并保持其可以活动。 \* A4-1~A4-7 between the place with a screw connection, and keep it movable.

## 履带张紧度调节方法 How to adjust track tension

1. 用“+”字螺丝刀逆时针方向将诱导轮松脱下来(注意诱导轮与调节器之间有垫片);
  2. 再用“+”螺丝刀逆时针方向将诱导轮调节器松起并进行调节;
  3. 当履带偏松时,如图示将诱导轮调节器顺时针扭动到履带合适的张紧度位置并将螺丝顺时针拧紧;
  4. 当履带偏紧时,如图示将诱导轮调节器逆时针扭动到履带合适的张紧度位置并将螺丝顺时针拧紧;
  5. 将诱导轮和履带按正确方法装上,履带张紧度调节完毕。
1. Use "+" screwdriver to release the idler wheels counterclockwise. (Caution: Shim are installed the gap between idler wheels and the adjuster)
  2. The use "+" screwdriver to loose and adjust the tracks adjuster counterclockwise.
  3. If the track are too loose, You can twist the adjuster counterclockwise to tighten it.
  4. If the tracks are too tightened. You can twist the adjuster clockwise to loosen it.
  5. Install the idler wheels and the tracks properly, then you finish the job.



**注意 Caution** 当拧紧履带调节器时,如有螺丝打滑,务必将调节器拉起后慢慢地再将螺丝拧紧。  
When you tightening the tracks adjuster, if the screw begin to slips, then pull the adjuster up and tighten the screw slowly.

# 电气零件表 ELECTRONIC PARTS



TD-BX001

L左(left)  
M右(right)  
Ø8x48mm

驱动波箱  
Drive gearbox



TD-BX003

升降波箱  
Gun barrel elevation unit



TD-BX004

转向波箱  
Steering gearbox



TD-SM001B

出烟口(Outlet/fuse)  
加油口(oil filter)

冒烟波箱  
Smoke generator



TD-SP001

圆形音响  
Round sound



TD-EP001

TD-2.0 功能主板(2.4GHz)  
TD-2.0 Multi-function circuit unit(2.4GHz)



TD-EP002

发射板(2.4GHz)  
Transmitting board(2.4GHz)



TD-EP003

大六脚开关(SS-22H03 G7)  
Main power ON/OFF switch(SS-22H03 G7)



TD-EP005

PH-3P插座  
PH-3P socket



TD-EP006

红外线接收器  
Infrared receiver



TD-EP007A

Ø5mm红外线发射管  
Ø5mm Infrared transmitting tube



TD-EP007B

Ø5mm红外线接收管  
Ø5mm Infrared receiving tube



TD-EP008

Ø3mm LED (白灯发红光)  
Ø3mm LED (white LED shine red light)



TD-EP009

Ø5mm LED (白灯发白光)  
Ø5mm LED (white LED shine white light)



TD-EP010

Ø5mm LED (白灯发红光)  
Ø5mm LED (white LED shine red light)



TD-EP011

KET 电源线(120mm)  
KET Power Cord(120mm)



TK-EP012

单向2P插头线(Ø2.1 180/270mm)  
2 ports single head cable (Ø2.1 180/270 mm)



TD-EP014

单向2P插头线(Ø1.0 320/430mm)  
2 ports single head cable (Ø1.0 320/430 mm)



TD-EP014

单向2P插头线(Ø1.0 320/430mm)  
2 ports single head cable (Ø1.0 320/430 mm)



TD-EP015

单向3P插头线(Ø1.0 220/420mm)  
3 ports single head cable (Ø1.0 220/420 mm)



TD-EP016

杜邦2P插头线(Ø1.0 150/350/420mm)  
Dupont 2 ports single head cable (Ø1.0 150/350/420 mm)



TD-EP017

7.4V锂电池(带智能保护板)  
7.4V Li-ion battery(Built-in battery intelligent protective board)



TD-EP018

USB 充电线(专用)  
USB Charge line (Special)



TD-EP019

遥控器(2.4GHz)  
Remote controller(2.4GHz)

# 其他配件表 OTHER PARTS



TD-OA003

贴纸  
Paste



TD-OA004

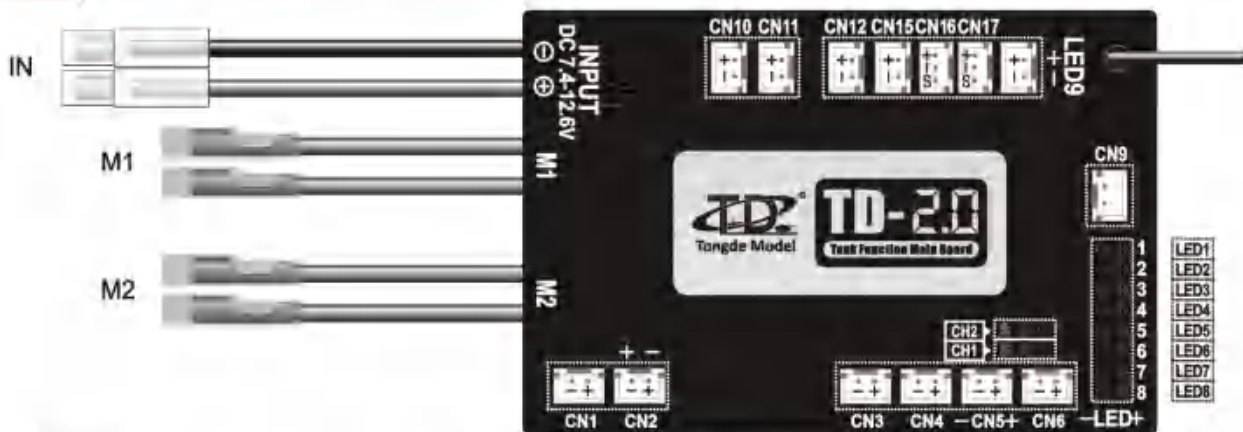
说明书  
Instruction manual

# TD-2.0

## 多功能主板功能操作说明书

Multifunctional Mainboard Operation Instructions

### 电子板插口对照表 (Electric board socket comparison table)



- CN1** ▶ 电源开关 (Power switch)
- CN2** ▶ 散热风扇 (Radiator fan)
- CN3** ▶ 炮台旋转 (Turret turning)
- CN4** ▶ 炮管俯仰 (Cannon lifting)
- CN5** ▶ WiFi图传 (WiFi image transmission)
- CN6** ▶ 触发开关 (Trigger switch)
- CN9** ▶ 声效喇叭 (Loud speaker)
- CN10** ▶ BB弹波箱 (BB Launch system)
- CN11** ▶ 发热丝 (Heating wires)
- CN12** ▶ 冒烟波箱马达 (Smoke generator motor)
- CN15** ▶ 红外线发射 (Infrared emitter)
- CN16** ▶ 红外线接收 (Infrared receiver)
- CN17** ▶ 生命灯 (Life value lights)

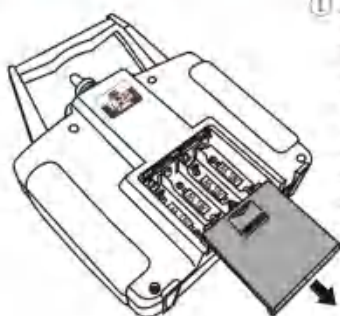
- CH1** ▶ 炮管伸缩舵机 (Cannon recoil servo)  
V+B 模式: 舵机信号 (V+B mode: servo signal)
- CH2** ▶ 炮管俯仰舵机 (Cannon lifting servo)  
V+B模式: 360度舵机 (V+B mode: 360° servo)
- LED1** ▶ 开炮闪烁灯 (Launch flashing light)
- LED2** ▶ 瞄准灯 (Aiming light)
- LED3** ▶ 后灯 (Taillights)
- LED4** ▶ 前灯 (Headlights)
- LED5** ▶ 机枪灯 (Machine gun flashing light)
- LED6** ▶ 刹车灯 (Brake lights)
- LED7** ▶ 左转灯 (Left signal)
- LED8** ▶ 右转灯 (Right signal)
- LED9** ▶ 第二机枪灯 (2<sup>nd</sup> Machine gun flashing light)

# TD-2.0

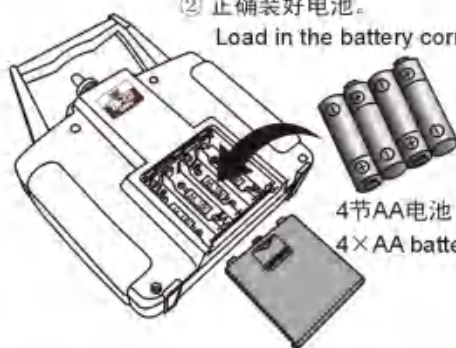
## 1:16 比例坦克遥控操作说明书

1:16 Scale tank remote control instruction manual

### 遥控器电池安装说明 (Battery installing of the Remote controller)



① 取下电池盖 (开关必须在OFF位置)。  
Remove the battery cover. (Make sure the switch is on OFF position.)



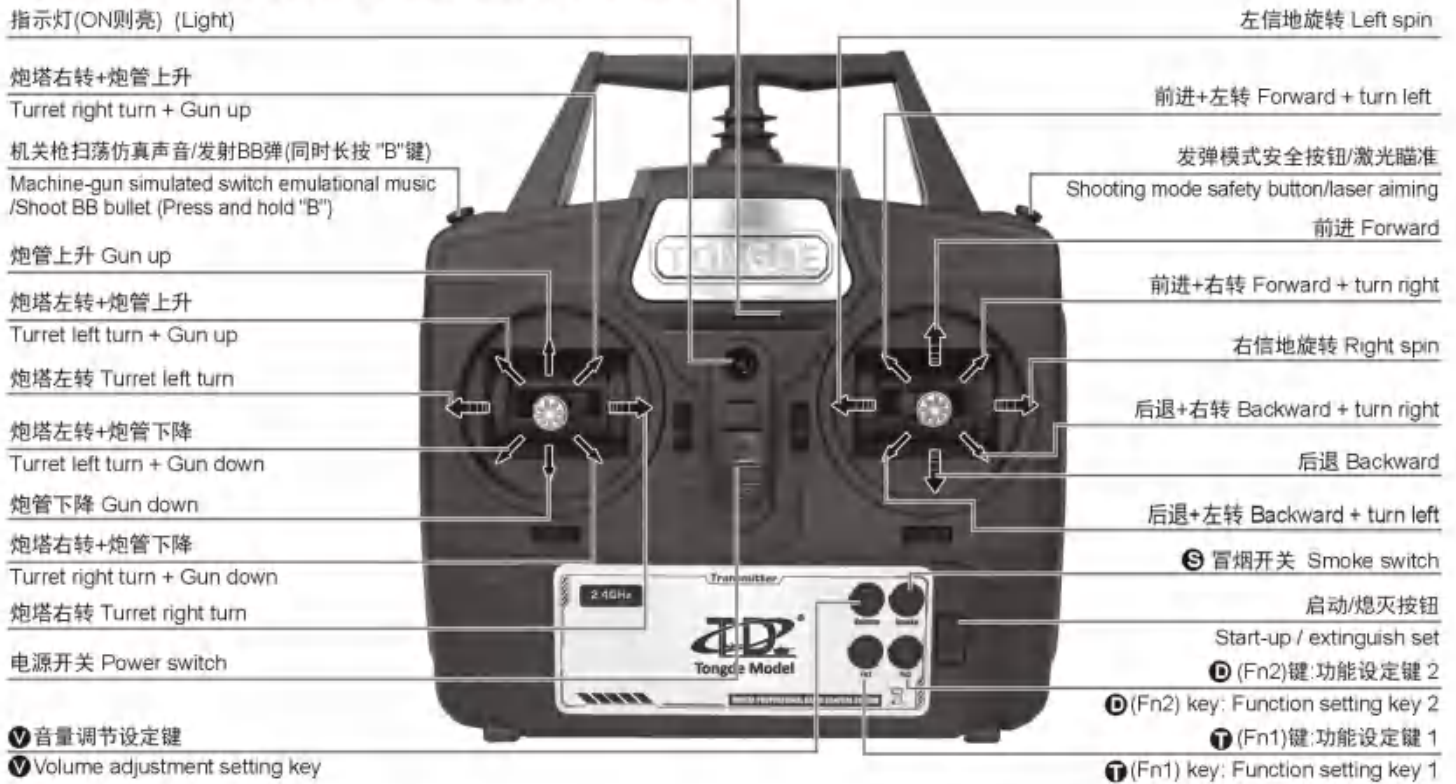
② 正确装好电池。  
Load in the battery correctly.  
4节AA电池  
4×AA batteries



③ 关上电池盖。  
Replace the cover.

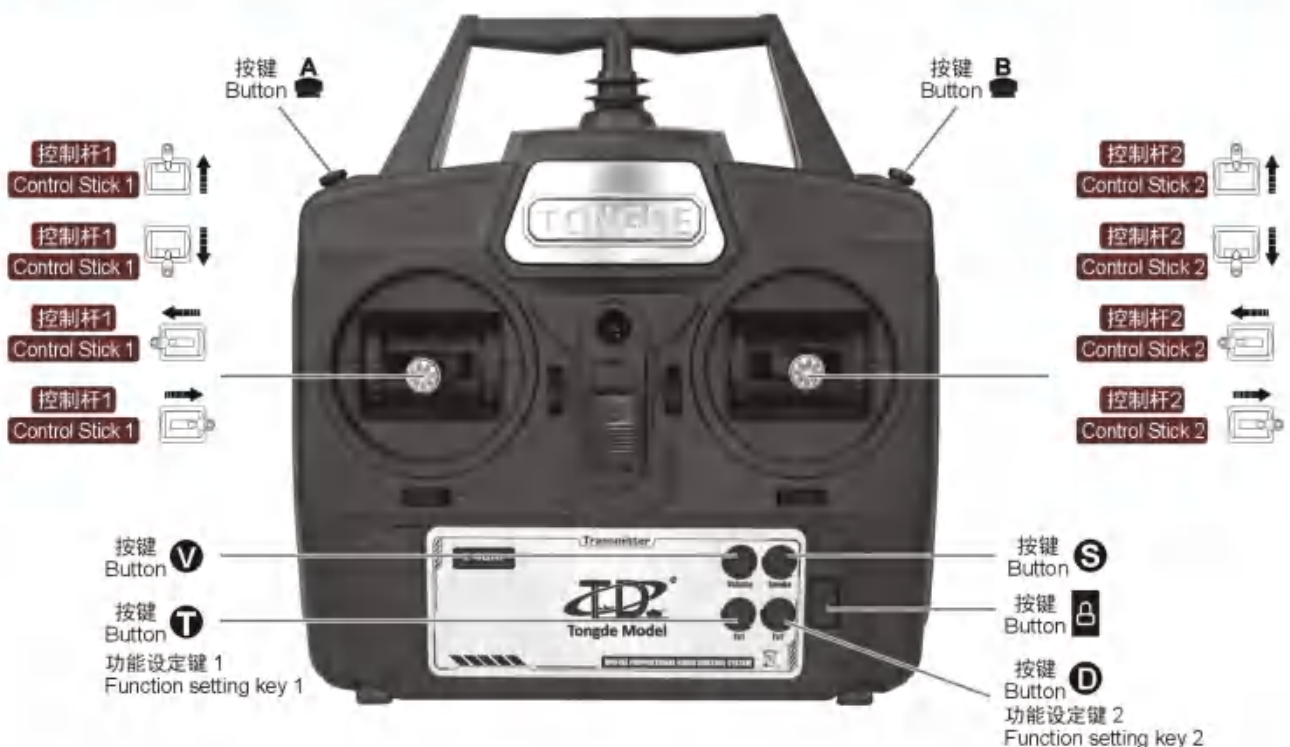
## 遥控器功能说明 (Transmitter instructions)








### 遥控器各个部分的名称 Controller Parts Identification



打开车体开关时务必先把遥控器开关置于ON, 关掉开关时先将车体开关置于OFF, 若次序搞错会引起坦克突然冲出去。  
When turning on power, the remote controller should be first turned ON. When turning off power, the tank should be first turned OFF. If the sequence is not followed, the tank may suddenly rush forward.

## 遥控器功能操作说明 (Transmitter operating instructions)



1. 按键 **T** + **控制杆1**  前大灯开关,同时蜂鸣器发出声音“嘀”  
Button **T** + **Control Stick 1** Front light switch, the buzzer sounded "Di" in the same time.
- 按键 **T** + **控制杆1**  后尾灯开关,同时蜂鸣器发出声音“嘀”  
Button **T** + **Control Stick 1** Rear light switch, the buzzer sounded "Di" in the same time.
2. 按键 **T** + **控制杆1**  坦克后退左微调,同时蜂鸣器发出声音“嘀”  
Button **T** + **Control Stick 1** Tank backward left fine-turning, the buzzer sounded "Di" in the same time.
- 按键 **T** + **控制杆1**  坦克后退右微调,同时蜂鸣器发出声音“嘀”  
Button **T** + **Control Stick 1** Tank backward right fine-turning, the buzzer sounded "Di" in the same time.
3. 按键 **T** + **控制杆2**  坦克前进左微调,同时蜂鸣器发出声音“嘀”  
Button **T** + **Control Stick 2** Tank forward left fine-turning, the buzzer sounded "Di" in the same time.
- 按键 **T** + **控制杆2**  坦克前进右微调,同时蜂鸣器发出声音“嘀”  
Button **T** + **Control Stick 2** Tank forward right fine turning, the buzzer sounded "Di" in the same time.
4. 按键 **T** + **控制杆2**  高速模式,蜂鸣器发出声音“嘀”,同时坦克发出声音“咚”  
Button **T** + **Control Stick 2** Operate mode 1 (High speed mode), The buzzer sounded "Di", In the same time the tank sounded "Don".
- 按键 **T** + **控制杆2**  低速模式70%,切换成功同时坦克发出声音“咚”  
Button **T** + **Control Stick 2** Low speed 70% mode, The tank sounded "Don" when it switch succeed.

5. 按键 **A** 机关枪声及灯光  
Button **A** Machine gun sound & flashing light

6. 按键 **B** 激光瞄准灯  
Button **B** Laser aiming light


7. 按键 **A** + 按键 **B** BB弹发射功能和坦克后座力,同时发射红外信号并伴随声效  
Button **A** + Button **B** Launching BB bullets & tank body recoiling. Launch infrared battle signal & Firing sound effect in the same time.

8. 按键 **T** + 按键 **A** 坦克缓加速系统开/关,同时坦克发出声音“咚”(需配合陀螺仪)  
Button **T** + Button **A** Tank slow acceleration system switch ON/OFF, The tank sounded "Don" in the same time. (Use with gyroscope)

9. 按键 **T** + 按键 **S** WIFI 开/关,同时坦克发出声音“咚”  
Button **T** + Button **S** Wi-Fi switch ON/OFF,The tank sounded "Don" in the same time.

10. 按键 **T** + 按键 **D** 坦克声效切换  切换成功时坦克自动熄火!  
Button **T** + Button **D** Tank sound effects switch The tank will automatically stop when it switch succeed.

11. 按键 **V** + **控制杆2**  喇叭音量增大,同时蜂鸣器发出声音“嘀”  
Button **V** + **Control Stick 2** Volume up, the buzzer sounded "Di" in the same time.

按键 **V** + **控制杆2**  喇叭音量减小,同时蜂鸣器发出声音“嘀”  
Button **V** + **Control Stick 2** Volume down, the buzzer sounded "Di" in the same time.

12. 按键 **P** 坦克启动/熄火,或对码  
Button **P** Tank turn On/Off, Or Frequency preparing


13. 按键 **D** + 按键 **S** 坦克后座力四档强度循环调节(最小档为关闭后座力)  
Button **D** + Button **S** Tank body recoiling four Levels cyclic adjustment. ( Minimum level is off.)


14. 按键 **T** + 按键 **B** BB发射功能/伸缩功能切换开/关,切换成功同时坦克发出声音“咚”  
Button **T** + Button **B** BB bullets launching/stretching switch ON/OFF, The tank sounded "Don" when it switch succeed.

15. 按键 **T** + 按键 **V** 刹车强度调节(三个刹车档)  
Button **T** + Button **V** Braking strength adjustment ( three braking Levels cyclic adjustment. )

备注: 主板发出“咚”一声为第一档刹车,连续“咚咚”两声为第二档刹车,连续“咚咚咚”三声为第三档刹车  
Remarks: Control board sound "Don" once is the 1st level braking, Sound "DonDon" twice is the 2nd level braking. "DonDonDon" three times is the 3rd level braking

第一档刹车为: 弱      第二档刹车为: 标准      第三档刹车为: 强  
1<sup>st</sup> level braking: Weak      2<sup>nd</sup> level braking: Standard      3<sup>rd</sup> level braking: Strong

16. 按键 **D** + **控制杆1**  左手油门模式,同时蜂鸣器发出声音“嘀”  
Button **D** + **Control Stick 1** Left hand control mode, the buzzer sounded "Di" in the same time.

按键 **D** + **控制杆1**  右手油门模式,同时蜂鸣器发出声音“嘀”  
Button **D** + **Control Stick 1** Right hand control mode, the buzzer sounded "Di" in the same time.

17. 按键 **D** + **控制杆1**  超信地旋转最高速增加, 同时蜂鸣器发出声音“滴”  
 Button **D** + **Control Stick 1** Raise the tank self-rotate speed, the buzzer sounded "Di" in the same time.
- 按键 **D** + **控制杆1**  超信地旋转最高速减小, 同时蜂鸣器发出声音“滴”  
 Button **D** + **Control Stick 1** Slow down the tank self-rotate speed, the buzzer sounded "Di" in the same time.
18. 按键 **D** + **控制杆2**  转弯比率减小, 同时坦克发出声音“咚”  
 Button **D** + **Control Stick 2** Reduces the turning circle, The tank sounded "Don" in the same time.
- 按键 **D** + **控制杆2**  转弯比率增大, 同时坦克发出声音“咚”  
 Button **D** + **Control Stick 2** Increase the turning circle, The tank sounded "Don" in the same time.
19. 按键 **D** + 按键 **A** 机枪声效切换, 切换成功坦克发出第二机枪声  
 Button **D** + Button **A** Machine gun sound effects switch, The tank sounded 2nd Machine gun sound when it switch succeed
20. 按键 **D** + 按键 **B** 超信地旋转的开/关, 同时坦克发出声音“咚”  
 Button **D** + Button **B** Super self-rotate switch, The tank sounded "Don" in the same time.
21. 按键 **⏏** + 按键 **T** + 按键 **D** 恢复出厂默认设置  
 Button **⏏** + Button **T** + Button **D** Restore the factory settings

恢复出厂默认设置方法: 先关闭遥控器电源后, 再同时按下此三个按键不放再打开遥控器电源开关至蜂鸣器发出“滴滴”两声提示声, 即可松开此三个按键, 此时出厂默认重置成功。

Operating method: Turn off the transmitter's power first, now press & hold these 3 buttons then turn on the transmitter's power again until hear "DiDi" sound from the buzzer. At this time these 3 buttons can be released. Restore the factory settings succeed.

## 步兵战车功能操作说明 Infantry Fighting Vehicle functional operating instructions

1. 按键 **V** + 按键 **B** 坦克车/步兵战车功能切换开关。  
 Button **V** + Button **B** Tanks / Infantry Fighting Vehicle function switch.
2. 按键 **A** 机炮伸缩同时带有灯光及声效。  
 Button **A** Machine gun cannon recoil with light and sound effect.
3. 按键 **A** + 按键 **B** 陶式反坦克导弹发射: 闪光灯, 同时发射对战红外信号伴随声效。  
 Button **A** + Button **B** Shoot TOW Anti-tank Missile: flash-light, battle IR emit with sound effect.
4. 按键 **V** + **控制杆1**  陶式飞弹打开  
 Button **V** + **Control Stick 1** Launch TOW anti-tank missile
- 按键 **V** + **控制杆1**  陶式飞弹关闭  
 Button **V** + **Control Stick 1** Close TOW anti-tank missile
5. 其他功能: 操作后门。(客户需要DIY添加舵机才能工作)  
 Further function: operate the rear door. (customer needs to DIY to add a servo to make it work)
- 按键 **V** + **控制杆1**  步兵战车后门打开  
 Button **V** + **Control Stick 1** Infantry fighting vehicle rear door open.
- 按键 **V** + **控制杆1**  步兵战车后门关闭  
 Button **V** + **Control Stick 1** Infantry fighting vehicle rear door closed.
6. 按键 **T** + 按键 **B** 按下 T+B 按键可随时切换 BB 或伸缩模式。  
 Button **T** + Button **B** BB / Recoil Mode: You can always switch between 2 modes by pressing the T + B buttons.

# M2A2 BRADLEY INFANTRY FIGHTING VEHICLE

## 美国M2A2 布雷德利步兵战车 简介



M2布雷德利步兵战车（M2 Bradley Infantry Fighting Vehicle —IFV）是美国的步兵战车，以美国陆军五星上将奥马尔·布雷德利为名，由BAE系统陆地与军备公司制造，即是前联合国防工业。

20世纪50年代时，为应对战争中可能会使用的大规模杀伤性武器，美国军方需要开发一种有生命支持系统和能够让士兵在内部向外面射击的步兵战车，随后开发出了多种试验车。1975年夏天，FMC集团生产出了生产出XM-732步兵战车。XM-732步兵战车后来按照美国军方的意见进行修改，1980年被命名为M2布雷德利步兵战车，1981年正式量产并进入美国军队服役。

M2A2于1988年服役，M2A2加强了600马力（447kW）引擎和HMPT-500-3型液压传动还加强了装甲（被动与反应装甲都加强）。新装甲防护可以挡住30毫米的APDS弹（脱壳穿甲弹）或是RPG火箭（以及若干小型反装甲榴弹），弹药库加装反内炸安全封条。新的装甲消除了布雷德利两栖坦克的装饰叶片，并覆盖了侧面射击端口。间隔层压装甲被安装到船体后部。间隔层压轨道裙保护较低的船体。一个半圆形的护盾被附加到炮塔后部，以增加更多的装载空间，以及作为间隔装甲。在关键区域添加了凯夫拉片衬板。携带部队的人数减少到6人，取消了驾驶员身后的潜望镜位置。在实弹射击测试后，重新绘制了座位和装载安排。这些升级将车辆的累计总重量提高到30,519 kg (67,282 lb(30.037长吨);33.641短吨))。M2A2有资格由C-17环球霸王III运输机运输。M2A2最终都被修改为M2A2 ODS或M2A3。

1991年，M2布雷德利步兵战车参加了海湾战争，M2布雷德利步兵战车击毁的伊拉克坦克与装甲车的数量比M1艾布拉姆斯主战坦克要多。

2023年，M2布雷德利步兵战车参加了抵抗2022年俄罗斯入侵乌克兰的行动，并于2023年6月8日的反攻行动中被俄军击毁了6辆。据Oryx (博客)网站统计，截止2023年7月为止，共有34辆M2在作战中遭到损毁，无法救援而不得遗弃在战场上。

## Introduction to the M2A2 BRADLEY INFANTRY FIGHTING VEHICLE

The M2 Bradley, or Bradley IFV, is an American Infantry fighting vehicle that is a member of the Bradley Fighting Vehicle family. It is manufactured by BAE Systems Land & Armaments, which was formerly United Defense.

Introduced in 1988, the A2 received an improved 600 horsepower (447 kW) engine with an HMPT-500-3 Hydromechanical transmission. Armor was improved, both passive and the ability to mount explosive reactive armor. The new armor protects the Bradley against 30 mm APDS rounds and RPGs, or similar anti-armor weapons. The new armor eliminated the trim vane that made the Bradley amphibious and covered up the side firing ports. Spaced laminate armor was installed to the hull rear. Spaced laminate track skirts protected the lower hull. A semicircular shield was attached to the turret rear to add more stowage space, as well as act as spaced armor. Kevlar spall liners were added to critical areas. The troop carrying number was reduced to six, eliminating the periscope position behind the driver. After live firing testing, the seating and stowage arrangements were redrawn. These upgrades raised the cumulative gross weight of the vehicle to 30,519 kg (67,282 lb (30.037 long tons; 33.641 short tons)). The M2A2 was qualified to be transported by the C-17 Globemaster III. M2A2s were all eventually modified to the M2A2 ODS or M2A3 standard.

In the 1950s, in response to the potential use of weapons of mass destruction in war, the U.S. military needed to develop an infantry fighting vehicle with a life support system and the ability for soldiers to shoot from the inside out, and subsequently developed a variety of experimental vehicles. In the summer of 1975, the FMC Group produced the XM-732 infantry fighting vehicle. The XM-732 infantry fighting vehicle was later modified in accordance with the opinions of the United States military, and in 1980 it was named the M2 Bradley Infantry Fighting Vehicle, and in 1981 it was officially mass-produced and entered service with the United States Army. In 1991, the M2 Bradley participated in the Gulf War, destroying more Iraqi tanks and armored vehicles than the M1 Abrams main battle tank. In 2023, M2 Bradley infantry fighting vehicles took part in the resistance against the Russian invasion of Ukraine in 2022, and six were destroyed by the Russian forces in the counter-offensive operation on 8 June 2023. According to Oryx (blog) website, as of July 2023, a total of 34 M2 vehicles have been damaged in combat and must be abandoned on the battlefield because they cannot be rescued.



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

NOTE: 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.

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

The device has been evaluated to meet general RF exposure requirements, the device can be used in portable exposure condition without restriction