

产品手册

Product Manual

TX3200 编排主机

TX3200 Firina Svstems



中 · EN  
2026

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## ⚠ 安全警示

- 本设备用于烟花点火控制。烟花燃放具有一定危险性，请在安全环境下由专业人员操作。
- 使用前请仔细阅读本说明书，并按照操作说明正确使用设备。
- 点火操作时，请确保所有人员处于安全距离之外，并遵守当地关于烟花燃放的相关法律法规。

## ⚠ Safety Warning

- The firing system is used for fireworks ignition control. Fireworks displays involve potential hazards and should only be operated by trained personnel in a safe environment.
- Please read this manual carefully before use and operate the device according to the instructions.
- During firing operations, ensure that all personnel remain at a safe distance and comply with local regulations regarding fireworks displays.

# 系统概述

TX-3200 (1.0) 主机是基于音乐燃放主机上开发的，可用电脑软件编排用 U 盘下载到机器的自动燃放设备。

## 技术特点

1. 点火头连接实时检测
2. 兼容音乐分机
3. 主机可运行 100 个分机 (00-99)，总共可控制  $100 \times 32 = 3200$  组燃放。(A 和 B 输出端采用软件控制使设备扩展到 3200 次点火)
4. 可选有线控制，更安全可靠
5. 有自动和手动两种燃放模式选择
6. 可在电脑上编写燃放计划，用 U 盘并下载到主机
7. 主机上有一个屏幕，您可以查看您的燃放计划，或了解正在进行的燃放进度
8. 内置 3\*2000mAh 锂电池，具有短路、过载、低压保护功能。锂电池更可靠，更环保，更轻，更坚固，适合长期保存，优于旧铅蓄电池。
9. 技术方案成熟可靠，值得信赖。

该系列支持品牌定制与功能定制，满足不同燃放需求。

# Overview of the Firing System

The TX-3200 host is developed based on the Music Fireworks Display System. It can be programmed by computer software and downloaded to the device with U disk.

## Technical Characteristics

1. Real-time detection of the Igniter connection status
2. Compatible with music extension.
3. Host controllable 100 extensions (00-99), total of  $100 \times 32 = 3200$  group of firing can be controlled. (Software control of A and B outputs allows expansion of the device to 3200 group of firings.)
4. Wired control, safer and more reliable.
5. Two firing modes : automatic and manual.
6. The ignition plan can be programmed on the computer and downloaded to the host with U disk.
7. There is a screen on the host where you can view your ignition plan or see the progress of the ignition in progress.
8. Built-in 3\*2000mAh lithium battery, with short circuit, overload and low voltage protection functions. Lithium batteries are more reliable, more environmentally friendly, lighter, stronger, and suitable for long-term storage than old lead-acid batteries.
9. The technical solution is mature and reliable, it's a trustworthy product.

# 参数

## 环境要求

|      |              |
|------|--------------|
| 工作温度 | -10℃～+55℃    |
| 储存温度 | -25℃～+70℃    |
| 相对湿度 | <85%         |
| 气压   | 86kPa～106kPa |

## 技术参数

|      |                |
|------|----------------|
| 内置电池 | 2000mAh*3      |
| 电压   | 12.6V          |
| 待机电流 | 0.3A           |
| 工作电流 | 2A             |
| 电池续航 | 正常环境下持续使用 6 小时 |

## 主机尺寸(cm)

L27.6 W22.5 H9.9

## 燃放能力

电点火头：并联连接 1 根，串联连接 2 根  
（与实际能燃放的数量和质量有关）

# Specifications

## Environmental Requirement

|                   |              |
|-------------------|--------------|
| Operate Temp      | -10℃～+55℃    |
| Store Temp        | -25℃～+70℃    |
| Relative Humidity | <85%         |
| Pressure          | 86kPa～106kPa |

## Technical Parameter

|                   |                                 |
|-------------------|---------------------------------|
| Built-in battery  | 2000mAh*3                       |
| Voltage           | 12.6V                           |
| Standby Current   | 0.3A                            |
| Operating Current | 2A                              |
| Battery Life      | 6 hours under normal conditions |

## Host Size(cm)

L27.6 W22.5 H9.9

## Firing Capacity

Electric Igniter: 1pcs in parallel, 2pcs in series  
(Related to the actual quantity and quality that can be fired)

## 注意事项

1. 操作人员应取到所在国家或地区的相应专业技术证书或资质，方可操作本系统。
2. 按所在国家与地区的法规，在分机开始接入点火头与烟花产品时，安装人员和烟花一定要按法规所要求保持安全距离。绝对不能在室内火或有易燃品旁安装。
3. 对要求比较高或无线干扰比较大的地方，建议使用有线通信，并且关掉分机的无线开关。确保安全和正常燃放。
4. 分机带有电源，建议不要去燃放礼花弹等危险系数比较大的产品。
5. 如果总线与容易失火的区域距离较近（如盆花旁边），为了避免总线被引燃导致短路，建议在这些区域将总线包锡箔纸。此外还要注意防水，外套塑料袋。
6. 每次燃放前需检测机器，在没有接点火头前分机打在点火位置用主机去检测每台分机的每一个点都会亮红灯。再把分机打再检测位置，每个分机接 2-3 个点火头进行产品检测，确保检测时不会发生点火。再每个盒留 1 个点火头（或不拆下）进行点火，确保点火正常。
7. 机器为锂电池供电，在低温时锂电池容易掉电。需要外接 12V 电瓶或用充电器插 220V 供电。燃放时间长也需要外接电源。
8. 编排间隔时间建议不编成 0.1 秒。

## 电池充电器

1. 充电器为锂电池专用，充电时间约 5 小时。充电电压 12.6V，电流 3A。
2. 充电电路有过充保护，不用担心过充损坏电池。充电时电池指示灯会亮红灯，充满电时会变绿灯。
3. 电压指示精度为  $\pm 0.1V$ 。当分机电压低于 20% 时。当电压低于 5% 时，机器将自动关闭。
4. 默认普通锂电池，在 0℃ 以上使用。低于 0℃ 需定制低温电池，可在 -20℃ 使用，但必须在 0℃ 以上充电，否则会损坏电池。

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## Cautions

1. Operators should obtain the corresponding professional technical certificates or qualifications in their country or region before they can operate this system.
2. According to the regulations of the country and region, when the extension starts to connect the igniter and fireworks, operators and fireworks must maintain a safe distance as required by the regulations. It must not be operated near an indoor fire or flammable products.
3. For places with high requirements or greater wireless interference, it is recommended to use wired communication and turn off the wireless switch of the extension to ensure safe and normal discharge.
4. The extension has a power supply, it is recommended not to ignite shell fireworks and other dangerous products.
5. If the bus is close to areas that are prone to fire (such as next to cake flowers), it is recommended to wrap the bus in tin foil in these areas in order to prevent the bus from being ignited and causing a short circuit. In addition, pay attention to waterproof, coat plastic bags.
6. The device needs to be tested before each firing. Before there is no contact igniter, the extension will be in the Fire position, with the host to detect every point of each extension. Then turn the extension in the Test position, each extension is connected to 2-3 igniter for product testing, to ensure that no ignition will occur during testing. Leave 1 igniter in each box (or do not remove it) for ignition to ensure normal ignition.
7. The device is powered by lithium batteries, which are easy to lose power at low temperatures. External 12V battery or 220V power supply with charger is required. Long discharge time also requires external power supply.
8. It is recommended that the fireworks display plan interval not be set to 0.1 seconds.

## Battery Charger

1. The charger is dedicated to lithium battery, charging time is about 5 hours. Charging voltage 12.6V, current 3A.
2. The charging circuit has overcharge protection, do not worry about overcharge damage to the battery. The battery indicator lights red when charging and green when fully charged.
3. The voltage indication accuracy is  $\pm 0.1V$ . When the voltage is below 5%, the extension will automatically shut down.
4. Equipped with ordinary lithium battery by default, it can be used above  $0^{\circ}\text{C}$ . Below  $0^{\circ}\text{C}$  a customized low-temperature battery is required, which can be used at  $-20^{\circ}\text{C}$ , but must be charged above  $0^{\circ}\text{C}$ , otherwise the battery will be damaged.

# 燃放命令说明

## 对多个分机的同一组依次点火操作

|     |                          |           |
|-----|--------------------------|-----------|
| 开门  | 从中间分机到两端分机依次点火           | #00↔#XX   |
| 关门  | 从两端分机到中间分机依次点火           | #00→↔#XX  |
| 左到右 | 从 0 号分机到设定的分机数依次点火       | #00→#XX   |
| 右到左 | 从设定的分机数分机到 0 号设定的分机数依次点火 | #XX→#00   |
| 齐上  | 所有设定分机同时点火               | #00...#XX |

## 仅对一个特定分机 32 组进行操作

|      |                      |
|------|----------------------|
| 单机单点 | 对某个音乐分机的某组进行点火       |
| 单机速射 | 音乐分机的 16 组或 32 组依次点火 |

# Firing Command Instructions

## Ignite the same group of multiple extensions sequentially

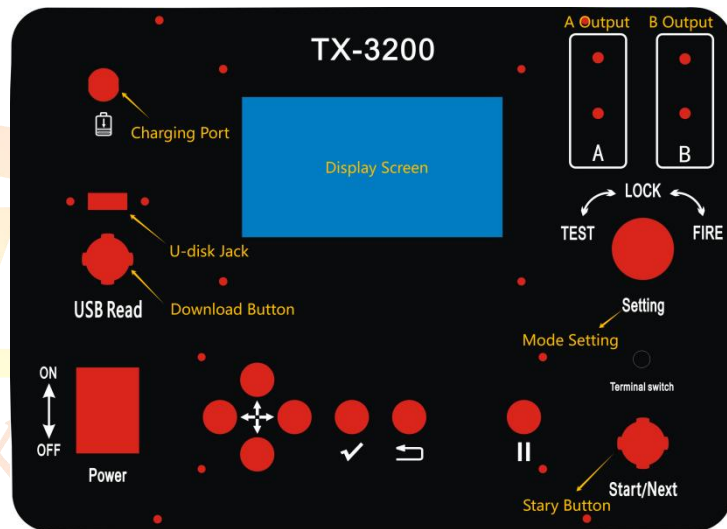
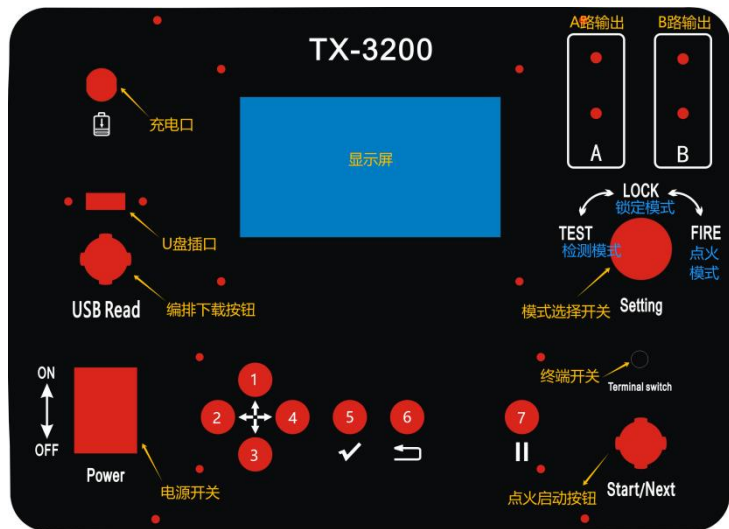
|                |                                                                              |           |
|----------------|------------------------------------------------------------------------------|-----------|
| Open the door  | Ignite sequentially from the middle extension to the extensions at both ends | #00↔#XX   |
| Close the door | Ignite sequentially from the extensions at both ends to the middle extension | #00→↔#XX  |
| Left to right  | Ignite sequentially from extension No. 1 to the set number of extensions     | #00→#XX   |
| Right to left  | Ignite sequentially from the set number of extensions to the extension       | #XX→#00   |
| All together   | All set extensions fire simultaneously                                       | #00...#XX |

## Operate 32 channels on a specific extension only

|                               |                                                                    |
|-------------------------------|--------------------------------------------------------------------|
| Single extension single group | Ignite a certain group of a certain music extension                |
| Single extension rapid fire   | The 16 or 32 groups of the music extension are ignited in sequence |

# 机器使用说明

# Instruction



|                         |                                                                                                                    |
|-------------------------|--------------------------------------------------------------------------------------------------------------------|
| USB Read 下载按钮           | 插入 U 盘后下载编排到主机                                                                                                     |
| 功能按钮②、④                 | 不同模式下功能选择：<br>②：检测模式-检测分机<br>点火模式-自动点火<br>④：检测模式-检测点火头<br>点火模式-手动点火                                                |
| 功能按钮⑥（⌂）                | 返回到功能选择页面                                                                                                          |
| 功能按钮⑦（  ）               | 自动燃放模式下如果在主机工作时发生意外情况，只需按下[  ]按钮即可暂停燃放。后续可通过按[Start/Next]键恢复燃放，系统将完成其余的燃放任务。                                       |
| [Start / Next]按钮功能      | 1、开始燃放的功能<br>2、在手动燃放模式下，若在一个燃放过程中按下按钮，它将立刻跳转到下一个燃放操作。                                                              |
| Terminal Switch<br>终端开关 | 主机与分机的供电与通讯开关。<br>上：关闭          下：打开                                                                               |
| [Setting]模式设置           | 三档：Test/Lock/Fire<br>Test：检测模式<br>Lock：锁定模式<br>Fire：点火模式                                                           |
| 两组接线柱<br>（A、B 路输出）      | 在一些大型演出中，可能会出现一个分机 36 组不够用的情况（每个分机实际要做的燃放操作命令超出 36 个）。增加一组接线柱，在编排时可以单 A 区或单 B 区或 AB 区同时输出。相当于给每一个分机增加了 36 组燃放操作空间。 |

|                                |                                                                                                                                                                                                                                                                                                                                                                |
|--------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| USB Read                       | Insert the USB flash drive and download plan to the host                                                                                                                                                                                                                                                                                                       |
| Function Button ②④             | Function selection in different modes:<br>②: Test Mode-test extension<br>Fire Mode-automatic ignition<br>④: Test Mode-test igniter<br>Fire Mode-manual ignition                                                                                                                                                                                                |
| Function Button ⑥（⌂）           | Return to the "Function Selection" page                                                                                                                                                                                                                                                                                                                        |
| Function Button ⑦（  ）          | If an unexpected situation occurs while the host is working, just press the [  ] button to stop the ignition. You can press the [Start/Next] button to resume, and the system continues to perform remaining tasks.                                                                                                                                            |
| Start / Next                   | 1. Start ignition function<br>2、In manual ignition mode, if a button is pressed during one setting off process, it will immediately jump to the next setting off operation.                                                                                                                                                                                    |
| Terminal Switch                | Power supply and communication switches for the host and extension<br>up: off          down: on                                                                                                                                                                                                                                                                |
| [Setting] Mode setting         | Three mode: Test/Lock/Fire                                                                                                                                                                                                                                                                                                                                     |
| Two binding posts (A、B Output) | In some large performances, a 36-group extension may not be enough. (The actual number of firing commands to be performed by each extension exceeds 36.) Set two binding posts, and you can output only A zone, only B zone, or AB zone at the same time during programming. This is equivalent to adding 36 sets of firing operation space to each extension. |

## ◇显示屏

TX-3200 主机的显示屏，有助于您检查燃放计划，或者了解正在进行的燃放表演的状态。

## ◇锁定模式说明

**[Setting]—Lock.** 确认[Terminal Switch 终端开关]关闭，否则机器一直报警。

只能在此模式下下载编排。

## ◇检测模式说明

**[Setting]—Test.** 确认[Terminal Switch 终端开关]打开，分机电压正常，否则机器一直报警。

检测分机：

- 1、检查编排分机总数
- 2、用于检测主机与分机的连接状态

检测点火头：

- 1、检查编排编排点火头总数
- 2、用于检测点火头的连接状态

## ◇点火模式说明

**[Setting]—Fire.** 确认[Terminal Switch 终端开关]打开，分机电压正常，否则机器一直报警。

自动燃放点火：

按下启动键[Start/Next]后，主机自动开始燃放。

手动燃放点火：

每按一次启动键[Start/Next]，主机按照编排序号发送一条点火命令。

## ◇Display

There is a screen on the host where you can view your ignition plan or see the progress of the ignition in progress.

The display screen of the TX-3200 helps you check the fireworks display plan or understand the status of the ongoing fireworks display.

## ◇Lock Mode

**[Setting]—Lock.** Confirm that the [Terminal Switch] is turned off, otherwise the machine keeps alarming.

The display plan can only be downloaded in this mode.

## ◇Test Mode

**[Setting]—Test.** Confirm that the [Terminal Switch] is turned on and the voltage of the extension is normal, otherwise the machine keeps alarming.

Test extension:

- 1、Check the total number of extensions
- 2、Check the connection status between the host and the extension

Test igniter:

- 1、Check the total number of igniters
- 2、Check the connection status of igniters.

## ◇Fire Mode

**[Setting]—Fire.** Confirm that the [Terminal Switch] is turned on and the voltage of the extension is normal, otherwise the machine keeps alarming.

·Automatic ignition:

After pressing the Start button [Start/Next], host will automatically start.

·Manual ignition:

Each time the Start button [Start/Next] is pressed, the host sends an ignition command according to the fireworks display plan number.

# 操作说明

## 制定一个燃放计划，并载入到主机

1. 在您的电脑上安装软件(安装步骤在本手册末)。软件在随附的 U 盘中。
2. 使用软件制定燃放计划
3. 将脚本导出到 U 盘中。**注：文件命名用英文或者数字**
4. 将 U 盘插入主机，按下 [USB Read]，显示屏上显示 ok 后，编排读取成功。

## 连接分机

该主机可与音乐分机有线连接。

主机和分机之间用 2 芯电线连接。并且连接时无正、负极问题。



## 燃放前检查

1. 检查主机电量  
打开主机电源，显示屏右上角显示主机电量。
2. 检查主机和分机之间的连接  
完成检测模式下检测分机的步骤。
3. 检查每个分机的区号  
使用写码器写入分机编号，确保每个分机上的区号按照您的计划正确设置。
4. 检查分机与烟花的连接  
完成检测模式下检测点火头的步骤。

一切准备就绪后，将主机[Setting]开关打到 Fire 模式，选择自动点火，按下启动按钮[Start/Next]，整个系统开始工作，按燃放计划开始自动顺序点火操作。

# Operation Instruction

## Make a ignition plan and Load it into the host

1. Install the software on your computer (installation steps are at the end of this manual). The software is on the included U disk.
2. Use software to make a ignition plan.
3. Export the script to the U disk. **Note: File names should be in English letters or numbers.**
4. Insert the U disk into the host, and it will automatically read and upload the script.

## Extension Connection

This host can be connected to the music extension.

·Wired connection

The host and extension are connected with a 2-core wire. And there is no problem of positive and negative electrode when connecting.



## Inspection Before Firing

1. Check the power of the host  
Turn on the power, the battery level of the host is displayed in the upper right corner of the screen.
2. Check the connection between the host and the extension  
Complete the steps for testing the extension in the test mode.
3. Check the code of each extension  
Use the coder to write the extension numbers and ensure that the code on each extension is set correctly according to your plan.
4. Check the connection between the extension and the fireworks/igniters  
Complete the steps for testing the igniters in the test mode.

When everything is ready, turn the [Setting] to Fire, select automatic ignition. press the [Start/Next] button to start the fire, the system starts working according to plan.

## 问题建议解决方案

如果此处未列出您的问题，请联系您的供应商寻求支持。

### 1. 系统不工作

- a. 检查电源开关
- b. 给设备充电并重试

### 2. 检查系统

- a. 检查主机和分机之间的有线连接是否正常
- b. 检查各个分机与点火头连接是否正常
- c. 检查分机的区号设置 (District) 是否正确，它应该和您的燃放方案一致
- b. 检查每个分机上的连接指示灯，确保每个烟花都已正确连接。

### 3. 不能正常点火

- a. 检查主机的 Setting 开关，确保其处于 Fire 位置
- b. 确保你按下了主机上的开始按钮 (Start /Next)
- c. 检查是否按了主机上的 “||” 暂停按钮

## Problem Suggestion Solution

If your problem is not listed here, please contact your provider for help.

### 1. System not working

- a. Check the power switch
- b. Charge the device and try again

### 2. Check the system

- a. Check whether the wired connection between the host and extension is ormal
- b. Check whether the connection indicators on each extension are normal
- c. Check whether the extension's number (District) is correct. It should be consistent with your firing plan
- d. Check the connection indicator lights on each extension to ensure that each firework is connected correctly

### 3. Cannot ignite normally

- a. Check the safety switch and make sure it is in the ON position on the host
- b. Make sure you press the [Start/Next] button on the host
- c. Check if the [||] pause button on the host is pressed

## 软件安装

！ 安装前请关闭杀毒软件

请联系供应商提供软件安装包及安装教程

## Software Installation

！ Please close anti-virus software before installation

Please contact your supplier for the software package and installation instructions.

