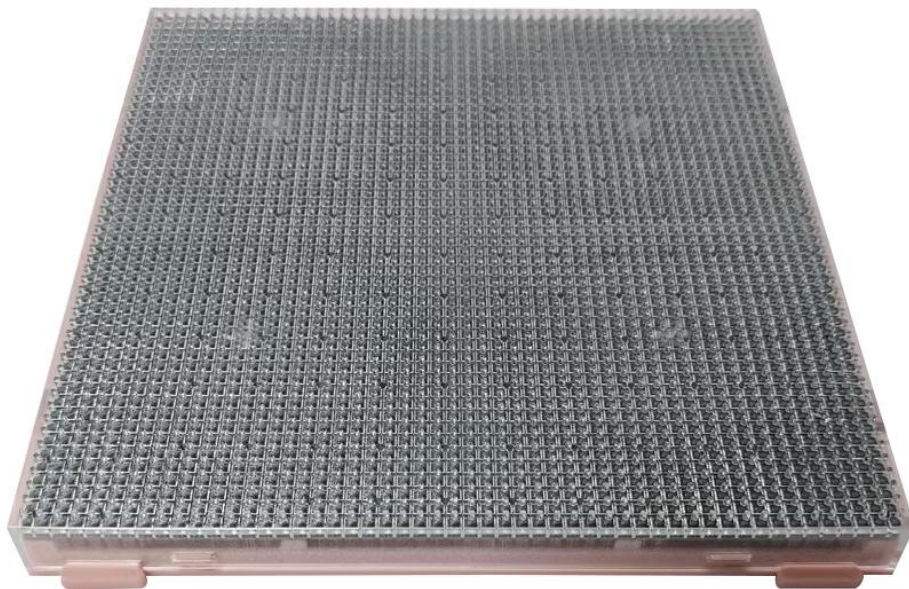


Pin Ge Dou Ba (Plug and Play) Software V1.0.24

Instruction Manual



1. Software Introduction

The Piggy Smart Piggyboard Control System is an integrated control, creative editing, content management, and social interaction platform software for smart bead-making devices. As the core supporting system for smart bead-making hardware, it deeply integrates the entire process of device connection, network configuration, visual creation, parameter adjustment, material management, firmware upgrade, and work sharing. With its extremely simple operation logic and powerful creative capabilities, it creates a low-threshold, high-freedom pixel bead-making experience for users, completely breaking the creative limitations of traditional handmade bead-making and achieving a seamless connection between digital creativity and physical bead-making devices, making bead-making creation more efficient, flexible, and fun.

This software is designed with intelligent interaction, convenient operation, and unlimited creativity as its core design concepts. Equipped with a stable Bluetooth connection and network configuration module, it can quickly complete device pairing and network parameter

settings, ensuring real-time and stable communication between the software and hardware devices. This eliminates the need for complex manual debugging processes; it's plug-and-play. The software includes professional pixel art creation tools, supporting advanced editing functions such as custom canvas size, switching between multiple color schemes, precise color filling, area erasing, canvas parameter adjustment, and importing external drawings. Whether it's simple patterns, fun text, dynamic animations, or complex pixel art, you can easily create your own works, meeting the dual needs of beginners and experienced users seeking in-depth creation.

Meanwhile, the software has built a rich and comprehensive material resource system, with a massive library of high-quality Perler bead templates covering diverse styles such as cartoon characters, text slogans, holiday patterns, minimalist icons, and dynamic animations. Users can access and quickly modify these templates with a single click, eliminating the need to start from scratch and significantly improving creative efficiency. The local image library module can uniformly

store and save original works and downloaded materials, supporting quick retrieval, repeated editing, and one-click screen projection for efficient management of creative content.

At the device control level, the software supports parameter settings such as screen brightness adjustment, animation playback speed control, full-screen display switching, and loop playback of works. It can freely adjust the device's operating status according to the usage scenario, adapting to various scenarios such as indoor display, portable decoration, desktop ornament, and gift creation. The built-in firmware upgrade function can automatically detect the device version and complete online upgrades, continuously optimizing device performance, expanding new functions, and ensuring long-term stable use and functional iteration of the device.

In addition, the software features creation sharing and community interaction capabilities, allowing users to easily share their original Perler bead creations to social media platforms. Users can exchange ideas and showcase their work with other Perler bead enthusiasts, building their own dedicated social circle for Perler

bead creation. The software boasts a clear interface, simple interaction logic, and smooth operation, requiring no complex professional knowledge. It's easy for teenagers aged 14 and above, as well as adults, to quickly learn and use. It's not just a control tool for smart Perler bead boards, but also a digital creation platform that inspires creativity and unleashes imagination. It provides a brand-new smart Perler bead experience for craft enthusiasts and is widely applicable to various scenarios such as personal entertainment, parent-child interaction, creative crafts, desktop decoration, and cultural and creative production, making it a high-quality supporting software in the field of smart Perler bead creation.

2. Parameter's

Number	Project	Technical Parameters
1	Pixel composition	1R1G1BLED (SMD2121)
2	Pixel pitch	2.692mm
3	Module size	140*140mm
4	Module resolution	52*52 dots
5	Maximum white balance brightness	600-1000 cd/m ²
6	Gray level	Red, green, and blue ≥ 256 levels, up to 65536 levels
7	Out of control point 失控点	$\leq 1/10000$
8	Optimal viewing distance	≥ 40 cm
9	Viewing angle	Level: $\geq 120^\circ$ Vertical $\geq 120^\circ$
10	Refresh rate	≥ 60 Hz
11	Control method	Bluetooth
12	Waterproof grades and materials	IP65
13	Lifetimeh	$\geq 100,000$ hours.
14	Operating Voltage	DC5V, 50Hz ± 2 Hz
15	Environmental temperature and humidity	Temperature: $-20^\circ\text{C} \sim +60^\circ\text{C}$, Humidity: 10%-95%
16	Model	5252RGB
17	Power consumption (maximum/average)	7W
18	Product size	14.1*14.1*1.5cm
19	Packing size	23.1*16.2*5cm
20	Screen weight	0.2kg
21	Carton size	52*52*34cm
22	Carton weight	40pcs/13.5KG
23	Switching power supply	DC5V/2A

Scope of application: This product is suitable for use by teenagers aged 14 and above and adults. It is not recommended for children under the age of 14.

Precautions for use: Children under the age of 14 must be supervised by an adult at all times to avoid accidental ingestion or misuse, which could lead to safety risks.

3. Operating Instructions

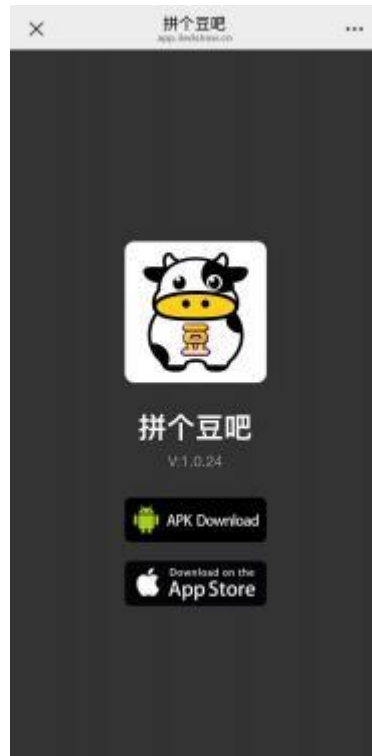
3.1. Software Download

Turn on Bluetooth and location services, scan the QR code below to access the app download page.



3.2. Download the APP

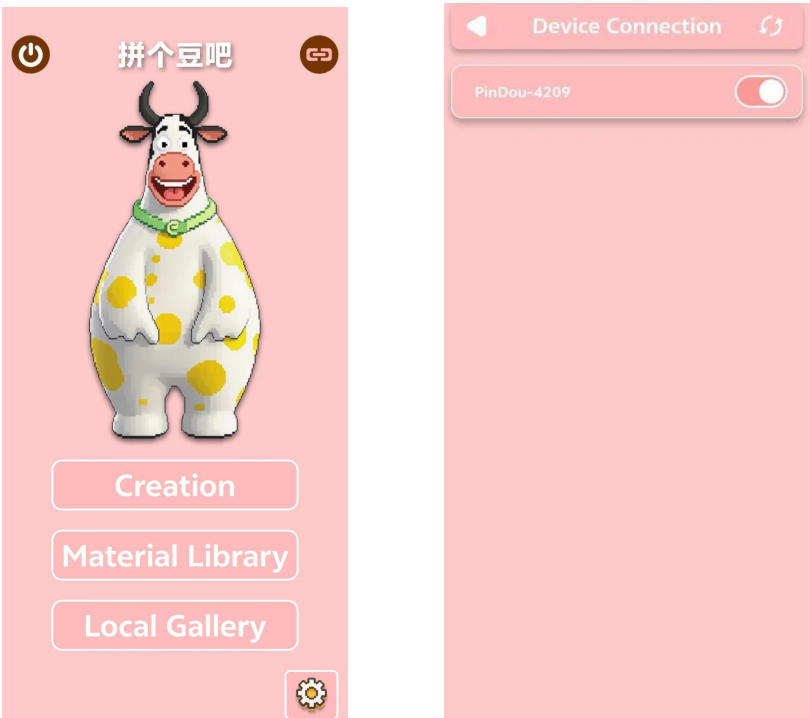
After scanning the QR code, click on the corresponding mobile phone system and select the appropriate system to install:



For Android phones, tap the black button at the top; for iPhones, tap the black button at the bottom.

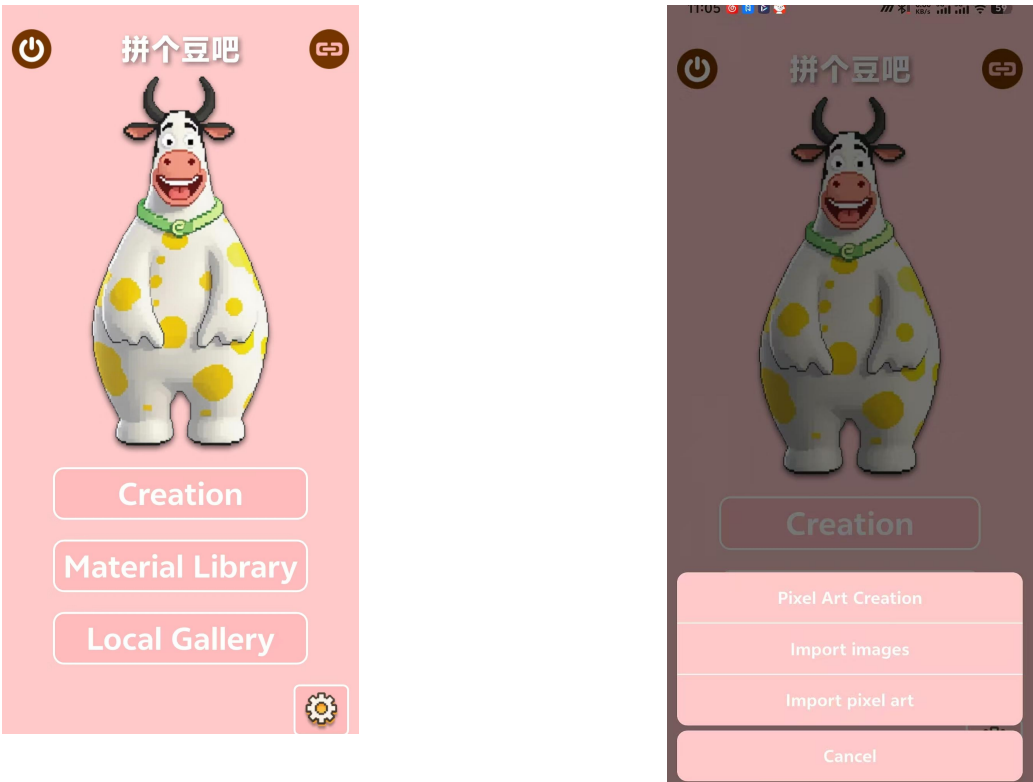
3.3. Enter the main interface

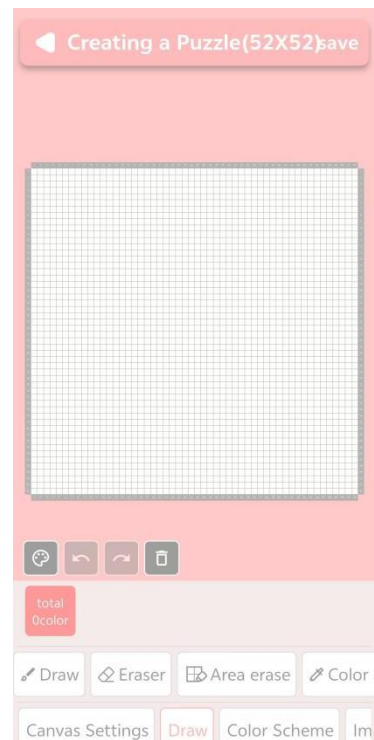
Power on the device; a code will appear on the screen. Open the app and tap the top right corner.  Button, connect to the corresponding product code



3.4. Creation Function

Click the "Create" button and select "Pixel Creation" to enter the pixel creation page.

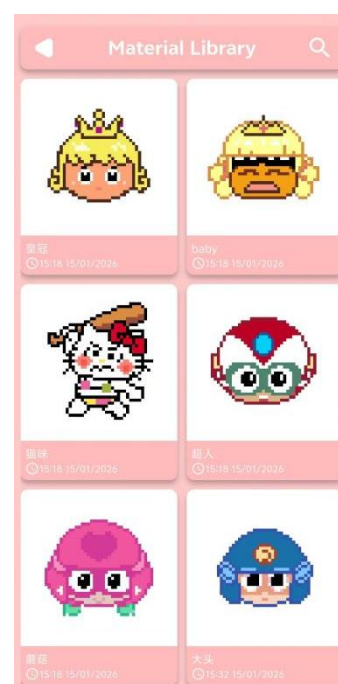
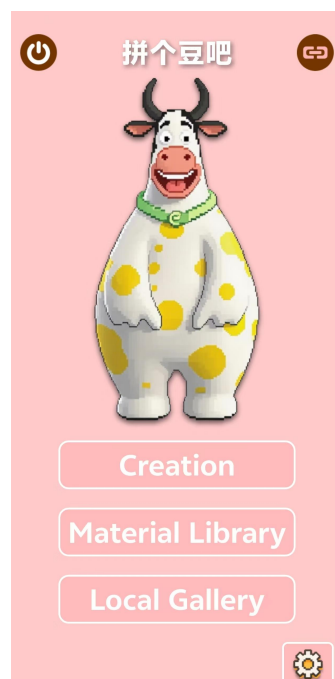


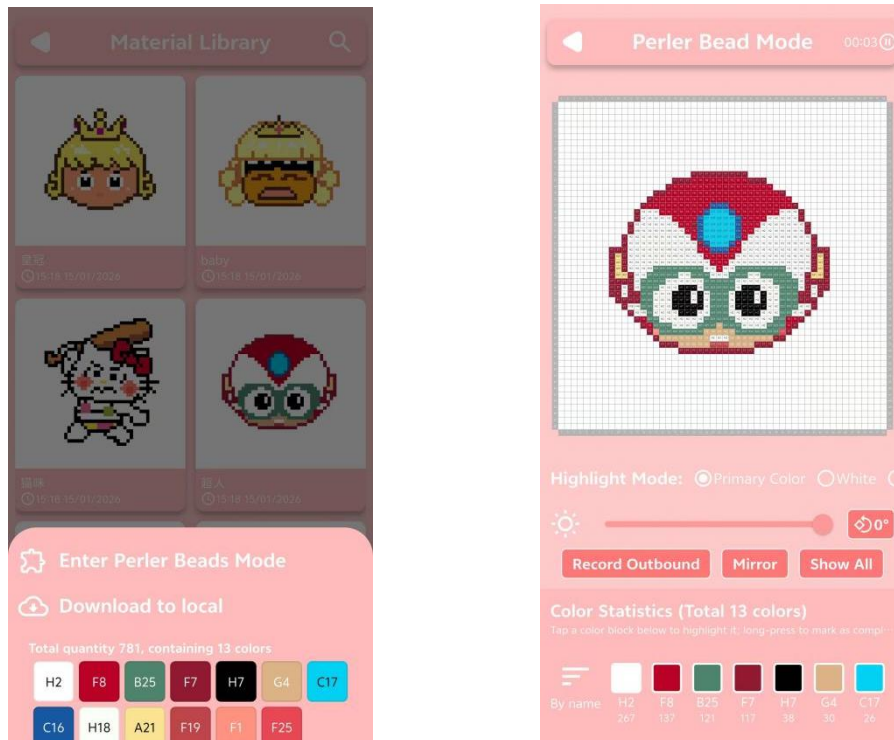


Once you have finished creating the image, click the save button in the upper right corner to save it. The saved image will then be displayed in this map library.

3.5. Resource Library Function

Click the "Material Library" button to enter the Material Library creation page.





Select any image and click to enter the bead creation mode. Click the "Show All" button to display your creation on the bead screen. Click "Download to Local" to download images from the image library to your local image library.

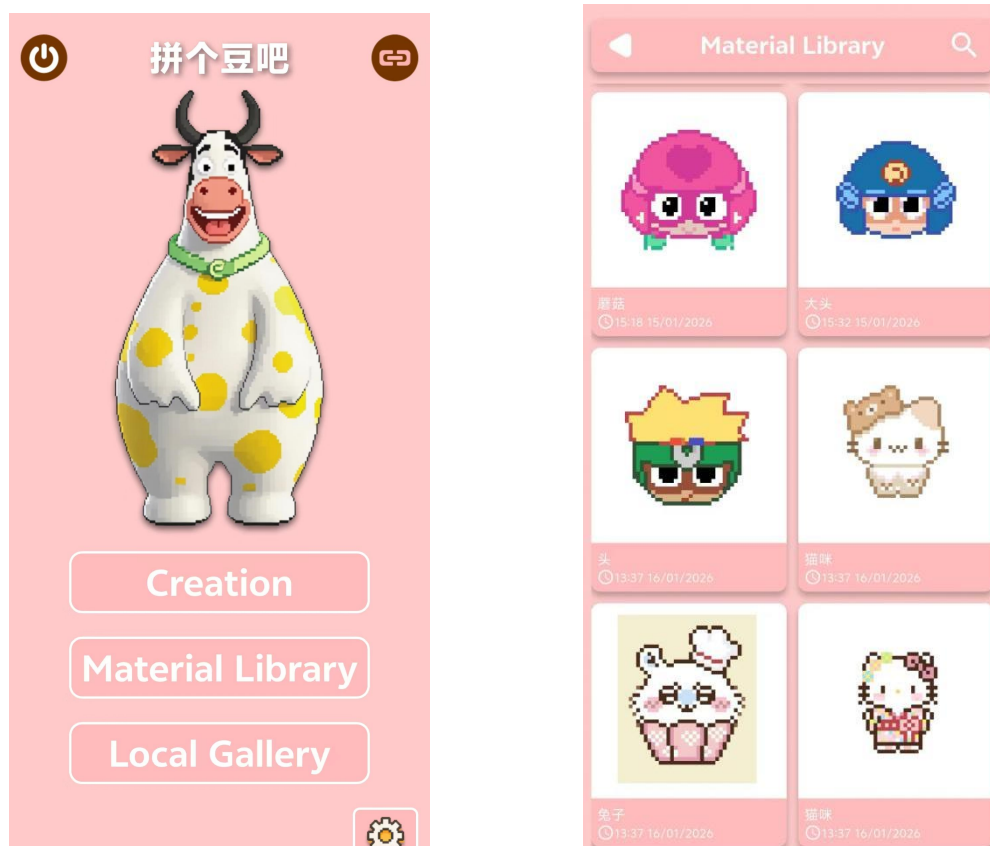
3.6 Functions of this map library

Click the Local Gallery button to enter the Local Gallery creation page.

3.6.1. Content Display: Includes original creations and downloadable materials.

3.6.2. Function Support: Search, preview, edit, delete, and project playback.

3.6.3. Secondary Creation: Select materials to enter the bean-bean mode for editing; you can overwrite and save or save a new work.



On the creation page, click on the saved materials and the materials library page. Materials downloaded to your local device will be displayed on this page. Select any material and click to enter the perlite mode to start creating.

FCC STATEMENT

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.

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

RF warning statement:

The device has been evaluated to meet general RF exposure requirement. The device can be used in portable exposure condition without restriction.

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.