Blasting System User Guide

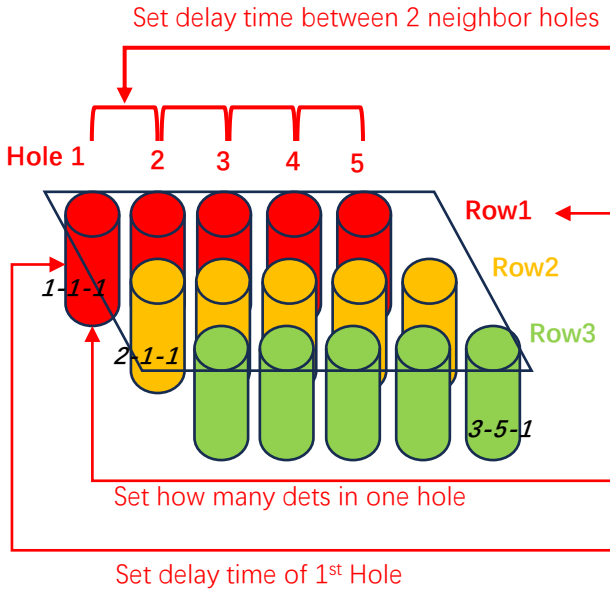
ChipDance

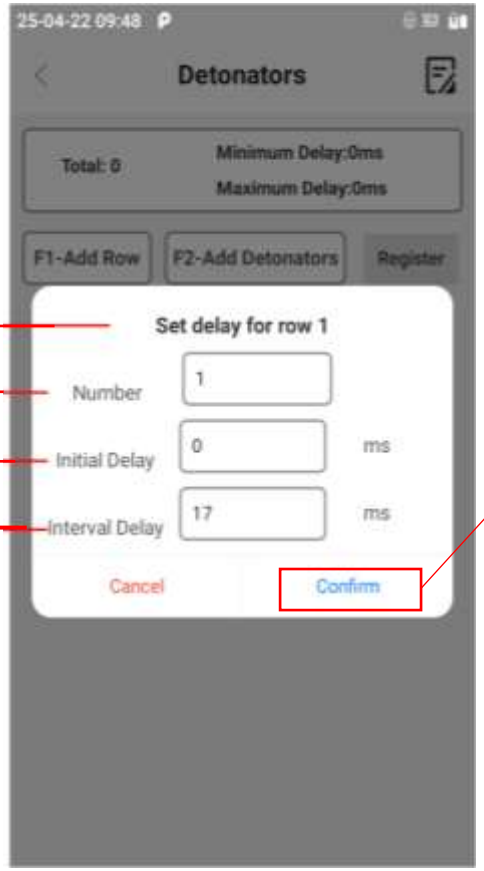
System Introduction

All devices below needed for normal blasting:

- Electronic Detonator with Chipdance ECM
- Logger
- Blaster
- Busbar (copper)
- Insulation tape (prevent leakage/short circuit)

Step 1 Registration: Pre-set Delay



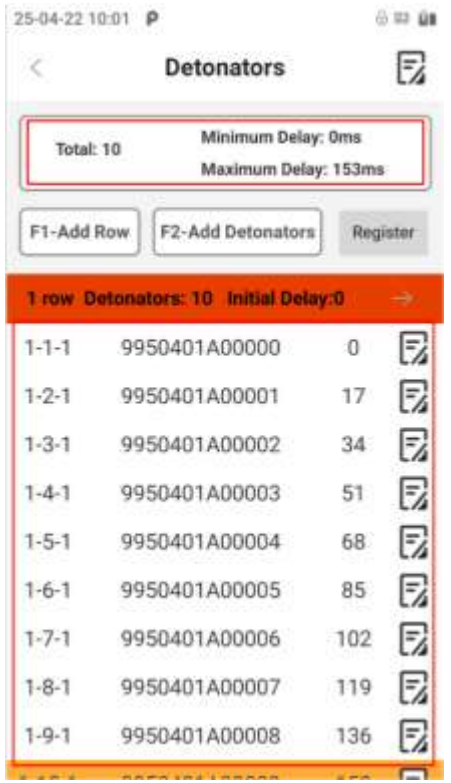


When user 1st time set the registration， there will be a chat box to pre-set the delay time for row1， click confirm to complete

Step 1 Registration: Register Det

After setting the delay time，you can register dets into this empty row in 3 different ways：

1. Scan Mode：Press the scan button（one of these three），let the beam align with the QR code on the bar. In this way user can continuously register dets. Please pay attention to the position of cursor, it points to the last hole in this row by default.

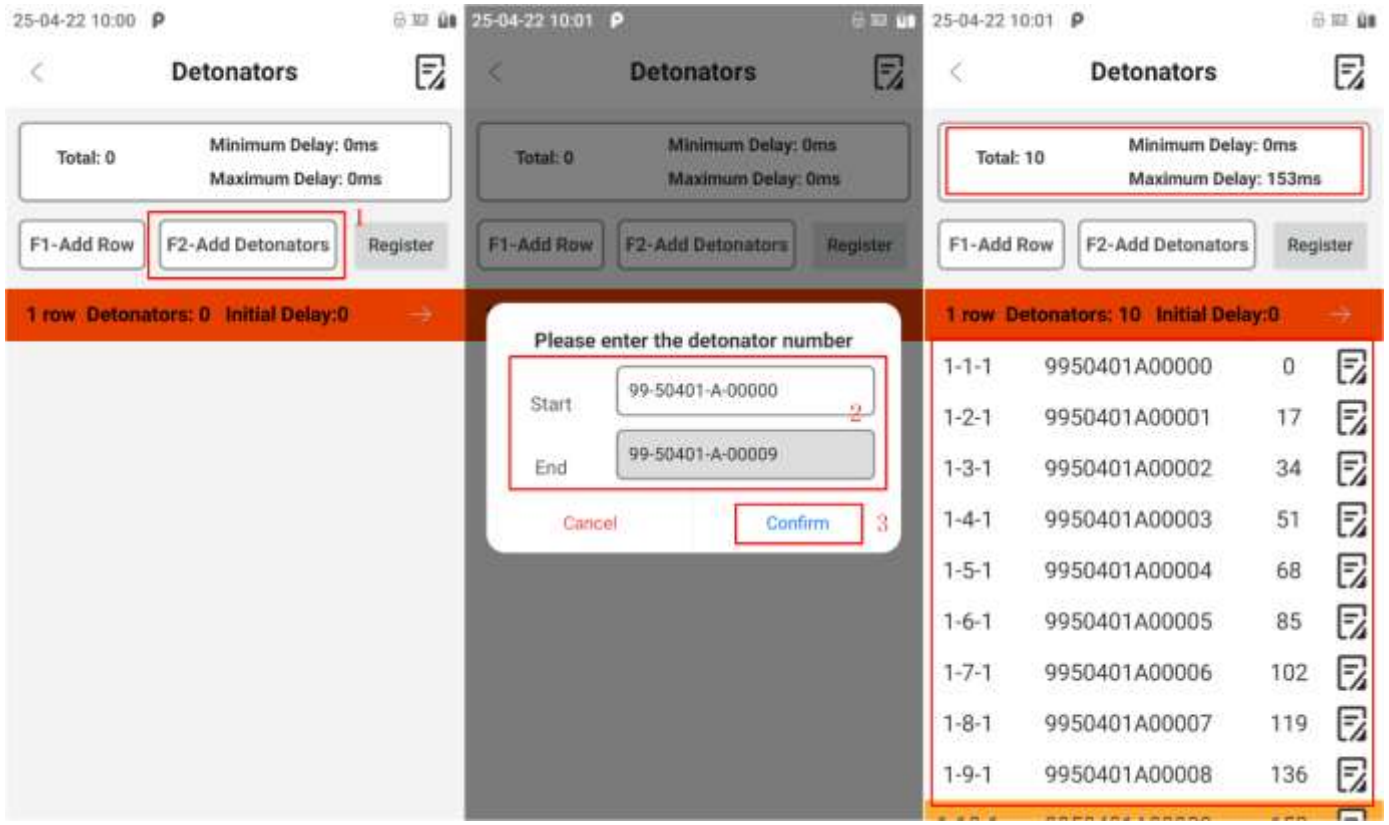


Step 1 Registration: Register Det

2. Shell Code Mode:

User can register dets into the row by input shell codes. The software will automatically correspond to the hole positions in the row based on the shell code sequence from start to end.
Here is the steps:

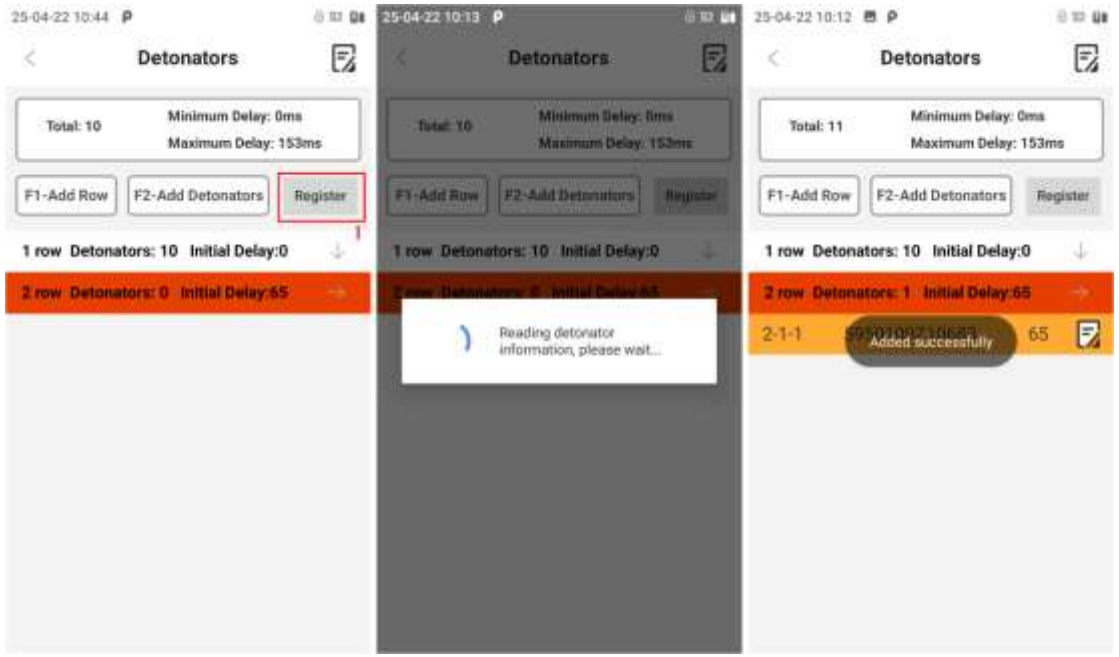
- Make sure there is a shell code marked on the det shell
- Select the row, click “Add Detonators”
- Input the start shell code and the end shell code
- Click “Confirm” to complete



Step 1 Registration: Register Det

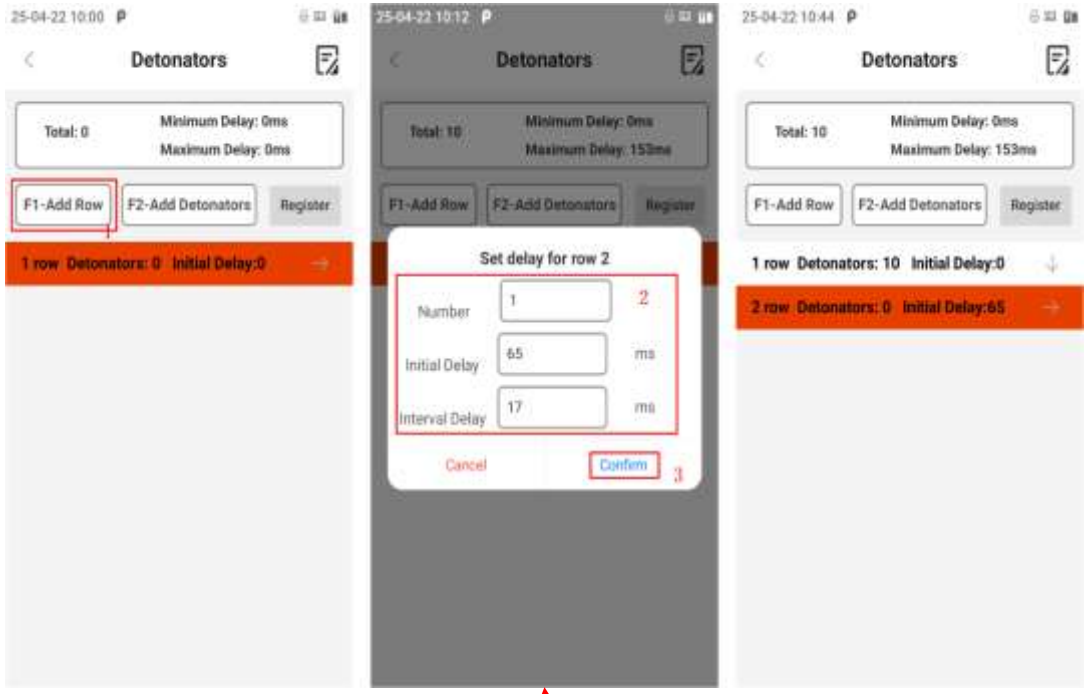
3. Wiring Mode:

- Link the detonator with the busbar connected to the Logger terminal
- Click "Register". The detonator will automatically start reading detonator information and assign delay to it.
- After registration is completed, the detonator needs to be disconnected from the busbar before proceeding with the next detonator operation.



Step 1 Registration: Add& Edit

User can add rows and set in different ways according to requirement. For example we already set for row1 and click “Add Row” to add row2 delay information:

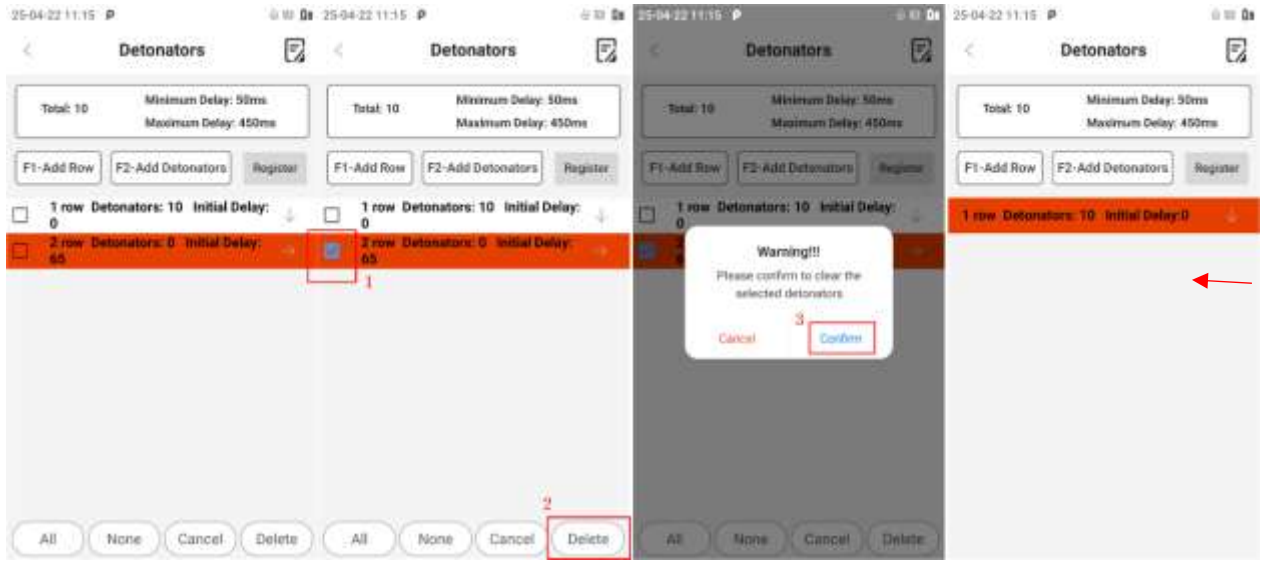


Add row

User can edit the delay info for either one row or one single det. Choose the row or det needed, click the pattern or press “Edit” to start, click "Confirm” to complete.

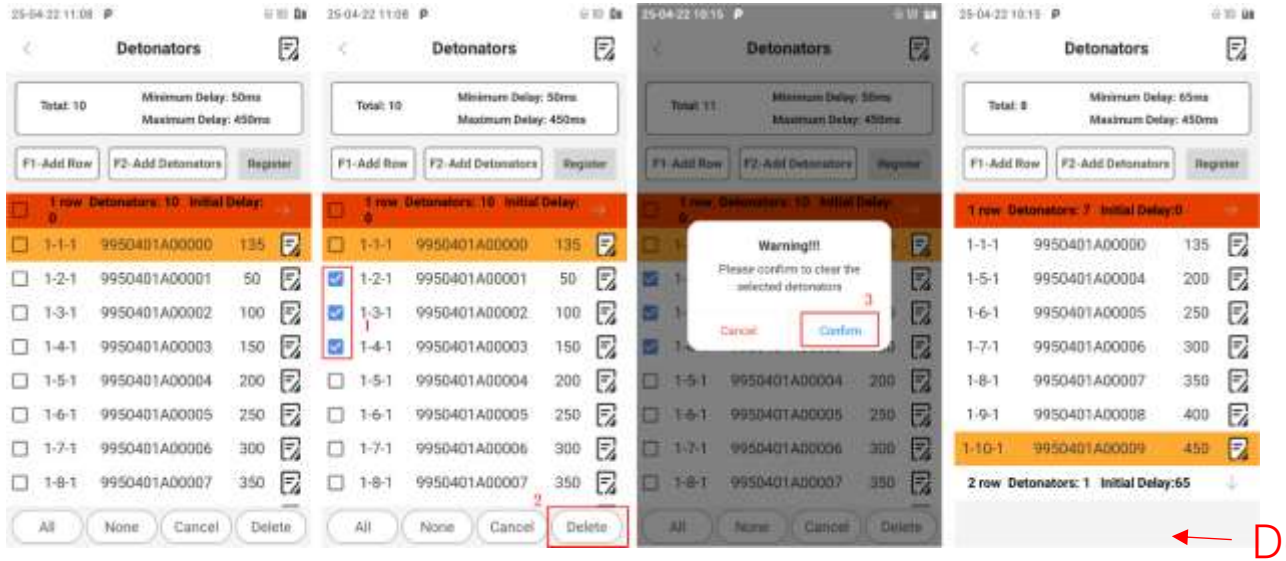
Step 1 Registration: Delete

Delete row:
When the row folded, long press the row, select the row (can multiple select), click "Delete", complete the warning prompt , click "OK" to delete the selected row data.



Delete row

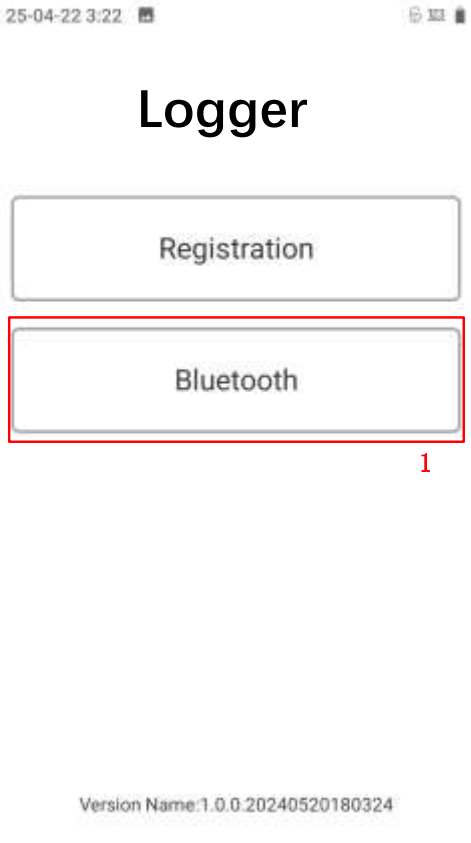
Delete det:
When the row unfolded, long press the det, select the row (can multiple select), click "Delete", complete the warning prompt , click "OK" to delete the selected row data.



Delete det

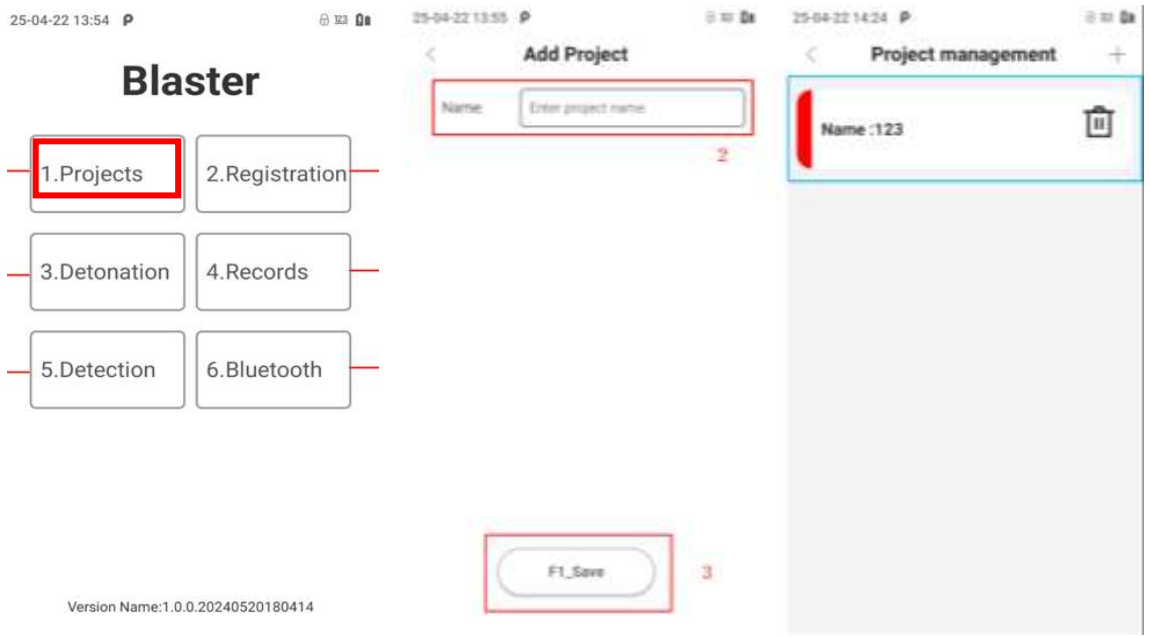
Step 1 Registration: Trans to Blaster

Click the "Bluetooth" button, and a QR code will be displayed on the screen. Scanning the QR code with **Blaster** can transfer the detonator data registered in Logger to Blaster.

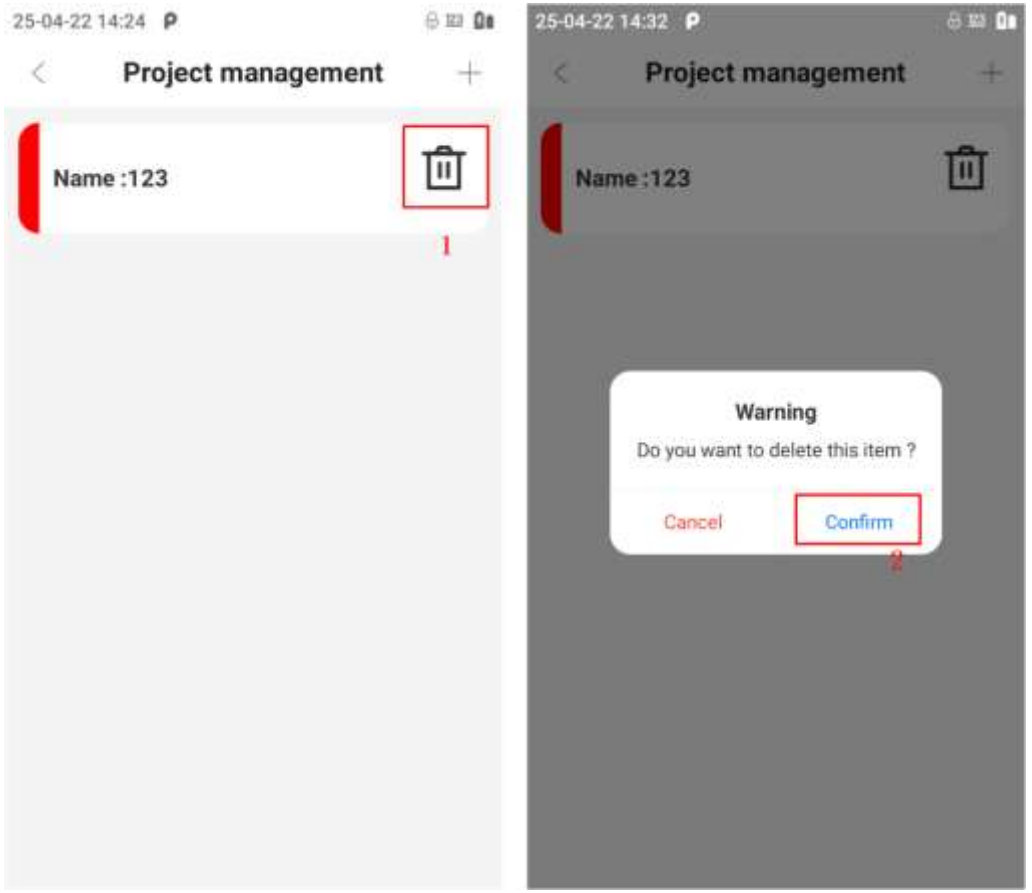


Step 2 Blasting: Create& Delete Project

When doing the first assignment, click “Project” to enter the project management page, click on the "+" sign in the upper right corner, enter the project information page, fill in the project name, and click "F1 Save" to save the project information.

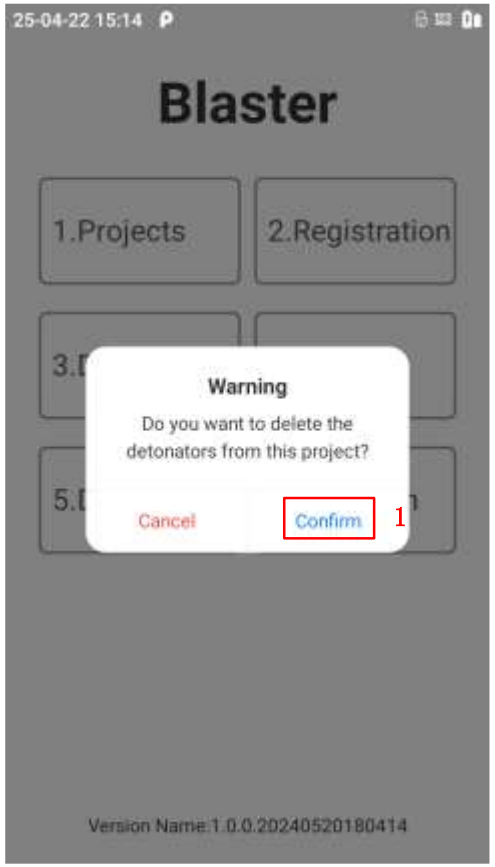


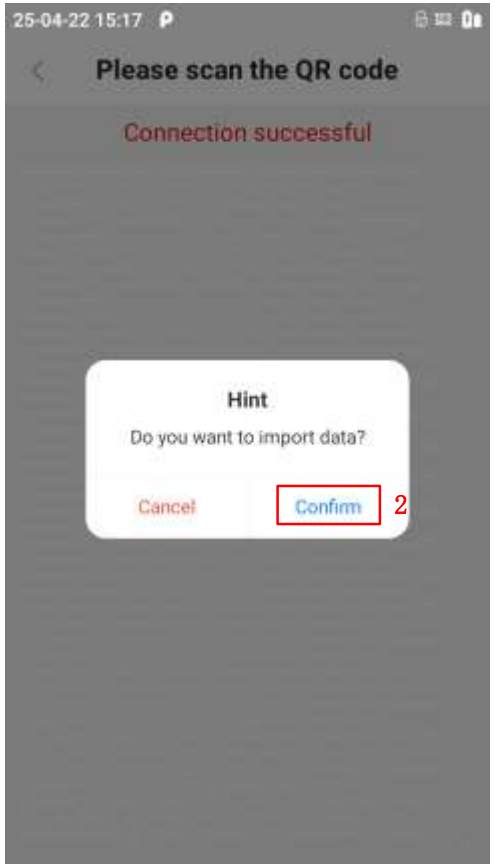
Click the delete button on the right side of the project information, and then click OK on the prompt interface.



Step 2 Blasting: Data Transfer

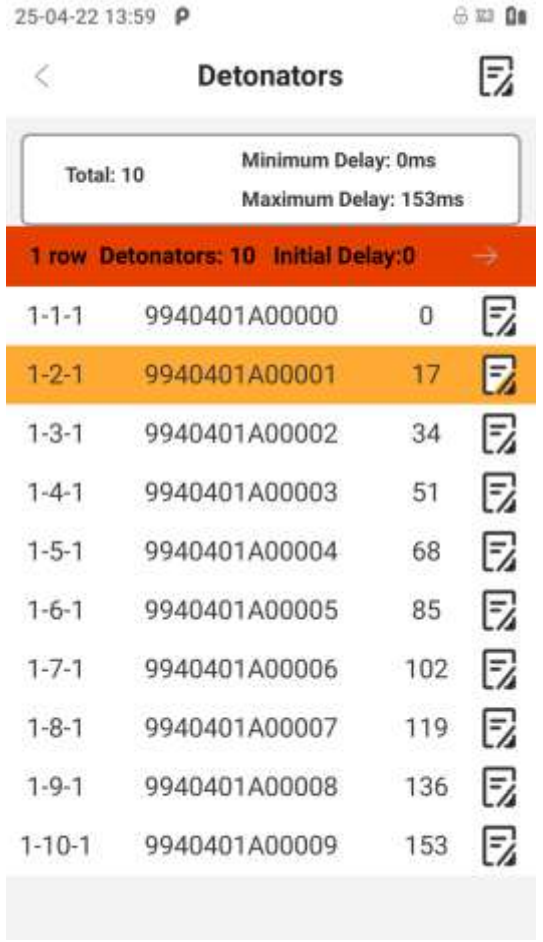
1. Consistent with the data transfer in step 1, click "Bluetooth" on **Logger** menu to generate a QR code.
2. Click "Bluetooth“ on **Blaster** menu to scan the QR code on **Logger**.
3. Click "Confirm" to import the data from Logger. The imported data will replace the detonator data in the current project.





Step 2 Blasting: Adjustment

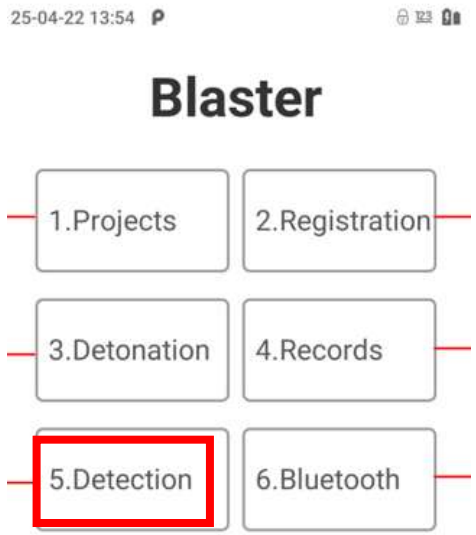
If it is necessary to adjust the registration data of detonators again, such as modifying the delay data of detonators and deleting detonators, click on registration and click on the edit icon on the right to operate in the same way as on the Logger

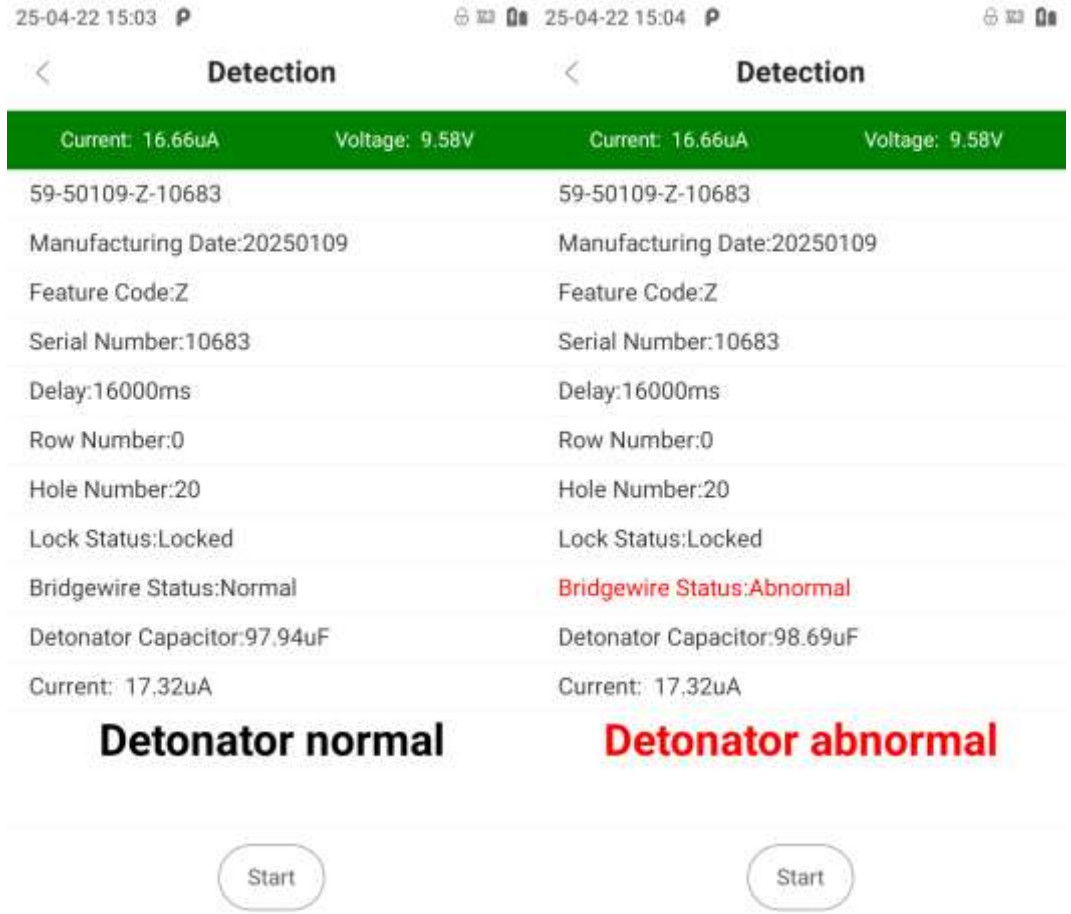


Step 2 Blasting: Single Detection(recommended)

Before blasting, it is recommended to do single shot detection :

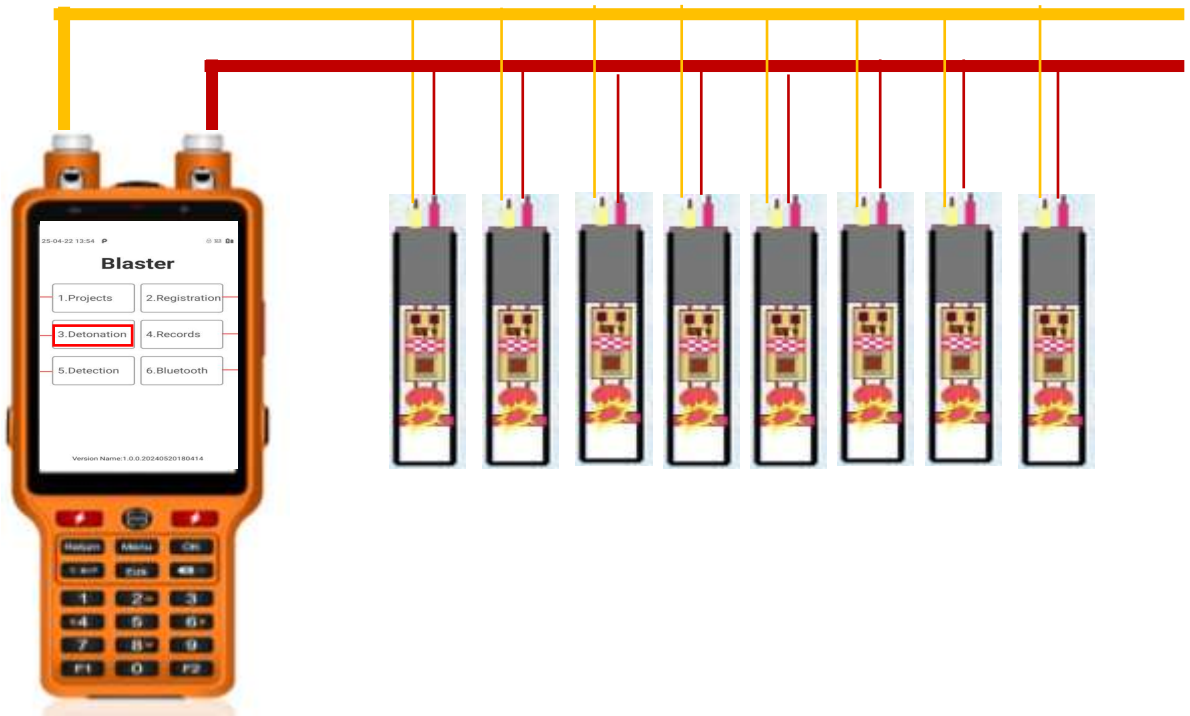
1. Click the "detection" button in the menu, and reliably connect the detonator to the detonator terminal.
2. Click 'Start', and the system will start detecting the connected detonator.
3. The detection results (detonator normal/detonator abnormal) will be displayed in the middle of the bottom of the screen

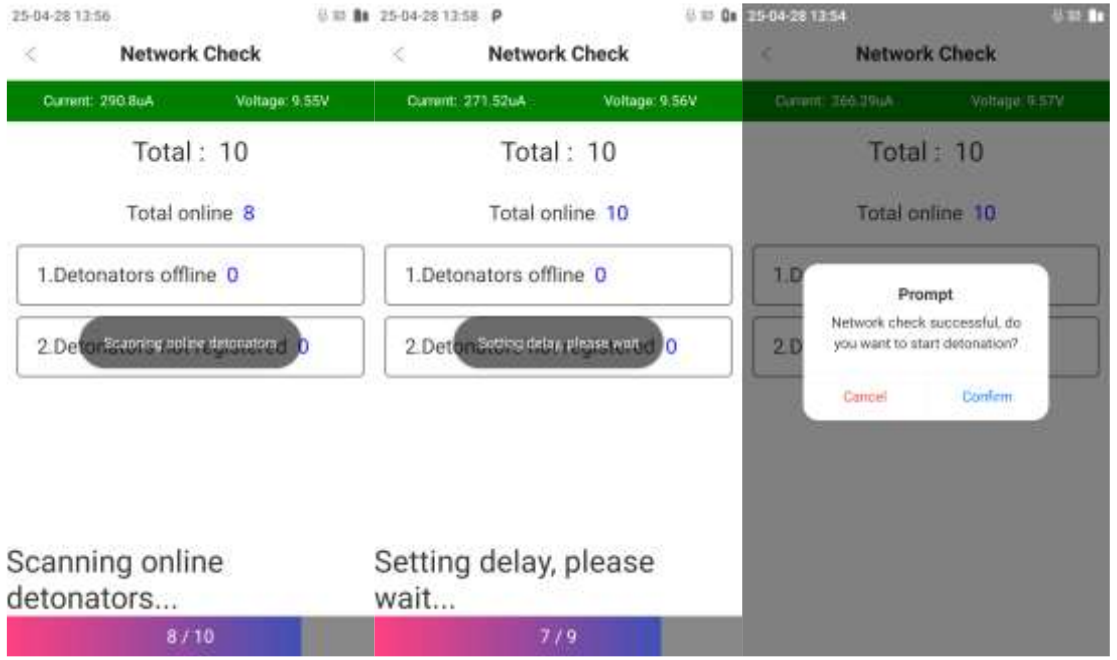




Step 2 Blasting: Network Detection

1. Connect the wire clamp of the electronic detonator to the busbar, and connect the busbar to the two terminals of Blaster.
2. Click ‘detonation’ to start network detection.
3. Blaster will compare the registered detonators with all linked detonators.
4. If the detection is successful, it will automatically enter the delay setting.





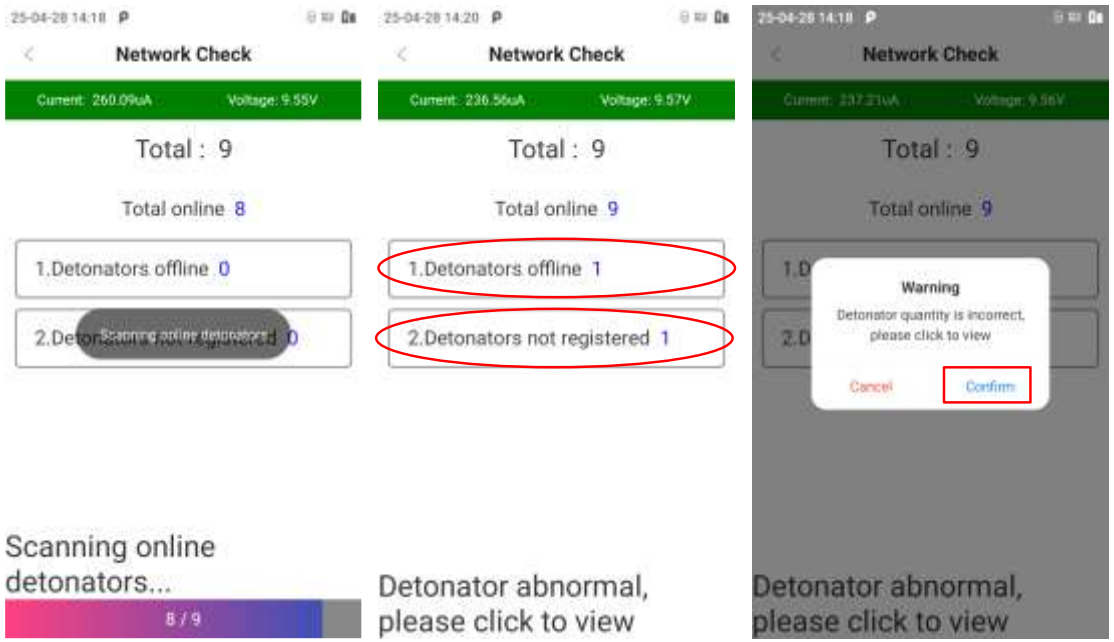
Step 2 Blasting: Errors

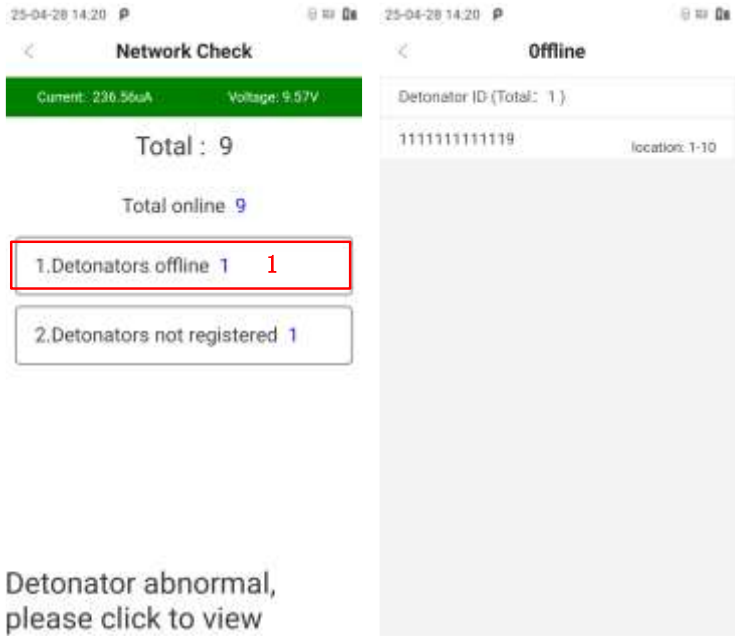
Within network detection, Blaster will automatically compare the selected registration with all connected detonators.

If the comparison is unsuccessful, click "Confirm" to check for abnormal detonators.

Type A: Detonators already registered but not connect to network will be displayed as "Detonator Offline";

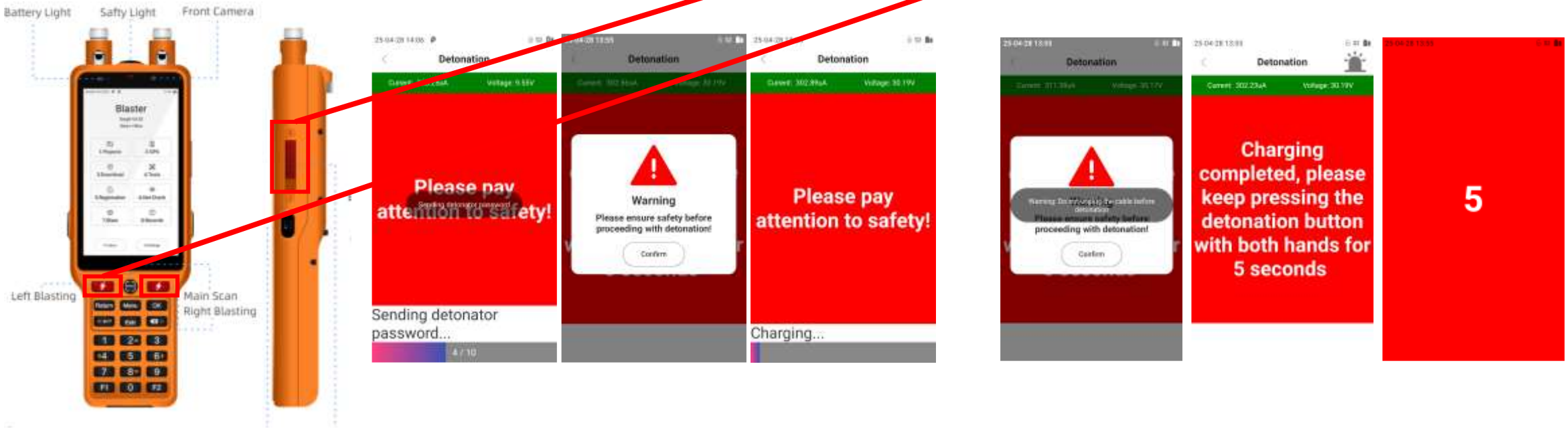
Type B: Detonators connect to network but not in the registration will be displayed as "Detonator not Registered".





Step 2 Blasting: Charging& Initiation

- After the delay setting is completed, click "Confirm" to enter the blasting process. The detonator will verify the password. After the password verification is successful, first turn on the "safety switch" on the side of the detonator, and then click "Confirm" charge.
- After charging is complete, click “Confirm”, and then long press the left& right button with both hands until the 5-second countdown ends. After the detonator issues the detonation command, it will automatically return to the menu.



Step 2 Blasting: Record

- After the blasting is completed, data will be generated.
- Upon entering the detonation record page, you can view the un uploaded and uploaded blasting data.