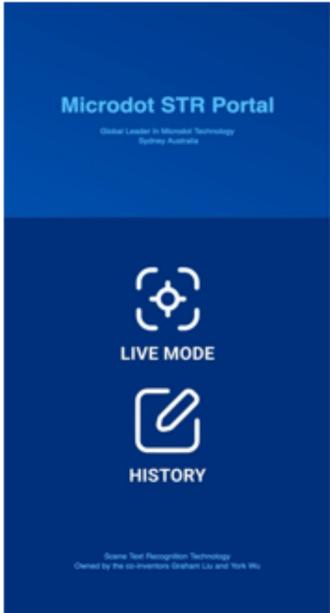


# Microdot STR Reader and SaaS System



Dashboard > Tracking History

Dashboard Data List Microdot List Tracking History >

Dot ID:  Search

Device ID	Time	Result	Dot ID	Data	Screenshot
AG_ExMTHyBWAOP99K	2024-07-05 05:07:22	Success	WBAK3420300J51905	wBAK3420300J5 FARMW...	
AG_ExMTHyBWAOP99K	2024-07-05 05:07:11	Not Found		3629EZA DATADOT ZA DTZ...	
AG_ExMTHyBWAOP99K	2024-07-05 05:05:47	Not Found		59AHTJ6300J5 AZA TSA...	
AG_ExMTHyBWAOP99K	2024-07-05 05:05:13	Success	AHTEZ39020709875	9G07C34374 AM ZA OT...	
AG_ExMTHyBWAOP99K	2024-07-05 05:04:35	Success	ZADOT1902191698M5	AD qMv ZACOTLA ADATA...	
AG_ExMTHyBWAOP99K	2024-07-01 01:54:31	Not Found		5MAZT EwAD08RE ACO...	
AG_ExMTHyBWAOP99K	2024-07-01 01:53:54	Not Found		wA089 MAZT wA089 SM...	
AG_ExMTHyBWAOP99K	2024-07-01 01:53:02	Success	AHTCB8CB04151367	OTSAM ZA OTSAN 41513...	
AG_ExMTHyBWAOP99K	2024-07-01 01:52:46	Not Found		63AA14SANESAF 18 385A...	
AG_ExMTHyBWAOP99K	2024-07-01 01:50:23	Success	AHTCB8CB04151389	AM ZACTSAM ZA CTSAN...	

Bringing microdot asset marking technology into the new World of AI and ML supported technologies

Making law enforcement more effective and de-powering organised crime and other fraudulent activities

## Installation and Operation Guide



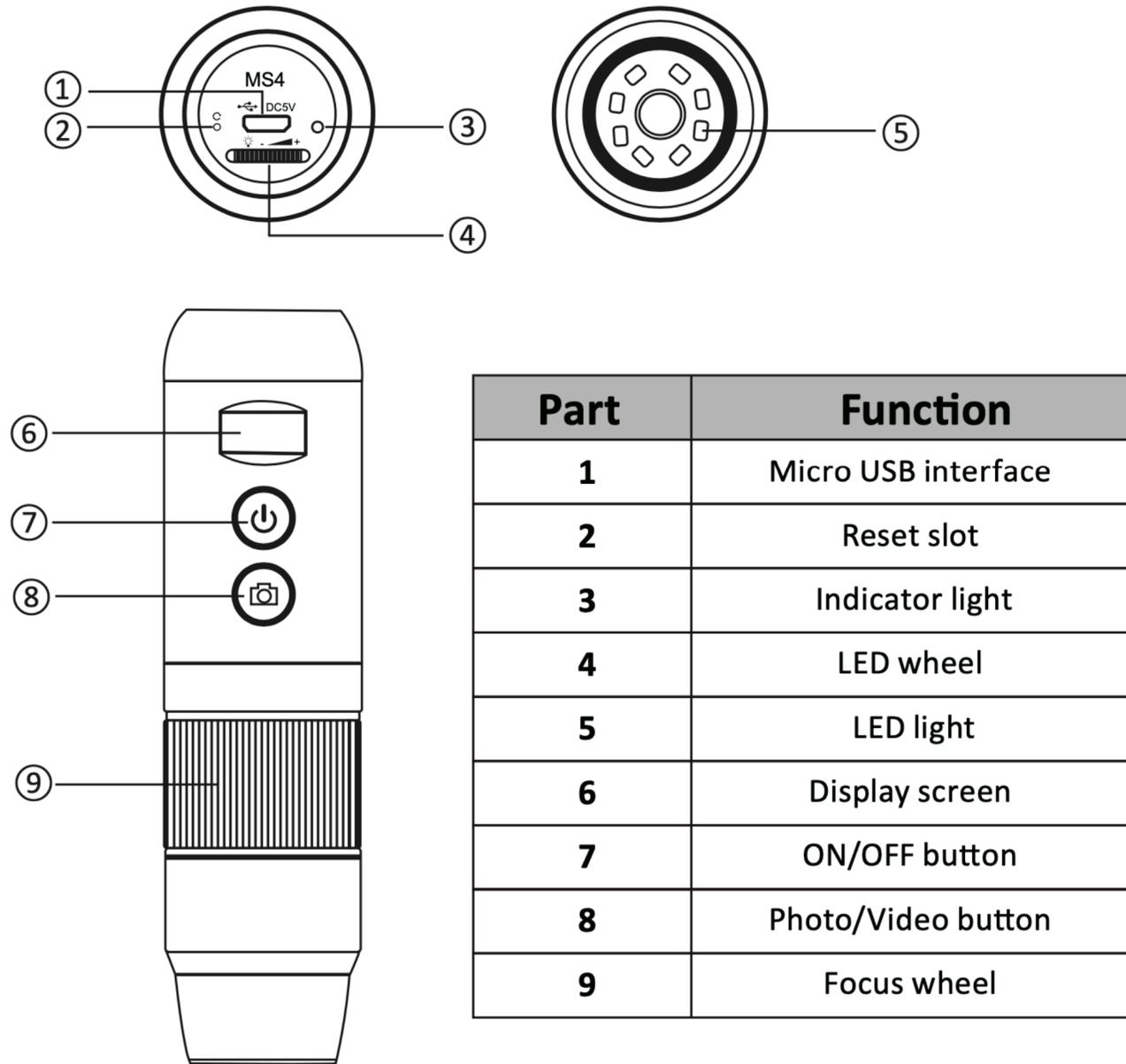


## Micro-STR Custom Reader



**\* Australian Provisional Patent, June 2023.**

# M-STR Reader



## Parts and Functions

- **Micro USB Interface:** Connect USB to charge
- **Reset slot:** If the operation of the reader is abnormal, poke with a needle or toothpick to force shutdown. (Note: After shutdown, long press the **ON/OFF** button to restart the machine.)
- **Indicator light:** During charging, the indicator light is red; after full charge, the indicator light is off.
- **LED wheel:** Turn the knob to adjust the brightness of the LED light.
- **LED light:** Supplements the ambient light.
- **Display screen:** Displays the battery power and Wi-Fi/USB connection status.
- **ON/OFF button:** Long press to turn the reader on/off.
- **Photo/Video button :** N/A in this latest version as the photo capture function is in the phone APP.
- **Focus wheel:** Place the reader firmly on the observed object and slowly rotate the focus wheel until the picture is clear.
- **Not shown in graphic:** On the reverse side of the reader is a circle indent on the plastic. Turn this to face the operator to help locate the object.

# Download the M-STR app version\* to your Android phone



<https://www.dtsinter.com/download/MicrodotSTR.apk>

- Use mobile phone/tablet camera to scan the QR code, or input the http link in the default browser to download the APP.
- The download file should be named 'MicrodotSTR.apk'
- Ignore the 'unknown source' warning (if it appears) and grant permission to install the APP.

NOTE: The APP will regularly update with enhancements. Any issues when activating the app, contact your local M-STR licence holder or [info@dtsinter.com](mailto:info@dtsinter.com)

**\* The APP is compatible with different microdot manufacture's type – the dot material and shape. However, the APP link will vary depending on the region you are operating in, and dot types used in your region. Also functionality will vary. The above is a default link.**



Examples of 2 types of microdots, both showing a 17 character motor vehicle VIN

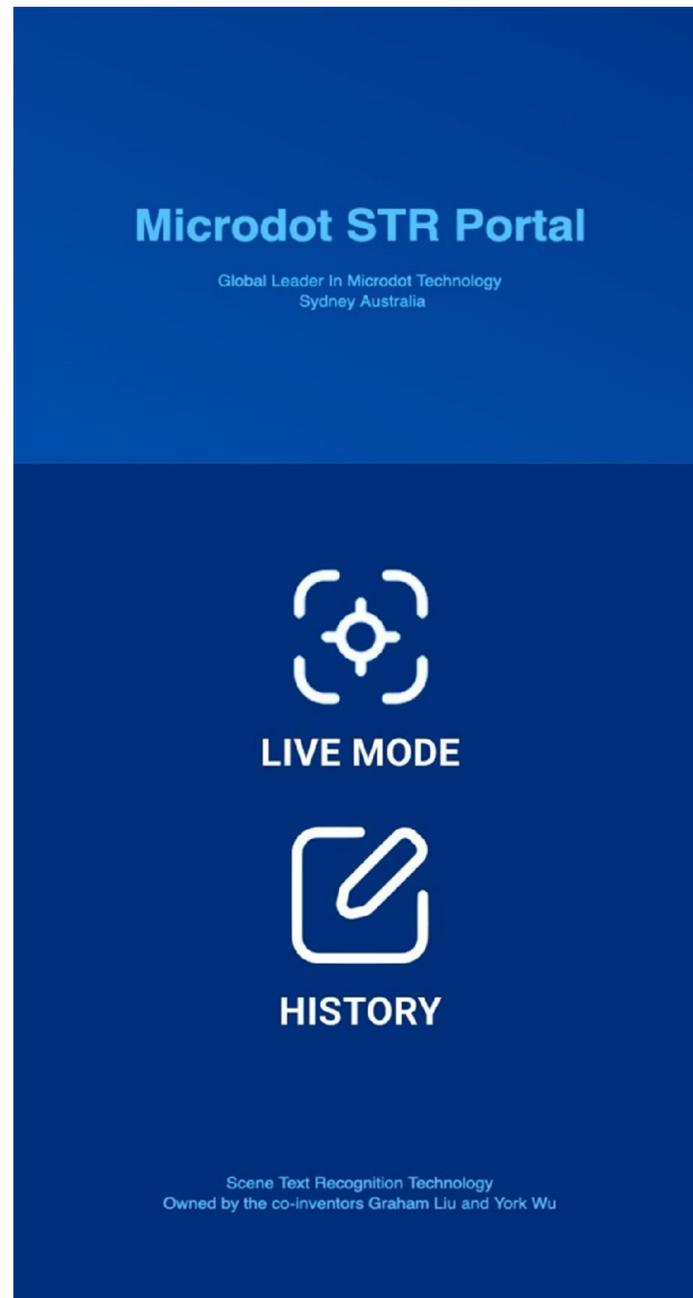
# Activate the Reader



- Long press the ON/OFF button to switch on the reader.
- Once the LED lights up, the reader is ready for scanning.
- Check the battery status bar in the top display screen, if the power is low, charge the reader.
- Use the cross-hairs on the hole in the centre of the clear shroud around the LED to help aim at the dot. Tilting the reader slightly will help to see the cross-hairs over the target dot. Then straighten the reader to focus on that dot.



# M-STR APP

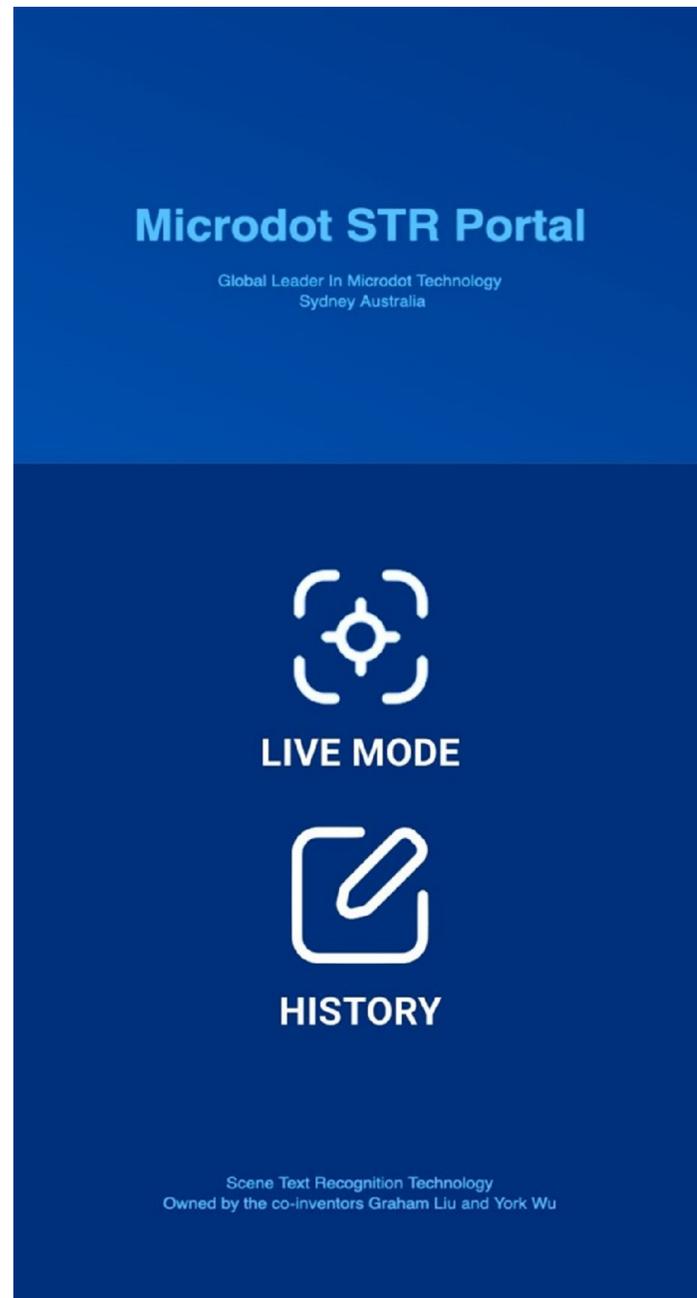


- Open the Microdot STR APP
- Input the Username/Password to login

**NOTE: Ensure the mobile phone has internet connection before you log in to the system.**

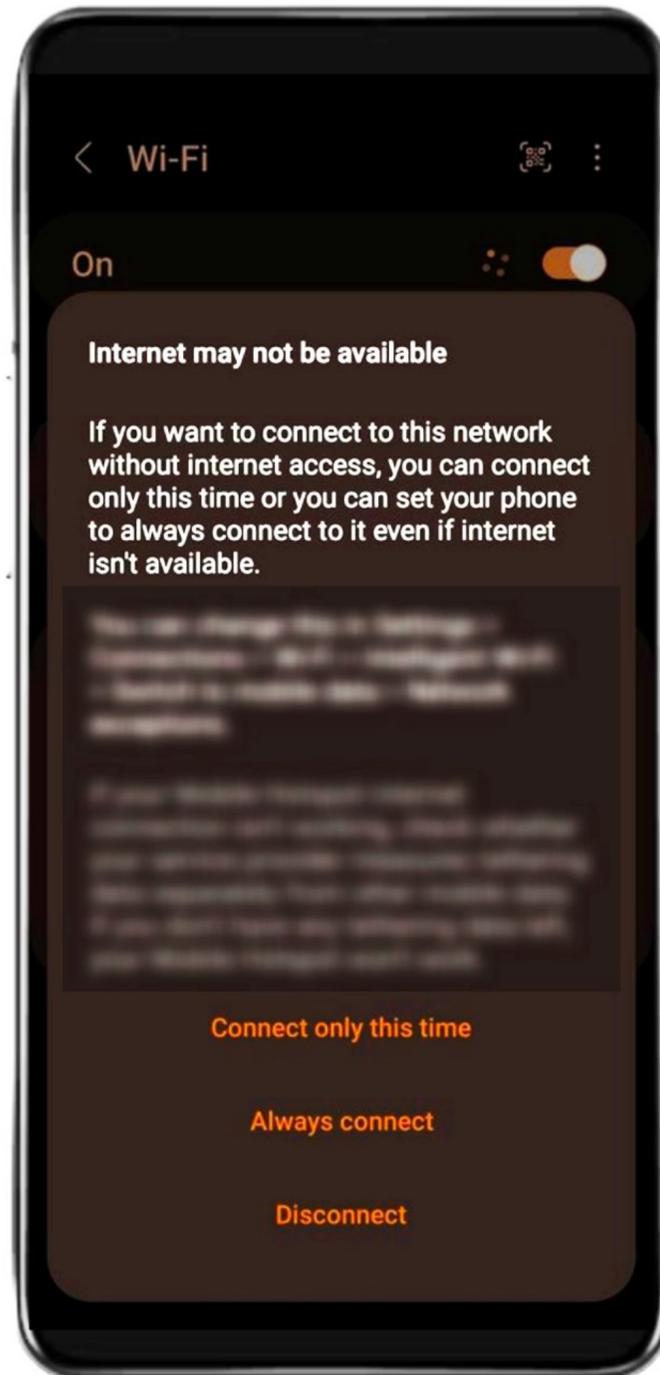
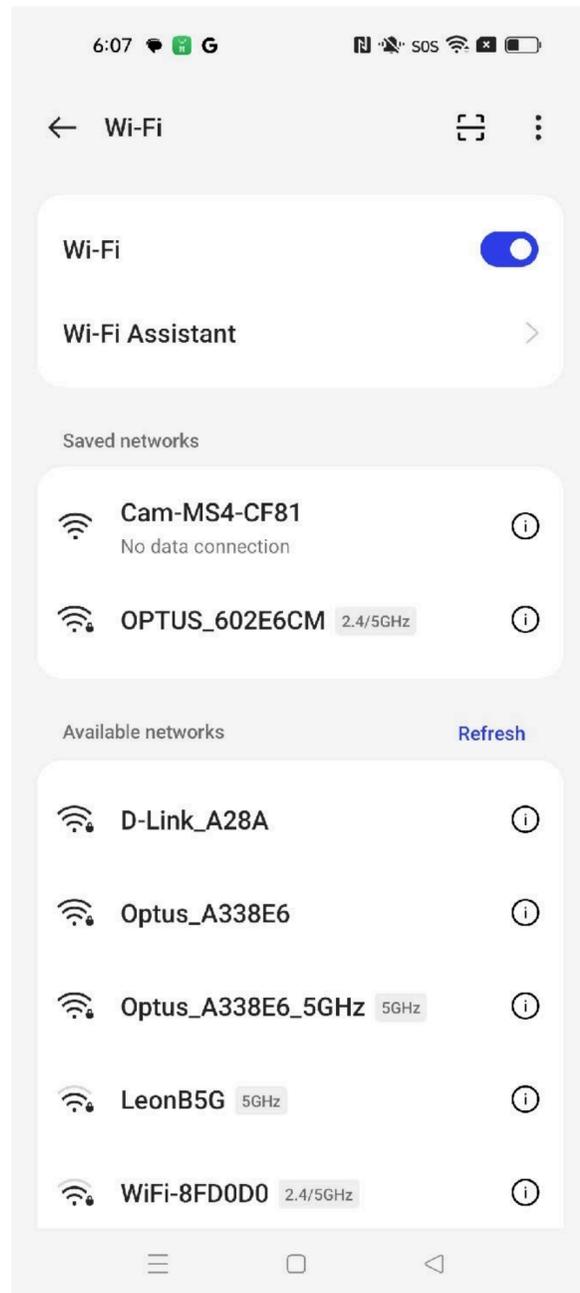
**Log in details available on request**

# M-STR APP



- After you log in, the program will take a short time to synchronize the dataset, after which it will enter the main interface.
- Tap LIVE MODE to activate the live camera detection function.
- Tap HISTORY to enter the record history page.

# M-STR APP



- Click the LIVE MODE, the program will load your phone's Wi-Fi connection page.
- Choose the reader's Wi-Fi name; e.g. 'Cam-MS4-xxxx'
- After the reader's Wi-Fi is connected, click the back arrow on the top left corner and you will enter the blue reader camera page. (Note: this will not affect your phone reconnecting to normal Wi-Fi, once the reader is switched off.)

**NOTE: For some android devices, a message window may appear saying 'internet may not available'. This is because this version of the reader will not connect to Wi-Fi (for the reader connection) and the internet at the same time. Choose 'Always Connect' to ensure the device will connect correctly with the reader. This will not affect your normal Wi-Fi when you finish using the reader.**

# M-STR APP



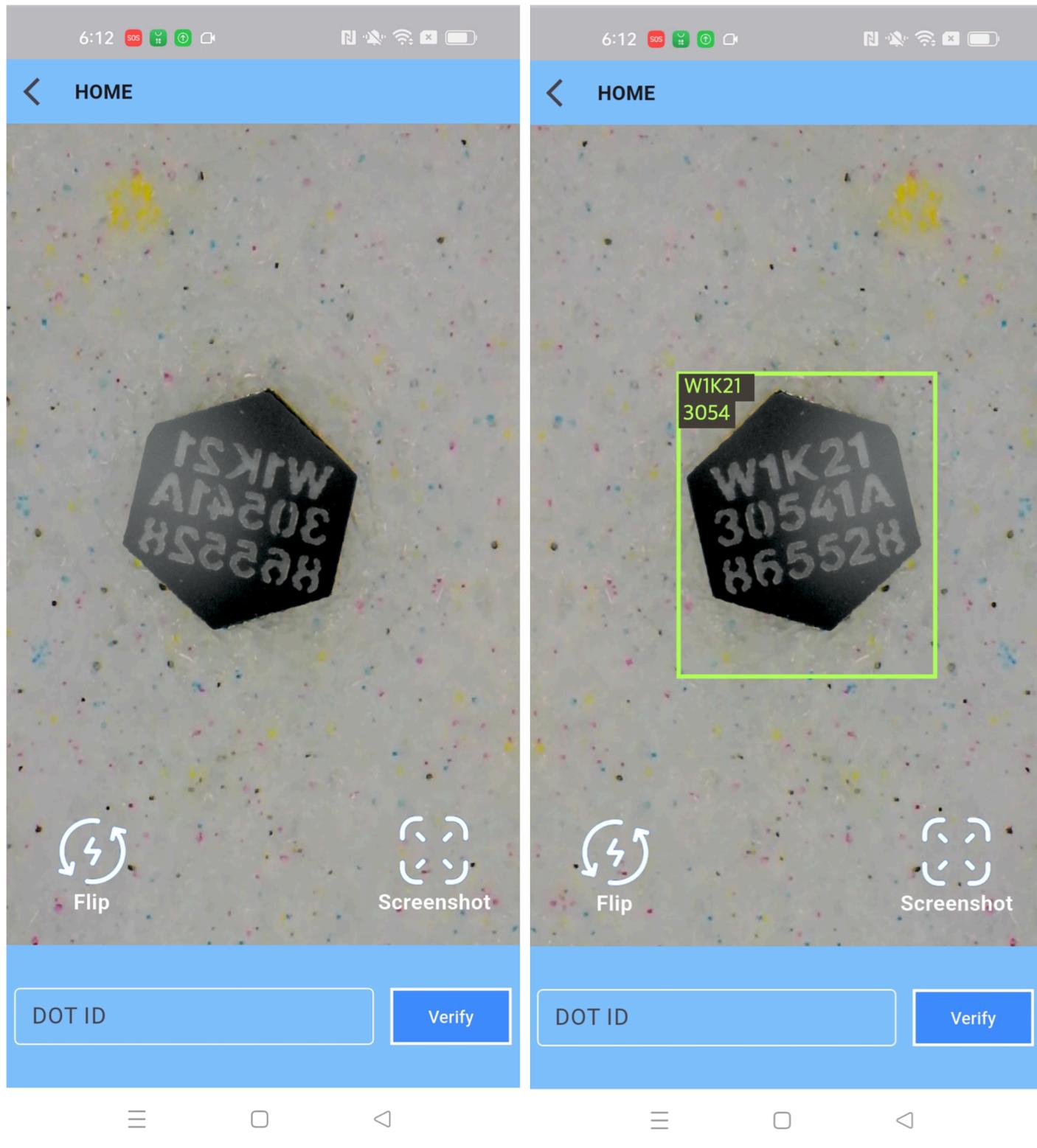
Change the brightness of the reader's lamp by turning the knurled wheel on top of the reader.

Turn the indent to face the operator.

Place the reader facing the surface that has dots. (Do not hover over the dot). To locate a dot, move the reader slowly over the surface that contains several dots.

Change the focus by turning the knurled section.

# M-STR APP



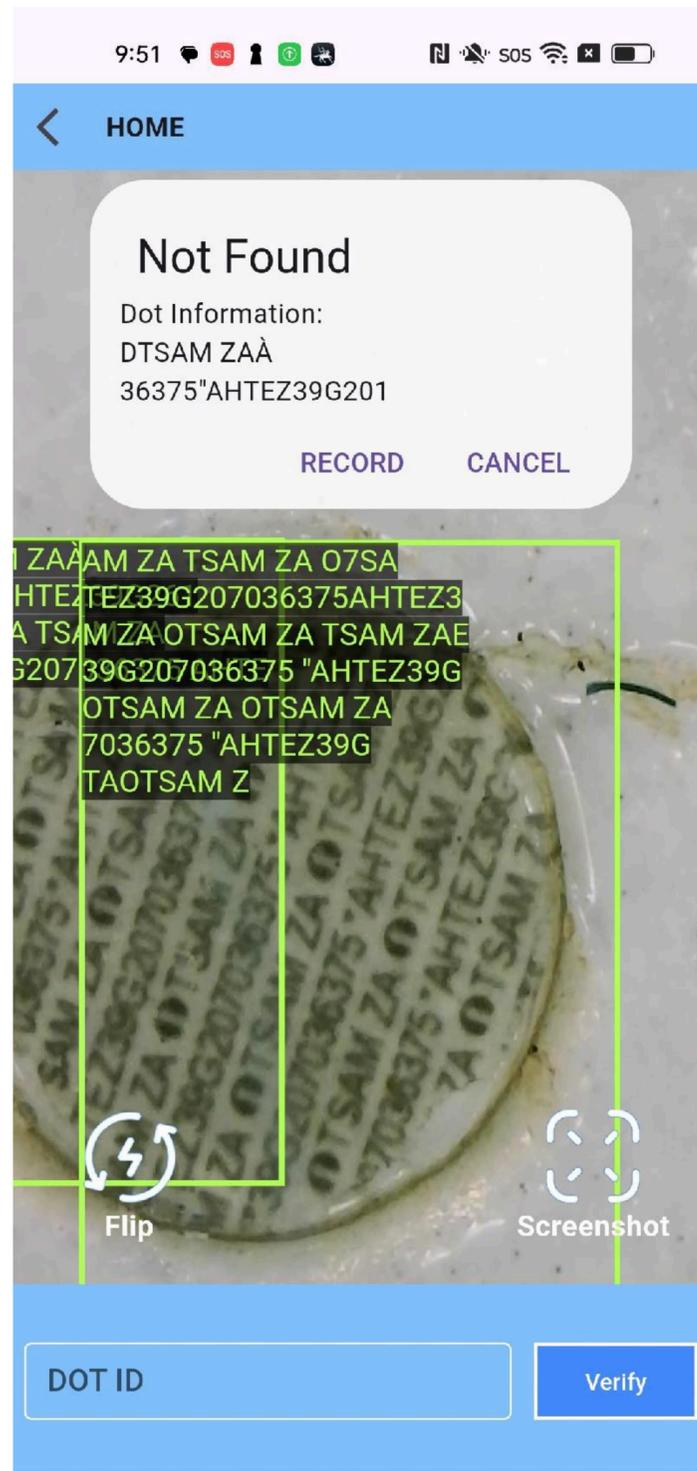
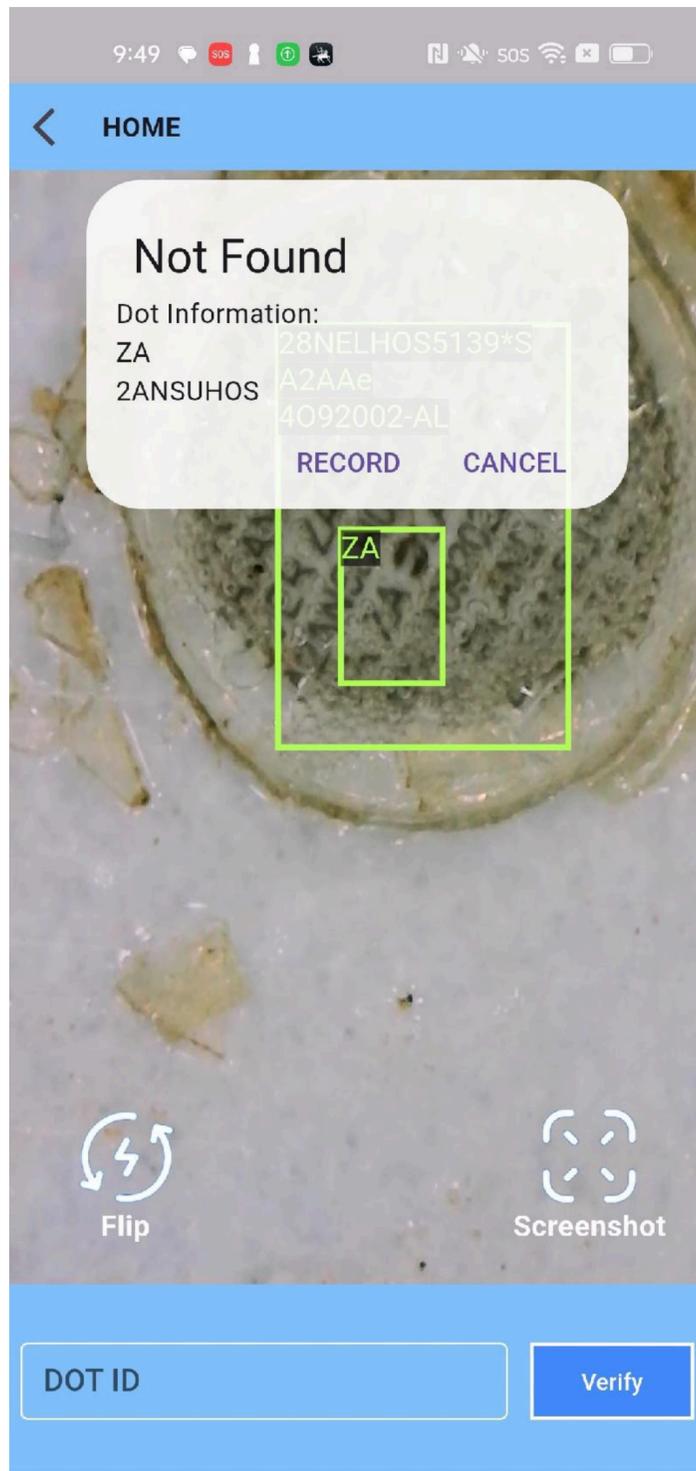
- The live camera image will appear like this.
- Move the reader around the target area to locate a clear and uncovered dot. (Or remove the dot from a motor vehicle or other dotted asset and place the loose dot on a light-coloured background.)
- If the dot is back-to-front, tap the **Flip** button to flip the image.

# M-STR APP



- If the dot matches a record in the database, the pop-up will read SUCCESS.
- Tap RECORD to save the reading result plus a screenshot to the APP. All saved records will be shown in the HISTORY page.
- Click CLOSE or CANCEL to switch off the pop-up window without saving any information.

# M-STR APP



**Not Found** can mean either:

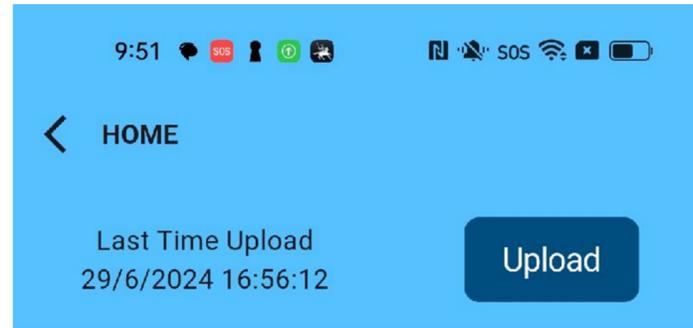
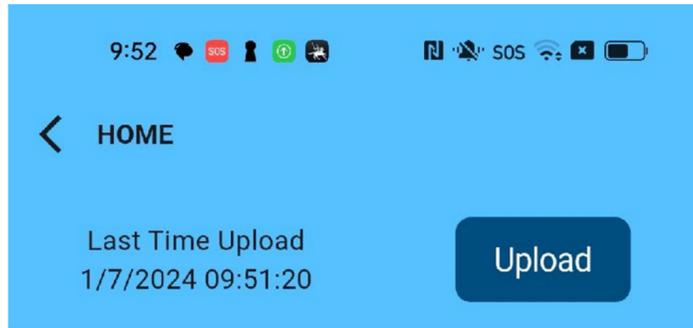
- There is insufficient legible / readable data in the dot to show the full relevant data; or
- The data can be read but there is no matching Dot ID data in the database\*. (The APP will search for up to 10 seconds to try and find a match.)

Even if no database match can be found (**Not Found**), you can still click **RECORD** to save all the read data and screenshot image to the APPs' database (within the APP).

Click **CANCEL** to close the pop-up window without saving the Dot ID data and image of the dot.

\*Licensed users of the APP can choose to have their database covering all dots that have been used in their territory, or a specific purpose database – for example stolen vehicles, outstanding fines, or warrants, insurance claims, etc.

# M-STR APP



	Time	Result	Data
↑	1/7/24 09:50:52	Success	QBSO415:367 AUTSĀM ZA ...
↑	1/7/24 09:50:23	Success	AM ZACTSAM ZA CTSAN
↑	1/7/24 09:49:33	Success	CrSAM D 31399"AHTC...
↑	29/6/24 16:56:12	Not Found	00J5 ZA BMW Z/
↑	29/6/24 16:55:41	Not Found	300J51905 "WBAKS
↑	29/6/24 16:55:00	Success	SAM ZA BO04151399...
↑	29/6/24 16:54:53	Success	C8004151399 KCTSAM ZA ...
↑	29/6/24 16:54:34	Success	5TSAM ŽA OTSAM Z
↑	29/6/24 16:54:28	Success	36/ ARICB8CB904
↑	29/6/24 16:53:51	Success	STSAM ZA UTSAM ZA
↑	29/6/24 15:28:33	Success	aAHTCB8CBy ITSAM ZA O...
↑	29/6/24 15:27:50	Success	OTSAMZA OTSAM ZA
↑	29/6/24	Success	A1SAM ZA

	Time	Result	Data
↑	1/7/24 09:50:52	Success	QBSO415:367 AUTSĀM ZA ...
↑	1/7/24 09:50:23	Success	AM ZACTSAM ZA CTSAN
↑	1/7/24 09:49:33	Success	CrSAM D 31399"AHTC...
↑	29/6/24 16:56:12	Not Found	00J5 ZA BMW Z/
↑	29/6/24 16:55:41	Uploading	300J51905 "WBAKS
↑	29/6/24 16:55:00	Success	SAM ZA BO04151399...
↑	29/6/24 16:54:53	Success	C8004151399 KCTSAM ZA ...
↑	29/6/24 16:54:34	Success	5TSAM ŽA OTSAM Z
↑	29/6/24 16:54:28	Success	36/ ARICB8CB904
↑	29/6/24 16:53:51	Success	STSAM ZA UTSAM ZA
↑	29/6/24 15:28:33	Success	aAHTCB8CBy ITSAM ZA O...
↑	29/6/24	Success	OTSAM ZA
↑	29/6/24	Success	A1SAM ZA

Network error, please check your internet

Tap **HISTORY** in the APP to show all the reading records saved in a viewing session:

Arrow icons in the leftmost column show the upload status of each row of data.

- A grey arrow means this row of data has not been uploaded to the Web Portal backend server.
- A green arrow means this row of data has been uploaded to the Web Portal backend server and can be checked at any time in the future in the Portal dashboard.

The header layer shows the last upload time stamp and **Upload** (to the server) button.

After the records have been uploaded to the database the file arrows will turn green.

**NOTE: Before tapping Upload - change the Wi-Fi connection from the reader to the normal internet Wi-Fi connection.**

If there is no internet connection, a warning message will display at the bottom.

# M-STR TROUBLE SHOOTING



## 1. What should I do if I can't download and install the program?

**A:** First, make sure you are using an Android phone. Enter the download link in the default browser and download the APK installer to your phone's file folder. Double-click the installer, ignore the warning, and confirm the installation. The program will be successfully installed on your phone. An APP named **Microdot STR** will appear on your screen.

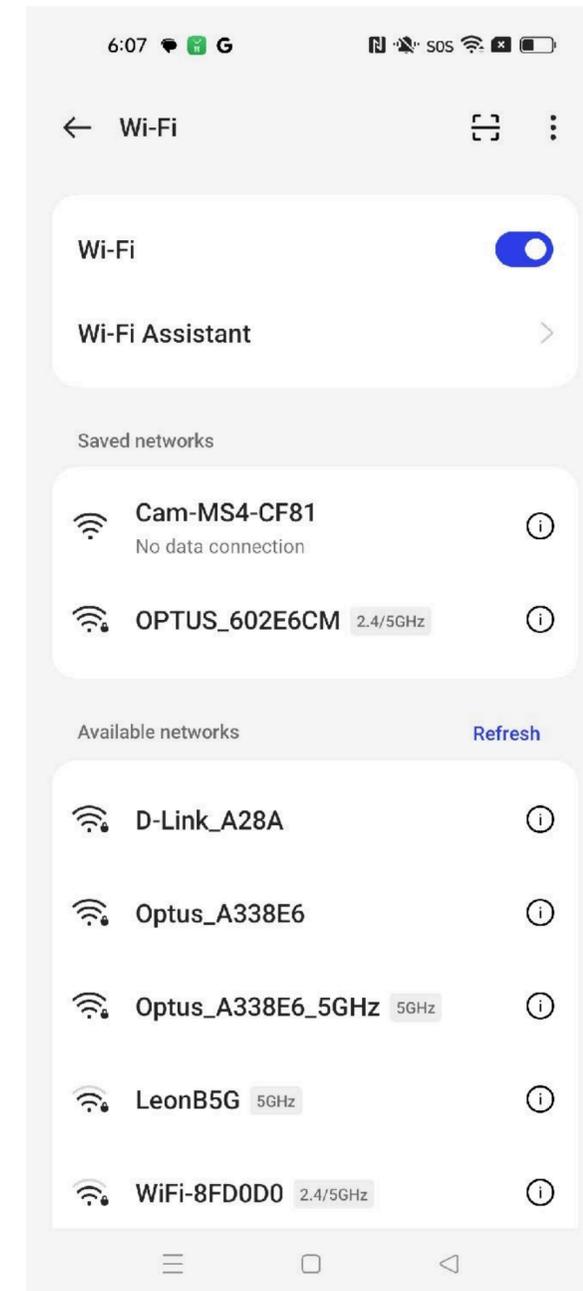
## 2. I entered my username and password, but I can't log into the program. What should I do?

**A:** Logging into the program requires an active internet connection on your phone. Please check the Wi-Fi settings. If your phone is still connected to the **reader**, switch the Wi-Fi to another valid internet source.

**Note:** When connected to the **reader**, the program will not be able to access the internet temporarily.

## 3. When I click the upload button to upload records, the program says there is no network connection and cannot upload. What should I do?

**A:** Before uploading records, please ensure your phone has a valid internet connection. Check your Wi-Fi settings—if your phone is still connected to the **reader**, disconnect it first and switch to another valid internet connection.



# Microdot STR Web Portal



## Microdot STR Registration System

### Web Portal URL:

<http://47.92.161.152:8085/login>

### Log in details available on request

**Note:** Each authorised account can access the user's dashboard with full access to the uploaded data history records, or limited access, depending on the access level approved by the head MSTR licensee for each region.

# Microdot STR Web Portal



Dashboard > Tracking History

Dashboard | Data List | Microdot List | **Tracking History** x

Dot ID:

Device ID	Time	Result	Dot ID	Data	Screenshot
AG_EnMTHJyBWMOP99X	2024-07-05 05:07:22	Success	WBAKS420300J51905	wBAKS420300J5 RABMW..	
AG_EnMTHJyBWMOP99X	2024-07-05 05:07:11	Not Found		3620EZA DATADOT ZA 0T2..	
AG_EnMTHJyBWMOP99X	2024-07-05 05:05:47	Not Found		S94AHTJB30U9 AZA TSA..	
AG_EnMTHJyBWMOP99X	2024-07-05 05:05:13	Success	AHTEZ39G207036375	9G207C3E376 AM ZA OT..	
AG_EnMTHJyBWMOP99X	2024-07-05 05:04:35	Success	ZADDT1902161698MB	AD gMB'ZADDTLA ADATA..	
AG_EnMTHJyBWMOP99X	2024-07-01 01:54:31	Not Found		SMA2T ErerA008D8E AO0..	
AG_EnMTHJyBWMOP99X	2024-07-01 01:53:54	Not Found		erAO09 MAZT erA0088 SM	
AG_EnMTHJyBWMOP99X	2024-07-01 01:53:02	Success	AHTCB8CB904151367	OTSAM ZA OTSAN 41513..	
AG_EnMTHJyBWMOP99X	2024-07-01 01:52:46	Not Found		634A14SANEBAF 18 393A..	
AG_EnMTHJyBWMOP99X	2024-07-01 01:50:23	Success	AHTCB8CB004151399	AM ZACTSAM ZA CTSAN...	

The uploaded reading records are shown in the **Tracking History** page.

**Device ID** is the identity of the mobile phone that uploaded the records. This serves as a record of who is viewing and recording the data extraction.

**Note:** The database source files for each jurisdiction can be updated as regularly as required by the MSTR licensee. By agreement, this database updating process can be automated with exchange of API and agreement on encryption protocols.

# Microdot STR Web Portal



The screenshot shows the 'Tracking History' page of the Microdot STR Web Portal. A modal window is open, displaying the following extracted data on the left:

```
AM ZACTSAM ZA CTSAN
B004151399 AHTCB8CB004151
SAM ZA GTSAM ZAGTSAM ZA
004199 AHTCB8CB00415139
31393 AHTO
ZACTSAM ZA C
151399 AHTCB8CB00
SAM ZA TSAM ZA
A199ACB8CB00415139
S7SAMACTSAM ZA
9 AHTCBP
CTSAM
```

On the right side of the modal is a circular image of a dot with the same alphanumeric characters printed on it. Below the modal, a table shows tracking history entries:

AG	EnMTHJyBWMOP99X	2024-06-29 08:54:34	Success	AHTCB8CB904151367	5TSAM ZA OTSAM Z 9041..	Delete
AG	EnMTHJyBWMOP99X	2024-06-29 08:54:28	Success	AHTCB8CB904151367	36/ARICB8CB904 M7ATS..	Delete

If you click the Dashboard **Data** column or **Screenshot** column, the details of the extracted data and the saved dot image will be displayed, as shown here.

The left text displays all the characters from the M-STR reading.

The right image is the reader's screen shot of that dot.

# Microdot STR Web Portal



- Data List
- Tracking History

Data Field:  Search + New Item

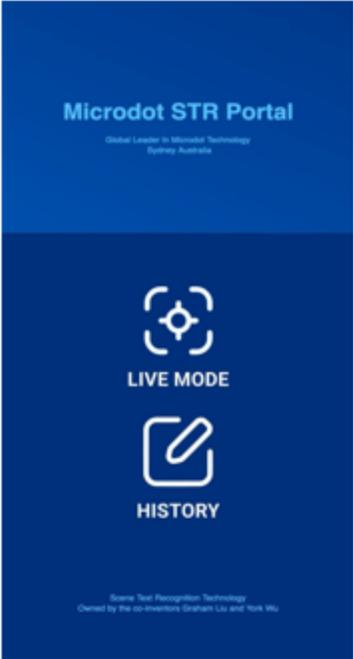
Data Field	Company	VIN/Serial Number	Description	Other	Registered Date	Operations
WBAKS420300J5905	SA	WBAKS420300J5905	SA	SA	2024-06-29 07:24:52	<span>Edit</span> <span>Delete</span>
AHTCB8CB904151367	TSAM ZA	AHTCB8CB904151367	SA	SA	2024-06-29 07:22:25	<span>Edit</span> <span>Delete</span>
AHTCB8CB004151399	TSAM ZA	AHTCB8CB004151399	SA	SA	2024-06-29 07:20:40	<span>Edit</span> <span>Delete</span>
662640	Volkswagen TAIWAN	662640	Volkswagen TAIWAN	Volkswagen TAIWAN	2024-01-09 00:43:19	<span>Edit</span> <span>Delete</span>
375234	Volkswagen TAIWAN	375234	Volkswagen TAIWAN	Volkswagen TAIWAN	2024-01-09 00:42:55	<span>Edit</span> <span>Delete</span>
1061300	BMW TAIWAN	WB1061300	BMW TAIWAN	BMW TAIWAN	2024-01-09 00:42:07	<span>Edit</span> <span>Delete</span>
Honda	Honda Taiwan	1234567	Honda Taiwan	Honda Taiwan	2023-12-21 00:49:37	<span>Edit</span> <span>Delete</span>

共 7 条 10条/页 < 1 > 前往 1 页

The M-STR central server can also store additional layers of data fields including, for example, stolen cars, or cars involved in previous felonies, or suspect warranty claims, or outstanding fines, or whatever users want to record against a particular data set (for motor vehicles, a VIN or PIN).

The M-STR reader app will automatically check against those sub-databases.

# Microdot STR Reader and SaaS System



Dashboard > Tracking History

Dashboard Data List Microdot List Tracking History

Dot ID:  Search

Device ID	Time	Result	Dot ID	Date	Screenshot
AG_EvMTHyBwMOP99K	2024-07-05 05:07:22	Success	WBAK5420300J51905	wBAK5420300J5 RADMIK...	
AG_EvMTHyBwMOP99K	2024-07-05 05:07:11	Not Found		9608ZA DATADOT ZA OTZ...	
AG_EvMTHyBwMOP99K	2024-07-05 05:05:47	Not Found		BMAHTJ800J5 AZA TSA...	
AG_EvMTHyBwMOP99K	2024-07-05 05:05:13	Success	AHTEZ39G20703675	9G20703675 AM ZA OT...	
AG_EvMTHyBwMOP99K	2024-07-05 05:04:35	Success	ZADOT1902181698M8	AD gMBZ ZADOTLA ADATA...	
AG_EvMTHyBwMOP99K	2024-07-01 01:54:31	Not Found		SMAZT EwA0808E ACG...	
AG_EvMTHyBwMOP99K	2024-07-01 01:53:54	Not Found		wA089 MAZT wA088 SA...	
AG_EvMTHyBwMOP99K	2024-07-01 01:53:02	Success	AHTCB8CB904151367	OTSAM ZA OTSAN 41513...	
AG_EvMTHyBwMOP99K	2024-07-01 01:52:46	Not Found		63A414SANESAF 18 383A...	
AG_EvMTHyBwMOP99K	2024-07-01 01:50:23	Success	AHTCB8CB004151389	AM ZACTSAM ZA OTSAN...	



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