S2 CASSETTE TESTER WITH USB INTERFACE

User Manual

Stock ID: 577072

TestLink Services Ltd.
1 Factory Road
Upton
Poole
United Kingdom
BH16 5SJ

Tel: +44 1202 627100

Email: sales@testlink.co.uk

Web: www.testlink.co.uk

NCR S2 Cassette Tester with USB Interface User Manual – 574649 – Issue 2

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1 Introduction

Thank you for purchasing the S2 Cassette Tester from Testlink Services Ltd. This product is designed to accurately test the configuration of NCR™ S2 ATM cash cassettes.

If you have any issues using this product, please contact us on the details below:

TestLink Services Ltd.
1 Factory Road
Upton
Poole
United Kingdom
BH16 5SJ

Tel: +44 1202 627100
Email: sales@testlink.co.uk
Web: www.testlink.co.uk

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Distribution options are available, please see our website or contact us for details.

2 Contents of Box

- S2 Cassette Tester
- USB Cable
- Instructions Flyer

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3 Key Features

- Powered from the USB connection to the PC.
- Simple operator panel.
- Large display panel for displaying the cassette type.
- **Read Mode -** Displays the current cassette configuration in the dual display window.
- **Inspection Mode -** Enables the cassette tester to be programmed for batch-testing cassette inspection with **Pass** or **Fail** LED indication. An alarm buzzer will sound if there is a mismatch between programmed cassette configuration and actual configuration. Inspection Mode is set when the mode switch is toggled to **Inspect**; the desired cassette type is selected by pressing **Select** and selection confirmed by pressing **Set**.
- **Four Indicator LEDs**
  - **Inspection Mode**
  - **Note Low** - confirms function and presence of the magnet in the note pusher. Operational in both Read and Inspection modes.
  - **Inspection Fail**
  - **Inspection Pass**
- Mechanical test of the side shutters and the cash exit shutter.



Mode Switch

Inspection Mode Buttons

Indicator LEDs

Cassette Type Display

Figure 1: Display and Operator Panel

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4 Read Mode

To set the unit to read mode:

1. Plug in the USB cable. The buzzer will beep, and all LEDs and Cassette Type display segments will light briefly on power up.
2. Set the mode switch to **Read**. The display will show two dashes and no indicator LEDs will be illuminated.
3. Insert a cassette. The cassette tester will beep when the cassette type dial has been detected. The display will show the current dial setting of the cassette.
4. The **Note Low LED** should also be illuminated if the note pusher is at its home position. If the magnet is missing, the LED will not be illuminated.
5. To test the operation signal of the magnet, move the note push towards the handle end of the cassette. **See section 5**.
6. With the cassette inserted and the lid removed, the cassette can be visually and physically checked. **See section 7**.



Figure 2: Read Mode Operation

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5 Note Low Testing

To check the operation of the note low, proceed as follows:

1. Set the mode switch to **Read**.
2. Insert the cassette and remove the lid.
3. The display will show the current configuration of the cassette.
4. The **Note Low LED** will illuminate if a magnet is detected when the note pusher is in the home position.
5. Press down the green release mechanism and pull back the note pusher. The LED will turn off.
6. Return the note pusher back to the home position.

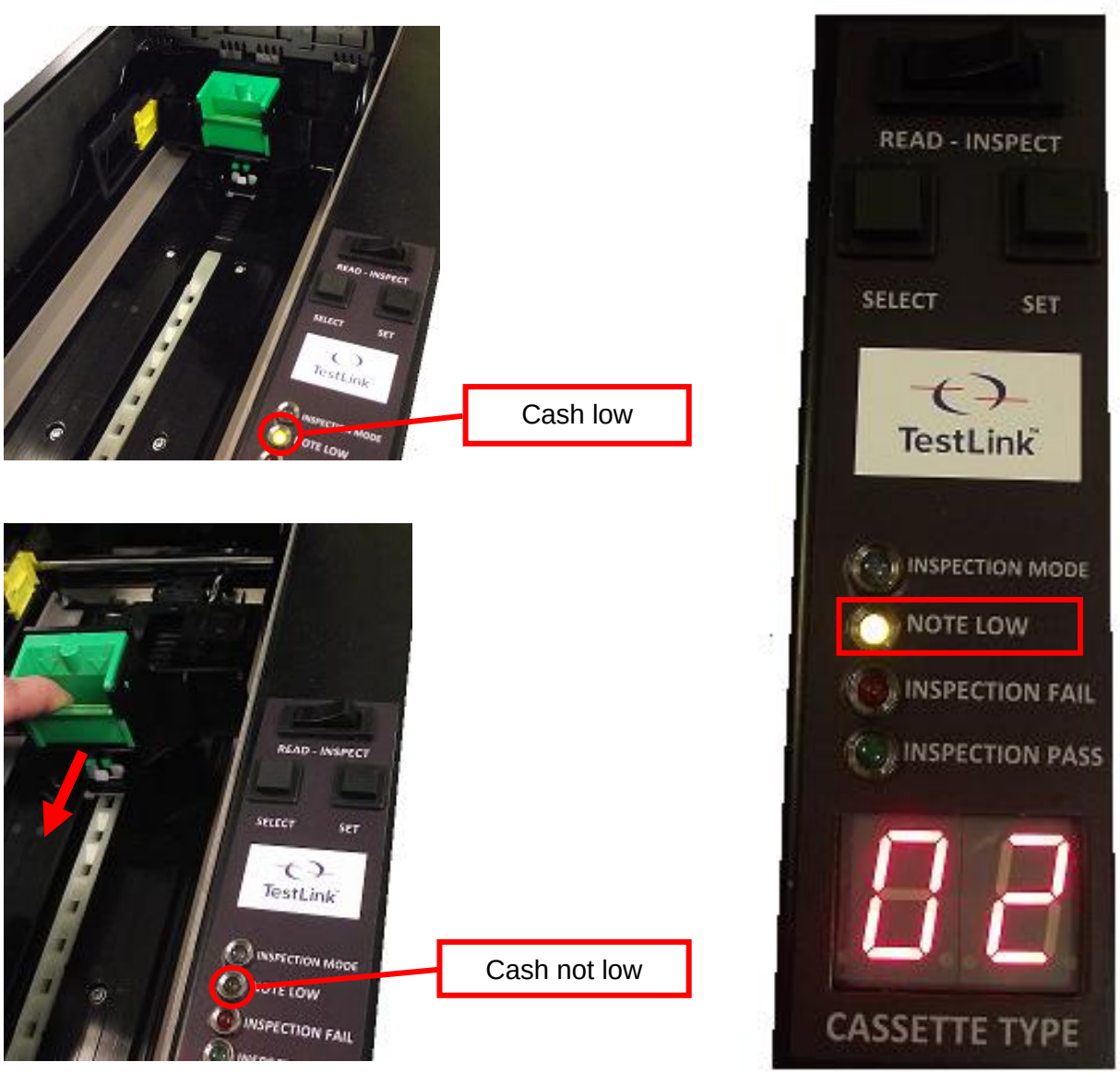


Figure 3: Note Low LED indicator

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6 Buzzer beep on/off setting

It is possible to mute or unmute the confirmation beep that sounds when a cassette is inserted:

1. Unplug the USB cable.
2. Hold down both **Select and Set** buttons and reconnect the USB cable.
3. If the beep is currently **on**, it will be switched **off** and the display will show:
   Cb then **00 (muted)**
4. If the beep is currently **off**, it will be switched **on** and the display will show:
   Cb then **01 (unmuted)**

Please note - this does not disable the beep on power up, or the alarm tone if an incorrectly configured cassette is detected when inspection mode is set.



Confirmation Beep



Muted



Unmuted



Figure 4: Confirmation Beep setting

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7 Visual and physical checks

With the cassette inserted and the lid removed, the following can be visually and physically checked:

1. Note low function – electronically (**see section 5**)
2. Physical operation and condition of the side shutters
3. Physical operation and the condition of the cash out shutter
4. Condition of the “bridge” that sits over the note low sensor
5. Width rail configuration settings
6. Lid spacer configuration settings

See section 8 for common failures.

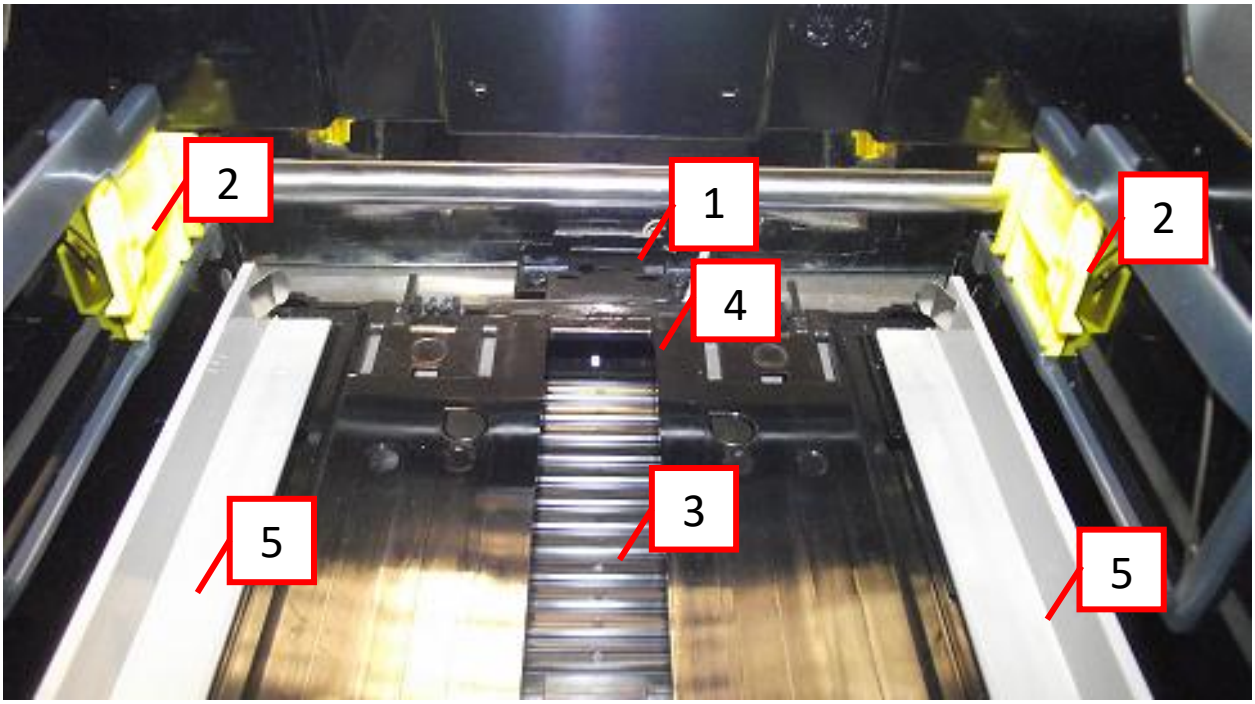


Figure 5: Cassette visual checks

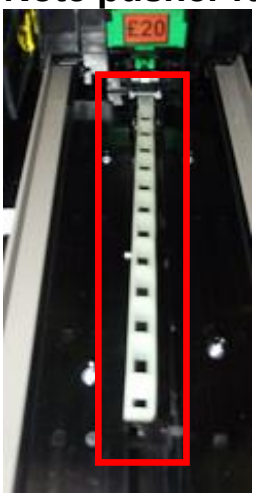
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8 Common failures

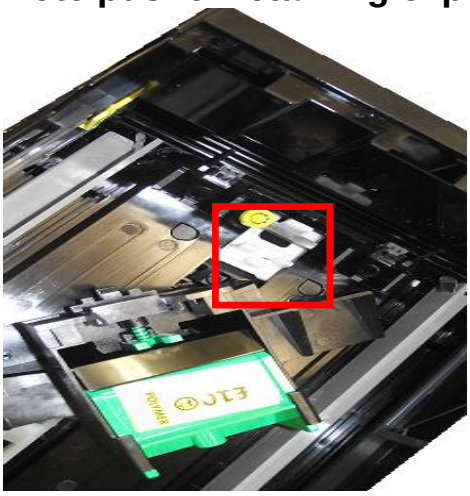
Lid hasp latch



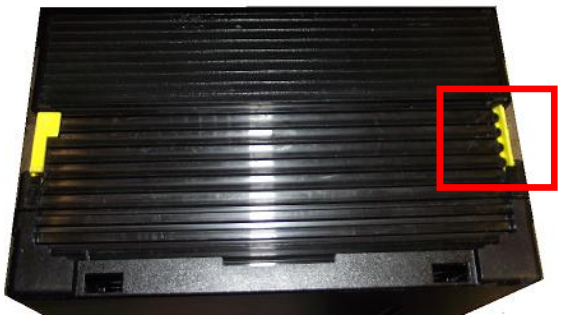
Note pusher ratchet



Note pusher retaining clip



Cassette truck side shutter



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9 Inspection Mode

9.1 Setup

Inspection mode can be set with or without a cassette inserted, however it is recommended to have the cassette removed.

1. Toggle the switch from **Read** to **Inspect**. The blue Inspection Mode LED and Cassette Type display will flash. The cassette tester will now need to be set to the Cassette Type to be inspected. (**1**)
2. Press the **Select** button (**2A**) until the required Cassette Type number (1 to 12) is shown on the display panel (**2B**).
3. Confirm the selection by pressing **Set** button (**3**). The cassette tester is now ready for a cassette.
4. Insert the cassette into the cassette tester. The cassette tester will read the cassette type dial setting on the cassette and check it against the cassette type number entered. There will one of two results from the cassette tester, as follows.

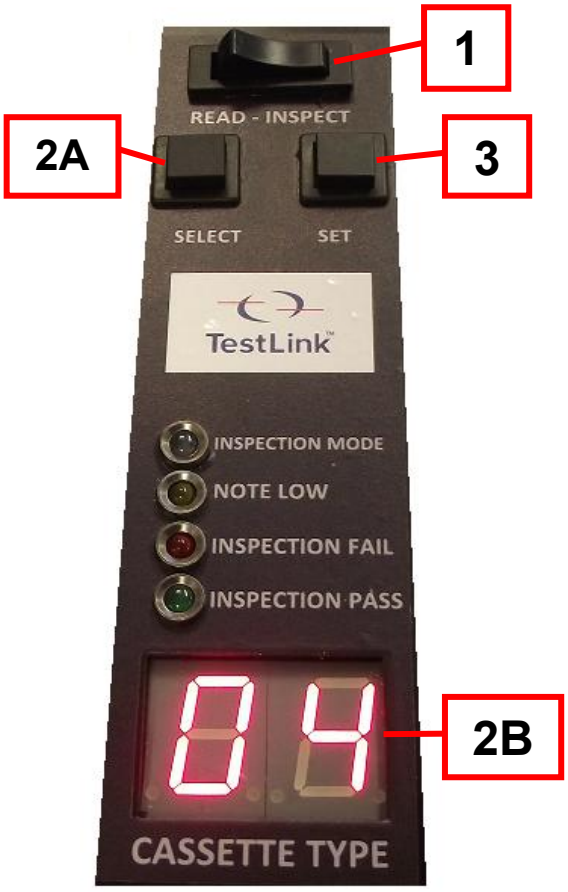


Figure 6: Inspection Mode Setup

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9.2 Inspection Pass

If the cassette configuration ***matches*** the programmed cassette type entered, the following will happen:

a) The display will show the current cassette type dial setting with **no alarm**.
b) **Inspection mode** will be illuminated blue.
c) **Note low** will be illuminated yellow if present.
d) **Inspection Fail** LED will not be illuminated red.
e) **Inspection Pass** LED will be illuminated **green**.

Proceed with the checks from **section 7** to confirm the structural integrity and configuration.

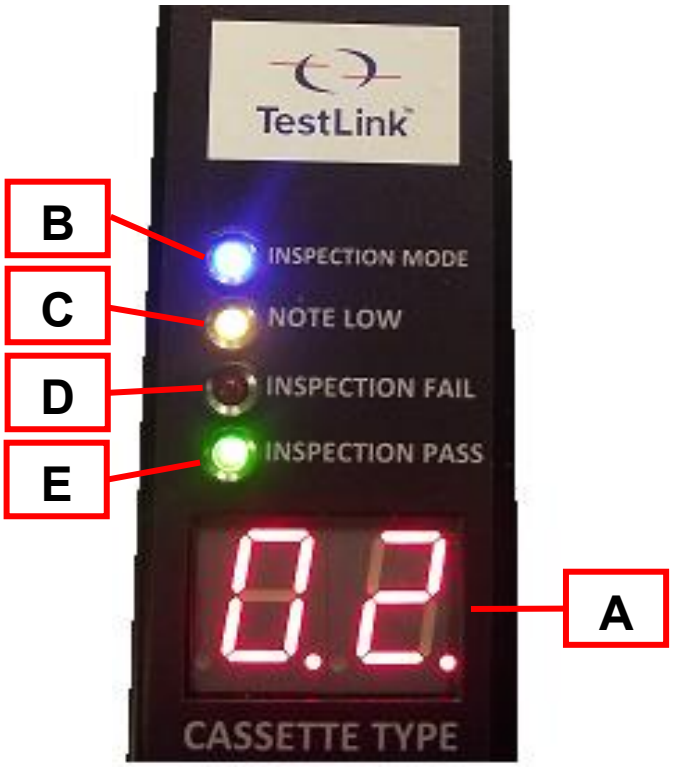


Figure 7: Inspection Pass

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9.3 Inspection Fail

If the cassette configuration ***does not match*** the programmed setting entered, the following will happen:

a) The display will show the current cassette type dial setting and an **alarm will sound** due to the mismatch.
b) **Inspection mode** will be illuminated blue.
c) **Note low** will be illuminated yellow if present.
d) **Inspection Fail** LED will be illuminated **red**.
e) **Inspection Pass** LED will not be illuminated green.

Remove the cassette from the cassette tester (the alarm will stop).

Isolate the cassette and continue inspecting the remaining cassettes. The cassette tester will remember the cassette type setting entered whilst inspection mode is active.

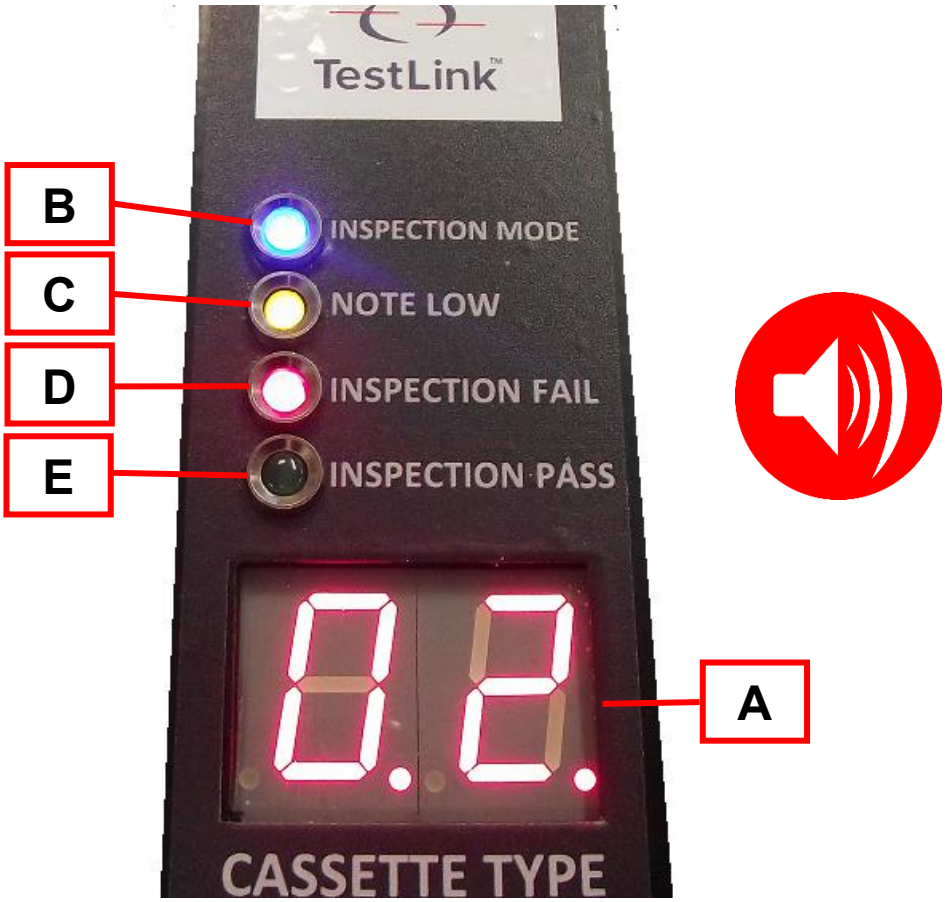


Figure 8: Inspection Fail

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10 Cassette Tester USB PC Interface

This section describes the serial protocol for the cassette tester. This can be used to obtain the cash cassette configuration, cash low sensor status and cassette tester identity.

10.1 Serial port settings

Baud rate	9600 bps
Data bits	8 bits
Stop bits	1 bit
Parity	None
Flow control	Off
Encoding	ASCII

10.2 Read cassette type

Transmit

Description	Command
Data	**?**

Receive

Good response (Valid cassette type – 1 to 12)

Description	Response
Data	**1-9, A, B, C**

A = Type 10, **B** = Type 11, **C** = Type 12

Error response (Invalid cassette type)

Description	Response
Data	**E**

Error response (Cassette not inserted)

Description	Response
Data	**N**

10.3 Low note sensor state

Transmit

Description	Command
Data	**!**

Receive

Description	Response
Data	**1**

1 = Cash is **low**

Description	Response
Data	**0**

0 = Cash is **not low**

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10.4 Cassette tester identity

Transmit

Description	Command
Data	#

Receive

Description	Response
Data	**S2**

S2 = NCR S2 Cassette Tester

11 Maintenance

- **Do not spray cleaning liquids over the control panel.**
- Unplug DC plug when cleaning.
- Remove dust by using a brush, airline, air duster or a mini vacuum.
- Wipe metalwork with a damp cleaning cloth.
- Regularly check the alignment of the key plate.

12 Troubleshooting

No beep/display at power on	Check power supply is switched on and plugged in. Check for damage to DC cable
No beep but display is on	Power off and hold down "Select & Set" together and turn on power
Note low not illuminating	Check note low sensor for damage or test with a good cassette
Inspection blue light not illuminating	Possible switch failure or LED failure
Type not being registered when cassette inserted	Check CIC is fitted to cassette & that cassette is latched in fully
Cassette not latching in fully	Check for damage to note low sensor & check keyplate prongs are aligned

13 Disclaimer

Testlink accepts no responsibility for mis-configured cassettes supplied by third parties using the Cassette Tester. It is the user's responsibility to ensure that cassettes are correctly managed, configured and tested. Testlink is in no way liable for any actions of our customers.

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14 Revision History

Change Date	Issue	Reason For Change
07/02/2023	1	Initial Issue
13/02/2025	2	Logo updated

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