

# How to Enable Automatic Detection for Unplaced or Empty Adapters (No Strip)?

ERTV or ST5 UI

# Explanation

During the initial testing phase of a new variety of rapid test reagents, a large number of analytical tests are often required.

However, human errors such as unplaced adapters or empty adapters (no strip) are common occurrences during the testing process. Such errors can lead to inaccurate analysis results.

The automatic detection function can alert testing personnel to correctly place adapters or test strips, thus avoiding issues.

# Methods of Automatic Detection

1. Check Cassette Sensor  
→ ST5 UI
2. Background Parameter Settings  
→ "Modify Lot" in ERTV

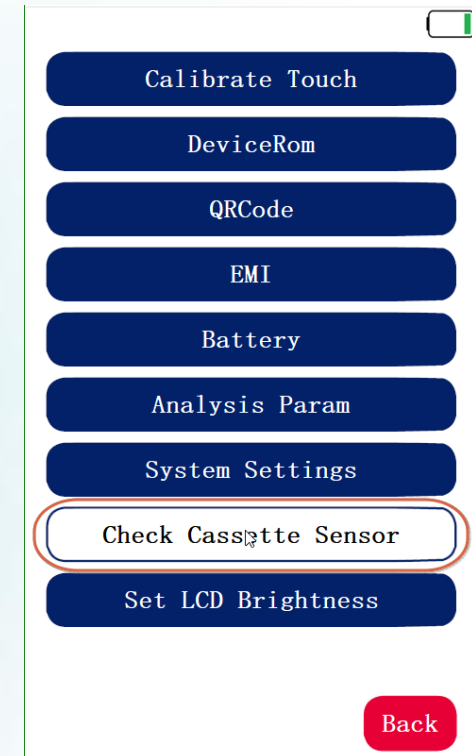
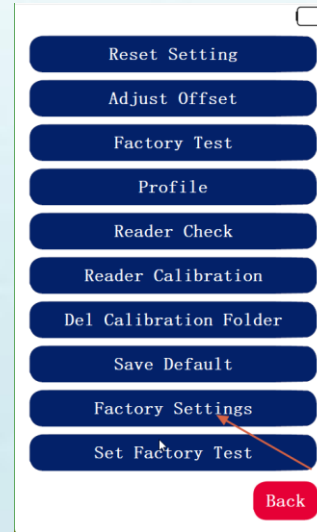
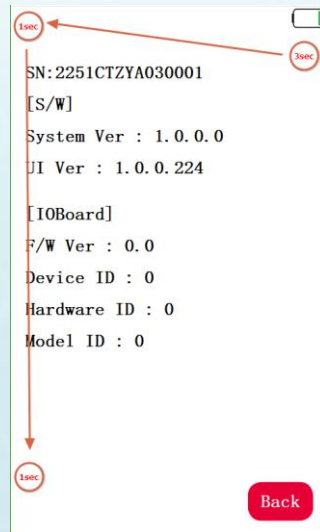
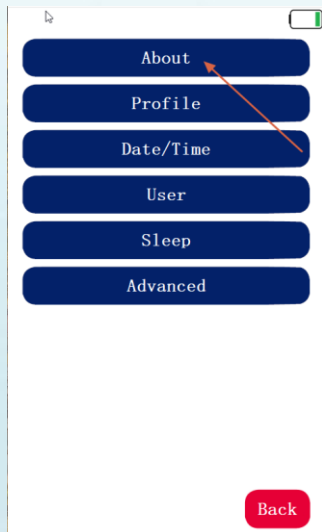


# Methods of Automatic Detection

- 1. Check Cassette Sensor**  
→ ST5 UI
  
- 2. Background Parameter Settings**  
→ "Modify Lot" in ERTV

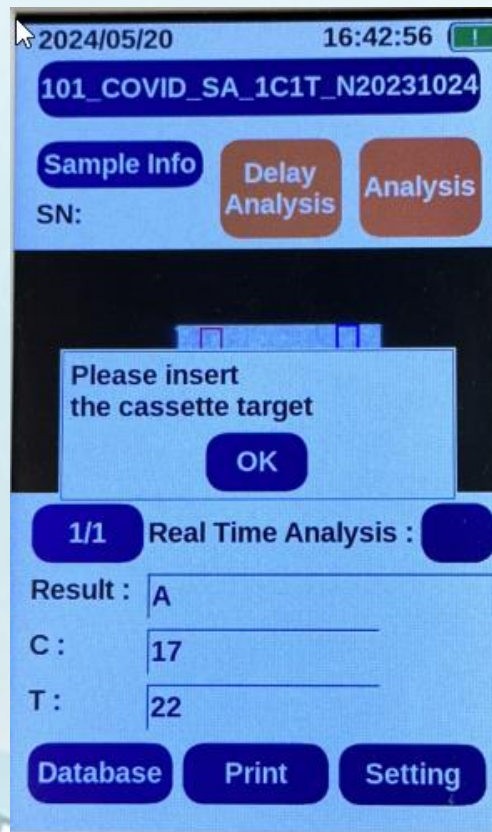


# Enable Check Cassette Sensor



# "Check Cassette Sensor" Error Notification

- When analysis is performed **without inserting the adapter**, the following message will appear:



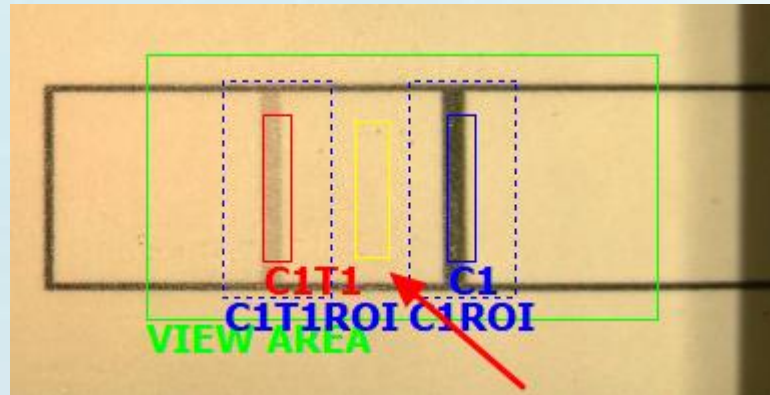
# Methods of Automatic Detection

1. Check Cassette Sensor  
→ ST5 UI
  
2. Background Parameter Settings  
→ "Modify Lot" in ERTV



# The Measurement Position of the 'Background' Parameter

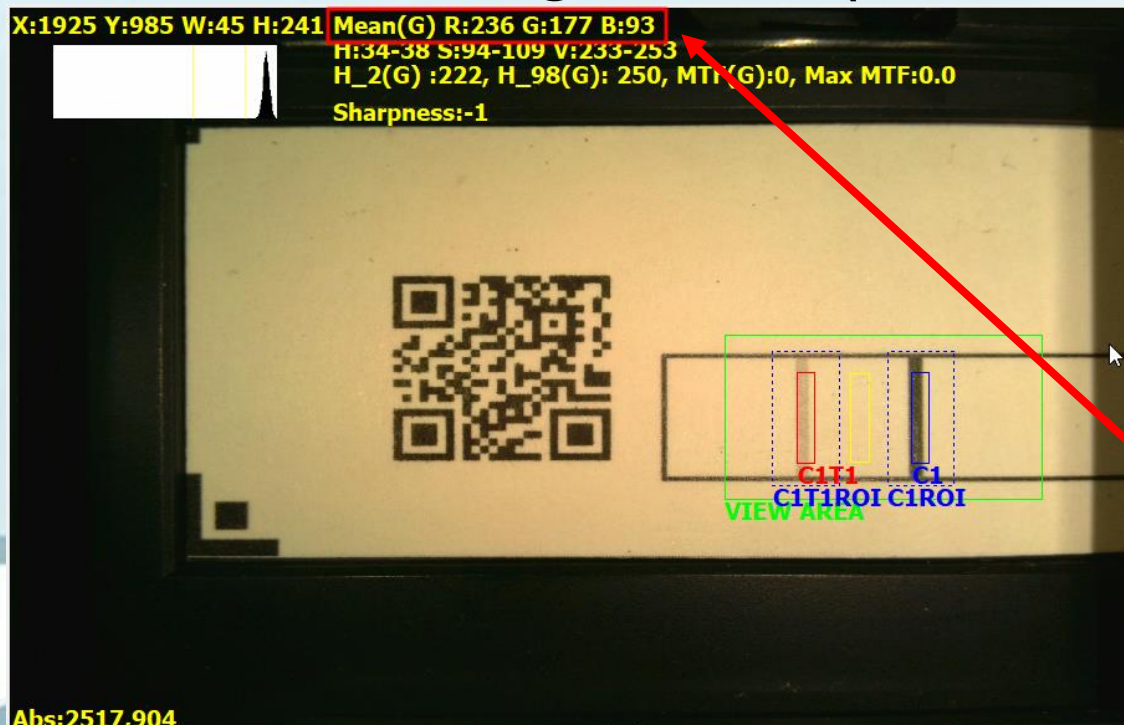
- Located approximately at the center of the two regions set by the ROI of C and T in the Profile settings, as indicated by the yellow box in the diagram below.





# The Measurement Tool for Background (The Situation of Having a Strip)

- You can use the Profile Wizard to draw a region with your mouse, and measure the actual value of the background, as shown in the following video (link below):

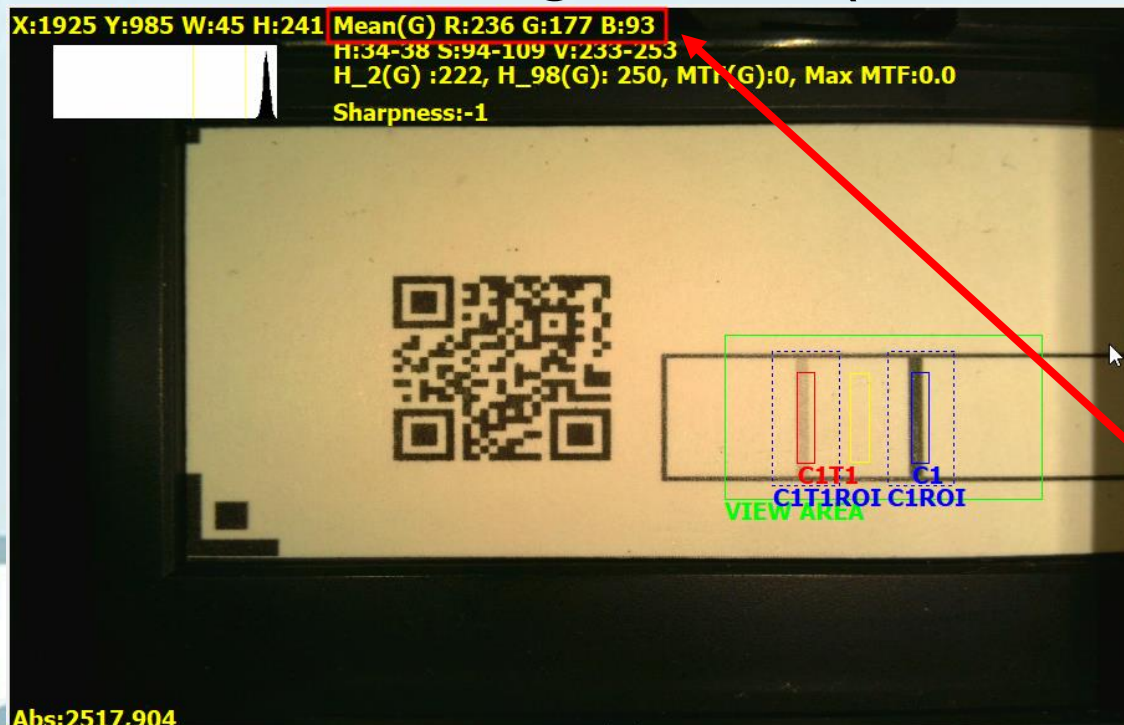


<https://drive.google.com/file/d/1BYX68qCsJdqm00HmPr2uouXHS3KwTtlu/view?usp=sharing>

When the presence of the membrane on the sample is detected, the measured value is very high.

# The Measurement Tool for Background (The Situation of Having a Strip)

- You can use the Profile Wizard to draw a region with your mouse, and measure the actual value of the background, as shown in the following video (link below):

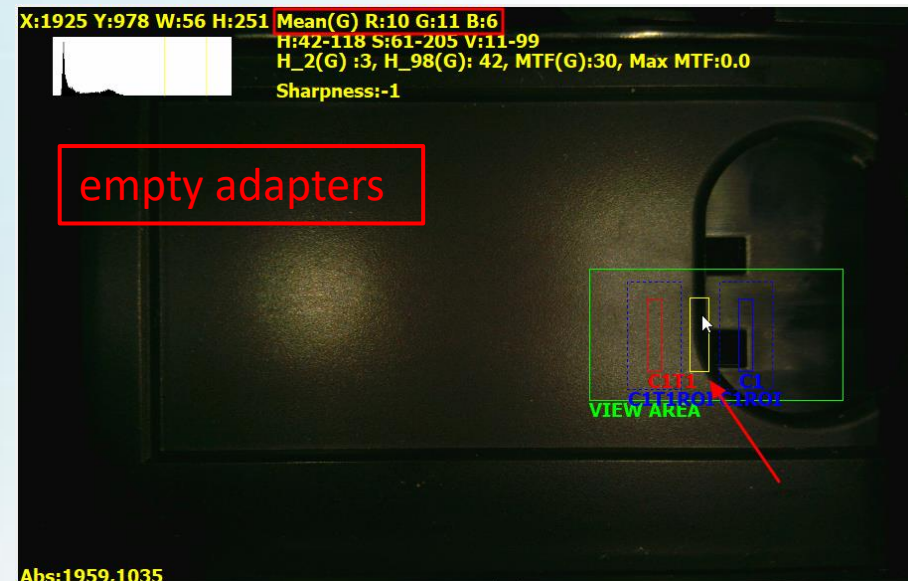
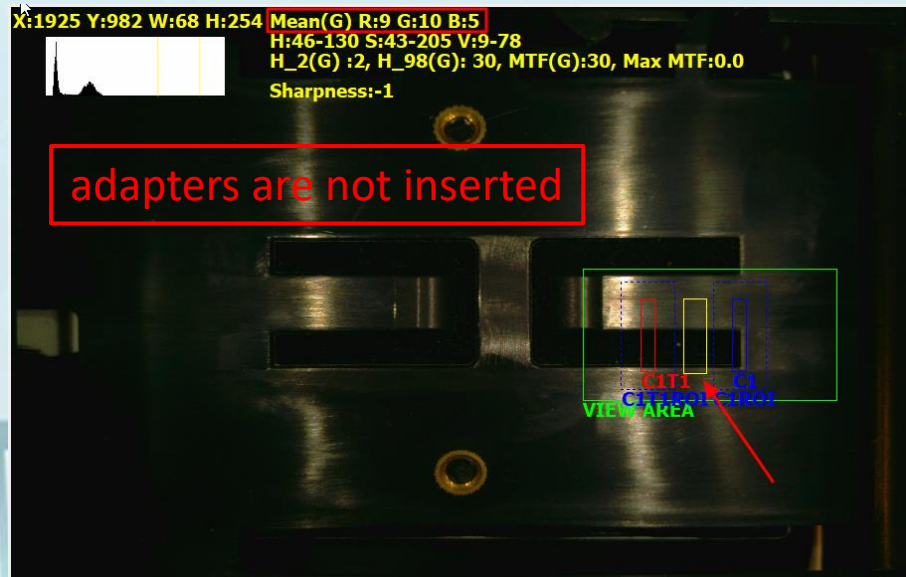


<https://drive.google.com/file/d/1BYX68qCsJdqm00HmPr2uouXHS3KwTtlu/view?usp=sharing>

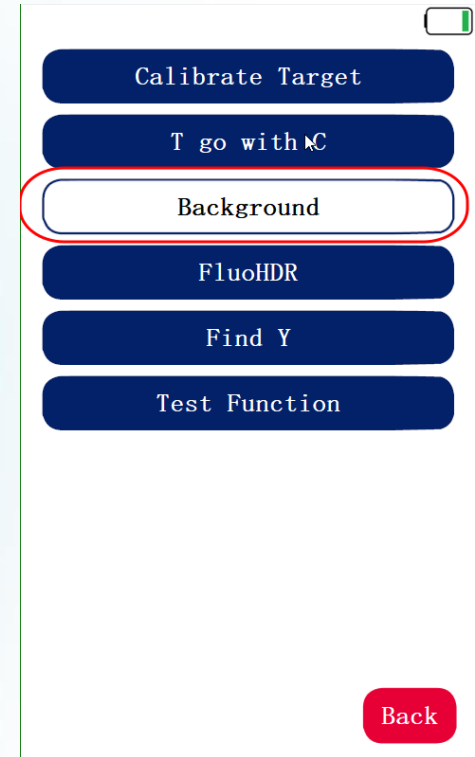
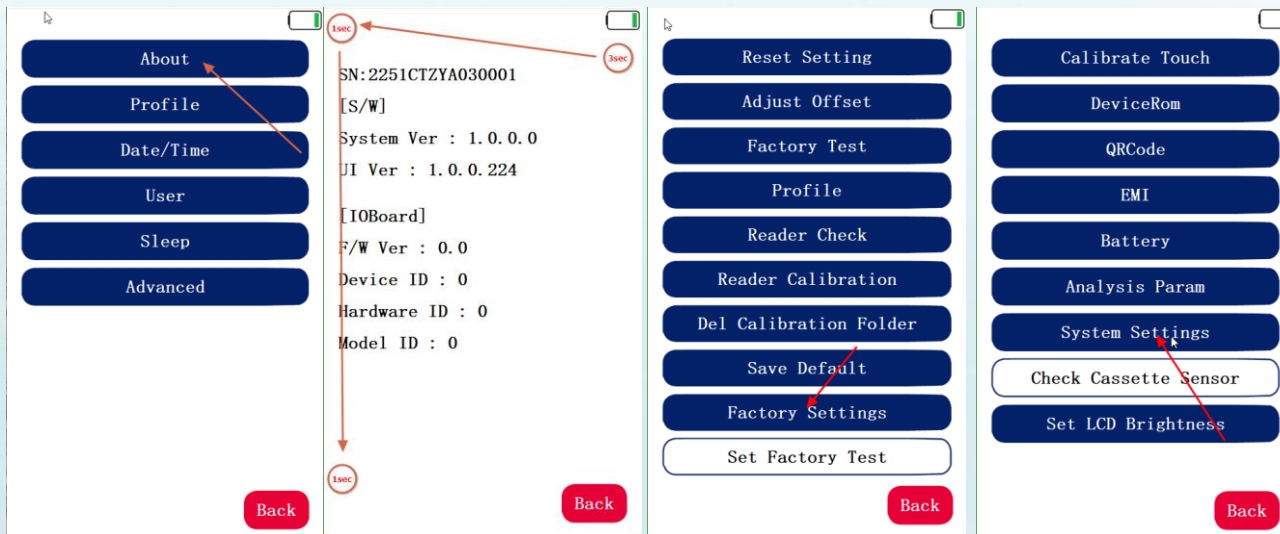
When the presence of the membrane on the sample is detected, the measured value is very high.

# The Measurement Tool for Background (The Situation of Not Having a Strip)

- But when adapters are not inserted or in the case of empty adapters (no strip), the value of Background is very low



# Enable Background Parameter Function(ST5 UI)



# Enable Background Parameter Function(RTV & ERTV)

Capture | Database | User | **Setting**

Rapid Test Data Export Folder : C:\Users\chnmo\OneDrive\文件\RTV\_Ethernet Choose a folder...

Language : English

Auto generate report Update F/W

Only Show Group Profile

Mark C/T Frames at Result Image Test QRCode Reset About

Device Maintain

Reader Check Reader Calibration

System Manager Settings

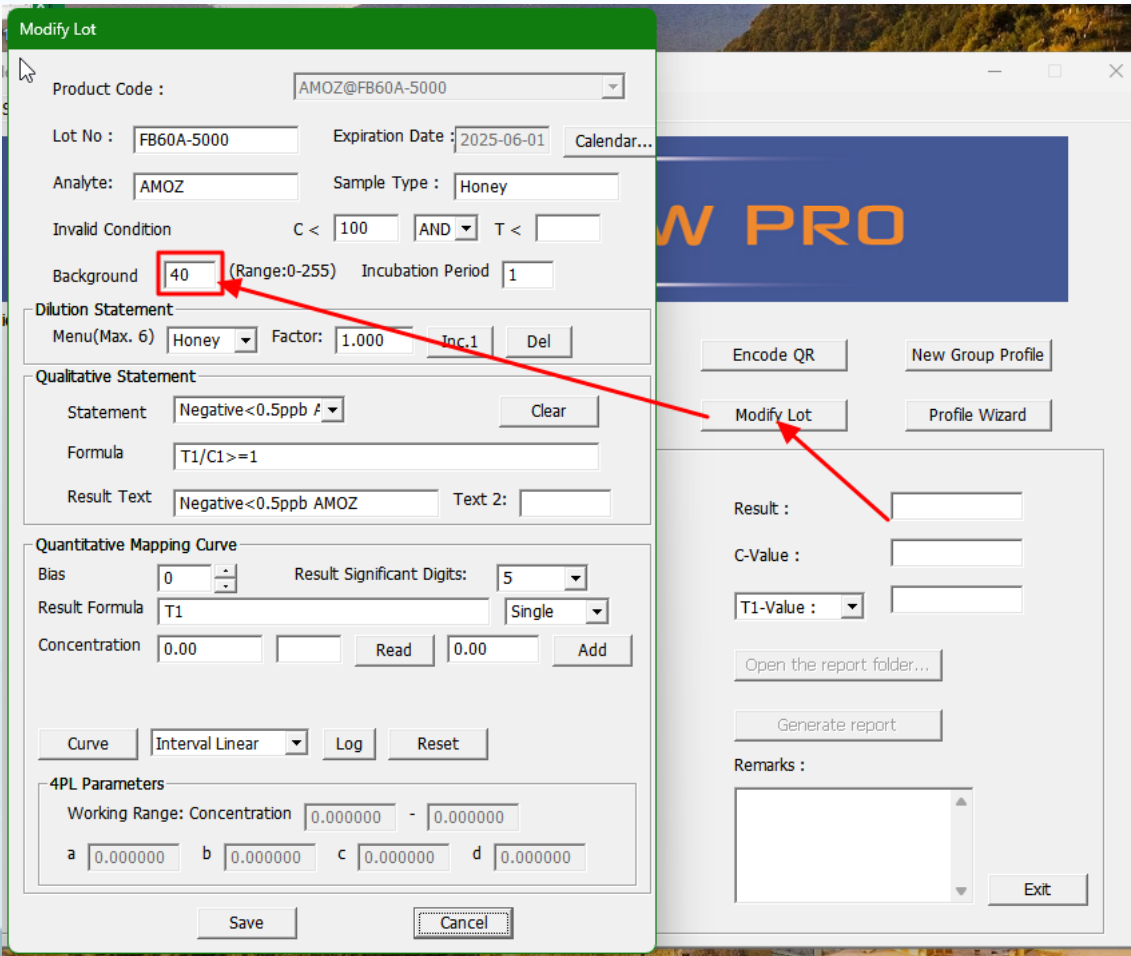
QR Code Light Setting: 1st Light(for Strip)

Data Transmission  Elaborated T  Significant Digits  **Background** Lot No. Mark: @  T go with C  ReduceQRCode

Result Color

Auto Detect Cassette: Manual Encode Ver.: Normal

# Background Parameter Setting



Modify Lot

Product Code : AMOZ@FB60A-5000

Lot No : FB60A-5000 Expiration Date : 2025-06-01 Calendar...

Analyte : AMOZ Sample Type : Honey

Invalid Condition C < 100 AND T <

Background 40 (Range:0-255) Incubation Period 1

Dilution Statement

Menu(Max. 6) Honey Factor: 1.000 Inc.1 Del

Qualitative Statement

Statement Negative<0.5ppb # Clear

Formula T1/C1>=1

Result Text Negative<0.5ppb AMOZ Text 2:

Quantitative Mapping Curve

Bias 0 Result Significant Digits: 5

Result Formula T1 Single

Concentration 0.00 Read 0.00 Add

Curve Interval Linear Log Reset

4PL Parameters

Working Range: Concentration 0.000000 - 0.000000

a 0.000000 b 0.000000 c 0.000000 d 0.000000

Save Cancel

- You can refer to the measurements with and without the strip to set this parameter
- Formula for Measurement Value:  
**Gray=**  
 **$0.299 \times R + 0.587 \times G + 0.114 \times B$**   
→A common formula for converting RGB to grayscale image
- It is recommended to set it slightly higher than the measurement without the strip.
- An error message will appear if the measured value is **less than the Background setting.**

# “Background Function” Error Notification

- When analyzing and a darker background is detected (no strip or adapters inserted), the following message will be displayed:

