



Biometric Authentication System

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1. COM Port

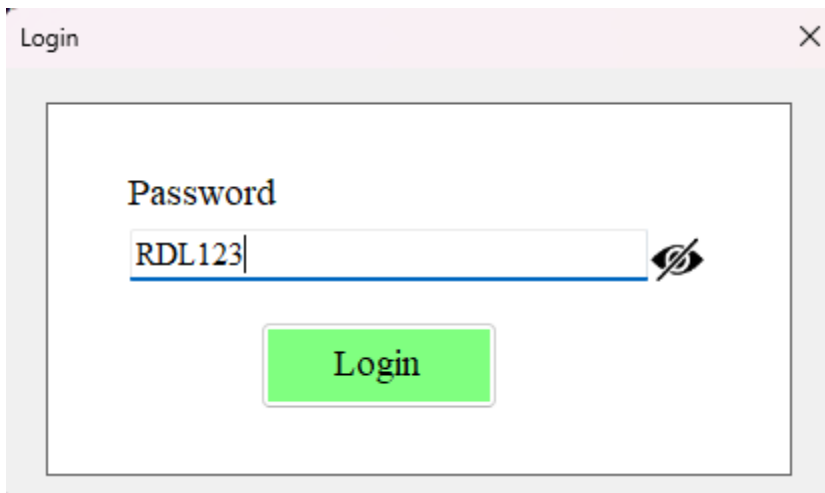
This should be the first step before in using the Access Control System UI.

1. Plugin the hardware and check for the COM Port number in **Computer->System Properties->Device Manager->Ports**

Note: Make sure that FTDI Com port driver installed. If not installed please download and install from below given link.

Link: <https://www.ftdichip.com/Drivers/VCP.htm>

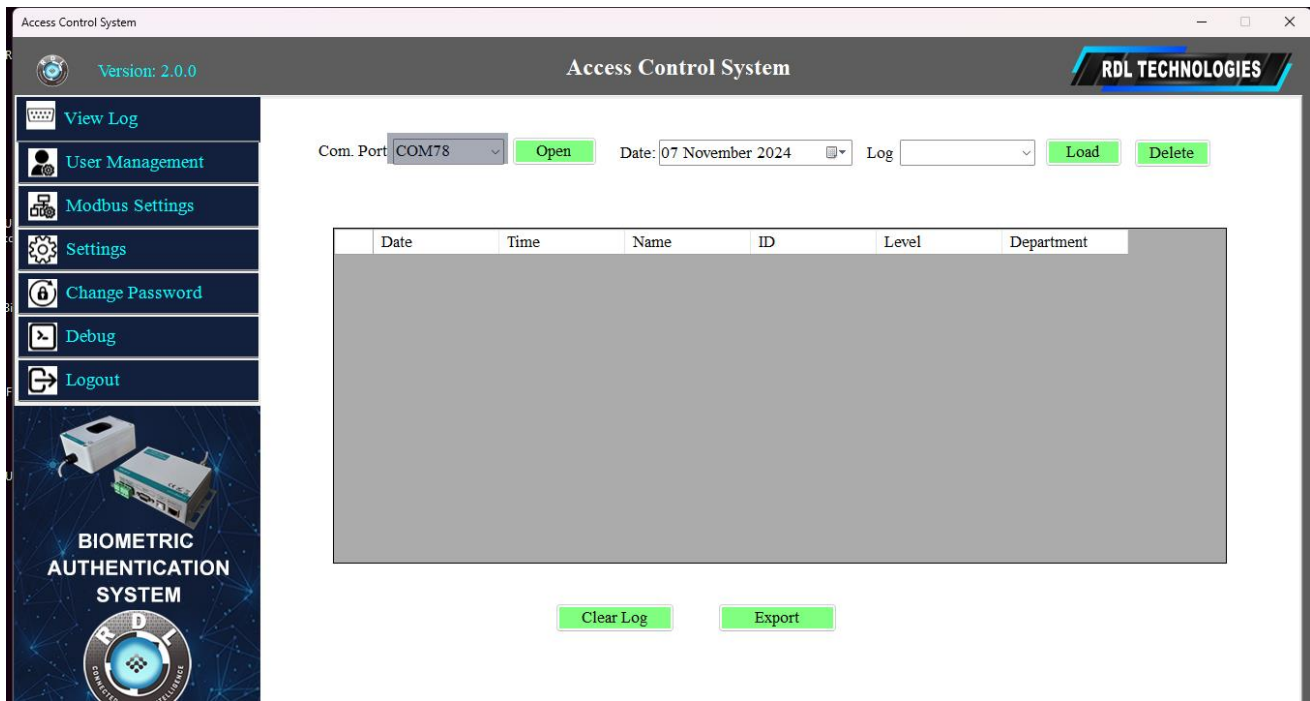
Login



The image shows a screenshot of a web browser window titled "Login". Inside the window, there is a form with a "Password" label above a text input field. The input field contains the text "RDL123" and has a small eye icon to its right, indicating a password toggle. Below the input field is a green button with the text "Login".

Use the Default Password "RDL123" during Login

1. Select the COM Port number in the UI App as shown below and Click Open.



2. View Log

Access Control System

Version: 2.0.0

Access Control System

RDL TECHNOLOGIES

View Log

User Management

Modbus Settings

Settings

Change Password

Debug

Logout

Com. Port: COM78 Date: 07 November 2024 Log: 7_11_24 ✓

Date	Time	Name	ID	Level	Department
7 11 24	11:32:30	Anush	78	2	procurement
7 11 24	11:32:34	Anush	78	2	procurement
7 11 24	11:32:58	Anush	78	2	procurement
7 11 24	11:35:33	Sowndarya	12	1	Production
7 11 24	11:35:37	Sowndarya	12	1	Production
7 11 24	11:35:40	Sowndarya	12	1	Production

BIOMETRIC AUTHENTICATION SYSTEM

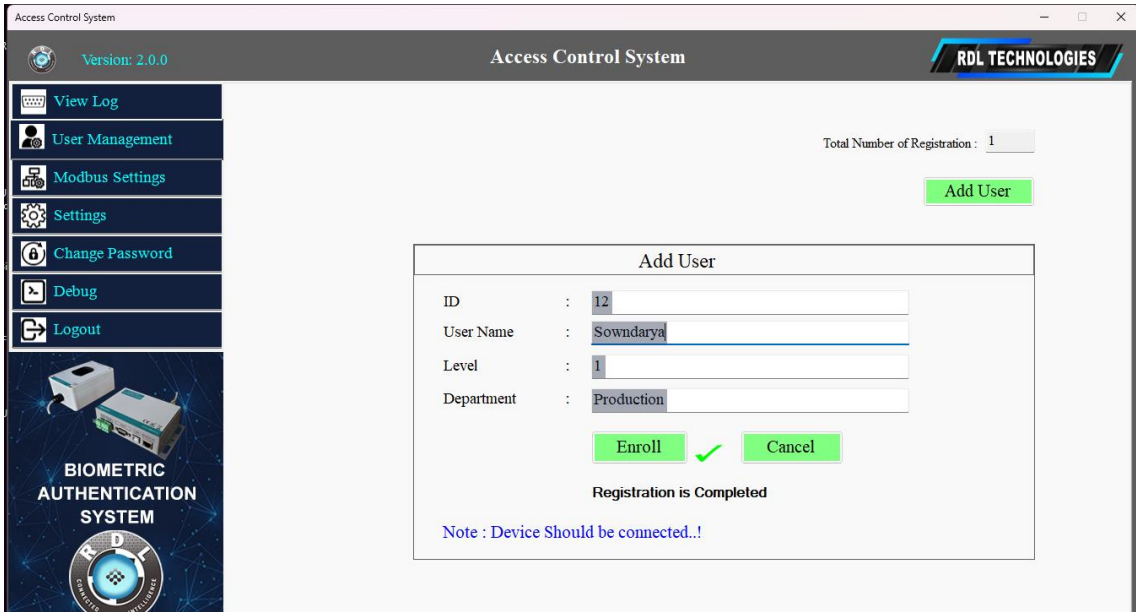
RDL

Date: Monitor the Log files by selecting the Date

Log Files: You can select the .CSV files and Click on Load to view.

3. User Management

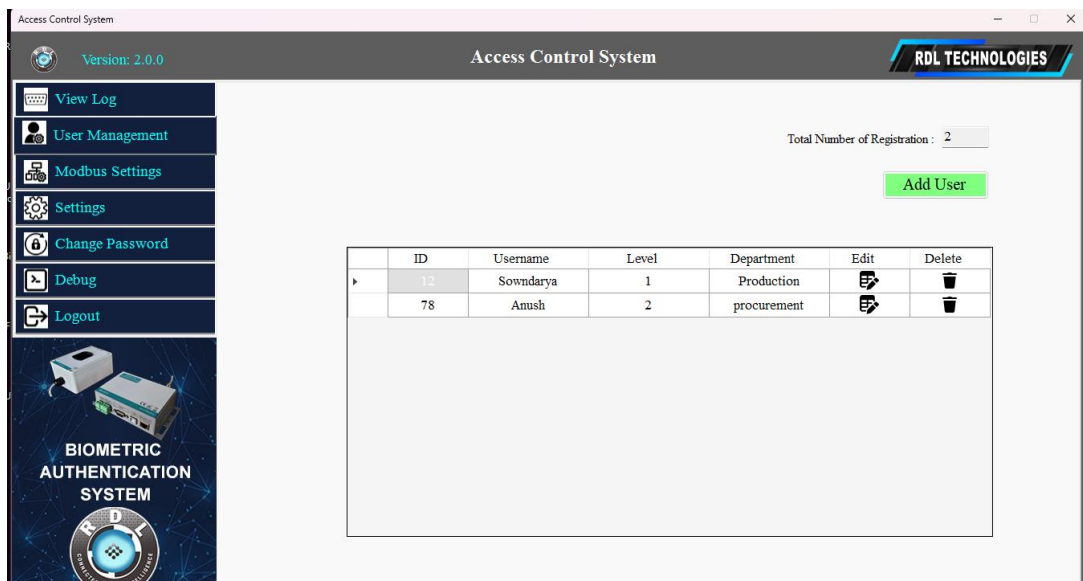
3.1 Enroll



Enroll: By giving the ID, Name, Level, Department to enroll the new user.

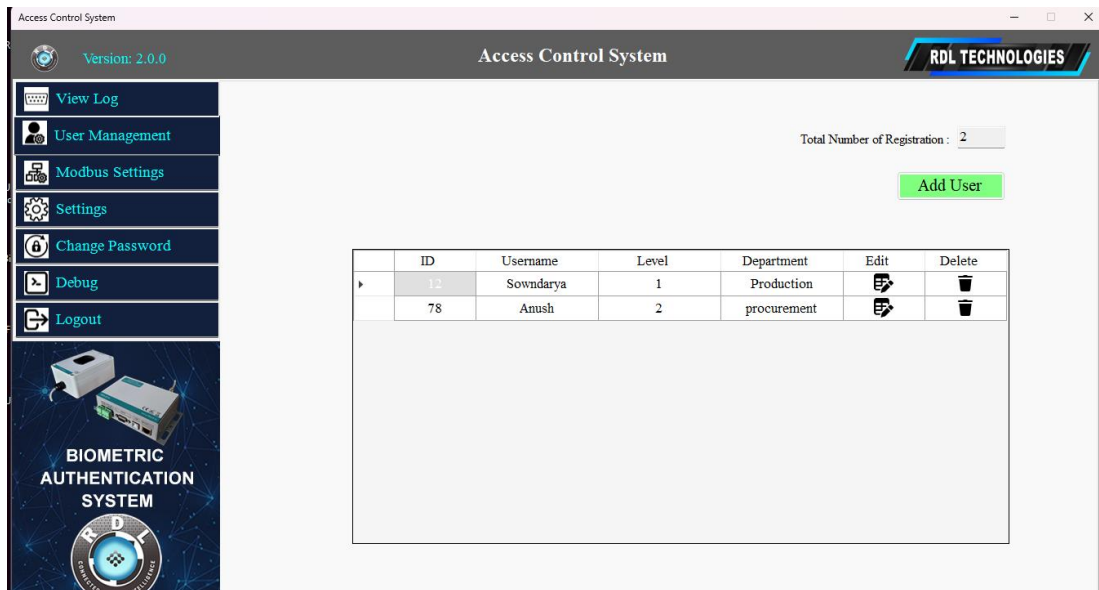
Note: Make sure that follow the instruction displayed on the Hardware during enrollment.

3.2 View



Here you can view the details of the user.

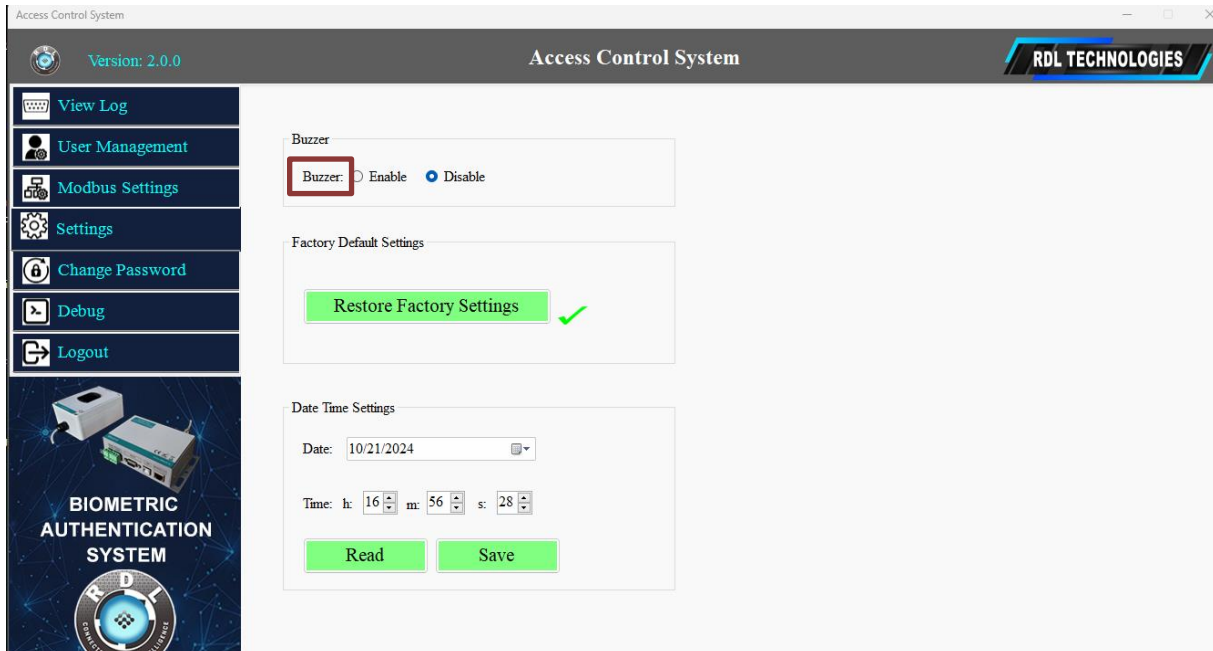
3.3 Delete



Click on Delete button By Selecting the User ID you can delete the details of the user.

4. Settings

4.1 Buzzer



Enable/Disable the Buzzer by selecting the Buzzer option and click on Save.

4.2 Date and Time

The screenshot displays the 'Access Control System' web interface. On the left is a navigation sidebar with options: View Log, User Management, Modbus Settings, Settings, Change Password, Debug, and Logout. Below the sidebar is a banner for 'BIOMETRIC AUTHENTICATION SYSTEM' with the RDL logo. The main content area is titled 'Access Control System' and features the RDL TECHNOLOGIES logo in the top right. It contains three sections: 'Buzzer' with radio buttons for 'Enable' and 'Disable' (where 'Disable' is selected); 'Factory Default Settings' with a green 'Restore Factory Settings' button and a checkmark; and 'Date Time Settings' with a date field set to '10/21/2024', time fields for hours (16), minutes (56), and seconds (28), and 'Read' and 'Save' buttons.

Change the Date and Time using Date Time Settings.

5. Modbus Settings

5.1 MODBUS RTU

5.1.1 MODBUS RTU Master

The screenshot displays the 'Modbus Settings' window in the 'Access Control System' software. The interface includes a sidebar with navigation options like 'View Log', 'User Management', 'Modbus Settings', 'Settings', 'Change Password', 'Debug', and 'Logout'. The main content area is titled 'Modbus Settings' and contains the following configuration sections:

- Modbus Type:** Radio buttons for RTU (selected), TCP, and RS85 Open Data.
- Mode(RTU):** Radio buttons for Master (selected) and Slave.
- Note:** Write Multy Register Function Code (FC 16)
- Slave:** A text input field for 'Slave ID' containing the value '1'.
- Comport Settings:** A group of dropdown menus for 'Baud Rate' (9600), 'Data Bit' (8 bit), 'Parity' (None), and 'Stop Bit' (1 Bit). Below these are 'Read' and 'Save' buttons.
- Modbus Register Address (Holding Register):** A table of register addresses with corresponding labels and values:

Name:	10	4010
ID:	20	4020
Level:	30	4030
Dept:	40	4040
Date Time:	50	4050

 Below this table are 'Set Default Value', 'Read', and 'Save' buttons.

Modbus Type: Select the Modbus type as RTU.

Slave: Enter the Modbus Slave ID and click on Save.

Comport Settings:

1. Baud Rate: Select **Baud Rate** from the list.
2. Select **Data Bit** from the list.
3. Select **Parity** from the list.
4. Select **Stop Bit** from the list.
5. Click on Save.
6. Clicking on Read will display the configuration that is already saved.

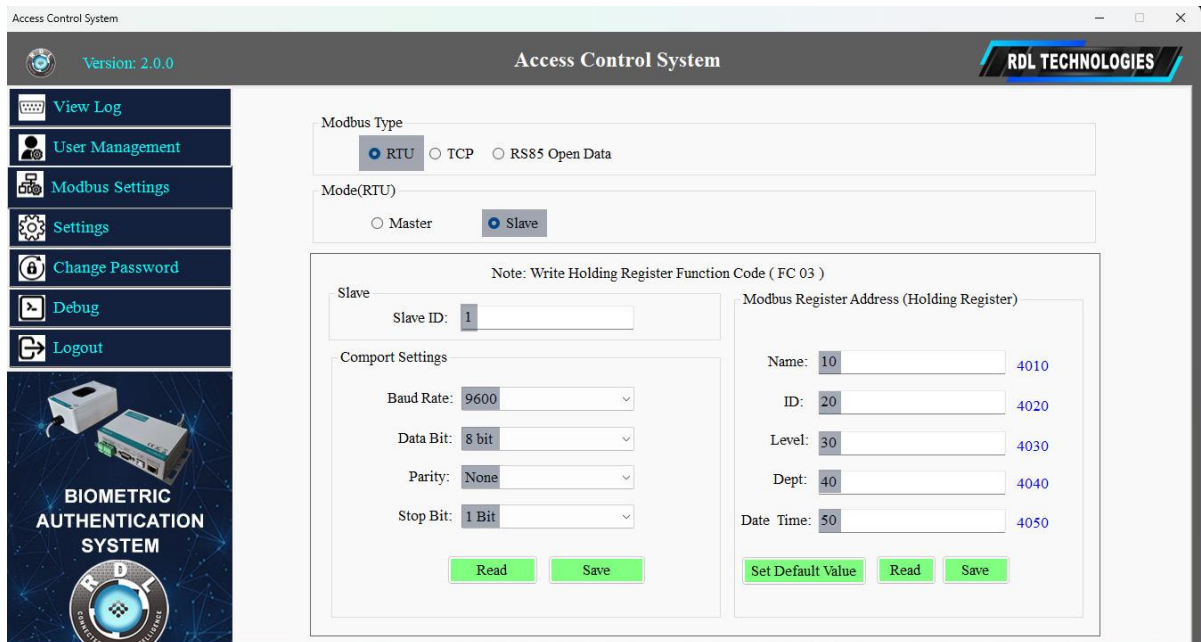
Mode: Select the mode as Master.

Register: To set the default value, click the "Set Default Value" button. If you want to change the register address, you can enter it manually.

5.1.2 Application Wiring Diagram of Modbus RTU Master:



5.1.3 MODBUS RTU Slave



Modbus Type: Select the Modbus type as RTU.

Slave: Enter the Modbus Slave ID and click on Save.

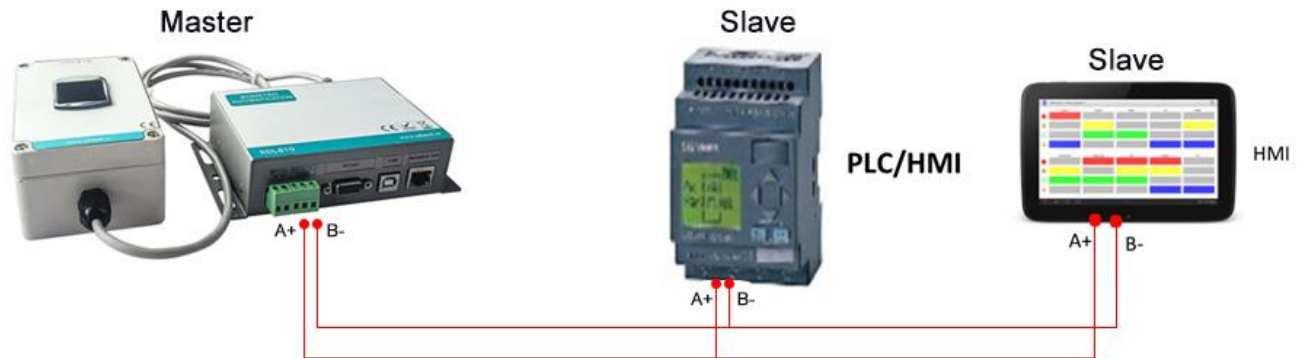
Comport Settings:

1. Baud Rate: Select **Baud Rate** from the list.
2. Select **Data Bit** from the list.
3. Select **Parity** from the list.
4. Select **Stop Bit** from the list.
5. Click on Save.
6. Clicking on Read will display the configuration that is already saved.

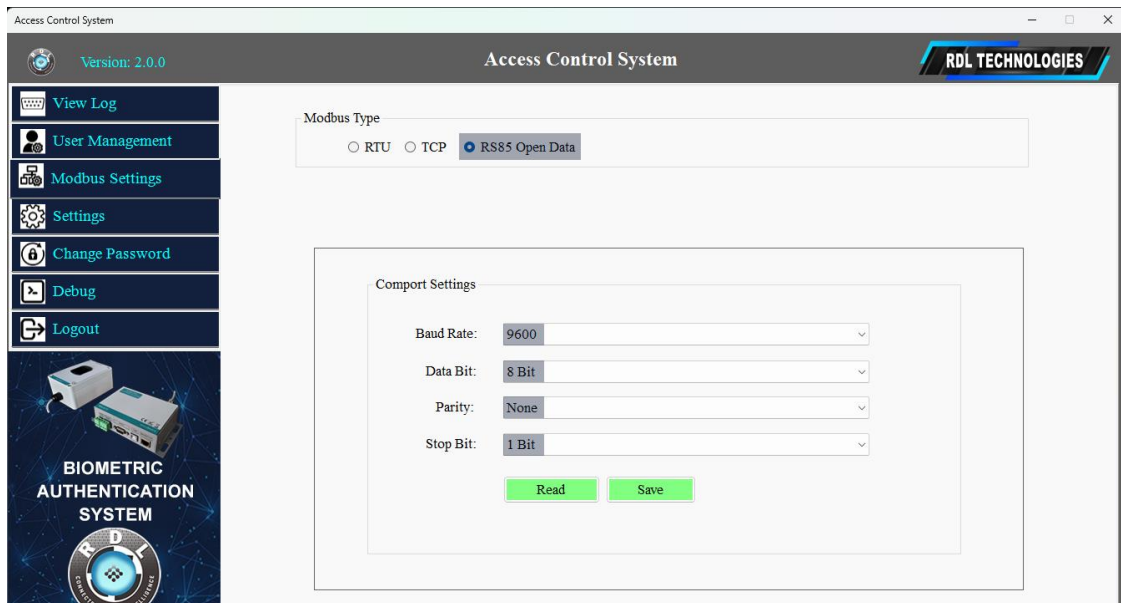
Mode: Select the mode as Slave.

Register: To set the default value, click the "Set Default Value" button. If you want to change the register address, you can enter it manually.

5.1.4 Application Wiring Diagram of Modbus RTU Slave:



5.2 RS485 Open Data



Modbus Type: Select the Modbus type as RS485 open data.

Comport Settings:

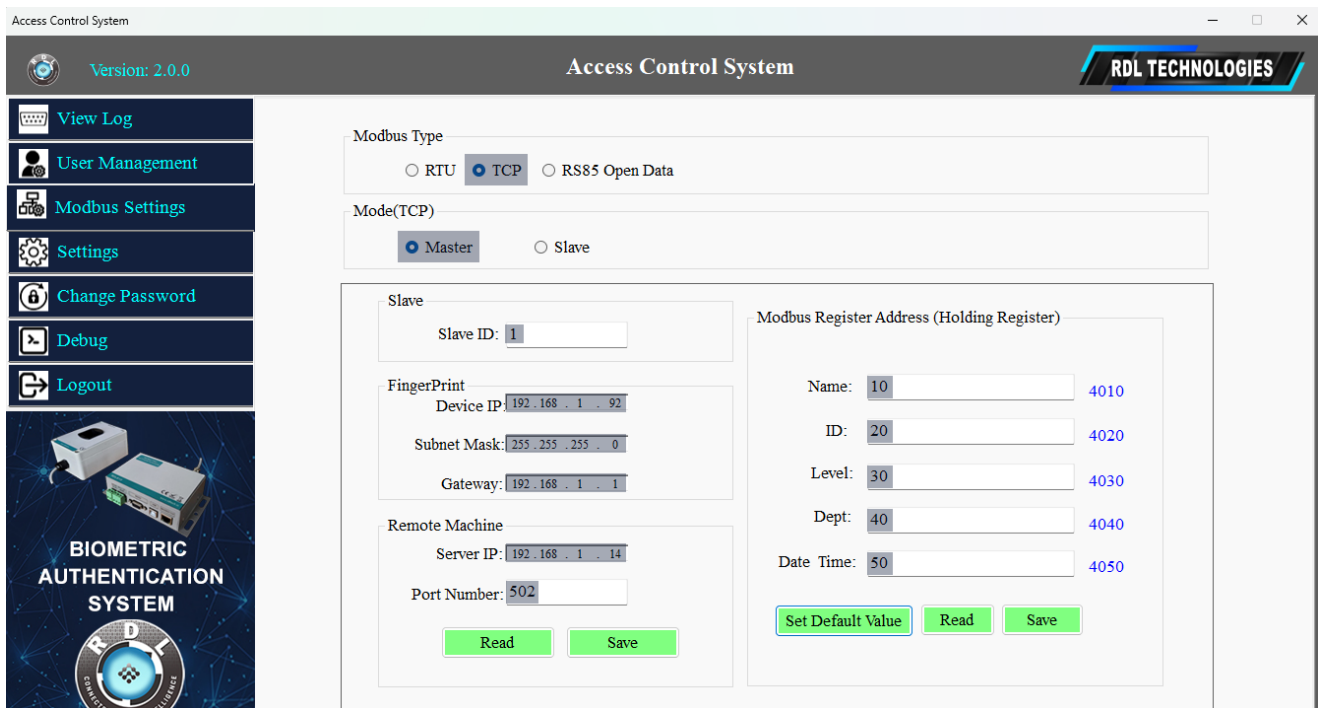
1. Baud Rate: Select **Baud Rate** from the list.
2. Select **Data Bit** from the list.
3. Select **Parity** from the list.
4. Select **Stop Bit** from the list.
5. Click on Save.
6. Clicking on Read will display the configuration that is already saved.

5.2.1 Application Wiring Diagram of RS485 Open Data



5.3 MODBUS TCP

5.3.1 MODBUS TCP Master



Modbus Type: Select the Modbus type as TCP.

Finger Print:

Set the Device IP Address, Subnet Mask, Gateway and click on Save.

Remote Machine:

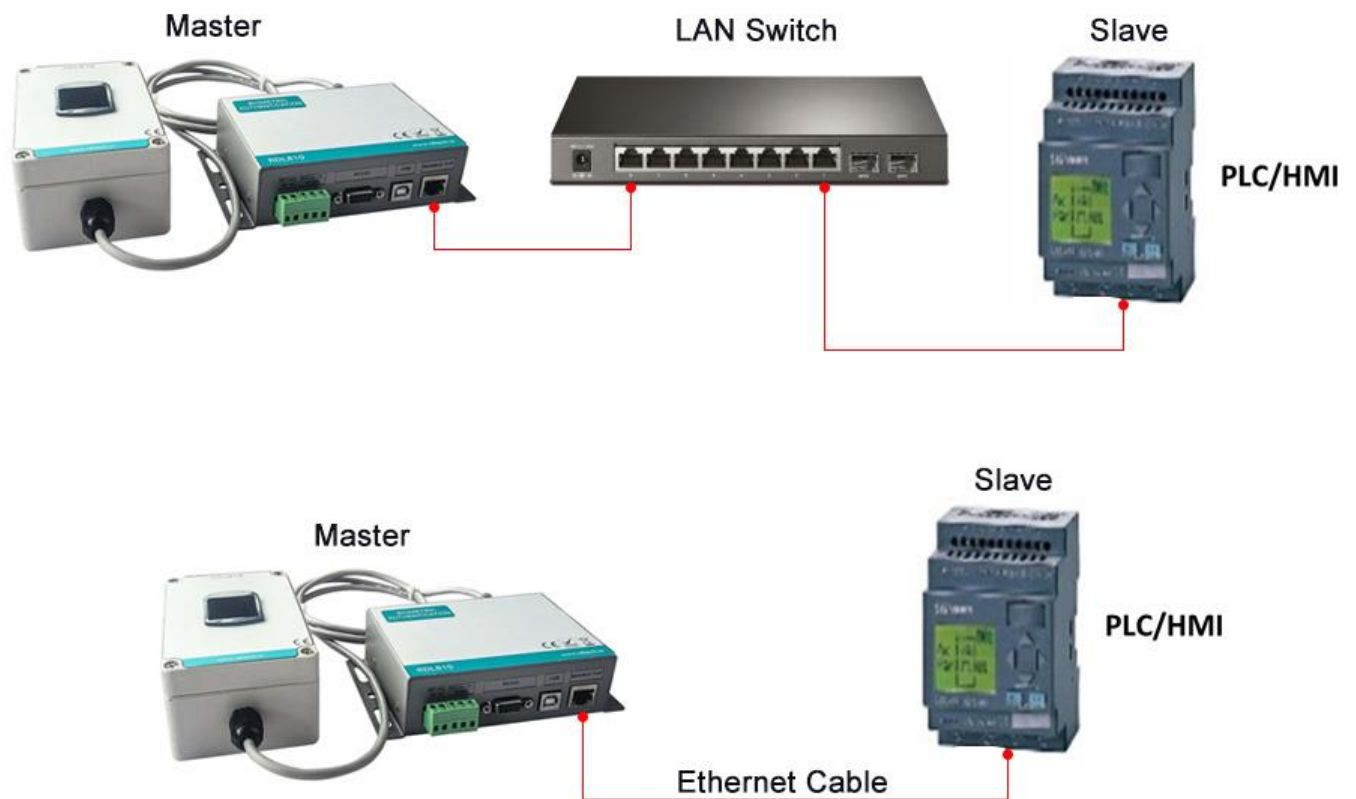
Set the Server IP Address, Port Number and click on Save.

Mode: Select the mode as Slave.

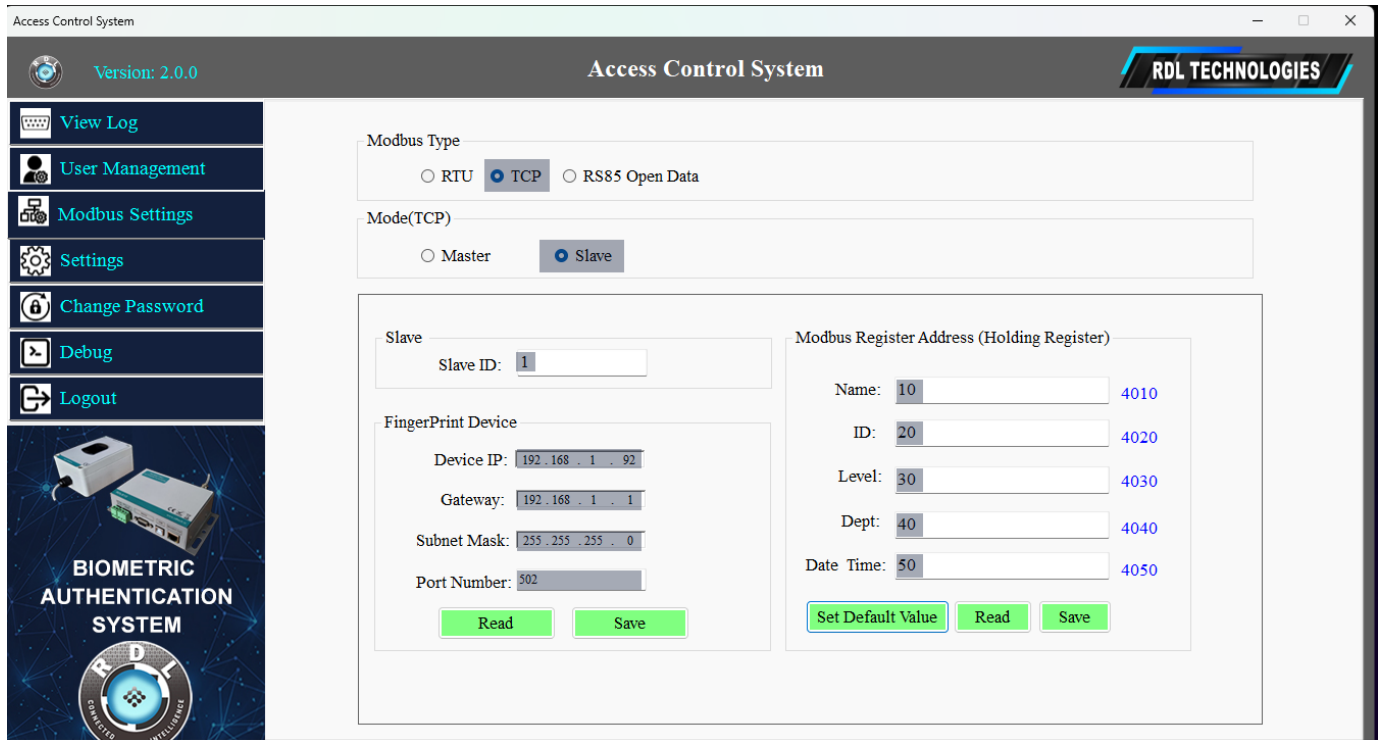
Slave: Enter the Modbus Slave ID and click on Save.

Register: To set the default value, click the "Set Default Value" button. If you want to change the register address, you can enter it manually.

5.3.2 Application Wiring Diagram of Modbus TCP Master:



5.3.3 MODBUS TCP Slave



Modbus Type: Select the Modbus type as TCP.

Mode: Select the mode as Slave.

Finger Print:

Set the Device IP Address, Subnet Mask, Gateway and click on Save.

Slave: Enter the Modbus Slave ID and click on Save.

Register: To set the default value, click the "Set Default Value" button. If you want to change the register address, you can enter it manually.

5.3.5 Application Wiring Diagram of Modbus TCP Slave

