MYST

Perfume Vending Machine Operator Manual

1. System Overview

MYST Vending is a complete management platform for automated spray vending machines. It consists of three interconnected components that work together to deliver a seamless vending experience:

- A web-based management dashboard for administrators and customers
- An Android HMI tablet application installed on each vending machine
- An embedded spray controller that physically dispenses product

The platform supports multiple customers, each managing their own machines and products, under a single admin umbrella.

2. System Components

Component	Description
Web Dashboard	Browser-based management portal for both Admin and Customer roles
HMI Tablet App	Flutter Android app installed on each 10" tablet mounted on the vending machine
Embedded Spray Device	Hardware controller that receives spray commands and manages product dispensing
Backend API	Server that connects all components, handles payments, and stores all data

3. User Roles

Customer

The Customer is the business owner or location operator who has one or more machines allocated to them. They manage their own products, view their own reports, and configure their own machines.

4. Getting Started

4.1 Admin Login

1. Open a web browser and navigate to the MYST Vending portal URL.
2. Enter your Admin email address and password.
3. Click **Login**.
4. You will land on the Admin Dashboard.

> ⓘ If you have forgotten your password, use the **Forgot Password** link on the login page.

4.2 Customer Login

1. Open a web browser and navigate to the MYST Vending portal URL.
2. Enter the email address and password provided by your Admin.
3. Click **Login**.
4. You will land on the Customer Dashboard.

> ⓘ Your login credentials are created by the Admin. Contact your Admin if you have not received them or need a password reset.

5.3 Machine Management

Navigate to **Machines** in the main menu.

Creating a New Machine

1. Click **Add Machine**.
2. Fill in the machine details:
   - Machine name / label
   - Serial number
   - Assign to a Customer
   - Set the number of slots (spray positions) on the machine
   - Configure per-slot capacity (maximum stock per slot)
3. Click **Save**.

> Upon saving, the system generates a unique **Activation Code** for this machine. The activation code is required to link the tablet to the machine during first boot.

Machine Detail View

Click on any machine to view:

- Current online/offline status
- Slot-by-slot stock levels
- Spray configuration per slot
- Activation status and device information
- Transaction history for this machine

Spray Configuration (Admin)

Inside the machine detail view, the Admin can configure per-slot spray settings:

- Duration per spray (in milliseconds)
- Number of sprays per transaction

These settings are synced to the tablet app automatically.

6. Customer Web Dashboard

6.1 Dashboard Overview

The Customer dashboard provides a summary of the customer's own machines and business:

- Total machines and their status
- Today's transactions and revenue
- Low stock alerts
- Recent transactions

6.2 Product Master

Navigate to **Products**.
The Customer can:

- Add new products for their machines
- Edit existing product details (name, price, image, description)
- Delete products

> After adding or updating products, make sure they are assigned to the correct machine slots.

6.3 Machine Management & Refill

Navigate to **Machines**.
The Customer can view all their machines and:

- Check slot-wise stock levels
- Update stock (refill) for each slot
- View machine online/offline status

Action	Description
Update Stock	Enter the current stock quantity for a slot. This helps maintain accurate inventory and low stock alerts.
Low Stock Alerts	The system shows alerts when stock goes below the configured threshold.
Machine Details	Click on a machine to view slot configuration and device information.

6.4 Spray Configuration

Navigate to **Machines** and open a machine.
The Customer can configure per-slot spray settings:

- Duration per spray (in milliseconds)
- Number of sprays per transaction

> These settings control how much perfume is dispensed for each transaction and are sent to the tablet automatically.

6.5 Transaction Logs (Customer)

Navigate to **Transactions**.

Customers can view all transactions for their machines.

Field	Description
Timestamp	Date and time of the transaction
Machine	Which machine was used
Slot / Product	Which product slot and product name
Amount	Amount paid (₹)
Sprays	Number of sprays dispensed
Duration	Total spray duration
Status	Success / Failed / Refunded

You can filter transactions by date range, status, or product.

6.6 Reports & Statistics (Customer)

Navigate to **Reports**.

Customers can view reports related to their own business:

- Daily, weekly, monthly sales
- Product-wise sales
- Machine-wise performance
- Revenue trends
- Payment method summary

ⓘ Use filters (date range, machine, product) to generate accurate reports.

7. HMI Tablet Application (End User)

The HMI Tablet App is used by end users to purchase perfume sprays from the vending machine.

7.1 Selecting a Product

1. Browse the list of available perfumes on the tablet screen.
2. Each perfume shows the product name and price.
3. Tap on the perfume you want to purchase.
4. You will be redirected to the payment screen.

7.2 Making a Payment

1. A QR code will be displayed on the screen.
2. Scan the QR code using any UPI app (Google Pay, PhonePe, Paytm, etc.).
3. Enter the amount and complete the payment.
4. Once the payment is successful, the machine will proceed to dispense.

ⓘ Ensure your internet connection is active to complete the payment and receive confirmation.

7.3 Transaction Status

- **Payment Successful:** The machine dispenses the perfume and shows a success message.
- **Payment Failed:** The screen will show an error message. Try again.
- **Refund (if applicable):** The amount will be refunded to your account.

8. HMI Control Panel (Operator)

The HMI Control Panel is used by machine operators to configure and monitor the machine.

8.1 Accessing the Control Panel

1. Open the **HMI Tablet App**.
2. Tap on the **Menu** (≡) icon.
3. Select **Control Panel**.
4. Enter the operator password to access the settings.

> ⓘ Only authorized operators should access the control panel.
> Keep the password secure.

8.2 Spray Configuration

In the Control Panel, operators can configure:

- Duration per spray (in milliseconds)
- Number of sprays per transaction

These settings control how much perfume is dispensed for each transaction.

Changes are saved and applied immediately.

8.3 Voltage Thresholds

Operators can set voltage limits to protect the machine:

Parameter	Description	Default Range
Low Voltage Threshold	Minimum voltage required for the machine to operate	190V – 210V
High Voltage Threshold	Maximum voltage allowed for safe operation	230V – 250V
Action on Fault	Choose what happens when voltage is out of range	Pause / Stop / Alert

> ⓘ Proper voltage settings help prevent damage to the machine and ensure consistent performance.

8.4 Machine Diagnostics

The Control Panel provides real-time machine diagnostics:

Diagnostic Item	Description
Device Status	Online / Offline status of the controller
Spray Test	Test each slot manually
Stock Status	Current stock level in each slot
Last Transaction	Details of the most recent transaction
Error Logs	View recent errors and alerts

> ⓘ Use diagnostics regularly to ensure smooth operation and quick issue resolution.

9. Machine Activation (First Boot)

When the tablet is powered on for the first time, it must be activated to link it to a machine.

1. Power on the tablet installed on the vending machine.
2. The **Activation Screen** will appear automatically.
3. Enter the **Activation Code** provided by the Admin.
4. Ensure the machine is connected to the internet.
5. Tap **Activate**.
6. Once successful, the tablet will restart and load the machine dashboard.

> The activation code is unique to each machine.
> Contact your Admin if you do not have the code.

10. Real-Time Monitoring

The system provides real-time monitoring of all machines.

Both Admin and Customers can view:

- Machine online / offline status
- Real-time stock levels
- Live transaction updates
- Low stock and fault alerts
- Payment status

> Real-time monitoring helps ensure smooth operations
> and quick response to issues.

11. Troubleshooting

Common issues and solutions:

Issue	Possible Cause	Solution
Machine is Offline	No internet connection	Check internet connection and restart the tablet
Payment Failed	UPI issue or timeout	Retry payment or check internet
Spray Not Working	Low stock or hardware fault	Check stock level and run diagnostics
Tablet Not Activated	Incorrect activation code	Verify the code and try again
Stock Not Updating	Sync issue	Check internet connection and refresh

> If issues persist, contact your Admin or service provider for support.

12. Maintenance & Care

Regular maintenance ensures the machine operates efficiently and has a longer life.

12.1 Daily Maintenance (By Operator)

- Check stock levels and refill if required.
- Wipe the exterior and touchscreen with a soft, dry cloth.
- Ensure the tablet is online and functioning properly.
- Check for any error alerts on the Control Panel.
- Run a spray test for a few slots to ensure proper dispensing.

12.2 Weekly Maintenance

- Clean the nozzle area with a soft cloth.
- Check all product bottles for leaks or spills.
- Verify spray performance and adjust settings if needed.
- Review transaction logs for any failed payments or errors.

12.3 Monthly Maintenance

- Inspect all tubes and connections for wear or blockages.
- Clean the internal compartment and remove dust.
- Backup important data (transactions, stock, settings).
- Check voltage thresholds and ensure settings are appropriate.

Maintenance Frequency	Task Summary
Daily	• Check stock • Clean exterior & screen • Check connectivity • Run spray test
Weekly	• Clean nozzles • Check for leaks • Verify spray performance • Review logs
Monthly	• Inspect tubes • Clean interior • Backup data • Review voltage settings

ⓘ Proper maintenance helps prevent downtime and ensures consistent customer satisfaction.

13. Error Codes & Alerts

The system will show alerts or error messages when an issue occurs.

Error / Alert	Description	Recommended Action
E01 - No Internet	Tablet is not connected to the internet.	Check Wi-Fi or mobile data connection.
E02 - Payment Failed	UPI payment was unsuccessful.	Retry payment or check internet.
E03 - Low Stock	Stock in a slot is below the threshold.	Refill the product in the slot.
E04 - Spray Failure	No spray detected during transaction.	Run spray test and check the nozzle.
E05 - Over Voltage	Voltage is higher than the set limit.	Check power supply and voltage settings.
E06 - Under Voltage	Voltage is lower than the set limit.	Check power supply and voltage settings.
E07 - Device Offline	Controller is not responding.	Restart the tablet or controller.

ⓘ If an issue persists after taking the recommended action, contact your Admin or service provider.

14. Support & Contact

For support, contact your Admin or service provider.

Support Email
support@mystvending.com

Website
www.mystvending.com