

Business Operations & Integrations Guide

A practical, step-by-step operating guide for businesses registering on Payvo: how each section of the platform works, how to manage assets and contracts, and how to connect payment gateways, Make.com, and automated hardware controllers.

Purpose of This Guide

This guide is a direct instructional manual for business owners, operations managers, and technical administrators registering to use Payvo. It provides clear setup steps, describes every platform module, and gives working examples for payment gateways, Make.com automations, and smart hardware triggers.

1. How Payvo Works (The 3-Step Lifecycle)

Payvo automates recurring billing, installment collections, customer records, and hardware activations. The entire platform operates on a simple, three-step automated cycle:

- **Step 1: Set Up Your Inventory & Customer Contracts:** You register your assets (properties, shops, apartments, solar units, or equipment) and create customer billing contracts with predefined payment schedules.
- **Step 2: Collect Payments Seamlessly:** Customers pay through your connected payment channels (online checkout, dedicated virtual bank accounts, direct bank transfers, or manual cash/POS entry).
- **Step 3: Instant Automated Reconciliation & Actions:** The instant a payment is verified, Payvo marks the contract installment paid, generates a branded digital receipt, sends a WhatsApp confirmation, and fires automated actions (such as Make.com scenarios or GSM relay switches).

2. Business Registration & Account Setup

Payvo is built with private multi-tenant workspaces. Your company's data, financial logs, and client lists are completely private and isolated.

2.1 Creating Your Account

1. Go to the registration page (/register/) and enter your Business Name, Administrator Email, and secure password.
2. Choose your default currency (e.g. NGN - Nigerian Naira).
3. Once registered, your private company workspace is instantly created and ready for configuration.

2.2 Company Branding & Receipt Customization

Navigate to Settings → Company Profile to configure your public branding:

- Upload your official Business Logo (PNG or JPG format).
- Enter your official business address, phone number, and support email.

- Select your preferred receipt style: Classic, Modern, Minimal, or Commercial Invoice style.
- All generated PDF receipts, client invoices, and WhatsApp messages will automatically carry your branding.

2.3 Team Members & Role Permissions

You can invite team members to collaborate inside your workspace with specific role permissions:

Role	Access & Permissions
Super Admin / Manager	Full access to dashboard metrics, integrations, API keys, bank credentials, staff accounts, and financial exports.
Sales Agent	Can create client profiles, draft new contracts, view inventory availability, and track their personal sales.
Accountant	Can record and confirm payments, issue receipts, audit bank logs, and download revenue reconciliation reports.

3. Platform Modules (How to Use Each Section)

3.1 Executive Dashboard (/)

The Dashboard provides an immediate financial pulse of your operations:

- Revenue Collected This Month: Total verified inflow across all gateways.
- Due Today & Overdue Installments: Immediate alert count of pending payments requiring attention.
- Collection Efficiency Rate: Percentage of invoices collected on time versus total billed.
- Quick Actions: One-click buttons to record payments, add clients, or create new contracts.

3.2 Assets & Inventory Management (/assets/)

Assets represent the items, units, or services you sell or manage on installment:

- What counts as an asset: Apartments, land plots, commercial stalls, solar inverter kits, or smart hardware channels.
- Asset Details: Set title, total valuation, category, and occupancy status (Available, Reserved, or Sold).
- Unit Identifier / Label: Each asset can have a specific identifier (such as 'Unit 101 - Smart Controller') which is passed into automation webhooks upon payment.

3.3 Clients & CRM (/clients/)

The Clients section stores all customer records:

- Client Profile: Full name, telephone number (in international format, e.g. +234 800 000 0000), email address, and physical address.
- Identification & KYC: Upload identity cards, passport photographs, or business registration documents.
- Payment History & Statements: View the complete ledger of all payments made by this client across all their contracts.

3.4 Contracts & Billing Schedules (/contracts/)

Contracts link a Client to an Asset with a structured payment plan:

- Total Amount & Initial Down-Payment: Enter the agreed contract price and any deposit received.
- Installment Duration & Frequency: Choose weekly, monthly, quarterly, or custom milestone frequencies.
- Automated Amortization: Payvo automatically generates the full schedule of upcoming payment dates and individual installment amounts.
- Grace Periods & Penalties: Set how many days after the due date before an installment is marked Overdue.

3.5 Payments & Branded Receipts (/payments/)

The Payments section tracks every inflow across your business:

- Automated Online Payments: Processed through your connected gateways (Make.com, Paystack, Monnify, Remita, etc.) and recorded automatically.
- Manual Payment Entry: Staff can log offline cash, bank deposits, or POS payments with proof-of-payment notes.
- Dynamic Digital Receipts: Every payment generates a tamper-proof receipt with your company logo, installment details, and a scannable QR verification code.

3.6 WhatsApp Automation Hub (/whatsapp/)

Payvo includes built-in WhatsApp messaging automation:

- Instant Payment Confirmations: Automatically sends a WhatsApp message with receipt details the exact moment payment is verified.
- Payment Due Reminders: Automated notifications sent 3 days before, on the due date, and when overdue.
- Broadcast Notices: Send general updates or payment notices directly to client WhatsApp numbers.

3.7 Reports & Financial Exports (/reports/)

Comprehensive financial reporting for business owners and accounting teams:

- Revenue by Gateway: Breakdown of collections across each connected payment provider.
- Debtor Aging Report: List of clients with overdue installments categorized by 30, 60, and 90+ days.
- One-Click Excel / CSV Export: Download raw ledger tables for external auditing or filing tax returns.

4. The Integrations Working Guide

The Integrations page (/integrations/) is the central hub where you link Payvo to external payment gateways and automation tools. This section details how each connection works in plain, simple English.

What is a Webhook?

A webhook is an automated alert between computer systems. When a customer pays money at a bank or on a checkout page, the payment provider sends a secure notification to Payvo saying: 'Payment of ₦50,000 confirmed for Reference PAY-SAMPLE-001.' Payvo verifies the signature, updates the contract, and triggers your configured automations.

4.1 Make.com & Automation Tools (Featured On Top)

Make.com allows your business to create automated workflows without writing code. When a payment is confirmed in Payvo, Payvo dispatches an outbound event to Make.com within milliseconds.

- 1. Open Make.com and click 'Create a new scenario'.
- 2. Add the 'Webhooks' module and choose 'Custom Webhook'.
- 3. Name the webhook (e.g. 'Payvo Payments') and copy the unique URL provided by Make.com.
- 4. In Payvo, navigate to Integrations → Make.com & Automations tab.
- 5. Paste your Make.com Webhook URL into the field and turn ON the toggle switch 'Enable forwarding'.
- 6. Click 'Send Test Payload to Make.com'. Payvo immediately sends sample data so Make.com can detect the data fields.
- 7. In Make.com, verify that the data structure was successfully recognized, then connect your desired next step (e.g. GSM controller, Google Sheets, or Slack alert).

4.2 Connecting Paystack (Cards, Bank Transfer, USSD)

Paystack allows your customers to pay using debit cards, direct bank transfer, and USSD codes:

- 1. Log in to your Paystack Dashboard (dashboard.paystack.com) → Settings → API Keys & Webhooks.
- 2. Copy your Secret Key (starts with sk_live_ or sk_test_) and Public Key (starts with pk_live_).
- 3. In Payvo, go to Integrations → Payment Gateways, find Paystack, and click 'Connect'.
- 4. Paste your Secret Key and Public Key into the form and save.
- 5. Copy your unique Payvo Webhook URL shown on the Paystack card.
- 6. Return to your Paystack Dashboard, paste this URL into the 'Live Webhook URL' field, and click Save Changes.
- 7. Verification: Paystack signs every callback using HMAC-SHA512. Payvo verifies this signature automatically before recording payments.

4.3 Connecting Monnify (Virtual Accounts & Dedicated Bank Transfers)

Monnify allows you to allocate dedicated virtual bank account numbers to clients for automatic reconciliation:

- 1. Log in to app.monnify.com → Settings → Developers → API Keys.
- 2. Copy your API Key, Client Secret, and Contract Code.
- 3. In Payvo, click 'Connect Monnify', paste all three credentials, and click Save.
- 4. Copy your Payvo Monnify Webhook URL.
- 5. In your Monnify Dashboard, paste this URL into the Webhook URL field.
- 6. Verification: When a customer transfers money into their dedicated account, Monnify calls Payvo. Payvo validates the HMAC-SHA512 hash and records the payment.

4.4 Connecting Flutterwave (Cards, Mobile Money & Transfers)

Flutterwave supports payments across Africa via cards, USSD, and mobile money:

- 1. Log in to Flutterwave → Settings → Webhooks.
- 2. Create a 'Secret Hash' (a private secret phrase of your choice) in Flutterwave.
- 3. Copy your Secret Key and Public Key from API Keys.

- 4. In Payvo, click 'Connect Flutterwave', enter your Keys and the exact same Secret Hash, and click Save.
- 5. Copy your Payvo Webhook URL and paste it into Flutterwave's Webhook URL field.

4.5 Connecting Remita (RRR Invoice Collections)

Remita is used for corporate invoicing, institutional collections, and RRR-based payments:

- 1. Log in to login.remita.net → Account Settings → API & Webhook Settings.
- 2. Copy your Merchant ID and API Key.
- 3. In Payvo, click 'Connect Remita', paste your Merchant ID and API Key, and save.
- 4. Copy your Payvo Webhook URL and enter it in Remita's Notification URL settings.
- 5. When an RRR payment is processed, Remita calls Payvo, and the contract installment is marked Paid.

4.6 Other Supported Nigerian Gateways

Payvo also provides direct native webhook connectors for additional Nigerian financial providers:

Gateway	Credentials Needed	How It Operates
Squad by GTBank	Secret Key + Public Key + Webhook Secret	Automated notifications for HabariPay/GTBank virtual accounts and payment links.
Korapay (Kora)	Secret Key + Public Key + Webhook Secret	Instant settlements and bank transfer checkout via Korapay signature check.
OPay Business	Merchant ID + Secret Key	Merchant wallet and POS terminal payment alerts with instant reconciliation.
Kuda Business	Client Email + API Token + Webhook Password	Virtual account credit callbacks from Kuda Microfinance Bank.
Custom Webhook	Target Endpoint URL	Forward raw payment events to any internal API server, Zapier, or custom microservice.

5. Hardware & GSM Relay Controller Automation Recipe

Many businesses operate physical infrastructure that must turn on or unlock when a customer pays—such as solar mini-grid breakers, water dispensing pumps, automated security gates, or equipment locks. Here is the exact step-by-step recipe to trigger a GSM relay controller using Payvo and Make.com.

5.1 How the Physical Setup Works

A GSM Relay Controller is a hardware device connected to an electrical switch and equipped with a SIM card or internet connection. When it receives a command, it switches an electrical relay ON or OFF.

- Flow: Customer pays installment → Gateway notifies Payvo → Payvo notifies Make.com → Make.com sends an HTTP or SMS command to the GSM controller → Hardware turns ON automatically.

5.2 The Exact Event Payload Sent by Payvo

When any payment is confirmed, Payvo sends this clean, standardized JSON payload to your Make.com webhook URL:

```
{
  "event": "payment.confirmed",
  "source": "Payvo",
  "company": "Sample Business Enterprise Ltd",
  "gateway": "paystack",
  "data": {
    "reference": "PAY-SAMPLE-2026-0001",
    "gateway_reference": "TXN_987654321",
    "amount": 50000.00,
    "currency": "NGN",
    "customer_name": "Sample Customer",
    "customer_email": "customer@example.com",
    "customer_phone": "+2348000000000",
    "contract_number": "CTR-20260401-0001",
    "unit_label": "Unit 101 - Smart Controller Relay",
    "status": "confirmed",
    "confirmed_at": "2026-10-11T01:15:00Z"
  },
  "timestamp": "2026-10-11T01:15:00Z"
}
```

5.3 Payload Data Fields Explained

Field Name	Description & Usage
data.reference	Unique payment identifier generated by Payvo (e.g. PAY-SAMPLE-2026-0001).
data.amount	The numerical payment value in Naira (e.g. 50000.00).
data.customer_phone	Customer phone number in international format (+2348000000000).
data.contract_number	The agreement code (e.g. CTR-20260401-0001) for audit reference.
data.unit_label	The specific unit, plot, or controller name (e.g. 'Unit 101 - Smart Controller Relay'). Use this field in Make.com to

specify which relay channel to activate.

data.status

Confirmed payment status indicator.

5.4 Make.com Scenario Configuration

Inside your Make.com scenario, add the execution step after the Custom Webhook module:

- If your GSM Controller has an IP/SIM API: Add an 'HTTP' module → 'Make a request'. Set URL to: `http://[your-controller-ip]/switch?channel={{1.data.unit_label}}&action=turn_on`
- If your GSM Controller uses SMS commands: Add an SMS module (or SMS gateway provider) to text your GSM SIM card: 'RELAY ON {{1.data.unit_label}}'.

Once configured, switch the Make.com scenario to ON. The automation will run automatically 24/7.

6. Developer REST API Reference

For companies with their own software engineering teams or internal ERPs, Payvo provides a full REST API.

6.1 Authentication

Generate your company API Key at `/api-keys/`. Include this key in the HTTP header on all requests:

```
X-Payvo-Key: your_company_api_key_here
Content-Type: application/json
```

6.2 Primary REST Endpoints

Endpoint	Action Description
GET <code>/api/v1/assets/</code>	List all assets, inventory items, and units in your workspace.
POST <code>/api/v1/assets/</code>	Create a new asset or inventory unit via API.
GET <code>/api/v1/clients/</code>	Retrieve client records, contact details, and account balances.
POST <code>/api/v1/clients/</code>	Register a new client record programmatically.
GET <code>/api/v1/contracts/</code>	List contracts, payment schedules, and outstanding balances.
POST <code>/api/v1/payments/record/</code>	Record an external or offline payment directly against a contract.

7. Security, Verification & Best Practices

To ensure that your revenue operations are protected against fraud and accidental duplicates, Payvo implements strict security safeguards:

- **Cryptographic HMAC Signature Verification:** Payvo never processes an inbound webhook based on plain text alone. Every callback from Paystack, Monnify, or other gateways is verified using SHA-512/SHA-256 HMAC cryptographic signatures. If a request is forged, it is rejected immediately with HTTP 400.
- **Strict Payment Idempotency:** If a gateway re-sends a payment notification multiple times due to a network retry, Payvo detects the identical transaction reference, logs it as a duplicate, and prevents double-crediting.
- **Audit Logs & Raw Event Storage:** Every webhook received from a gateway is preserved in the Activity & Webhook Logs table with full headers and raw payload for audit compliance.

8. Troubleshooting Checklist

Issue / Question	Solution & Recommended Action
Customer paid, but installment is still unpaid	Check the 'Activity & Webhook Logs' tab in Integrations. Verify if the event shows 'Invalid Signature' (meaning secret keys do not match) or 'Unmatched' (meaning the customer's email or contract code was not provided in the payment reference).
Make.com scenario did not trigger	1. Verify that 'Make.com forwarding' is toggled ON in Payvo. 2. Ensure your Make.com scenario is turned ON. 3. Click 'Send Test Payload' in Payvo to test network connectivity between Payvo and Make.com.
How do I switch from Test to Live mode?	In Integrations, click Edit on the gateway, select the 'Live / Production' radio card, enter your live production API keys, and click Save.
Can I accept manual bank transfers?	Yes. Go to Payments → Record Payment, select the client and contract, enter the amount, select 'Bank Transfer' as payment method, and save.

Need Assistance?

If your team needs assistance configuring custom webhook routing, dedicated virtual bank accounts, or specialized IoT relay hardware, contact our dedicated integration support team or consult the live Activity & Webhook Logs

inside your Payvo workspace.