

PAPIRO PRESS

Beyond Books.

Interactive pens are often associated with children's entertainment. But the technology behind them has applications far beyond kids' books. The pen reads printed surfaces and triggers digital actions.

This brochure explores what becomes possible when you treat any printed page as a smart, single-purpose interface.

The open platform for interactive print
Use cases beyond entertainment

papiro.press

Paper Is the Original Single-Purpose Device

When you use a laptop to present, you're not using a presentation device - you're using a general-purpose computer that happens to have a slideshow open. One stray trackpad gesture shows your email. One accidental shortcut closes the app. The audience sees your desktop, your notifications, your browser tabs. The tool can do everything, which means it can go wrong in every possible way.

The same problem exists everywhere we force general-purpose screens into single-purpose roles. A tablet as a restaurant menu is one home-button press away from YouTube. A phone as a smart home remote is also a phone with notifications, apps, and an OS that needs updating. A kiosk screen in a museum crashes, freezes, or needs rebooting by staff.

A printed page is like a DSL for interfaces: it does exactly one thing, and it cannot do anything else.

Paper doesn't crash. It doesn't need WiFi to display its contents. It doesn't have a window manager, a notification system, or a home button. When you print a control surface, what you see is what you get - permanently, reliably, with zero attack surface for user error. The Papiro pen connects the two: tap a printed area and a digital action fires. The paper is the interface. The pen is the input device. Everything else happens in the background.

Printed materials end up being cheap, reliable, and narrowly focused control surfaces. A new version costs cents to print. No app updates, no compatibility matrices, no IT support tickets. Anyone already knows how to use it - you point at what you want.

GENERAL-PURPOSE SCREEN

OS, window manager, notifications, accidental exits, software updates, crashes, training required

vs.

PRINTED INTERFACE + PEN

It does one thing, it can't crash or accidentally exit, and it costs cents to replace



HOW IT WORKS

Invisible Patterns, Instant Actions

Every Papiro-compatible print contains an invisible layer of microscopic dots, printed in infrared-absorbing ink beneath the visible artwork. The pen's camera reads these dots and determines its exact position on the page - with sub-millimeter accuracy. Each position maps to a digital action: play audio, send a command, trigger an API call, advance a slide, update a database.

The visible print - your menu, your presentation notes, your museum map - is printed on top in regular ink, completely unaffected. You design the interface you want in Papiro Studio, and the dot pattern is embedded automatically during export. For full production runs, we print through our print-on-demand partners using carbon ink at 1400 dpi. For prototyping or small runs, we offer pre-printed code sheets - sticker paper with patterns already applied - that you pair with your content in Papiro Studio. Once paired, the pen syncs the new content over WiFi automatically. No reprinting needed when content changes.

Play Audio

Narration, sound effects, music, AI conversation - from the pen's speaker or headphones

Send Commands

Over WiFi or Bluetooth to any connected device: advance slides, toggle lights, trigger actions

Log Data

Track interactions, collect responses, update systems - every tap is a data point



HOSPITALITY

Restaurant Menus That Speak

A guest taps a dish on the printed menu and hears the chef describe it – the inspiration, the ingredients, the wine pairing. Another guest taps the same dish and hears it in Japanese. The menu is printed once, but it speaks every language your guests do.

No QR codes, no apps to download, no tablet that needs charging. The pen sits on the table next to the salt and pepper. Allergen information, preparation methods, sommelier notes – all accessible with a tap, without cluttering the printed design. Update the daily specials by pushing new audio to the pens over WiFi. The printed menu stays clean; the content behind it stays current.

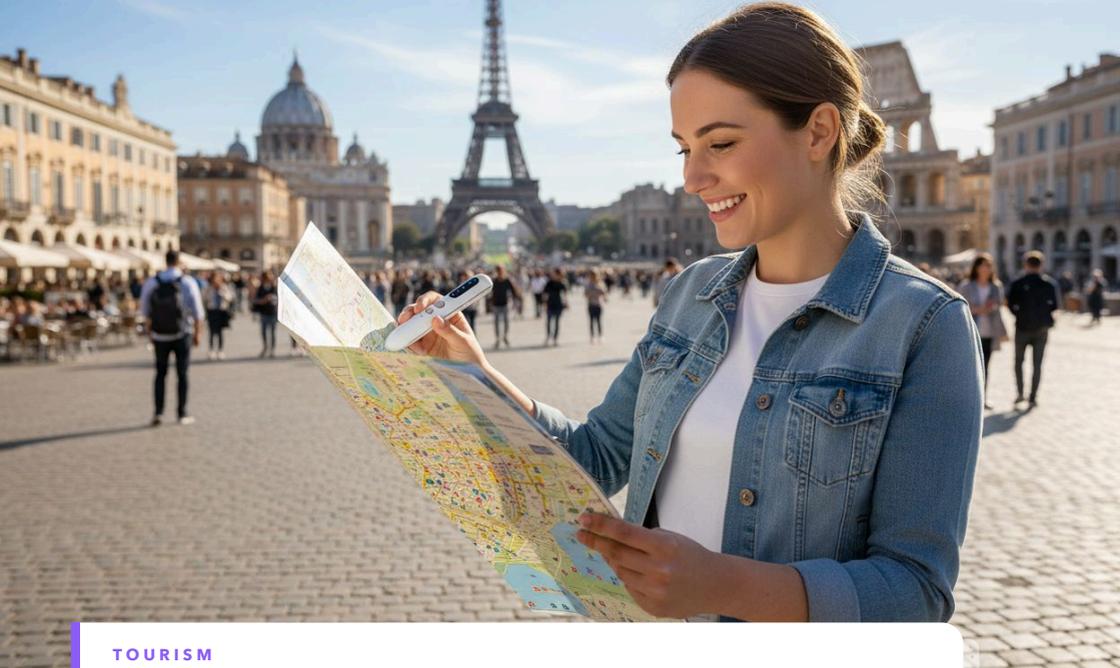


HOSPITALITY

Museum & Gallery Guides

Hand visitors a printed exhibit brochure and a pen at the entrance. They tap an artwork's thumbnail on the map and hear the curator's commentary. They tap a symbol for the children's track and hear a simpler explanation. They tap a language flag and switch the entire guide to French, Arabic, or Mandarin.

Unlike audio guide devices with numbered stops, Papiro lets visitors explore freely - the map IS the guide. No headset rental queues, no device sanitization between visitors, no numbered keypads. The printed brochure goes home with the visitor as a souvenir that still works. Temporary exhibitions get a new brochure; the pens stay the same.



TOURISM

City Maps & Walking Tours

A printed city map where tourists tap a landmark and hear its history in their own language. Tap a restaurant icon for a review. Tap a metro station for directions. One map, forty languages, no cell signal required - the pen works offline once synced.

Hotels and tourist offices distribute the maps at the front desk along with a pen. Walking tour operators print route guides where each stop narrates itself. City marketing departments create official guides that work for every visitor, regardless of language - without the expense of multilingual printing. The audio content updates seasonally: summer festival listings, winter market locations, all pushed to the pens wirelessly.



HOSPITALITY

Wine & Product Labels

A wine label that tells its own story. Tap the vineyard name and hear the winemaker describe the terroir. Tap the vintage year for tasting notes. Tap the grape variety for food pairing suggestions. The bottle becomes a guided tasting experience - at the shop, at the restaurant, or at home.

This works for any premium product where the story behind it matters: craft spirits, specialty coffee, artisan chocolate, olive oil. The label's real estate is limited, but the audio behind it is unlimited. Producers can add harvest stories, production details, serving suggestions - building brand depth without redesigning packaging. Distributors offer the pens at point of sale or include them in gift sets.

ALSO WORKS FOR: Craft beer labels · Specialty coffee bags · Chocolate box inserts · Olive oil / artisan food



ENTERPRISE

Presentation Control

Your speaker notes ARE the remote

Print your speaker notes. Each section corresponds to a slide. Tap the section heading to jump to that slide. Tap “next” in the margin to advance. The pen communicates with the presentation software over WiFi or Bluetooth. You never touch the laptop. Your audience never sees your desktop.

This is paper as a domain-specific controller. It can only do what the printed interface allows: advance, go back, jump to a section. There is no accidental Alt+Tab, no notification popup, no trackpad misfire. The speaker’s printed notes double as a physical remote with that only has the controls they actually need. For panel discussions, each panelist gets their own printed page with their talking points – tap to cue their slides.



ENTERPRISE

Meeting Room Control

No more "can someone figure out the AV?"

A laminated card on the conference table. Tap "Start Video Call" to launch the meeting. Tap "Share Screen" to begin presenting. Tap "Mute All" to silence the room mics. Tap "End Meeting" to hang up. No need to find the right app, navigate a touchscreen panel, or ask IT for help.

Meeting rooms are one of the most common places where general-purpose devices fail: unfamiliar AV systems, different setups per room, visitors who don't have access to the corporate network. A printed control card eliminates all of that. It's always visible, always available, and self-documenting. When the AV setup changes, reprint the card - it costs less than a single IT support ticket.



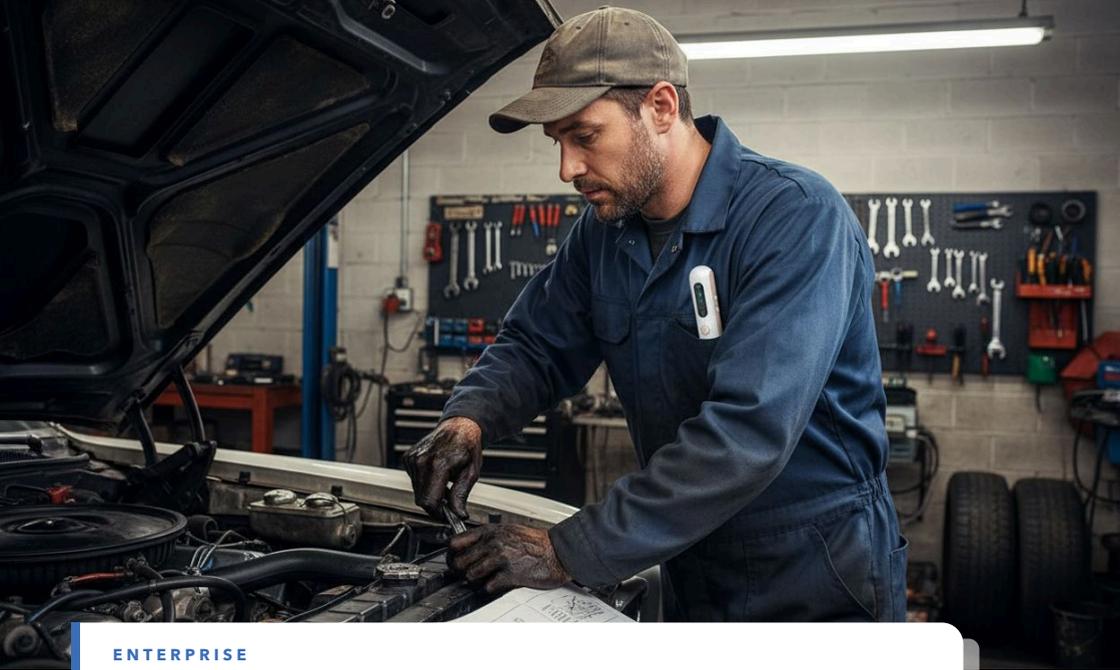
ENTERPRISE

Product Catalogs & Trade Show Collateral

A printed product catalog in front of a screen at a trade show booth. The visitor taps a product photo on the page, and the screen plays a demo video. Tap another product, and the screen switches. The printed catalog is the remote control for a rich media experience - but it's also a physical document the visitor takes home, where the pen still works for audio descriptions.

For sales teams, the leave-behind brochure keeps selling after they leave. Tap a product for the pitch. Tap the pricing page for a detailed breakdown. Tap the case study for a customer testimonial. The brochure becomes a self-contained sales tool that doesn't require a laptop, a projector, or an internet connection.

ALSO WORKS FOR: Showroom catalogs · B2B sales leave-behinds · Automotive brochures · Machinery specifications



ENTERPRISE

Instruction Manuals & Assembly Guides

You're under a car, hands covered in grease. Your phone is in your pocket and you're not touching it. A tablet wouldn't survive five minutes here. But the printed manual is right there - folded, stuffed into the gap next to you, oil-stained and still working. The pen clips to your shirt and works as a voice assistant: ask it a question and it talks you through the next step hands-free.

When you need to be specific, pick up the pen and tap the exploded diagram or a part number on the printed page. That anchors the context for the voice AI: "tell me more about this gasket" becomes a precise query instead of a vague one. The flow is voice-first, paper-when-needed. Printed materials survive environments where screens don't - dust, grease, vibration, tight spaces. Multilingual support means one manual works for every technician on a global team. For organizations with large knowledge bases, the pen queries your documentation system in real time (see Live Knowledge).



ENTERPRISE

Corporate Training & Onboarding

An onboarding handbook that talks new hires through company procedures. Tap the HR section for benefits enrollment instructions. Tap the safety chapter for compliance training narration. Tap the org chart and hear each department's role explained. The handbook replaces hours of orientation videos with a self-paced, hands-on experience.

For regulated industries - manufacturing, healthcare, food service - printed compliance manuals with audio walkthroughs ensure consistent training regardless of language barriers. Track completion through the pen's interaction data: management sees which sections each employee reviewed and for how long. Update the audio content when procedures change; the printed handbook stays current.



ENTERPRISE

Real Estate Brochures

A property brochure where buyers tap a room on the floor plan and hear a virtual tour narration. Tap the kitchen for a description of the finishes. Tap the garden for square footage and orientation. Tap the neighborhood map for school ratings, commute times, and local amenities. The brochure works at the open house and at home - the buyer keeps exploring after they leave.

For luxury properties and new developments, the brochure becomes a premium sales tool. For international buyers, the same brochure speaks their language. For commercial real estate, tap a unit on the site plan for lease terms and availability - updated wirelessly as units sell.



CREATIVE

Interactive Sheet Music

Tap a bar on the score and hear it played at performance tempo. Tap again for a slower practice version. Tap a chord symbol and hear the voicing. Tap a passage marked “crescendo” and hear the difference between piano and forte. Sheet music that teaches itself.

For music students, the feedback loop between reading and hearing is immediate - no switching to a YouTube tutorial or a separate app. For ensemble musicians, tap your part to hear it isolated, or tap the full score for the complete arrangement. For composers and arrangers, printed drafts become audible: share a physical score with a collaborator and they hear your composition simply by tapping it. The pen replaces the need for a separate playback device during rehearsal.

ALSO WORKS FOR: Choir rehearsal scores · Music theory textbooks · Guitar tablature books · Rhythm exercise cards



CREATIVE

Recipe Books

Hands-free cooking from a printed page

Your hands are covered in dough. You tap step four with the pen and hear: “Now fold the dough in thirds, like a letter.” Tap the ingredient list and hear quantities read aloud. Tap a technique name - “chiffonade” - and hear it explained. The cookbook works as a hands-free cooking assistant, without needing to unlock a phone with floury fingers.

Celebrity chefs can narrate their recipes in their own voice - voice cloning means a single recording session covers an entire cookbook. Home cooks get the experience of having a chef in their kitchen. Tap a dish photo for the backstory: where the recipe comes from, what to serve it with, how to adapt it for dietary restrictions. Cooking schools can create coursework cookbooks where instructors demonstrate technique via audio.

ALSO WORKS FOR: Cocktail recipe cards · Baking technique guides · Meal prep planners · Cooking class workbooks



CREATIVE

Art Portfolios & Exhibition Catalogs

An artist's printed portfolio where each work speaks for itself - literally. Tap a painting and hear the artist describe their process, inspiration, and materials. Tap the detail crop for a technical explanation. Tap the price label for purchasing information. The portfolio becomes a gallery experience in a booklet.

For gallery exhibitions, the printed catalog replaces the wall text with richer, multilingual commentary. Visitors take the catalog home - it keeps working as a lasting record of the show. For art schools, student portfolios gain a presentation layer: the reviewing committee taps each piece to hear the student's artist statement. Photography books gain behind-the-scenes narration: settings, location stories, post-processing decisions.



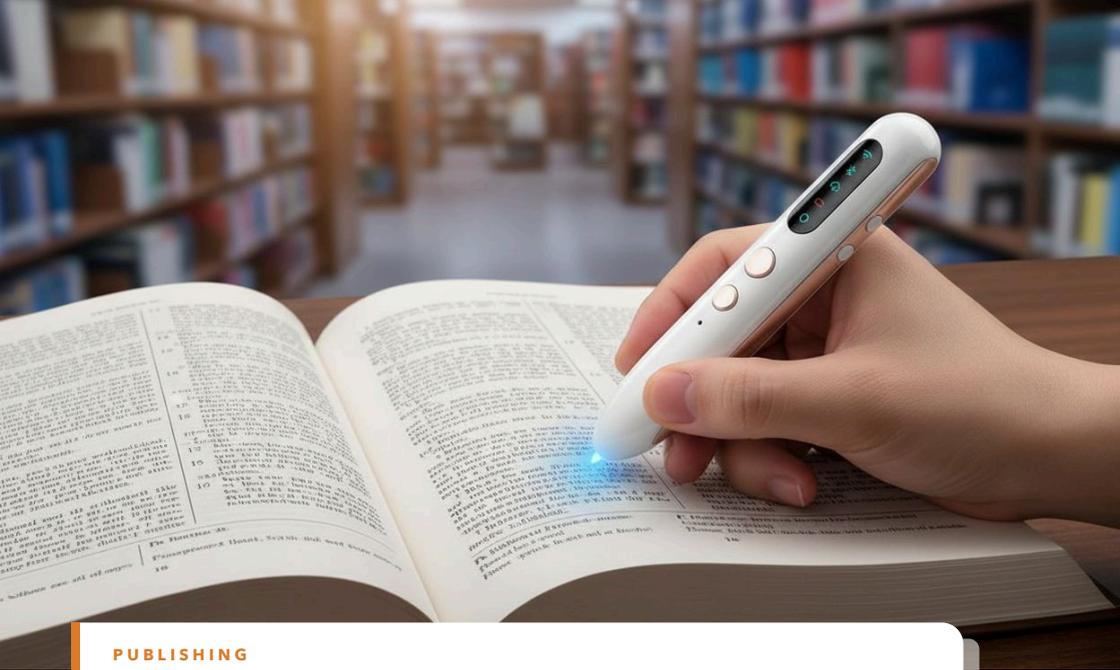
PUBLISHING

Document Annotation

Paper review that syncs back to your CMS

Senior reviewers, legal teams, and subject matter experts prefer marking up printed manuscripts. The problem: those paper annotations must be manually transcribed back into the digital CMS. With Papiro, the pen captures the exact position and records a voice comment. The annotation syncs directly to the CMS, linked to the precise paragraph in the source document.

For enterprise publishers using XML-based content management (like Fonto), the printed page maintains a coordinate-to-XML mapping. Every pen annotation lands as a structured comment in the right place. The paper review workflow is preserved – but the digital transcription step is eliminated entirely. Legal review, medical publishing, regulatory compliance – any domain where paper review is entrenched gets a bridge to digital without forcing a workflow change.



PUBLISHING

Academic Papers & References

Tap a footnote, hear the source

A printed academic paper where every footnote is tappable. Tap **[14]** and hear the cited paper's abstract, key findings, and publication details. Tap a cross-reference like "see Table 3 in Smith et al." and hear the relevant data summarized. The reader never leaves the page, never opens a browser, never loses their place in the argument.

This works in two modes. For published works, the import pipeline can parse the reference list and pre-load summaries, abstracts, and key excerpts as static audio – bundled with the book data, no internet needed during reading. For live research, the pen connects to academic databases and retrieves the latest version of a cited work, its citation count, or related papers – useful for fields where the literature moves fast.

For students, a printed textbook becomes a self-contained study environment: tap a term for its definition, tap a citation for context, tap a formula for a worked example. For peer reviewers, tap a claim to hear the supporting evidence from the referenced source without having to pull up each paper individually. Printed academic publishing gains a depth layer without changing the format.

ALSO WORKS FOR: Textbooks with tappable glossaries · Legal case law references · Standards cross-references (ISO, DIN, EN) · Medical literature reviews



EVENTS

Stage & Event Production

Cue sheets that run the show

A stage manager's printed cue sheet that triggers lighting changes, sound effects, and video playback. Tap "LX CUE 14" on the script and the lights shift. Tap "SFX: thunder" and the sound plays. The cue sheet is the controller - purpose-built for this specific show, with every cue exactly where it appears in the script.

Paper can be printed at any size. A control room wall poster gives you room to spatially organize an entire show - scenes laid out left to right, lighting rigs mapped top to bottom, sound cues grouped by act. The whole production visible at a glance, and every zone tappable. Try doing that on a 10-inch tablet. For live events, conferences, and concerts, the production team works from printed runsheets that trigger actions on the AV system. No accidentally tapping the wrong button. When the show changes, reprint the poster.

ALSO WORKS FOR: Concert set lists with cue triggers · Live broadcast runsheets · DJ set controllers · Control room wall posters



EVENTS

Wedding & Event Programs

A wedding program where guests tap the couple's photo and hear a personal message. Tap a family member's name for an anecdote. Tap the menu section for dish descriptions from the caterer. Tap the evening schedule to hear what's coming next. The program becomes an interactive guest experience – personal, surprising, and a keepsake that still works years later.

For corporate events, the conference program becomes an interactive guide: tap a speaker's bio for their introduction, tap a session for the abstract, tap the map for directions to the breakout room. For fundraising galas, the auction catalog speaks: tap a lot for its description and provenance. Pens at each table setting turn the printed program into the evening's entertainment layer.



EVENTS

Board Games & Tabletop RPGs

Some games are hard to learn because the rules are unintuitive, not because they're complicated. For example, MoneyMaker (moneymaker.games) models the banking system to teach players how money creation actually works. The mechanics are counterintuitive enough that the manual becomes a bottleneck - players spend more time looking up rules than playing. With Papiro, the entire board becomes interactive: tap a game zone to hear what happens there, tap a card to hear its effect explained, tap the bank to hear how the interest calculation works. The board teaches the game while you play it.

The same approach works for any board game with a learning curve. For tabletop RPGs, the dungeon master's printed map triggers sound effects and music when players enter a room. For legacy/campaign games, the campaign book narrates story beats as players progress. Game publishers can offer expansions as new audio content pushed to the pen - the physical game stays the same, the experience grows.



ACCESSIBILITY

Accessibility Tools

Making printed materials work for everyone

For visually impaired users, any printed document gains an audio layer. Tap a section and hear it read aloud. Tap a form field and hear instructions for filling it in. Tap a diagram and hear a description. The printed material doesn't need to be redesigned for accessibility - the audio layer is added on top. Papiro is also compatible with braille: print the dot pattern first, then braille-punch the paper. The infrared pattern largely survives the embossing, so a single page carries both tactile braille and tappable audio - two accessibility layers on one sheet.

For elderly users who struggle with smartphones and tablets, a printed card with large icons becomes a simple remote: tap the phone icon to call a family member, tap the TV icon for the evening program, tap the medication icon for a dosage reminder. The interface is permanently visible, never needs charging (the card itself), and never changes unexpectedly. For users with motor impairments, tapping a large printed area is far easier than navigating a touchscreen.



ACCESSIBILITY

Healthcare & Therapy

Speech therapists create pronunciation cards tailored to each patient: tap a picture, hear the target sound. Cognitive rehabilitation uses interactive memory cards: tap to reveal, tap to check. Physiotherapy exercise cards play movement instructions when tapped. The therapist designs the materials in Papiro Studio; the patient practices at home with the pen.

For patient information, hospital discharge booklets become multilingual audio guides: tap a section for medication instructions in the patient's language. For mental health, guided journaling cards with audio prompts. For elderly care, daily schedule cards with spoken reminders. Interaction data from the pen tells the care team how often the patient is practicing and which exercises they engage with.



ACCESSIBILITY

Public Services & Government

Government forms are notoriously difficult to fill in. Tap a field on the printed form and hear an explanation of what's required, in any language. Tap the header for an overview of the entire process. Tap the fine print for a plain-language summary. The form becomes self-documenting without adding clutter to the printed layout.

For voting, accessible ballots where visually impaired citizens tap candidate names to hear them read aloud. For immigration offices, multilingual form assistance without requiring an interpreter for every language. For social services, application forms that guide applicants through the process step by step. The cost of adding an audio layer to existing printed forms is negligible compared to the cost of misunderstanding.



INDUSTRIAL

Warehouse & Factory Floor

A printed picking sheet where the warehouse worker taps each item as they pick it. The pen confirms the pick audibly ("Item 14: confirmed"), updates the inventory system in real time, and logs the timestamp. Tap a product code for the shelf location. Tap the order number for priority and shipping instructions.

On the factory floor, printed workstation cards trigger machine setup instructions. Tap the current batch number for quality specs. Tap the safety section for a reminder before operating equipment. The printed card survives the environment - dust, grease, vibration - where tablets struggle. Replace a damaged card in seconds for the cost of a printout. For equipment maintenance, the service manual mounted next to the machine plays step-by-step instructions when technicians tap each procedure.

ALSO WORKS FOR: Quality control checklists · Equipment maintenance logs · Safety procedure cards · Shipping manifest confirmation



INDUSTRIAL

Smart Home Control

A physical interface for your digital home

A laminated card on the wall next to the light switch. Tap the living room icon to toggle the lights. Tap the thermostat zone to cycle through presets. Tap the music icon to start your evening playlist. No phone to find, no app to open, no voice assistant mishearing you. A physical control panel that costs cents to print.

For households with elderly family members or young children, the smart home becomes accessible without a smartphone. For vacation rentals, guests get a printed house manual that IS the controller: tap the WiFi section for the password read aloud, tap the heating icon to adjust the temperature, tap the check-out section for departure instructions. When the smart home setup changes, print a new card. No app updates, no compatibility issues, no "which app controls the blinds again?"



ENTERPRISE AI

Live Knowledge

When static audio isn't enough, ask the book a question

Everything shown so far uses pre-compiled audio: you create the content, it gets loaded onto the pen, the pen plays it back. But some use cases need more. A technician servicing a machine encounters a fault code not covered in the manual. A compliance officer needs to cross-reference a regulation across three different standards documents. A field engineer needs the latest service bulletin for a specific serial number.

For these scenarios, Papiro supports **live knowledge connectors**. The pen connects over WiFi to your organization's knowledge systems – documentation databases, ERPs, compliance repositories, CMS platforms – and uses GenAI to answer spoken questions in real time. Tap a section in the printed manual to set the context, then ask your question out loud. The pen queries your backend, retrieves the relevant information, and speaks the answer back. The printed page anchors the conversation to the right topic; the AI fills in the details from your live data.

A printed manual stops being a static reference and becomes a way to talk to your knowledge base while you stay at the machine. Papiro Studio lets you configure which data sources each zone on a page connects to, what system prompts to use, and what guardrails to apply. The printed page defines the scope; your data provides the depth.

ALSO WORKS FOR: Technical manuals with live lookup · Standards & compliance reference · Field service with serial-number-specific data · Medical protocol consultation

S Papiro Studio

Design any printed interface in an afternoon

Every use case in this brochure is created through the same tool: Papiro Studio, a web-based editor where you design your printed interface, assign actions to areas, and export a print-ready file with the invisible dot patterns embedded automatically.

No coding, no special hardware knowledge. Upload your design, draw interactive zones, and assign what happens when each zone is tapped: play audio, send a command to another device, log an interaction, trigger an API webhook. AI tools handle the heavy lifting – generate narration from text, clone a voice from a two-minute recording, translate content into 50+ languages, create illustrations from descriptions.

Audio Actions

Play narration, sound effects, music. Record your own or generate with AI voice cloning.

Device Commands

Send signals over WiFi/Bluetooth to control presentations, AV systems, smart home, POS.

API Webhooks

Trigger any HTTP endpoint: update a database, send a notification, log an event.

Data Logging

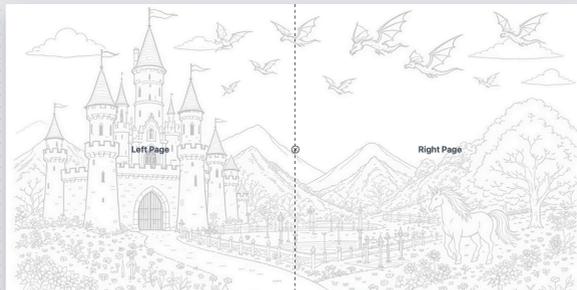
Track every interaction. Dashboards show who tapped what, when, and how often.

Instant Translation

One printed interface, dozens of languages. AI translates and re-voices automatically.

Dynamic Content

Push content updates to pens over WiFi. Printed interface stays the same; the content behind it evolves.



W Your Brand, Our Platform

White-label pens, custom deployments, API integration

Papiro is infrastructure. You don't need to build a pen, develop firmware, or set up a content delivery system. We handle the technology; you put your name on it. Pens with your branding, a platform instance in your visual identity, API access for integration with your existing systems.

For restaurant chains: branded pens at every location, centrally managed menu content. For museum networks: a single pen that works across all branches. For publishers: add interactive audio layers to your existing catalog without becoming a tech company. For enterprise: integrate the pen into your workflows via API - every tap becomes a data event in your system.

1 Custom Hardware Pens with your logo, colors, and packaging. Minimum order from 500 units.

2 Branded Platform Your own Papiro Studio instance with your visual identity and domain.

3 API Integration REST API for pen events. Every tap becomes a webhook, a database entry, a command.

4 Content Management Centrally manage audio across locations. Push updates to all pens at once.

You don't need to build hardware or figure out printing -- we handle the whole chain.

Let's talk.

Whatever you print, we can make it interactive. Tell us what you're working on and we'll show you how Papiro fits.



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