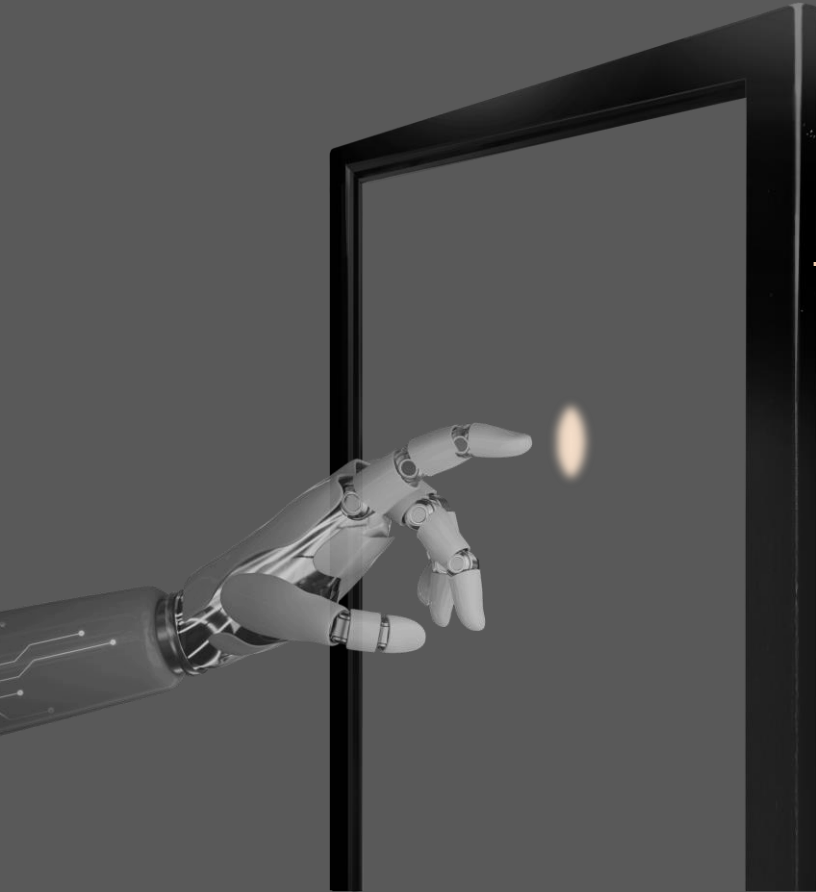# HTO + HMI
Hover Touch Overlay

Contactless Self-Service Kiosk
Upgrade

Out of All Contact-Free Techs Available, Why KOGI's HTO?

Zero Communication Module = No Hidden Data Collection

Zero Smart Phone Required = Less Cybersecurity Risks

Zero Downtime Digitization = No Operating Cost on Upgrade

Zero Internet Required = Technology Designed for Everyone
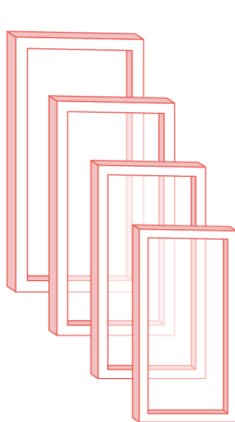
Hover Touch Overlay (HTO) Gen.2

10mm Ultra-Thin Design

Next Generation "Zero-Contact" Touch Maneuver

"Easy, Modular, Plug & Play" Upgrade to Existing KIOSK

Target Applications:

Metro Ticketing | ATM | Self Service | Healthcare

KOGI HTO Specification	
Frame Sizes	15" ~ 55" (NRE on new sizes)
Touch Haptic	**Light (LED) / Sound / Visual** LED Haptic Standard on Sizes <24"
Touch Type	Hover (Air) Touch
Touch Distance	20mm and above (USB length)
Operating Voltage	DC 5V (+/- 0.25) USB Power
Interface	USB Type B 2.0 HID Compatible
Response Time	5 ~ 25ms
Input Method	Finger, Gloved Hand, Pointer (7mm+)
O/S Support	Windows / Android / Linux
Mounting Method	Screw Mount / Tape Mount

Step.1
Select from our Range
of HTO Frame Sizes
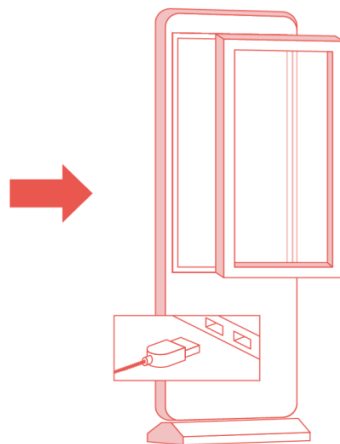
Step.2
Connect HTO via USB
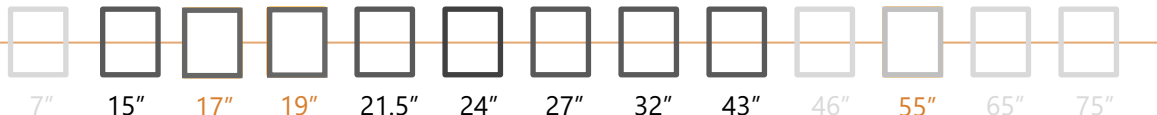+ Auto Calibrate
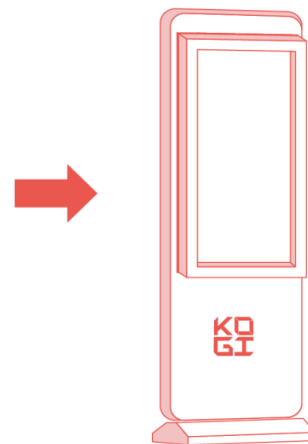
Step.3
Enjoy Zero-Contact
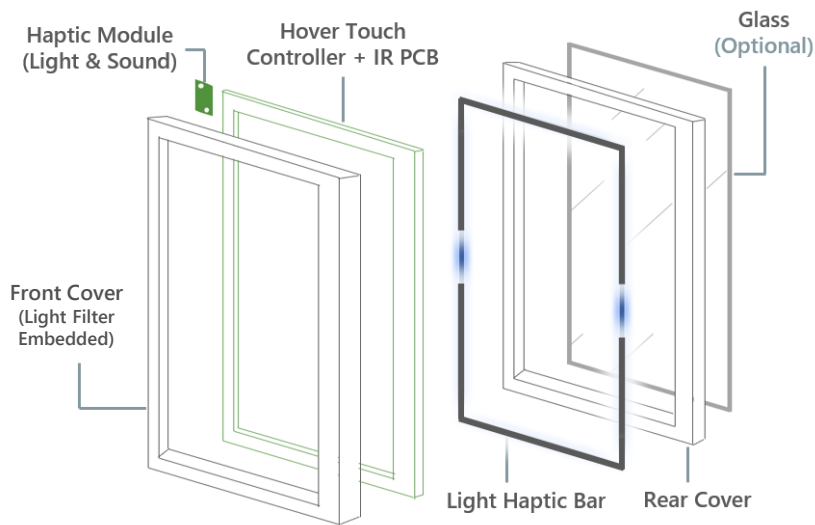Operations

Hover Touch Overlay Size Support

Mass Produced and Available
Inquired, Assessing Market Demand

HTO Size Selector

7″ 15″ 17″ 19″ 21.5″ 24″ 27″ 32″ 43″ 46″ 55″ 65″ 75″

HTO P/N	Frame Ratio	Specifications	
HTO-15-H3U	4:3	Base Detection Tech	InfraRed (IR)
HTO-17-H3U	5:4	Core Enhancement Tech	Light Filter + Enhanced IR + Haptics Feedback
HTO-19-H3U	5:4	Min. Touch Object	7mm
HTO-21-H3U	16:9	Response Time	125 RPS (30ms touch / 12ms draw)
HTO-27-H2U	16:9	Operating Temp.	-20~70℃
HTO-32-H2U	16:9	Relative Humidity	90% or lower
HTO-43-H2U	16:9	Power Source	DC 5V ±5% (USB2.0 HID)
HTO-55-H2U	16:9	Driver OS Support	Windows / Android / Linux
		Frame Material	Metal with Black Coating
		Certificate	CE / FCC class B

Haptic Module (Light & Sound)

Hover Touch Controller + IR PCB

Glass (Optional)

Front Cover (Light Filter Embedded)

Light Haptic Bar

Rear Cover

Other Potential Deployment Areas

Hygienic Digitization | Addresses Service Staff Shortage Issues | Next-Gen Interaction

Food & Beverage	Retail & Mall	Clinics & Hospitals

Self-Ordering / Payment Kiosks

Way Finding / Information Kiosks

Self Check-In / Queuing Kiosks

HTO Key Sectors & Partners

Finance
Phase 1 Touch ATM

NCR
Fortune 500 Company
No.1 ATM Supplier

Food & Beverage
Self Ordering

AbacusPOS
Trusted by Restaurants
Chains to Michelins

Healthcare
Self-Check In /Pickup

VitalHub
Canada-based Public
Listed Health Provider

Retail
Interactive Promotion

ChargeSpot
No.1 Power Sharing
Provider in Asia

Transportation
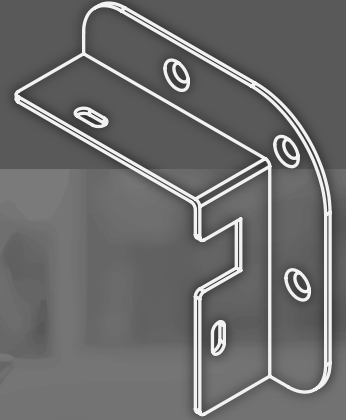Self Ticketing

To be Identified
Project-based, until
securing key partner

Flexible Mounting Design

choose from our variety of mounting brackets
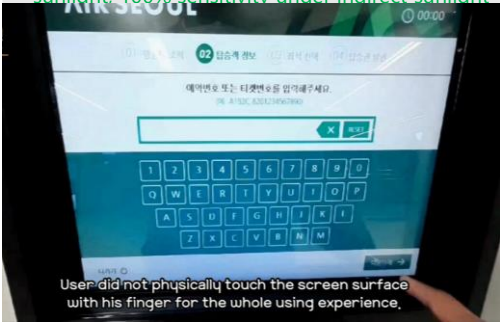to adapt to your unique kiosk designs

Tape Mount

Screw Mount

How is KOGI's HTO different from IR Frames?

		IR Touch Frame	HTO Frame
System Level	Contact / Contactless	Contact (Glass Touch)	Contactless (Hover Touch)
	Enhanced IR Detect Signal	2mm	5mm
	Response per Second	30-50rps (Normal IR require glass for positioning)	115-125rps (Achieved via light filtration enhancement)
	Assembly	Required (4 piece self-assembly on site)	Not Required (Light filter embedded, can't assemble on site)
	Haptics Design-In	NO	YES- 3 tier haptics (LED/visual/sound)
	Country of Origin	China	Taiwan
	Future Proof OS Compatibility	NO (OS support range defined in spec, very limited Android & Linux version support)	YES- Future Proof Support (Dedicated Android/Linux engineers to ensure ALL past/current/future OS versions support)
Service Level	Touch Calibration Support	NO (basic factory "touchpad" Microsoft setting)	YES (tailored FW update: 5-8 workday lead time)
	Customization Support	NO	YES- low MOQ (metallic frame color change, LED color change, cabling design, size & ratio design)
	Design-In Project Support	NO (off the shelf selling standard product)	YES (dedicated engineers for design-in projects)
	Marketing Support	NO (rely on generic online materials)	YES (dedicated marcom to support in localized eDM / video / webpage graphics support)

Analysis- SAW Touch vs. Hover Touch vs. Motion Touch

	Surface Acoustic Wave (SAW) Touch	Hover Touch Overlay (HTO)	I* Company Depth Camera
Contact Method	Touch-based	Touchless	Touchless
Base Technology	Acoustic (Sound)	InfraRed Variation	InfraRed Variation
Touch Distance	0mm	20-30mm	N/A depends on multiple factors
Touch Operation	Slightly stiffened (pressure) finger gesture to trigger "acoustic wave"	Normal finger/hand gesture w/joint-level movements	Abnormal, big gestures to trigger "object leaving line of sight"
Technical Limitation	Water (Hand Sweat) High Replacement Rate on Sensors	Sunlight (emits IR wave) *Proprietary IR Filtration- 85% sensitivity under full sunlight; 100% sensitivity under indirect sunlight	Sunlight (emits IR wave) Spatial calibration unavoidable
In-Lab Integration	None, Plug & Play		
Onsite Calibration	SAW requires periodic calibration to maintain quality touch experience		
Connector Requirement	USB2.0 Type B or above		
Aftersales Support	Components relatively hard to find as SAW is not mainstream	the mainstream in B2B touch space	the mainstream in B2B touch space
Price Point	Starting from US$80	Starting from US$275	Starting from US$350
Commercial Perk	1. Low Price Point 2. Very matured technology	1. Hygiene Control Added Value 2. Supports Deployed Kiosks	1. Hygiene Control Added Value 2. Excellent Value for XXL Displays

User did not physically touch the screen surface with his finger for the whole using experience.

KOGI & World Recognition

Taiwanese Startups | KOGI drives AI-based, contactless digital transformation

By Vivian Hsiao, The China Post, Taiwan | January 1, 2021

Share

INNOVATION IN AI & IoT DESIGNS

KOGI believes AI will redefine all industries—including healthcare, fintech, security, and retail sectors.

KOGI Corporation offers AI-based contactless technologies across five key sectors: healthcare, retail, transportation, enterprise management, and agriculture. (Courtesy of KOGI)

Innovative solutions which address immediate effects of this crisis are much needed. These are unprecedented times, and a caution of situations to come.

How can we better respond to future crises, prevent infection, and allow for early detection?

In order to be ahead of the COVID-19 virus, we are seeking technologies, innovations and solutions that will help us increase our collective readiness to respond to future crises, prevent infection, and allow for early detection of COVID-related infections.

The submission period for the COVID Challenges 2020 is now closed. Find out the first UpLink COVID Innovators Cohort and join our Action Group to stay connected and updated.

Challenge Partners

The COVID Challenges were launched in collaboration with the World Health Organization, Goldman Sachs Foundation, 500 Startups, Top Tier Impact, Impact Africa Network, Village Capital, and the Global Education & Leadership Foundation.

Leading the Digital Transformation
KOGI Corporation
2021/1/28 | Taiwan

e-Government
Applied IoT — AI Designer
KOGI Corporation
https://www.kogicorp.com/

Highlights:
- CEO app brings facial recognition to mobile CRM software, allowing for seamless and accurate attendance and task management
- Data privacy is ensured through mathematical representation and reactive location tracking
- Fully contactless solutions drive activity to mobile phones, reducing the risk of viral cross-contamination

AI Facial Recognition
- Image Deconstruction
- Coded Encryption
- AI Authentication
- Liveness Detection

Leading the Digital Transformation

With projects spanning four sectors, 27 countries and more than 80 institutions, KOGI Corporation is uniquely poised to address the design challenges vexing many of today's organizations as they look to rebound in a pandemic-stricken world. KOGI's flexible and creative AI and IoT design solutions help ensure that they not only bounce back, but reemerge even better poised to com-pete in a digital economy.

Uniqlo Sister Brand With 75% Profit Gains Seen as Earnings Star

As fashion franchises like Forever 21 struggle globally amid changing shoppi...

Bloomberg · 1 day ago

World Economic Forum (WEF)
COVID Challenge
2020 Technology Spotlight

Goldman Sachs
World Health Organization
VillageCapital

Contribution Spotlight

Gavin Lee | Global, Global

Community Spread Mitigation (CSM) System

SOLUTION | PREPARE, PREVENT AND DETECT
HEALTH

DISCOVER MORE >

Needs
Visibility | Visibility

https://uplink.weforum.org/uplink/s/uplink-issue/a002o00000vObOaAAK/prepare-prevent-and-detect