Manuals+ — User Manuals Simplified.

HXG10 Human
Machine

Advanced Input Devices HXG10 Human Machine Instructions

Contents

Advanced Input Devices HXG10 Human Machine

Your trusted partner in commercializing innovation

New technologies present a lot of information and capabilities that can complicate a user experience, and that's why our mission is so targeted; for our customers, we are the bridge that connects people with information, capabilities, and tools that enhance lives every day.

Specifications

- FCC ID: GCYHXG10
- IC ID: 20156-HXG10
- For Indoor Use Only
- Compliance: Part 15 of FCC Rules
- Modular transmitter authorized for specific FCC rule parts
- Compliant with Part 15 Subpart B
- Radiation Exposure: FCC limits for an uncontrolled environment
- Operating Distance: The radiator should be at least 20cm away from the body

Product Usage Instructions

1. Ensure the device is for indoor use only.
2. Comply with Part 15 of FCC Rules for operation.
3. Avoid causing harmful interference or receiving undesired interference.

4. Install the modular transmitter according to the FCC guidelines.

5. Follow the guidance for host integrators if integrating the device into a host system.

6. Avoid co-locating the transmitter with other antennas or transmitters.

7. Maintain a distance of at least 20cm between the radiator and the body during installation and operation.

Immersive Products

The evolution of digital interaction is driving new immersive experiences. We're focused on helping customers integrate and deploy new technologies that shape the Human Machine Experience. The advent of new technologies including AR/VR, Tele-operation, Smart Fabrics, and Sensor Integrated End Effectors are paving the way for HMX products. Our core competencies are grounded on integrating these new capabilities to deliver positive user experiences.

- Wearable Electronics & Exoskeleton
- Robotics & Tele-robotics
- Virtual Reality & Augmented Reality

Infection Control
Developed in conjunction with the University College of London Hospital (UCLH). The Medigenic® washable infection control keyboard reduces the spread of pathogens by enabling quick and easy disinfection while also creating habits that save lives without compromising usability.

- Keyboards
- Mice
- Custom Input

Display Interface

From the true tactile user interface of OnGlass Controls to the touchless technology of gesture sensing. AIS strives to enhance the Human Machine Experience. Our display interface solutions deliver exceptional performance meeting the needs of a broad range of
industries, be it the regulated requirements of medical applications, the durability counted on for industrial controls, or the rugged outdoor environment of oil fields.

- Touchscreens
- Touch Displays
- OnGlass Controls
- Gesture Sensing

HMI Solutions

Physical controls are a dominant HMI attribute that supports a broad range of interactions and applications to

achieve a desired experience. Advanced Input Systems has decades of experience helping] customers identify design and performance tradeoffs to meet
product requirements.

- Membrane switches
- Buttons
- Elastomer Buttons & keypads
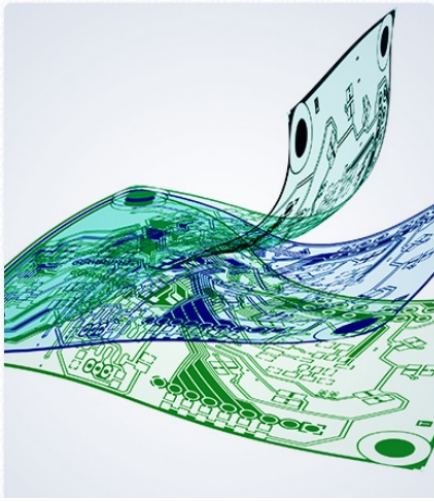- Smart Surfaces
- Joysticks
- Touch Controls

Commercialization Services

For custom-designed input devices or entirely integrated systems, our 40+ years of Human Machine Interface experience will help you meet your creative vision and differentiation goals. We partner with countless original equipment manufacturers on proprietary designs from the initial conceptual design stages through manufacturing end-of-life. Helping OEM customers manage every phase of their product life cycle. Working directly with your teams to assist in developing products that are optimized for manufacturing, cost, and quality. Our Concurrent Engineering development process emphasizes participation for all downstream functions early in the design cycle to maximize program objectives.

- Models and prototyping
- Design Engineering
- Concept and specification development
- Project management
- Product life-cycle management
- Reliability and compliance testing

Expertise in crafting superior HMX products

At the Forefront of Technology

- Projected Capacitive touch displays, 5″ to 85″
- Display to touch screen full optical lamination bonding, any size
- Smart surfaces, touch-responsive surfaces
- Embedded computing
- Wireless connectivity and charging
- Printable electronics
- VR/AR, Robotics, & Exoskeleton
- Training
- Virtual design
- Telerobotics
- In Harsh Environments

For Difficult Requirements

- Sealed surfaces
- Fully cleanable
- High life-cycle (1M, 3M, and even up to 10M cycle options)
- Wear-proof icons
- Ruggedized housings
- Impact proof
- Liquid immune touch screen
- Glove touch compatible
- Antimicrobial, infection control surfaces
- Medical, Industrial, Commercial
- Military and Defense
- Automotive, Off-highway & Electric

Vehicle

- Custom tactile response

- Complex cosmetics
- Challenging backlighting needs
- Unique touch screen and touch control requirements
- Display enhancements

FOR INDOOR USE ONLY
This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. This device complies with part 15 of FCC Rules.

- Part 15 Subpart C
- Part 15 Subpart E

The modular transmitter within the HaptX air pack is only FCC-authorized for the specific rule parts (i.e., FCC transmitter rules) listed on the module's grant, The HaptX air pack (101-100) has also been tested to be compliant with Part 15 Subpart B with the modular transmitter installed. The module inside of the HaptX air pack has been installed professionally using an antenna approved for use by the module's manufacturer and therefore complies with the antenna and transmission system requirements of §15.203 Since there is no space for an FCC ID on the internal module, the FCC ID is located in the module manufacturer's manual as well as the module information provided below.

Guidance For Host Integrators

The following statements must be described in the user manual of the host device of this module.

Contains Transmitter FCC ID: GCYHXG10 Contains Transmitter IC ID: 20156-HXG10
This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

FCC CAUTION
Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Compliance with FCC requirement 15.407(c)
Data transmission is always initiated by software, which is passed down through the MAC, through the digital and analog baseband, and finally to the RF chip. Several special packets are initiated by the MAC. These are the only ways the digital baseband portion will turn on the RF transmitter, which it then turns off at the end of the packet. Therefore, the transmitter will be on only while one of the aforementioned packets is being transmitted. In other words, this device automatically discontinues transmission in case of either the absence of information to transmit or operational failure.

Frequency Tolerance: ±20 ppm
This transmitter must not be co-located or operated in conjunction with any other antenna or transmitter. This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment and meets the FCC radio frequency (RF) Exposure Guidelines. This equipment should be installed and operated keeping the radiator at least 20cm or more away from the person's body.

The available scientific evidence does not show that any health problems are associated with using low-power wireless devices. There is no proof, however, that these low-power wireless devices are safe. Low power Wireless devices emit low levels of radio frequency energy (RF) in the microwave range while being used. Whereas high levels of RF can produce health effects (by heating tissue), exposure to low-level RF that does not produce heating effects causes no known adverse health effects. Many studies of low-level RF exposures have not found

any biological effects. Some studies have suggested that some biological effects might occur, but such findings have not been confirmed by additional research. Type1VY has been tested and found to comply with FCC radiation exposure limits set forth for an uncontrolled environment and meets the FCC radio frequency (RF) Exposure Guidelines.

FAQs

Q: Can the device be used outdoors?
A: No, the device is designed for indoor use only.

Q: What should I do if I encounter interference issues?
A: Ensure that the device is operating within the specified FCC guidelines. If interference persists, contact customer support for further assistance.

Q: Is it safe to operate the device close to the body?
A: The device complies with FCC radiation exposure limits. However, it is recommended to maintain a distance of at least 20cm between the radiator and the body for safety.

Documents / Resources

Advanced Input Devices HXG10 Human Machine [pdf] Instructions
GCYHXG10, 101-100, HXG10 Human Machine, HXG10, Human Machine, Machine

References

- **User Manual**