

AUTONOMY TOUCH SCREEN DATASHEET

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OVERVIEW



The Autonomy Touch Screen automatically pairs with co-located JDRF Electromag Autonomy Sensors and Autonomy Switchpacks and dynamically updates the GUI based on room-specific conditions.

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OVERVIEW

DYNAMIC GUI

The Autonomy Touch Screen provides scene and group control without user setup or programming. It automatically pairs with co-located luminaires and dynamically updates the GUI within minutes of initial power-up. Users can pair their smartphone through NFC to gain access and modify default scene levels and group membership.

**NETWORKING**

Automatically builds and maintains a secure wireless network with other JDRF Electromag devices. Devices use multi-factor authentication without involvement.

NFC PAIRING

Integrated NFC transceiver allows easy pairing to the JDRF Electromag mobile application to customize the behavior of the Autonomy Touch Screen.

**ENERGY
MEASUREMENT**

Local data logging stores energy consumption data published by co-located Autonomy Sensors and Autonomy Switchpacks with no added hardware required.

AUTONOMY TOUCH SCREEN DATASHEET

SPECIFICATIONS

ELECTRICAL

- 1 Input voltage: 120-277 VAC (50/60 Hz).
 - 2 Input power: 5 W maximum.
 - 3 Impulse voltage: 4 kV.
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GENERAL

- 1 Purpose of control: Electronic Lighting Control (non-safety related).
 - 2 Type 1 Action.
 - 3 Pollution Degree: 2.
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WIRELESS

- 1 Communication Protocol: Wireless Mesh.
 - 2 Frequency: 2.4 GHz.
 - 3 Transmitter output +8 dBm (adjustable).
 - 4 Communication Range: 10 m (33 ft) line-of-sight to nearest device.
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**SELF-
DIAGNOSTIC**

- 1 Pass & Fail indicators displayed on GUI.
 - 2 Detailed logs available via mobile application.
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STANDARDS

- 1 cETus listed UL60730.
- 2 FCC Class A Part 15 Subpart C.
- 3 Ingress Protection Rating of IP53.
- 4 Impact Rating of IK07.



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SPECIFICATIONS

MECHANICAL

- 1 Material: Cycloy C6600 FR PC/ABS blend.
- 2 Colour: White (RAL9003), Black (RAL9005).
- 3 Mounting: Wall mount to junction box.

ENVIRONMENT

- 1 Operating Temperature: 0-45 °C (32-113 °F).
- 2 Storage Temperature: 0-75 °C (32-167 °F).
- 3 Relative Humidity: Operating range of 5-95% (non-condensing).
- 4 Environment: Dry indoor use only.

WARRANTY

- 1 Standard: 5-year limited manufacturers warranty.
- 2 Extended: contact sales representative for details.

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SCENES

OVERVIEW

A scene is a lighting preset that controls multiple groups within an Area with a single command. Each group can be programmed to go to a different light level for a given scene. The Autonomy Touch Screen automatically configures scene groups within an area.

**DEFAULT
SCENES**

The Autonomy Touch Screen has three default scenes, as listed below. The mobile application can be used to modify scene light levels and group membership.

- 1 Reading (brightest scene light level).
 - 2 Meeting (medium scene light level).
 - 3 Presentation (lowest scene light level).
-

**PRIORITY
MANAGEMENT**

- 1 Scene command takes priority over the occupancy level and the scheduled event.
- 2 Daylight harvesting: reduces the active scene level.

AUTONOMY TOUCH SCREEN DATASHEET

CALENDAR

OVERVIEW

The Calendar is a scheduled set of events and actions that may repeat on daily, weekly, monthly, or yearly cycle. It runs locally on the Autonomy Touch Screen and can be applied on an individual device (Autonomy Sensor or Autonomy Switch Pack) with the Area. The Calendar can be created using 3rd party applications (iCal, Outlook, Google) and published to the Touch Screen using the JD RF Electromag Mobile Application.

EVENTS & ACTIONS

- 1 Maximum number of calendars per Touch Screen: 2.
 - 2 Maximum number of recurring event series per Calendar: 75.
 - 3 Event recurrence end-date: indefinite.
 - 4 Holiday/exception programming supported: yes.
 - 5 Minimum interval between events: 15 minutes.
 - 6 Event resolution: 1 minute.
 - 7 Maximum number of actions per event: 4.
 - 8 Supported actions: set occupancy level, set vacancy level, change occupancy hold time, enable/disable daylight harvesting.
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**PRIORITY
MANAGEMENT**

- 1 Multiple recurring events: the event with the lowest frequency of recurrence takes priority.
- 2 Touch Screen: the local override takes priority over the scheduled event.
- 3 Daylight harvesting: reduces the scheduled level.

AUTONOMY TOUCH SCREEN DATASHEET

ANALYTICS

OVERVIEW

The Autonomy Touch Screen aggregates and stores the power and energy consumed by each luminaire in an Area. When the light level of a luminaire is changed, the Autonomy Sensor reads the power measured by the D4i-compliant LED driver and transmits it, along with a reason code, to the Autonomy Touch Screen. The reason code explains why the light level was changed (i.e. motion, daylight harvesting, local override, etc.) and is used to gain insight into the performance of the system.

**LOCAL ENERGY
LOGGING**

The event-based energy consumption data is time-stamped and stored locally in the Autonomy Touch Screen. It can be downloaded directly by the mobile application where it can be viewed and exported to .csv/.xls format. The data can be viewed on an event-basis, in 15 minute intervals (for the last 60 days), and in the following time intervals:

- 1 The current day cumulative total.
 - 2 Each day for last 31 days.
 - 3 Each month for the last 24 months.
 - 4 Each year for the last 2 years.
 - 5 Lifetime cumulative total.
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**REMOTE DATA
LOGGING**

Where an Internet connected Autonomy Gateway is used, the energy consumption data and reason code can be published to the cloud for remote storage.

AUTONOMY TOUCH SCREEN DATASHEET

ORDERING INFO

**ORDERING
INFORMATION**

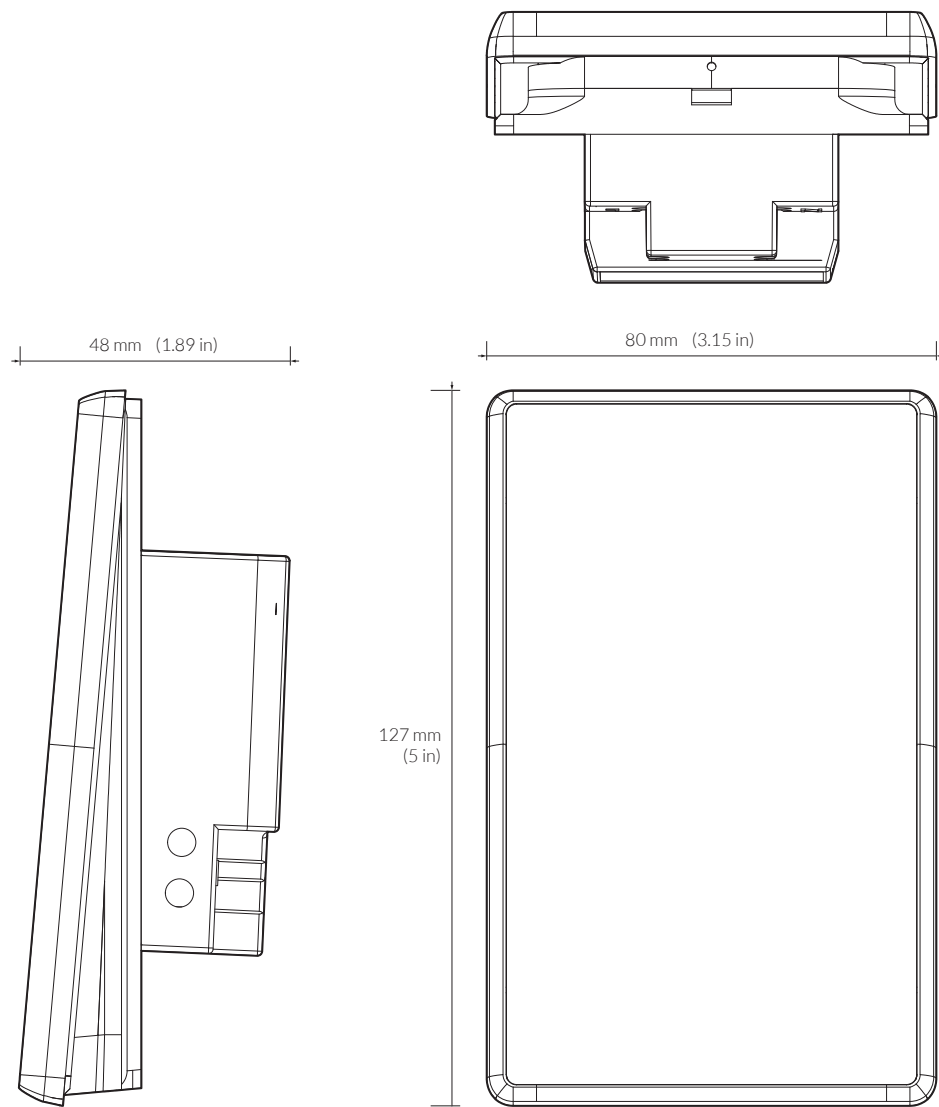
PART NUMBER	DESCRIPTION	UPC/GTIN
JDRF-ATS-01-W-V01-1P	Touch Screen with Single-Gang mounting bracket (white).	628693852333
JDRF-ATS-01-B-V01-1P	Touch Screen with Single-Gang mounting bracket (black).	628693852470

**PACKAGE
INFORMATION**

PART NUMBER	DIMENSIONS	WEIGHT
JDRF-ATS-01-W-V01-1P	12 x 19 x 4.8 cm	0.2 kg
JDRF-ATS-01-B-V01-1P	12 x 19 x 5.3 cm	0.2 kg

AUTONOMY TOUCH SCREEN DATASHEET

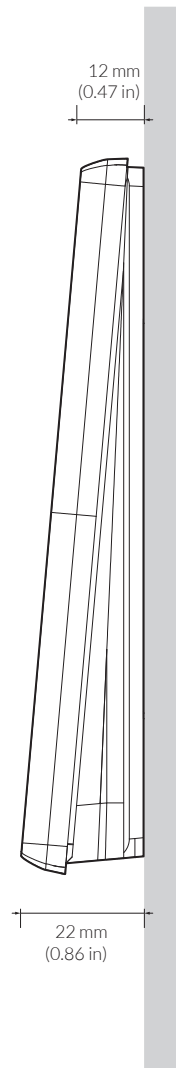
DIMENSIONS

TOUCH
SCREEN

AUTONOMY TOUCH SCREEN DATASHEET

DIMENSIONS

TOUCH
SCREEN
(INSTALLED
TO WALL)



AUTONOMY TOUCH SCREEN DATASHEET

INSTALLATION

WIRING**Risk of Fire, Electrical Shock, Cuts or other Casualty Hazards**

Installation and maintenance of this product must be performed by a qualified electrician. This product must be installed in accordance with the applicable installation code by a person familiar with the construction and operation of the product and hazards involved.

Before installing or performing any service, the power **MUST** be turned OFF. All installations should be in compliance with the National Electric Code and all regional, state, and local codes. Due to sharp edges, handle with care.

Failure to comply with these instructions may result in death, serious bodily injury and property damage.

DISCLAIMER OF LIABILITY

JDRF Electromag Engineering Inc. assumes no liability for damages or losses of any kind that may arise from the improper, careless, or negligent installation, handling or use of this product.

NOTICE

Product may become damaged and/or unstable if not installed properly. Designed for indoor installation and use only. Specifications and dimensions subject to change without notice.

AUTONOMY TOUCH SCREEN DATASHEET

INSTALLATION

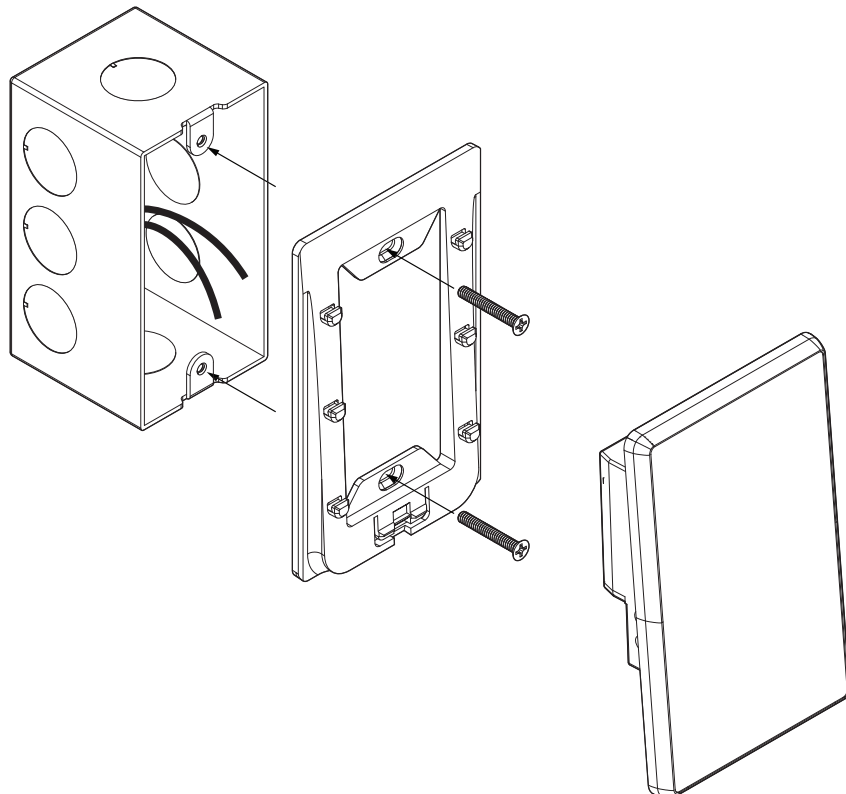
WIRING

The Autonomy Touch Screen package contains 1x Autonomy Touch Screen, 1x wall-mount bracket for a single-gang wall-box, and 2x mounting screws. Wall-box is not included.



Only use wall-mount bracket provided by JDRF Electromag.

- 1 Turn off power at circuit breaker or fuse and test that the power is off before wiring.
- 2 NOTE: The Autonomy Touch Screen is powered by Neutral and Line/Hot wires.
- 3 Use 2 x 12 AWG or 14 AWG wires. Remove wiring insulation by approximately 2 cm (3/4").

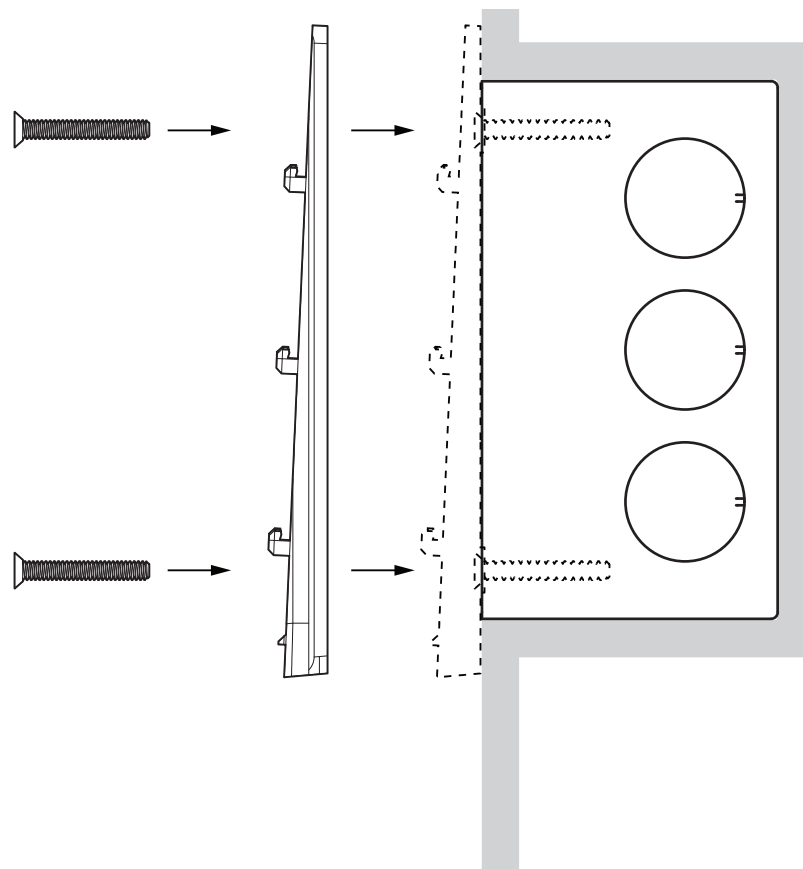


AUTONOMY TOUCH SCREEN DATASHEET

INSTALLATION

SECURE THE WALL-MOUNT BRACKET

The wall-mount bracket is designed to fit into a standard single-gang wall-box. Begin by securing the wall-mount bracket to the single-gang wall-box using the screws provided. Note the vertical orientation of the wall-mount bracket and install as shown below.



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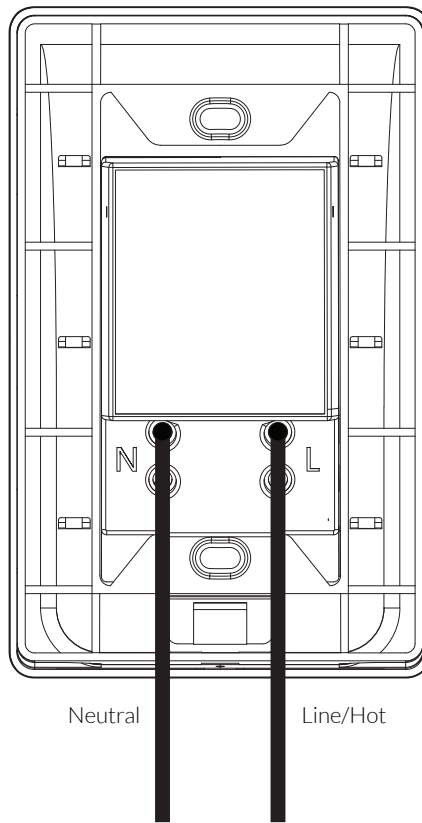
INSTALLATION

WIRING

The Autonomy Touch Screen has a pair of dual-port wire entry terminals. The wire entry terminal for the Neutral connection is marked with a capital letter "N". The wire entry terminal for the Line/Hot connection is marked with a capital letter "L". The two contacts in each dual-port terminal are short-circuited together to allow for a daisy-chain connection to other Autonomy Wall Switches.



Do not connect Neutral and Line/Hot wires to the same dual-port wire entry terminal.



AUTONOMY TOUCH SCREEN DATASHEET

INSTALLATION

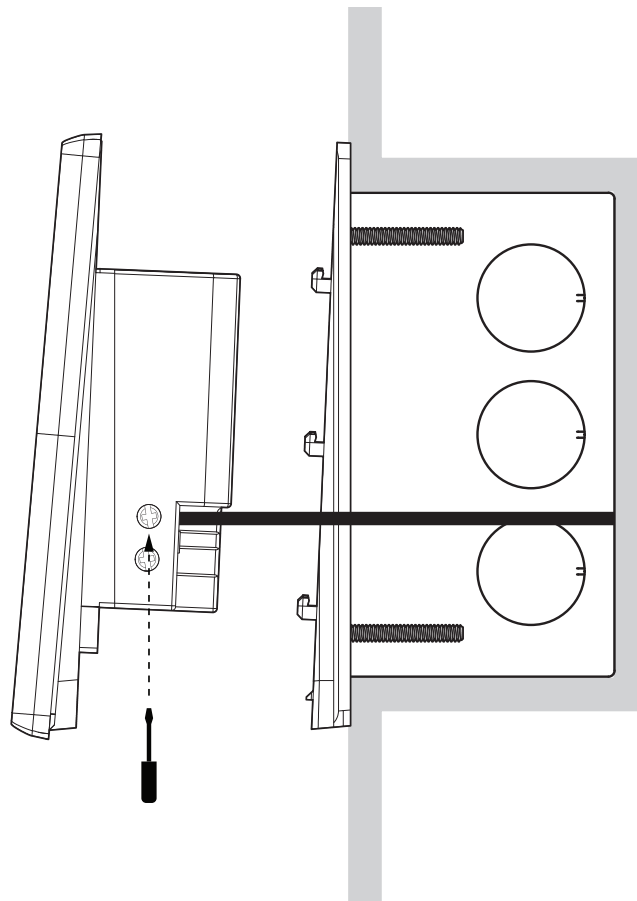
WIRING

The Autonomy Touch Screen has a pair of side-mounted fastening screws that are used to secure the power wires in place. Once the wire is inserted to the correct dual-port wire entry terminal, tighten the screw using a screw driver to hold the wire in place.



The screw-head is not electrically isolated. Make sure the supply is not energized before tightening or loosening the screw terminal.

- 4 Connect Line and Neutral wires into their respective wire entry terminal.
- 5 Firmly tighten screw over wires.



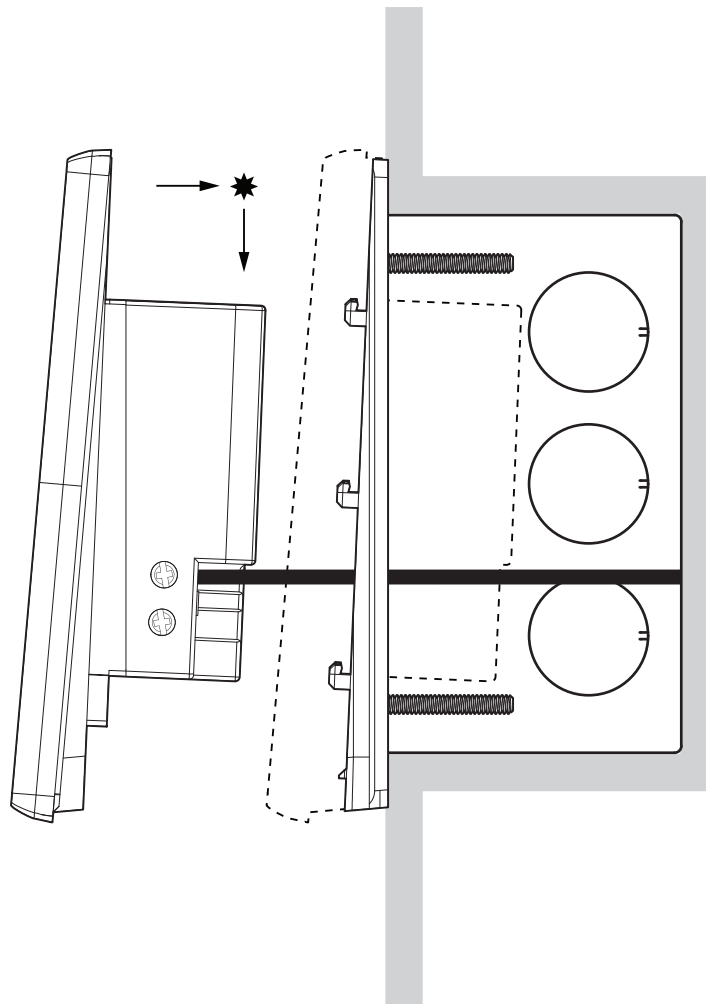
AUTONOMY TOUCH SCREEN DATASHEET

INSTALLATION

SECURE THE TOUCH SCREEN TO THE WALL- MOUNT BRACKET

The mounting holes on the Autonomy Touch Screen are designed to fit into the mounting flanges of the wall-mount bracket.

- 6 Once the wires have been connected, secure the Autonomy Touch Screen to the wall-mount bracket by placing it over the wall-mount bracket and sliding it down.

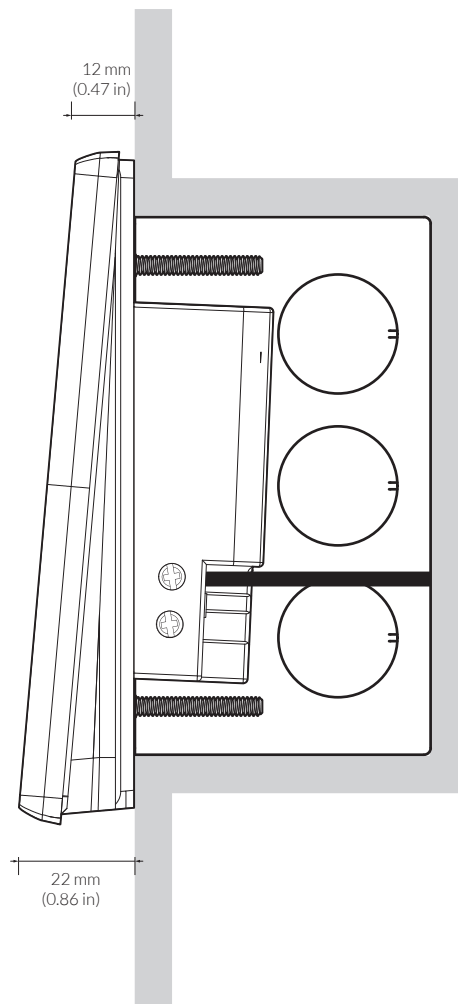


AUTONOMY TOUCH SCREEN DATASHEET

INSTALLATION

SECURE
THE TOUCH
SCREEN TO
THE WALL
MOUNT
BRACKET

When installed correctly, the Autonomy Touch Screen is secured flush with the wall-mount bracket. There should be no visible gaps between the wall-mount bracket and the wall or the wall-mount bracket and the Autonomy Touch Screen. The wall-mount bracket orients the Autonomy Touch Screen at a slight angle to provide ergonomic use.



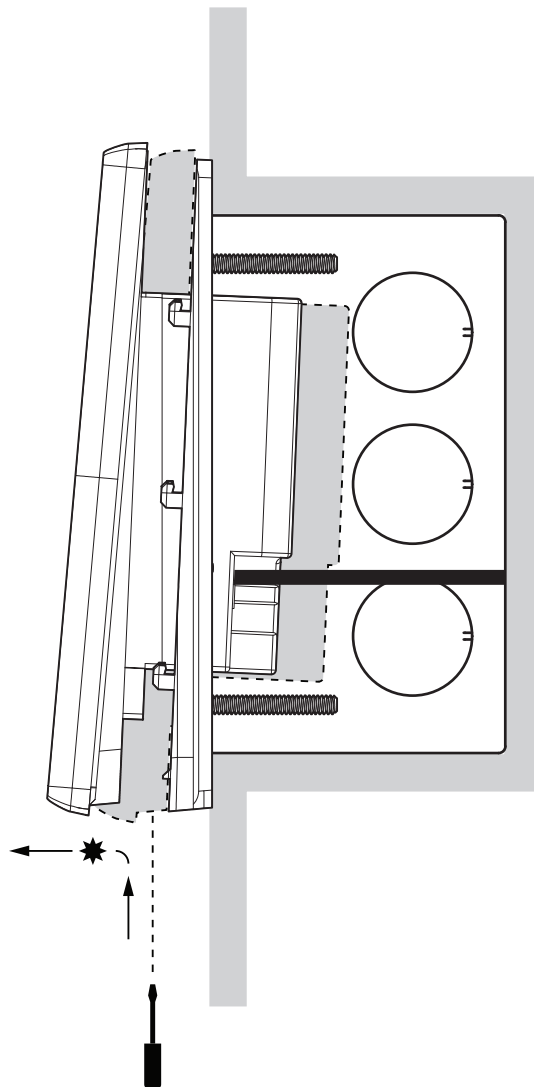
AUTONOMY TOUCH SCREEN DATASHEET

INSTALLATION

REMOVE THE TOUCH SCREEN

The Autonomy Touch Screen can be removed using a flathead screwdriver.

- 1 Press the screwdriver against the latching mechanism located on the bottom of the wall-mount bracket.
- 2 Use a gentle force to lever the Autonomy Touch Screen away from the wall.
- 3 The Autonomy Touch Screen should easily disengage from the wall-mount bracket.



AUTONOMY TOUCH SCREEN DATASHEET

INSTALLATION

MOUNTING POSITION

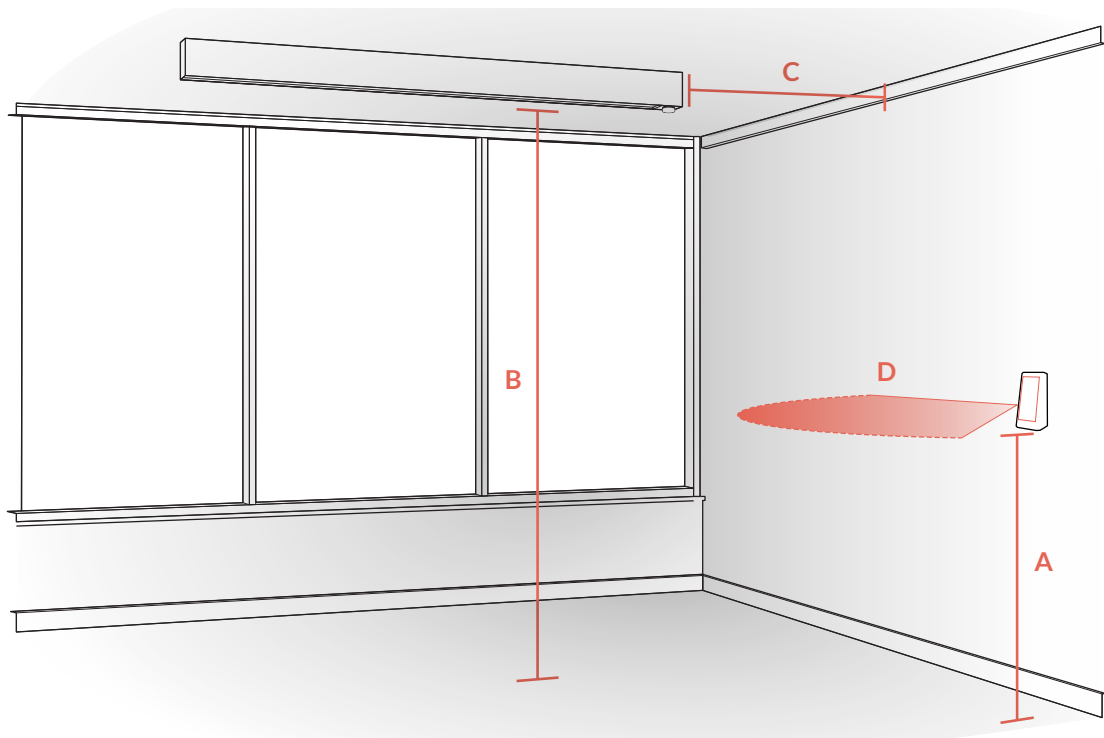
The Autonomy Touch Screen pairs with co-located Autonomy Sensors by establishing a reciprocal Near Infrared Optical Link. Refer to the mounting instructions below to ensure that the Autonomy Touch Screen and at least one Autonomy Sensor are within detectable range of one another.

A - Autonomy Touch Screen Mounting Height: 122-142 cm / 48-56"

B - Autonomy Sensor Mounting Height: 2.7-3.7 m / 9-12'

C - Autonomy Sensor Distance from Wall: 0.6 - 2.4 m / 2-8' (to closest device).

D - Autonomy Sensor to Autonomy Touch Screen Azimuth: 90°.



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ISED & FCC

ISED Non-Interference Disclaimer

This device contains license-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's license-exempt RSS(s). Operation is subject to the following two conditions:

1. This device may not cause interference.
2. This device must accept any interference, including interference that may cause undesired operation of the device.

This device complies with the Canadian ICES-003 Class A specifications. CAN ICES-003(A) / NMB-003 (A).

L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempt de licence. L'exploitation est autorisée aux deux conditions suivantes :

1. L'appareil ne doit pas produire de brouillage;
2. L'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Cet appareil numérique de la classe A est conforme à la norme NMB-003 du Canada.

FCC Compliance Statement

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense. This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: this device may not cause harmful interference, and this device must accept any interference received, including interference that may cause undesired operation. Please note that changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

USA (FCC) SAR Compliance

This device has been evaluated for RF exposure and has been found to comply with FCC limits for limb-worn devices. It is engineered to operate under the FCC's limb SAR exemption criteria.

Canada (ISED) SAR Compliance

This device has been assessed for RF exposure and complies with the ISED RSS-102 limits for limb-worn devices. It meets the requirements for the limb SAR exemption under RSS-102. Operation of this device is subject to ISED's interference conditions.

Cet appareil a été évalué pour son exposition aux ondes RF et est conforme aux limites fixées par ISED RSS-102 pour les dispositifs portés sur le membre. Il satisfait aux exigences de l'exemption SAR pour les membres conformément à RSS-102. L'utilisation de cet appareil est soumise aux conditions d'interférence établies par ISED.