# Sensormatic

## IDX-9000 User Guide



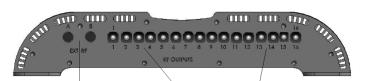
### Introduction

This users guide provides overview information for the IDX-9000; which includes models IDX-9000-US, IDX-9000-EU, IDX-9000-JP, with corresponding part numbers 34000774-0005, 34000774-1005, 34000774-2005, respectively for the US, EU, and Japan. The IDX-9000 Users Guide includes LED definitions, port descriptions, connection and mounting information, as well as regulatory and compliance information. References to IDX-9000 apply to all versions, except where the version is explicitly identified.

This device received all regulatory approvals under the name Sensormatic Electronics. Vue Technology is the RFID business unit of Sensormatic Electronics.

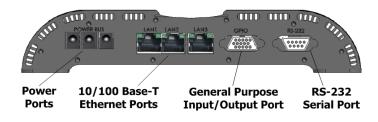
### Physical Connections

The physical connections to the IDX-9000 device are shown in the graphics below



External RF Ports Monostatic RF Output Ports

**RF Side Ports** 



## **Digital Side Ports**

RF Side Port	Description
EXT RF A	External RF Port A (Reverse SMA)
EXT RF B	External RF Port B (Reverse SMA)
RF Outputs 1-16	Monostatic RF Output Ports (MCX)

Digital Side Port	Description	
Power BUS 1-3	Power supply port. Connect the Sensormatic approved power supply to any of the three ports. The power supply uses an AC adapter that varies, depending on the country. Maximum power consumption: 24 VDC, 1.33A.	
LAN1	10/100 Base-T Ethernet Port.	
LAN2 LAN3	Insert a standard RJ45 Ethernet cable for connection to an Ethernet network. Insert a cross-connect Ethernet cable for connection to a local PC.	
	The left LED indicates link/activities. The LED turns on when the link is established and flashes when data packets are sent or received.	
	The right LED indicates speed. When the left LED is on, the right LED turns on when the port is linked at 100 Mbps and turns off when the port is linked at 10 Mbps.	
GPIO	General Purpose Input/Output (15 pin) Port. Insert a DE15 cable assembly for connection to an external device.	
RS-232 Serial Port	For serial device connection.	

### LED Definitions

See the top view illustration below for the LED positions on the IDX-9000.

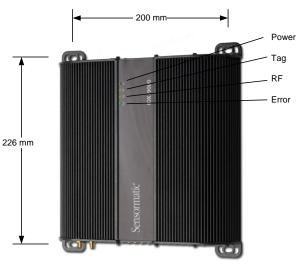
LED	State	Description	
Error	Off	No known error conditions.	
	Flashing	Flashes when the power on cycle is initiated. If flashing after initial power on cycle, the unit has detected errors during self- test. If errors are detected, contact Technical Support.	
RF	On	RF transmitter is turned on and transmitting.	
	Off	No RF output.	
Tag	On	Valid tag(s) are found and being read.	
	Off	Tags are not currently being read.	
Power	On	Power is on and unit is ready.	
	Off	No power to the unit.	
	Flashing	Unit is powering on.	

All LEDs are off when the power is not connected. All LEDs will be on briefly and cycle their display when the power is reset. The Green, Yellow1, and Yellow2 LEDs will cycle when in a downloading state.

#### Mounting

Position the IDX-9000 on the wall or shelf, ensuring a minimum clearance of five inches on all sides. Mark the hole locations using the mounting tabs as a guide. The distance between mounting holes across the width of the connector panels is 200 mm. The distance between mounting holes across the length of the unit is 226 mm.

Remove the IDX-9000 and drill four mounting holes at the marked locations. Reposition the IDX-9000 over the mounting holes and secure using fasteners appropriate for its 3.5-pound weight, the mounting surface, and any other conditions present, such as vibration.



#### **Regulatory Information**

All Sensormatic devices are designed to be compliant with rules and regulations in locations in which they are sold and are labeled, as required. Any changes or modifications to Sensormatic equipment, not expressly approved, in writing, by Sensormatic could void the authority to operate the equipment.

#### **Country Approvals**

Regulatory markings are applied to the device signifying the radio(s) are approved for use in the following countries: United States, and Canada,.

## Health and Safety Recommendations

Operation of the device without regulatory approval is illegal.

#### Warning for Use of Wireless Devices

Please observe all warning notices with regard to usage of wireless devices.

#### **Potentially Hazardous Atmospheres**

You are reminded of the need to observe restrictions on the use of radio devices in fuel depots., chemical plants, etc., and areas where the air contains chemicals or particles (such as grain, dust, or metal powders) and any other area where you would normally be advised to turn off your vehicle engine.

#### Safety in Hospitals

Wireless devices transmit radio frequency energy and may affect medical electrical equipment. When installed adjacent to other equipment, it is advised to verify that the adjacent equipment is not adversely effected.

#### Hearing Aids

The wireless device may interfere with some hearing aids. In the event of interference, you may want to consult your hearing aid supplier to discuss solutions.

#### **Other Medical Devices**

Please consult your physician or the manufacturer of the medical device to determine if the operation of your wireless product may interfere with medical devices.

#### **Remote and Standalone Antenna Configurations**

The antennas used with this transmitter must be installed to provide a minimum separation distance of 25 cm from all persons and must not be co-located or operated in conjunction with any other antenna or transmitter. End users and installers must be provided with antenna installation instructions and transmitter operating conditions for satisfying RF exposure compliance.

#### **Power Supply**

Use only the Sensormatic Electronics power supply provided with this unit or other power supply approved by and obtained from Sensormatic for use with this product.

#### Wireless Devices - Countries

If frequency is selectable for your model, select only the country in which you are using the device. Any other selection will make the operation of this device illegal.

## Frequency of Operation - FCC and IC (US/Canada Versions)

The unit operates from 902-928 Mhz at a maximum power level of 1W.

# FC Federal Communications Commission (FCC)

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help

Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

This device has received regulatory approval with and been designed to operate only with Sensormatic Electronics approved antennas. Use of antennas not on Sensormatic's approved list will not be supported by Sensormatic Electronics and may damage the device, as well as violate local regulations.

#### Canada Industry (IC)

This Class B digital device complies with Canadian ICES-003.

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

#### **Radio Transmitters**

This device complies with RSS210 of the Industry & Science Canada. Operation is subject to the following conditions: This device may not cause harmful interference and this device must accept any interference received, including interference that may cause undesired operation.

#### Approved Antennas

This device has been designed to operate only with Sensormatic Electronics approved antennas described in the table below. Antennas not included in this approved list are strictly prohibited for use with this device.

Manufacturer	Model Number	Polarization	Composite Gain
Symbol	AN480-CL66100WR	LHCP	6 dBiL
Symbol	AN480-CR66100WR	RHCP	6 dBiL
Sensormatic	IDA-2100	RHCP	6dBiL
Sensormatic	IDA-2400	RHCP	6dBiL

#### Restriction of Hazardous Substances Directive (RoHS)

All parts and components are manufactured in accordance to and be compliant with the "DIRECTIVE 2002/95/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 27 January 2003 on the restriction of the use of certain hazardous substances in electrical and electronic equipment.

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#### Service

If a problem using the equipment occurs, contact the facility Technical or Systems Support. If there is a problem with the equipment, they must contact Sensormatic Technical Support at <a href="http://www.sensormatic.com/support/techsupport/default.aspx">http://www.sensormatic.com/support/techsupport/techsupport/techsupport/techsupport/default.aspx</a>.

## Sensormatic

Sensormatic Electronics 6600 Congress Ave. Boca Raton, FL 33431-0837 http://www.sensormatic.com

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