JRI Nova SPY 2.4 GHz Data Loggers User Guide

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JRI Nova SPY 2.4 GHz Data Loggers

USER GUIDE

I. INTRODUCTION

The Nova SPY is a device that measures several physical quantities (T/HR%/Lux depending on the model) and transmits the data wirelessly, by radio frequency (2.4GHz), to the JRI-MySirius monitoring software hosted on the JRI cloud or on a client server via a Nano Link, Relay/Alarm or Nanocell.

The Nova SPY complies with EN 12830 only with temperature sensors and is compatible with EN 13486, defining periodic verification procedures.

a) Product contents

- 1 Nova SPY
- 1 JRI User guide
- 1 Protective shell
- 1 Lithium battery A 3,6V [In versions including a battery]

b) Symbols

	RECYCLAGE : ne pas jeter dans une décharge ou dans un container de collecte des déchets ménagers. Se conformer à la législation en vigueur pour la mise au rebut.
	Power source: this device is powered by a 3.6VDC type A lithium battery (§ ch. V). (Battery like Saft 17500)
	CE LABELING: this device is certified to conform to European regulations for electrical safety, flammability, disruptive electromagnetic emissions, and immunity to environmental electrical disturbances.
	FCC ID: W4513756 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. NOTE: The grantee is not responsible for any changes or modifications not expressly approved by the party responsible for compliance. Such modifications could void the user's authority to operate the equipment NOTE: 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.
	ISED ID – IC: 25800-13756 CAN ICES-003(A) / NMB-003(A) This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-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.

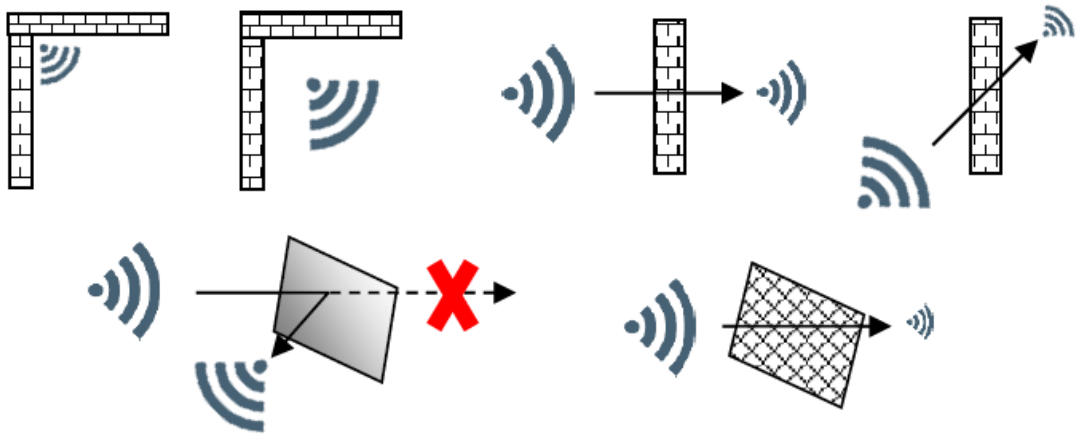
Do not use the device under conditions other than those described in the technical specifications (risk of fire or explosion).
For uses other than those mentioned, please contact JRI.

II. INSTALLATION RECOMMENDATIONS

To ensure optimum radio transmission, a number of recommendations must be followed, as all wireless transmissions are subject to interference.

a) Sources of disturbance or attenuation

- The presence of obstacles in the wave path between the Nova SPY and the LINK (wall, furniture, people…) or near the antenna.
- The thickness of an obstacle in the wave path. The attenuation is greater diagonally than perpendicularly.



A solid metal wall will not allow radio transmission. A perforated metal wall will allow waves to pass while attenuating them.

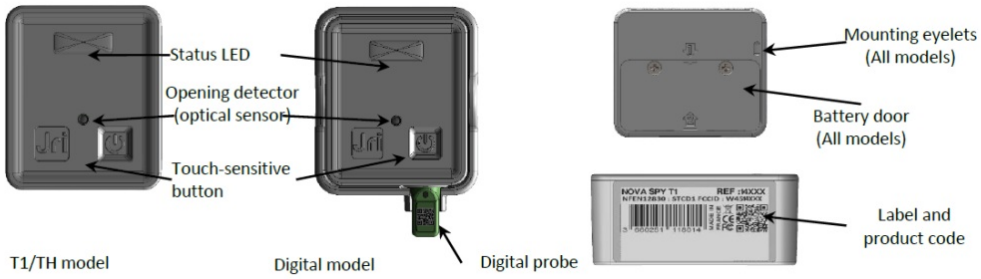
b) Positioning

- Nova SPYs can be placed either inside or outside the speakers.
- For installations outside enclosures, prioritize the top of the walls to avoid obstacles and the passage of people.
- If possible, position the LINK centrally in relation to the measurement points.
- Try to position them preferably within view.
- You can use RELAY/ALARMS (repeaters) or connect another LINK to improve radio coverage.

To ensure your safety during installation or intervention on a device placed in a high position, use proper equipment that is in good condition and provides adequate stability, wear appropriate, non-slip shoes, and install warning signs around the work area if the intervention takes place in an area of foot traffic.

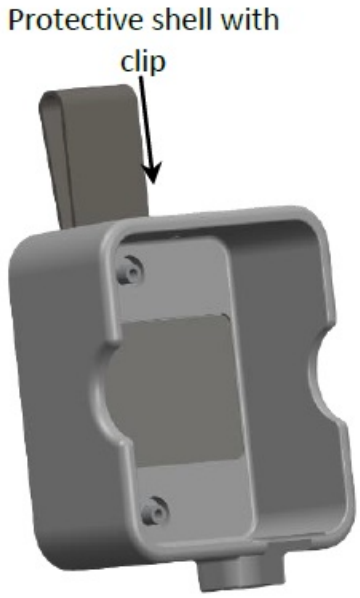
III.PRODUCT DESCRIPTION

a)Control unit

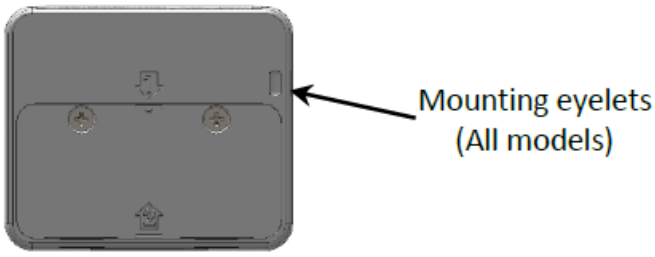


b)Mounting

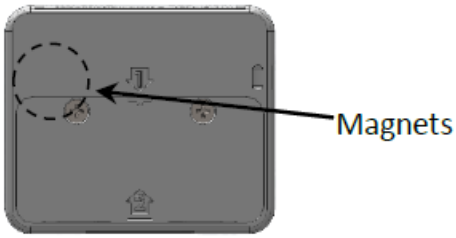
Nova SPYs can be attached in 4 different ways



- Using a tie wrap to attach it to the monitored product

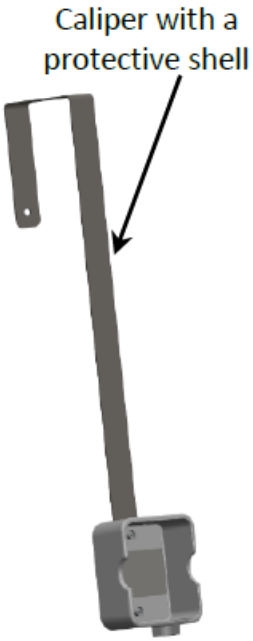


- Magnetically: Nova SPYs feature an internal magnet for attachment to magnetic metalwalls. A protective shell with a magnetic base is available as an option (Part nbr: 13735).



- For example, use a clip to attach them to the grids of a positive enclosure. This option allows them to be as close as possible to the products to be monitored and facilitates maintenance operations. A protective shell with a magnetic base and clip is available as an option.

- With a caliper for insertion into a chest-type freezer with an opening atthe top. This option facilitates maintenance operations whileguaranteeing an optimum position for temperature measurement. Aprotective shell with a magnetic base and bracket is an option.

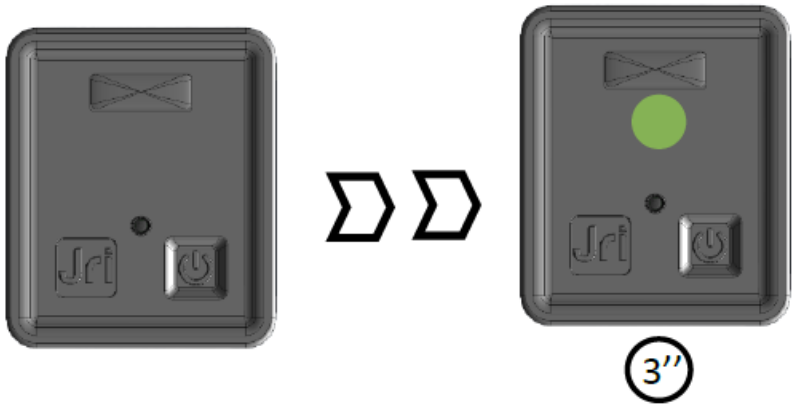


IV. OPERATION

The Nova SPYs can only be used with JRI-MySirius monitoring software hosted on the JRI cloud or on a client-server via a Nano Link, Relay/Alarm, or Nanocell. For Nova SPY configuration, please refer to the MySirius online help.

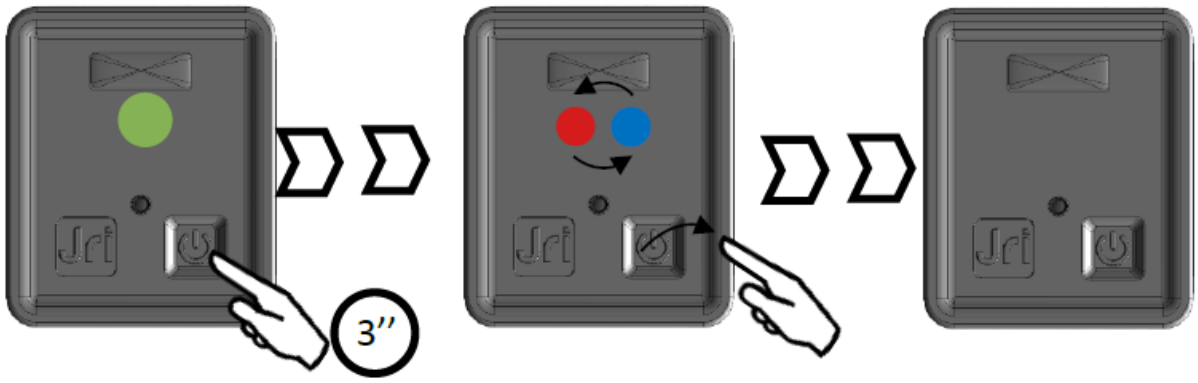
a) Stop
As delivered, the Nova SPY is turned off. It can neither emit nor receive signals.

b) Activation



Once the battery is inserted, the device is activated after three seconds. Once activated, the Nova SPY automatically declares itself in MySirius if it is in contact with a Link. It starts measuring and transmitting its readings to MySirius as it goes along, then flashes regularly according to its status.

c) Turning Off (Only possible if the device is not registered in MySirius)



Once the device has been declared in MySirius, the touch button shutdown function is deactivated to prevent “accidental” shutdowns when handling the device. However, this option can always be re-enabled in MySirius to switch off the Nova SPY device using the touch button.

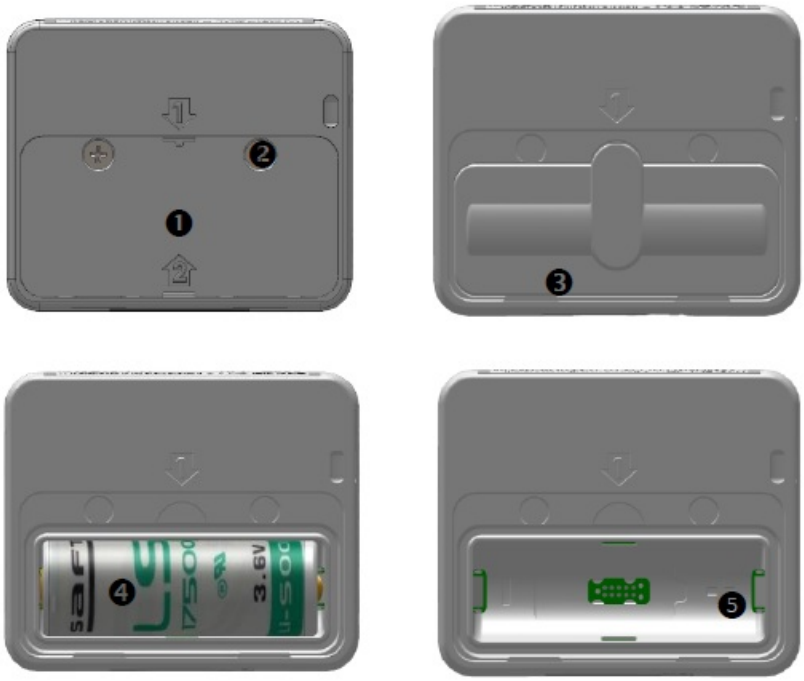
Mode \ Press sensitive button	< 3"	between 3'' and 8''
Activation	-	● during 3''
Measurment	● 1'' = OK ● 1'' = Technical alarm ✳ 3x1'' = OK but paused ● 1'' = In alarm state	Off
Off (If authorized by program)	-	● ●

Using active, corrosive or flammable products or solutions (e.g. acid or petroleum) on JRI equipment is prohibited.

JRI equipment is designed to map and monitor the temperature and humidity of thermal or climatic enclosures within the limits described in their data sheets.

For maintenance of these devices, please refer to the dedicated section.
For uses other than those mentioned, please contact JRI.

V. BATTERY REPLACEMENT



Removing the battery

Open the battery door 1 with a suitable object (Phillips screwdriver), and remove the screws 2. Remove the battery door seal 3. Remove the battery 4 from its lodging.

Replacing the battery
Put the new battery 2 in place respecting the polarity 5 , replace the battery door seal & the battery door.
Confirmation that the new battery has been detected is given by the activation of the red LED for a few seconds.
The device restarts automatically when the LED goes out.

KEEP THE BATTERY AWAY FROM FIRE, DO NOT ATTEMPT TO RECHARGE IT OR SHORT-CIRCUIT IT
THE BATTERY MUST BE A LITHIUM 3.6V TYPE A BATTERY.
USE PREFERABLY THE BATTERIES* SUPPLIED BY JRI (REF: 12761)

* Recommended batteries: Saft LS17500 type A 3.6V|3.6Ah

VI. MAINTENANCE

Clean the unit with a soft, dry cloth, or one slightly dampened with water. To remove stubborn dust, use a cloth impregnated with a diluted, non-abrasive detergent. Then wipe thoroughly with a soft, dry cloth. Never use benzene, thinner, alcohol or solvents of any kind, which may cause discoloration or deformation of surfaces.

VII. TECHNICAL FEATURES

a) Common features:

- HMI : 1 RGB LED + 1 touch-sensitive button

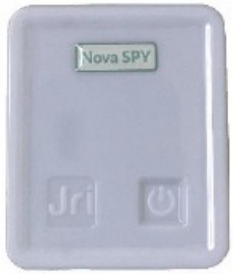
- Frequency band : 2.4GHz (from 2400 to 2483.5 MHz)
- Power consumption Nominal current
  : Maximum power – 300mW
  : Average current – 80uA
  : Maximum power – 80mA
- Maximum Radio Power : 6 dBm
- Internal memory : 10 000 timestamped measures per channel
- Resolution : 0.01
- Dimensions : 64 mm x 54 mm x 28 mm
- Operating conditions : -40°C to 80°C – 0 to 100% HR
- Protection class : IP66* – For indoor use only

*** Protection valid only with a digital probe connected to the device**

- Case : Polycarbonate – Food contact
- Power source : Lithium A 3.6V battery. Battery life up to 6 years depending on use (Operating at 23°C with an optimized radio configuration)
- Pollution / Altitude (refer to IEC 60664 guideline))
  : Pollution rate – 2
  : Operating altitude from 0 to 2000m
- Weight : ~ 80 gr (with battery and without probe weight)

b) Specific features per product :

Nova SPY T1 Ambient temperature (internal probe)



Nova SPY Digital

For more information, please refer to the product web page. HERE
Only connect JRI probes to the product, otherwise irreversible damage may occur.

VIII. ENVIRONMENTAL PROTECTION

JRI recommends that its customers dispose of unusable and/or irreparable measuring or recording equipment in an environmentally sound manner. Insofar as the production of waste cannot be avoided, it should be reused using the recycling process best suited to the materials in question and to the protection of the environment.

RoHS Directive

The European RoHS Directive regulates and limits the presence of hazardous substances in electronic and electrical equipment (EEE).

Article 2 of this Directive excludes “Monitoring and control instruments”, which include the products manufactured by JRI. Nevertheless, JRI has decided to apply all the provisions of this Directive to its new electronic products, which will comply with the above-mentioned Directive 2002/95/EC.

Recycling: To avoid any risk of explosion, please do not dispose of the Nova SPY in the garbage, do not burn it and avoid crushing it. Please follow these safety instructions carefully.

Specifications:

- Measures: T/HR%/Lux (depending on the model)
- Transmission: Radio frequency (2.4GHz)
- Compliance: EN 12830 for temperature sensors, EN 13486 for periodic verification procedures
- Connectivity: Wireless transmission to JRI-MySirius monitoring software

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FAQ:

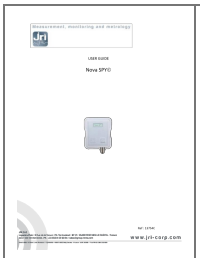
Q: How do I connect the Nova SPY to the JRI-MySirius monitoring software?

A: To connect the Nova SPY to the software, refer to the user manual for detailed instructions on setting up the wireless transmission.

Q: What should I do if the device shows erratic readings?

A: Check for sources of interference and ensure proper positioning of the Nova SPY. If issues persist, contact customer support for assistance.

Documents / Resources

	**JRI Nova SPY 2.4 GHz Data Loggers** [pdf] User Guide 13756, 13754C, Nova SPY 2.4 GHz Data Loggers, Nova SPY, 2.4 GHz Data Loggers, Data Loggers, Loggers

References

- **User Manual**