

# INSTALLATION NOTES



## NESS UNIVERSAL TRANSMITTER

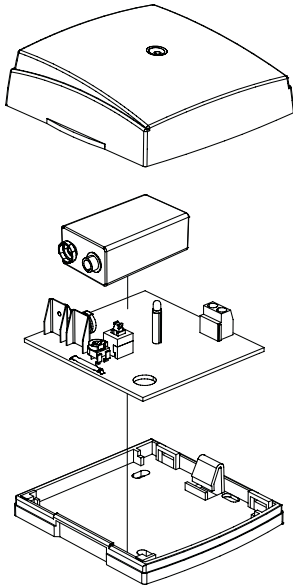
WITH  
ON-BOARD  
VIBRATION  
ANALYSER

**PART NUMBER:** 100-527

**MODEL:** RR2 Ness Universal Transmitter

### FEATURES

- External input for reed switches, vibration sensors, push buttons or any N.C. device.
- On-board adjustable vibration analyser for Nessensor™ vibration sensors.
- On-board reed switch.
- 9V battery operation.
- Fully supervised, encrypted signals.
- Compatible with all Ness radio receivers.
- Ultra low standby current draw.



## INTRODUCTION

The 100-527 Ness Universal Transmitter is a 9V battery operated transmitter with onboard reed switch, an external input and vibration analyser.

The external input can be used to take inputs from normally closed reed switches or emergency buttons. This allows connection of any type of N.C. switch or button to trigger an alarm signal.

The external input can also be used to connect Nessensor™ vibration sensors for completely wireless vibration sensing. The onboard vibration analyser can be easily adjusted for sensitivity.

The onboard reed switch allows for standalone door or window protection without using the external input. (The Ness 100-662 RR1 miniature radio reed switch can also be used for this purpose).

The Ness Universal transmitter also features radio encryption and supervision for total radio security.

### EXTERNAL INPUT CONNECTION IDEAS:

Reed Switch protecting:

- Coolroom door
- Emergency exit door
- Ceiling man hole
- Skylight grille
- Tradesman's van door parked at home
- Lawnmower, tool shed, garden shed

Roller Reed Switch protecting:

- Garage roller/tilt door
- Warehouse door
- Caravan or boat parked at home

Nessensor protecting:

- Door and window frames
- Cars in car yards
- Display cases in shops
- Jewellery cabinets
- Safes, strongroom doors

## INPUTS

**TB1 Terminals:** EXTERNAL INPUT. Normally closed contact from reed switch or Nessensor.

**NOTE:** The length of any cabling to the External Input must not exceed 400mm.

## BATTERY

A 9V lithium battery is supplied. Connects to the fixed battery terminals.

The Ness Universal Transmitter will send a low battery signal when the battery voltage drops to 6 volts. Battery life will depend on the number of transmissions per day.

The red LED Flashes when transmitting during low battery condition.

## LED INDICATOR

The red LED is visible when the cover is closed and is on while the unit is transmitting. (Flashes during low battery condition).

## LINKS

**EBI LINK:** Selects the active input.

**EB** position: Only the external input is active.

**BI** position: Only the on-board reed switch is active.

**Open** position (link parked): Both the on-board reed switch and the external input are active in series.

## TAMPER SWITCH

The onboard tamper switch detects removal of the cover. A Tamper signal is sent on activation.

## LEARN MESSAGE

The Ness Universal Transmitter sends its Learn Message when the battery is first connected. This is used to teach the transmitter's unique code to the Ness control panel/receiver being programmed. Refer to the control panel's programming instructions.

## REED SWITCH

The on-board reed switch can be used to protect openings using the magnet supplied.

Mount the magnet on the moveable door or window and the Ness Universal Transmitter on the fixed frame. Align the magnet with the reed switch leaving a gap of no more than 15mm when the door/window is closed.

The magnet is not required if the reed switch is not being used.

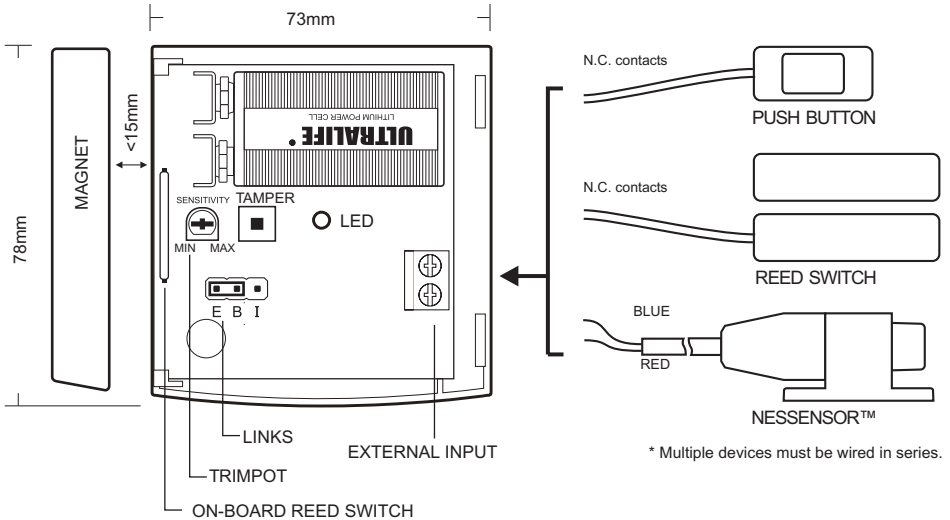
## VIBRATION ANALYSER

The on-board vibration analyser operates on the External Input and provides adjustable sensitivity for Nessensor™ vibration sensors.

Sensitivity is adjusted using the onboard rotary trimpot. Turn fully anti-clockwise for lowest sensitivity, fully clockwise for highest sensitivity. The middle position is likely to be suitable for most situations. **Use the highest sensitivity setting with caution.**

In addition to the analyser's sensitivity adjustment, the overall sensitivity of the Nessensor™ can be adjusted by rotating the sensor's body to provide low, medium and high sensitivity.

Multiple Nessensors™ can be connected in series, although this is limited by the maximum cable length of 400mm allowed on the External Input.



### INPUT SELECTION LINKS



THE EXTERNAL INPUT IS ACTIVE



THE ONBOARD REED SWITCH IS ACTIVE



(Link is shown parked)

THE EXTERNAL INPUT AND THE ONBOARD REED SWITCH ARE ACTIVE

## SPECIFICATIONS

OPERATING VOLTAGE	9V Lithium battery
QUIESCENT CURRENT DRAW	<10 $\mu$ A
SIGNALS TRANSMITTED	<ol style="list-style-type: none"> <li>1. Alarm/restore from reed switch or external input.</li> <li>2. Tamper.</li> <li>3. Low battery signal (~6V).</li> <li>4. Learn message (on power up).</li> </ol>
RADIO SECURITY (When used with a compatible Ness Receiver)	<ol style="list-style-type: none"> <li>1. Encrypted signals.</li> <li>2. Supervised operation.</li> </ol>
INPUT SELECTION LINK	Internal reed or external input or both in series.
EXTERNAL INPUT	Accepts N.C. devices. 400mm maximum cable length to input.
TAMPER SWITCH	Cover tamper switch.
REED SWITCH	Miniature glass envelope, matching magnet supplied.
VIBRATION ADJUSTMENT	Rotary min/max sensitivity adjustment.
RADIO FREQUENCY	303.85MHz
TRANSMIT POWER	100 $\mu$ W
COMPATIBILITY	All Ness radio receivers.
DIMENSIONS	78(h) x 73(w) x 27(d) mm



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Ness RR2 UNIVERSAL TRANSMITTER  
Installation Notes  
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For the product 100-527 RR2 Universal  
Transmitter 304MHz

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Specifications may change without notice.