



**VERSATILE
MULTI-USER
RECEIVER**

The **NOVA** system incorporates code-hopping technology (Keeloq™ encryption) to offer the ultimate security in a remote control.

A unique, randomly changing code is transmitted with each operation making it impossible to duplicate the system.

The **SMART** system uses a unique fixed code protocol to provide a convenient and efficient remote control system.

Whether **NOVA** or **SMART**, the receiver uses self-learning technology, making it quick and easy to set up.

For the best results, we recommend that the receiver be mounted as high up as possible, and preferably away from metal objects and other radio equipment.

The receiver enclosure is weatherproof, but any holes drilled during installation should be properly sealed.

The antenna wire has been tuned to an optimum length, and should not be modified.

1. Configuring the system

1. Transmitter


Whether **NOVA** or **SMART**, each transmitter is uniquely coded at the factory. It is NOT necessary to open the transmitter, except when changing the battery. To replace the battery, rotate the inner casing, and remove from the outer clip. Using a coin, pry apart the inner casing to expose the battery. Replace with type GP23 or similar.

2. Receiver

Open the receiver housing by inserting a screwdriver into the slot at the base and twisting (See diagram overleaf).

For pulsed operation:

1. Locate the "learn / J1" pins. **With power on, bridge the two pins with the jumper provided. The red LED will now illuminate.**
2. Press the required button on the transmitter. The red LED will flash once, indicating that the button has been learned as a memory button.

 **If the red LED flashes rapidly, the memory is full, and the button cannot be memorised.**


3. If further buttons are to be memorised, repeat from step 2. If not, remove the jumper from the "learn / J1" pins and store on one of the pins. The system is now ready for use.

For latched operation:

1. Locate the "erase / J2" pins. **With power off, bridge the two pins with the jumper provided.** Power up the unit. The red LED will now illuminate.
2. Press the required button on the transmitter. The red LED will flash twice, indicating that the button has been learned as a latched button.


 **If the red LED flashes rapidly, the memory is full, and the button cannot be memorised.**

3. If further buttons are to be memorized, repeat from step 2. If not, remove the jumper from the "erase / J2" pins and store on one of the pins. The system is now ready for use.


 **Self-learning memory:** The **NOVA** receiver is capable of memorising up to 62 buttons; the **SMART**, 125 buttons.

Erasing the memory

1. With the power on, the memory may be erased by bridging the "erase / J2" pins with the jumper provided. The red LED will begin to flash.

 **During this time, removing the shunt will cancel the erase process.**

2. After twelve flashes, the red LED will remain illuminated. Remove the jumper, and the red LED will flash rapidly as the memory is erased.
3. Store the jumper on one of the pins.


 **This procedure will remove ALL existing users from the system memory.**


Autolearn mode (for pulsed operation only):

1. The receiver can be set into autolearn mode by bridging the "learn / J1" pins **prior to applying power.**

Each valid signal received in this mode will both activate the contact, **and** be stored in memory. This is useful when setting up systems with a large number of transmitters.

The system can be left in autolearn mode for a period of time, and will automatically memorise the transmitters as they are used.

 **Removing the jumper will cancel autolearn mode.**

 **When using autolearn mode, whether the receiver is NOVA or SMART, any corresponding transmitter operated in the nearby vicinity, may be memorized.**

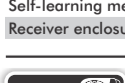
Receiver signal indicator

1. If a signal is received from an unauthorised transmitter button, the red LED will flash briefly. **This indicates that the transmitter is functioning, but has not been learned into the system.**

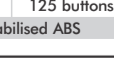
NOVA and SMART receiver technical specifications

Specifications	NOVA	SMART
Operating frequency	433.92 MHz	
Supply voltage	12 - 24V DC	
Quiescent current @12V DC	11mA	
Maximum current @ 12V DC	40mA	
Operating temperature	-15°C to 50°C	
Humidity	0 - 90% non-condensing	
Sensitivity	-115dB	
Self-learning memory	62 buttons	125 buttons
Receiver enclosure	UV stabilised ABS	

continued overleaf



RECEIVERS



Established 1986

Remove cover

1. Insert screwdriver into slot.
2. Twist screwdriver.

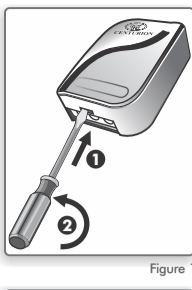


Figure 1

3. Remove cover.

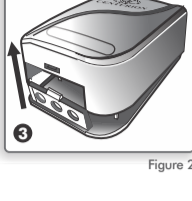


Figure 2

Mount unit

1. Mark position of unit against mounting surface.
2. Using a 5mm masonry bit, drill a hole into mounting surface.
3. Mount unit using the fastener supplied.

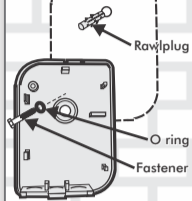


Figure 3

Wiring

1. Use a 6mm drill bit to open the required cable entry hole.

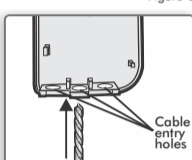


Figure 4

2. Route cable into housing.
3. Terminate cable onto receiver - refer to connection diagram below.
4. Fix cable to wall using cable saddles.
5. Feed aerial through one of the spare holes - stretch out fully for best results.
6. **Seal cable entry holes with silicone sealant.**

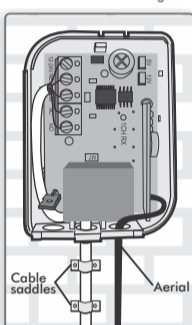


Figure 5

Connections

1. Supply the unit with 12-24V AC/DC.
2. The output contact is potential-free.



Some applications may require an external link between NEG and COM.

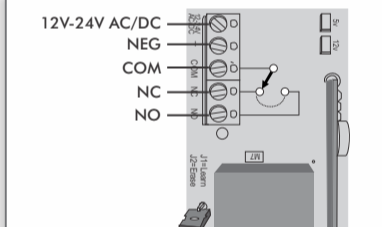


Figure 6

Replace cover

1. Hook the top edge of the cover onto the top of the unit.
2. Lower the cover and press securely into position.

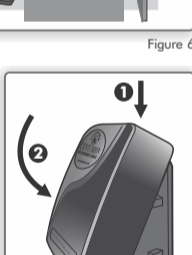


Figure 7

FCC information to users

USA and Canada only – where a FCC ID number is inscribed on the receiver, the following information is applicable to users:

FCC Label @ FCC 15.21 and 15.105

For Class B – Unintentional radiators:

This equipment has been tested and found to comply with the limits for Class B digital devices, 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 instruction manual, 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
- Warning to users @ FCC 15.21 & 15.105



Changes or modifications not expressly approved by CENTURION SYSTEMS (Pty) Ltd. could void the user's authority to operate the equipment.

FCC Label @ FCC 15.19

For Class B - Unintentional radiators:

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.