

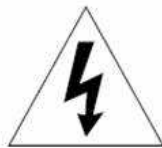


Model NSB-600R

Security Controller

Instruction – NS Controller

	CAUTION RISK OF ELECTRIC SHOCK DO NOT OPEN	
<p>CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK) NO USER-SERVICEABLE PARTS INSIDE REFER SERVICING TO QUALIFIED SERVICE PERSONNEL</p>		



The lightning flash with arrowhead symbol within an equilateral triangle is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product.

WARNING

TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK,
DO NOT EXPOSE THIS PRODUCT TO RAIN OR MOISTURE.

CAUTION: TO PREVENT ELECTRIC SHOCK, MATCH WIDE BLADE OF PLUG TO WIDE SLOT, FULLY INSERT.

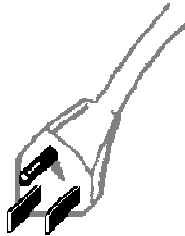
ATTENTION: POUR ÉVITER LES CHOC ÉLECTRIQUES, INTRODUIRE LA LAME LA PLUS LARGE DE LA FICHE DANS LA BORNE CORRESPONDANTE DE LA PRISE ET POUSSER JUSQU'AU FOND.



IMPORTANT SAFETY INSTRUCTION READ BEFORE OPERATING EQUIPMENT

This product was designed and manufactured to meet strict quality and safety standards. There are, however, some installation and operation precautions which you should be particularly aware of.

1. Read these instructions - All the safety and operating instructions should be read before the product is operated.
2. Keep these instructions - The safety and operating instructions should be kept for future reference.
3. Heed all warnings - All warnings on the product and in the operating instructions should be adhered to.
4. Follow all instructions - All operating and use instructions should be followed.
5. Do not use this apparatus near water - Do not use this product near water-for example, near a bath tub, wash bowl, kitchen sink, or laundry tub, in a wet basement, or near a swimming pool, and etc.
6. Clean only with dry cloth - Unplug this product from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a dry cloth for cleaning.
7. Do not block any ventilation openings. Install in accordance with the manufacture's instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong.



Type B -Flat blades with round grounding pin

10. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.

11. Only use attachments/accessories specified by the manufacturer.



12. Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
13. Unplug this apparatus during lightning storms or when unused for long periods of time.
14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
15. This product should not be placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided or the manufacturer's instructions have been adhered to.

INTRODUCTIONS

Thank you for purchasing the NXTAR NSB-600R Security Controller. This remarkable component has been engineered to provide its user with many years of reliable sensing capabilities utilizing fiber optics as its medium. Please take a few minutes to read this manual thoroughly before you connect and operate the NSB-600R.

As the operation may be multi-layered and the configuration options are very flexible, you are encouraged to discuss the requirements with your Nxtar Specialist in your country for technical assistance.



FEATURES

6 Zones

6 Individually calibrated zones to cover a maximum of 3000ms of perimeter on fence and 750m of underground deployment. Powered by extremely high powered, stable light source, to give you constant and maintenance-free performance, all these housed in a strong cast aluminum casing.

Intelligent Discrimination

High performance software to calibrated the zones individually and the ability to monitor them simultaneously. Equipped with Intelligent discrimination to help eradicate Nuisance Alarm and False Alarm to the lowest possible industrial standard. The NSB-600R is also able to identify the presence of Global Noises (Rain, Wind,, Snow, Hailstorm) without the presence of weather station

100% Passive Outfield

Nxtar Systems is one of the few who is able to achieve a 100% passive components outfield. Our systems doesn't require any electrical powering once outfield. This is a very strong feat as it requires no deployment of electrical cables for powering and signal amplification for long distance transmission. It also enabled deployment within a faster.

Plug and Play

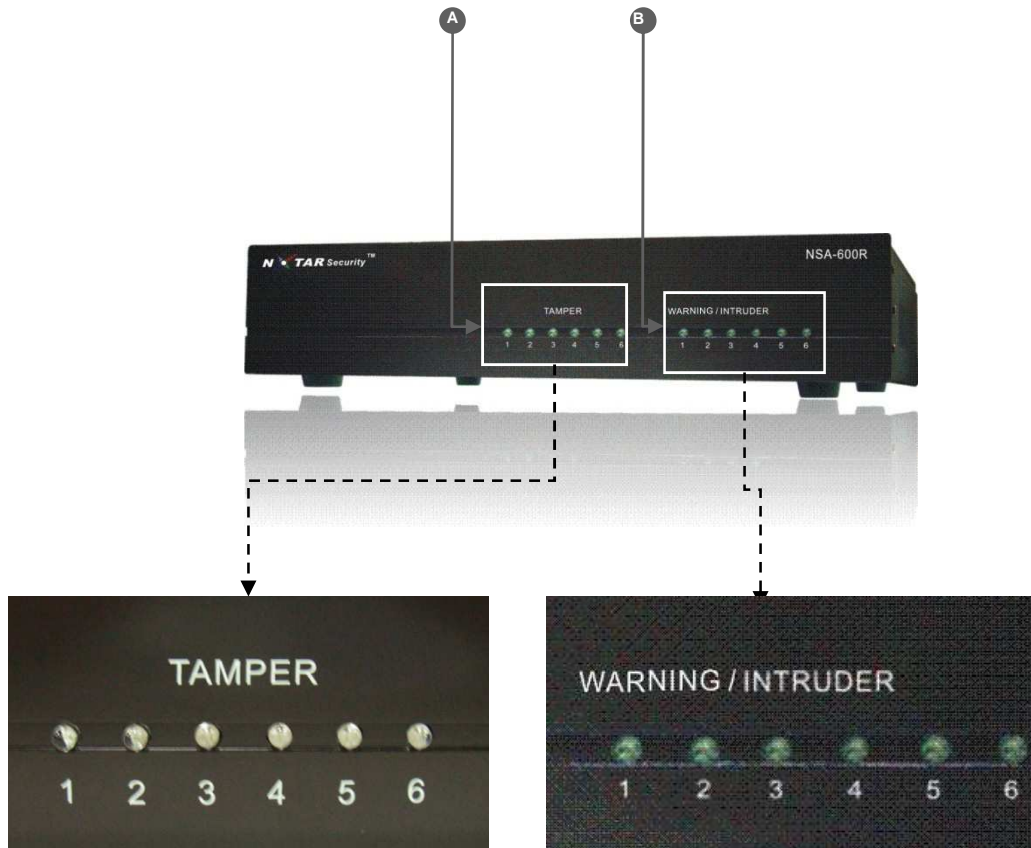
Nxtar enables the user and installer to connect all fiber optics with SC connectors. There is no need to expensive and fragile splicer to connect the fiber cables to their respective junctions/terminal boxes.



SYSTEM CHARACTERISTICS

1. The system senses changes as motion, vibration, and pressure. In a buried underground application, vibration and pressure changes are the primary modes of stimuli. However, when the sensor cable is buried in sand or soft soils, vibration is rapidly dampened and thus negligible. In this case, pressure change becomes the primary mode of sensor stimulation. It responds to either the vibration of the rock as it is transmitted from a footstep, or the pressure produced by the weight of a foot stepping directly over the cable.
2. All Nxtar NS System come equipped with a NC/ CC dry contact which enables a wide range of security equipments to link up with our system. Upon triggering a TAMPER or INTRUDER signal, the NS communication and monitoring unit will trigger the NC/ CC contacts to perform its respective task. It can also be connected to speed dome cameras to zoom in on its present location to see and record the intrusion.
3. We at Nxtar understand that it is almost impossible to demand a perimeter, especially a big one, to be of the same landscape and environment. Therefore, the NS system can accept Individual zone settings for finer monitoring resolution. The perimeter can be segregated into as many zone as desired, but each should not exceed 100m by 1.5m for underground buried installation. To successfully apply the sensing fiber to achieve good Signal to Noise ratio, the medium in which it is deployed must also be uniform. This guideline is going to provide our recommended installation methods and selection of medium, and should be followed as closely as possible to achieve optimum results.

FRONT PANEL



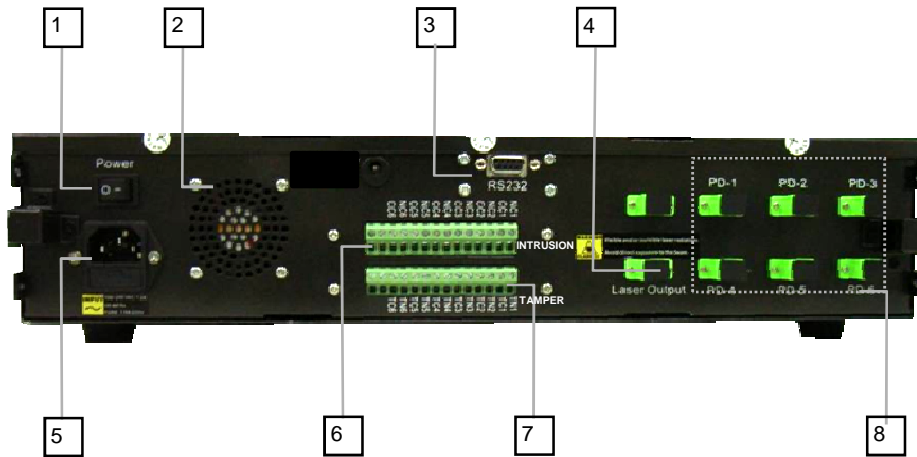
A TAMPER LED Indicator

When the LED is GREEN, it indicates normal operation and there is no breach in the fiber connection. It also signifies that the controller is ready for Operation. When LED is RED, it indicates that there is a breach somewhere in the system. This may be tampered or damaged by intruders. Thorough inspection is required at the respective zone or contact your dealers and supplier for an inspection. User can also refer to the operational software to detect if tampering occurs at the Leading Fiber or Sensing Fiber. User can refer to *“Installation – System Setting and Calibration”* for more details required or refer to your vendor for assistance.

B WARNING / INTRUDER LED Indicator

When the LED is no lit, it indicates normal operation and there is no intruder in the perimeter or the detection zones. When the LED is “RED” and blinking, it indicate that the Warning status is activated. It also indicates that there are some unknown object approaching and in contact with the detection zone. When the LED is “RED” in any zone, it indicates that there is a intrusion in that detection zone. Necessary action should be carried out while the respective NC/CC contacts will also be activated accordingly at real time.

REAR PANEL



1 POWER ON or OFF

Power switch to turn the controller “ON” or “OFF”. To prevent unauthorized access to this switch, the user can hide this panel with the tamper cover.

2 Ventilation Fan

The ventilation fan should not be blocked or covered up or be placed too closed to the back of the rack.

3 Controller Output

The controller output uses a RS-232 interface. It allows the user to communicate and calibrate the settings with a computer. After initial setting, it can be disconnected to allow independent operation.

4 Light Source Out - LD

This is the output for the light source to send its light pulse into the connection. Do not stare into the output at any time during operation to as it can caused permanent damaged to the eye.

5 AC INLET

Connect to AC Power. The NSB-600R can be powered by 100-240Vac 50/ 60 Hz.

6 Dry Contact – INTRUDER

There are 6 sets of dry contacts in this row. It is labeled “NC1/CC1” to “NC6/CC6” to trigger other devices of Zone 1 to 6 respectively if there is a presence of intruder in one of the zone.

7 Dry Contact - TAMPER

There are 6 sets of dry contacts in this row. It is labeled “NC1/CC1” to “NC 6 / CC6” to trigger other devices of Zone 1 to 6 respectively if there is a tampering in any of the zones. A check is required to see if there is a disconnection or breach in any of the connection or fibers outfield.

8 Signal Input PD1-PD6

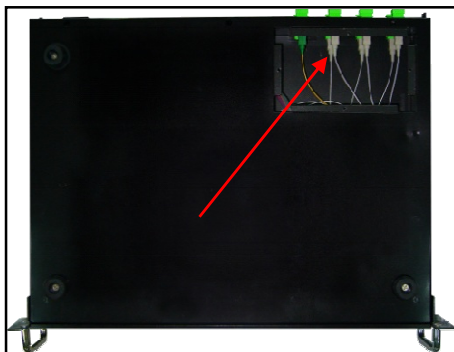
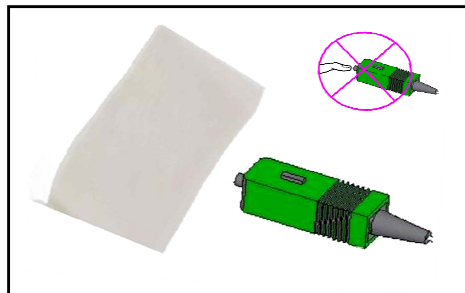
There are 6 sets of inputs to receive Tamper or Intruder signal from Zone 1 to 6. Please clean the connectors prior to connecting the SC connectors into their respective socket here. Do not stare into the sockets and connectors at all time to prevent permanent damaged to the user’s eyes.

Bottom Panel



1 Cleaning Access Cover

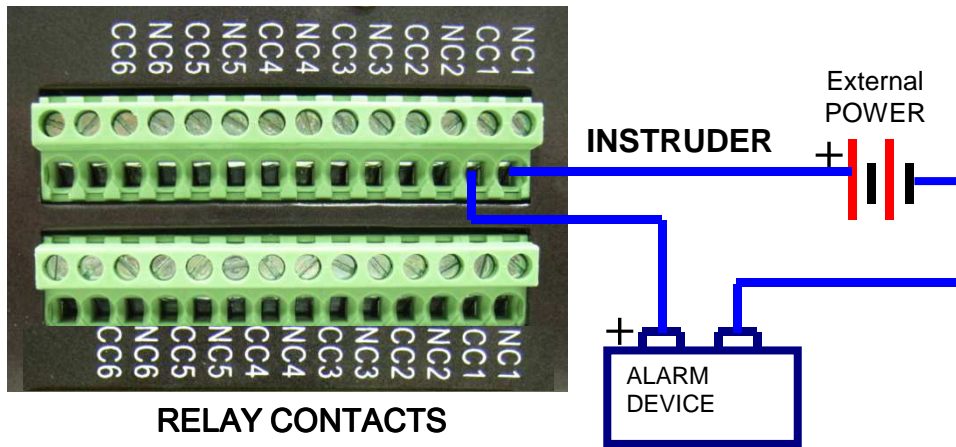
This cover is to facilitate easier cleaning of the internal SC connectors of the NSB-600R. By removing the four screws, user can gain access to the internal SC connectors for cleaning. Cleaning of all connectors should be performed with 99% cleaning alcohol and clean swipes.



2 Cleaning of SC/ APC Connectors

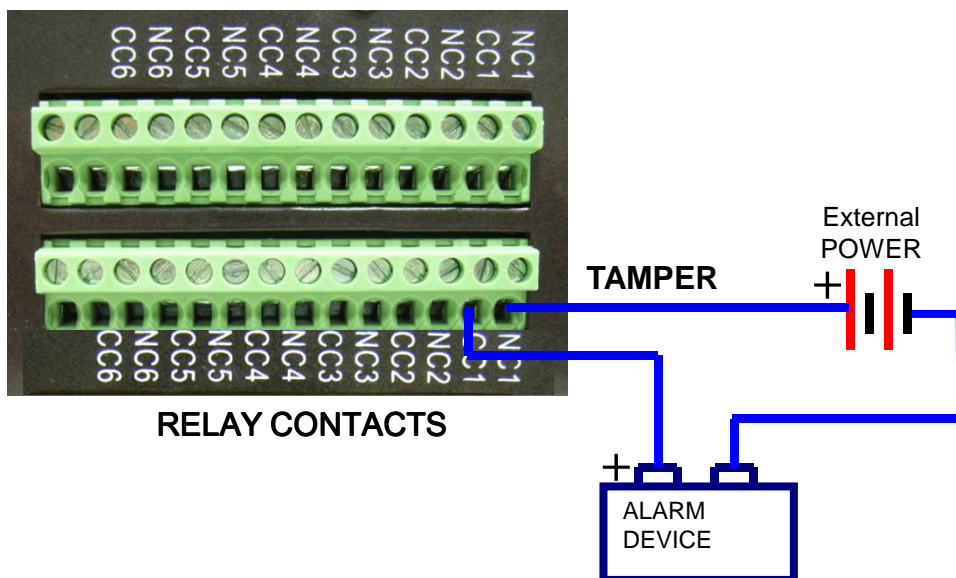
Upon removing the covers, the 07 SC/ APC connectors can be accessed. Each SC/ APC connectors are to be cleaned individually with 99% alcohol and lint-free clean swipes.

Relay Dry Contacts – Intrusion Alarm Trigger



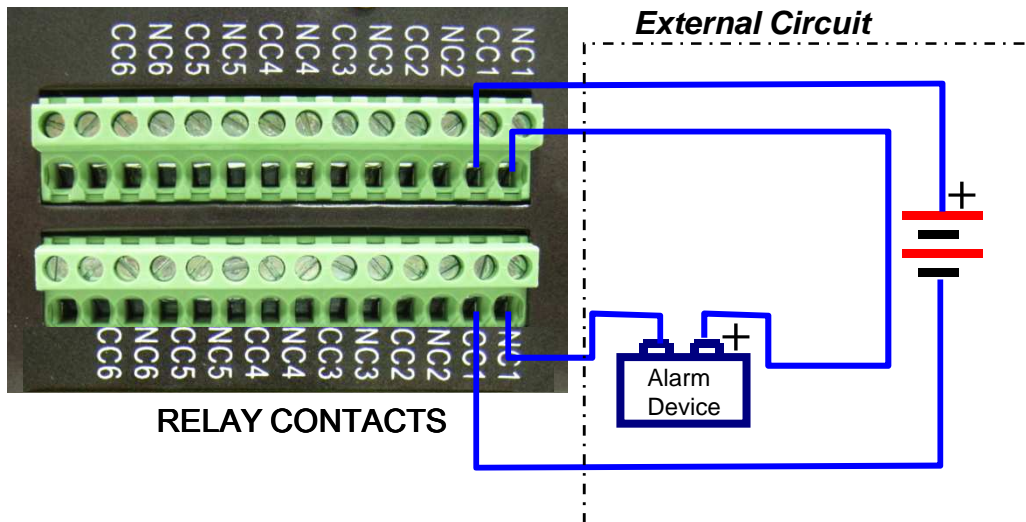
The above set-up is used to activate the Close-Circuit of the external Alarm Device for Intruder Alarm Signal.

Relay Dry Contacts – Tamper Trigger



The above set-up is used to activate the Close-Circuit of the external Alarm Device for Sensor Tamper.

Relay Dry Contacts – Controller Power Tamper Alarm



The above set-up is used to activate the Close-Circuit of the external Alarm Device for Controller Power Shutdown Alarm.

- The above first and second type of connections can be applied in a parallel connection. However, the third type of connection can not be applied with the first two types of connections.
- Power Consumption of Alarm Device:
 - 120Vac/ 10A - 250Vac/ 7A,
 - 24Vdc/ 10A



SYSTEM TESTING

The objective of these tests is to verify that the NSB-600R Controller is working properly.

- 1) Ensure that the NSB-600R is switched off. The switch is located at the Rear panel.
- 2) Make sure you have cleaned the connectors of LD with 99% Alcohol Solutions and clean swipes before connecting it into the socket.
- 3) Make sure you have cleaned the six SC connectors of PD1 to PD6 with 99% Alcohol Solutions and clean swipes before connecting them into their socket.

NOTE 1:

The tip of the SC connectors are made of ceramic and are not to be touched by bare fingers. When connecting, please ensure that the tip does not touch the sides of the sockets!

- 4) Turn system on and wait for 30 seconds.
- 5) In normal conditions, the LED in the “TAMPER” should be GREEN, while the LED in “INTRUDER” should be no lit. If the LED in the former one is red and/or if the LED in the later one is lit, please refer to “TROUBLESHOOTING” to rectify.
- 6) Please take extra care when you see the label below. Direct exposure of the eye to the tip of connectors can caused permanent damage to the user.





SPECIFICATIONS

Controller:

- 1) **Power Spec:** 100Vac – 240Vac 1.2A

Interface Spec:

- 1) RS-232 X 01pc
- 2) Relay Contact
 - i) 120Vac/ 10A - 250Vac/ 7A,
 - ii) 24Vdc/ 10A
- 3) Intruder/ Warning LED x 06
- 4) Tamper LED x 06
- 5) Beeper x 01

Mechanical Spec:

- 1) **Dimension:** 350mm x 100mm x 428mm
- 2) **Net Weight:** 4.9kg
- 3) **Gross Weight:** 5.5kg

Operation Conditions:

- 1) **Operating Temperature** - 30°C ~ 70°C for mainframe
- 2) **Humidity** (Non-Operating) 30% ~ 95% (non-condensing)

Instruction – NS Controller

DIMENSION

