

Nixalite® Bird-Zap Shock Track

Includes specifications for: Bird-Zap system components

Nixalite of America Inc offers the Bird-Zap Shock Track system. This is a flexible, electrified track bird deterrent that can be installed on all types of surfaces regardless of infestation levels. When a bird lands or walks on the shock track, they complete a circuit between the two stainless steel conductors and receive a harmless but memorable shock of DC electricity. This startles the trespassing bird and gives it incentive to look elsewhere for nesting, roosting or landing locations. Bird-Zap Shock Track changes the bird's behavior – it eventually learns to avoid the track by sight and makes no attempt at landing.

The Bird-Zap Shock Track system is comprised of individual components that when put together properly create a humane and discreet deterrent that can be used to deter all birds on all types of surface shapes and materials. The following outline is presented in a **modular format** making it simple to include or exclude any combination of the Bird-Zap Shock Track system as needed for each project and or surface.

List Nixalite Bird-Zap Shock Track specifications in the following locations;

Master Format 1995 – 10290 – Bird & Pest Control

Master Format 2004 – 10 81 00 - Pest Control Devices

Master Format 2004 – 10 81 13 – Bird Control Devices

PART 1 - GENERAL

1.1 - SYSTEM DESCRIPTION:

- A. Bird-Zap Shock Track SYSTEM:** individual components that when put together properly create a humane and discreet electric shock deterrent track that can be used to deter birds of all kinds, on all types of surface contours and materials.
- B. Bird-Zap Track:** A flexible, UV resistant PVC strip with 2 stainless steel conductors sewn into the track. Bird-Zap Track is 1/4" thick, 1-1/2" wide, comes in 50 foot rolls and is available in black, gray and tan.
- C. Bird-Zap Chargers:** All Bird-Zap Chargers create high voltage, low amperage and low impedance DC electric power. There are several charger designs available; 2 plug-in-the-wall 120 Volts AC powered chargers, 3 solar powered and 2 battery powered chargers. Choose the track charger or chargers that best suit the installation conditions.
- D. Bird-Zap Jumper Wire:** Heavy duty, double twisted-strand copper core wire with heavy insulation designed for the Bird Zap system. Use Jumper Wire to make the Charger-to-Track and Track-to-Track electrical connections. Bird-Zap Jumper Wire comes in 50 foot spools and is available in black, gray and tan.
- E. Snap-Tight Quick Connectors:** Designed for Bird-Zap Shock Track applications. Available in Straight, 90° Corner and Lock Down connector designs. These 2-piece, weather resistant connectors allow for quick track-to-track and track-to-charger electrical connections. The bottom half of each connector provides mounting holes for mechanical fastening of the track to the surface. Use the Quick Connector design that best suits the installation conditions. Quick connectors are accessories and sold separately.

- F. Crimp Style Connectors:** Inexpensive, weather resistant crush-style connectors that can be used to make the track-to-track and track-to-charger electrical connections. A few of these crimp style connectors are included with each roll of Bird-Zap Track. Quantity packs can be purchased as accessories.
- G. Surface Cleaning System:** surface cleaning, disinfecting and deodorizing products used to neutralize potentially hazardous bird or animal waste and prepare the surface for installation. Use Surface Cleaning Products to eliminate any residual odor that bird infestation may have left behind.

1.2 - QUALITY ASSURANCE

- A.** Installer must obtain, review and understand all available Bird-Zap Shock Track product brochures and installation guidelines. Contact a Nixalite technical representative to discuss installation procedures and requirements before installation.
- B.** Installer must be completely familiar with the proper installation procedures for the Bird-Zap Shock Track products specified.
- C.** Installer must be completely familiar with the specified method of fastening the Bird-Zap Shock Track to the surface.
- D.** Installer to have a working knowledge of electrical connections, be able to perform simple mechanical procedures and be able to improvise and/or adapt the Bird-Zap Shock Track system (if needed) to meet the conditions of the installation.
- E.** All parts used for this bird control system must be Bird-Zap Shock Track components. No substitutions are allowed.
- F.** All Bird-Zap Shock Track installations are to be inspected and approved by a licensed electrician.

1.3 - SUBMITTALS

- A.** Bird-Zap Shock Track literature including: Bird-Zap Shock Track product brochure and Installation Guidelines.
- B.** Sample of specified Bird-Zap Shock Track - not less than 6" in length (in gray, black or tan color).
- C.** The installer must provide an outline of Bird-Zap Shock Track installation procedures. Outline to be tailored to suit the parameters of each location. Outline subject to approval by licensed electrician (if necessary).
- D.** Installer to provide list of Bird-Zap Shock Track components used to complete the installation. Each list is to be tailored to the requirement of each surface. For multiple areas, each area to have its own lists of Bird-Zap Shock Track items.

1.4 - STORAGE & HANDLING

- A.** Provide storage to keep Nixalite Bird-Zap Shock Track shipping boxes dry, clean and undamaged. Do not stack or place other packaging on the Nixalite shipping boxes.
- B.** Keep Nixalite Bird-Zap Shock Track components in original packaging until needed for installation.

PART 2 - PRODUCTS

2.1 – ACCEPTABLE MANUFACTURER

A. Nixalite of America Inc

1025 16th Avenue, PO Box 727, Dept. NI, East Moline, Illinois 61244; U.S.A.
Ph: 800.624.1189 or 309.755.8771 - Fax: 800.624.1196 or 309.755.0077
E-mail: birdcontrol@nixalite.com or planning@nixalite.com
Web: www.nixalite.com.

B. ABC Advanced Bird Control – A division of Nixalite of America Inc

PO Box 727, Dept. NI, East Moline, Illinois 61244, U.S.A.
Ph: 888.212.8682 or 309.755.4708 – Fax: 309.755.1865
E-mail: info@abcbirdcontrol.com
Web: www.abcbirdcontrol.com.

2.2 – NIXALITE BIRD-ZAP SHOCK TRACK

A. Shock Track:

UV stabilized and flexible PVC track with 2 braided stainless steel conducting strips sewn into the track with a UV stabilized bonded polyester thread. Track is cut with #ST Scissors (sold as an accessory).

Width: Bird-Zap Shock Track is 1-1/2” (3.7 cm) wide.

Thickness: 1/4” (0.6cm) thick.

Length: 50 foot long (15.24 m) rolls.

Available Colors: Black, Gray and Tan.

B. Bird-Zap Track Chargers:

All Bird-Zap Shock Track Chargers output high voltage, low amperage, low impedance DC power. Install the chargers as close to the track as possible. Use **only the chargers offered by Nixalite** for the Bird-Zap Shock Track system. **DO NOT** substitute chargers designed for other purposes. **Choose the Bird-Zap Track Charger that best suits the application.**

C. Plug-In 120 Volt AC powered Track Chargers:

If the plug-in AC chargers are positioned outside or exposed to the weather, they must be installed inside a NEMA 3R rated utility box (purchased separately). Plug all AC powered chargers into a weatherproof outlet installed by a licensed electrician. All Plug-In chargers from Nixalite are UL approved for use in USA.

- a. **#ST AC500:** powers up to 500 feet* of Bird-Zap Shock Track
Size/Weight: 7” high x 4” wide x 2-3/4” deep / 1.2 lbs.
Output: 0.05 joule, low impedance DC power
- b. **#ST AC1500:** powers up to 1,500 feet* of Bird-Zap Shock Track
Size/Weight: 11” high x 4-3/4” wide x 4” deep / 3 lbs.
Output: 0.30 joule, low impedance DC power

D. Solar Powered Track Chargers:

Position solar track chargers so they receive at least 2 hours of direct sunlight every day.

- a. **#ST SC500:** powers up to 500 feet* of Bird-Zap Shock Track
Size/Weight: 10” high x 6-1/2” wide x 9” deep / 5 lbs.
Output: 0.06 joule, low impedance DC power
- b. **#ST SC1000:** powers up to 1,000 feet* of Bird-Zap Shock Track
Size/Weight: 14” high x 8” wide x 4-1/2” deep / 9 lbs.
Output: 0.15 joule, Ultra low impedance DC power

- c. **#ST SC1500:** powers up to 1,500 feet* of Bird-Zap Shock Track
Size/Weight: 14" high x 8" wide x 6-1/2" deep / 10 lbs.
Output: 0.25 joule, Ultra low impedance DC power

E. Battery Powered Track Chargers:

- a. **#ST BC500:** powers up to 500 feet* of Bird-Zap Shock Track
Size/Weight: 10" high x 3-1/2" wide x 5-1/2" deep / 2 lbs.
Output: 0.25 joule, low impedance DC power
Source: 12 volt DC battery or 6 volt DC (4 – D cells) batteries (not included)
- b. **#ST BC1500:** powers up to 1,500 feet* of Bird-Zap Shock Track
Size / Weight: 11" high x 5" wide x 3" deep / 2.05 lbs.
Output: 0.35 joule, low impedance DC power
Source: 12 volt DC battery (not included)

F. *The amount of track (in feet) that each charger can reliably power is based on a variety of conditions including ambient temperature, humidity, quality of solar exposure, battery condition and the quality of the wire and track connections. These numbers should be considered guidelines. If you are close to the coverage limit of a charger, either add another charger of the same size or use a larger capacity charger to power the track. If you have any questions, contact Nixalite of America Inc for details.

G. Shock Track Jumper Wire:

Heavy duty, 14 gauge, double twisted copper core wires with heavy insulation used to connect the Bird Zap chargers to the Bird Zap track and to join separate runs of track together. Easy to cut, strip and crimp. Jumper Wire is available in 50 foot spools and 3 different colors;

Wire Specs: 14 gage, double twisted strand copper core wire with heavy insulating jacket

Thickness: 1/4" (0.6cm) thick.

Length: 50 foot long (15.24 m) rolls.

Available Colors: Black, Gray and Tan.

H. Snap-Tight Quick Connectors:

Designed just for Bird-Zap Shock Track applications. Available in Straight, Corner and Lock Down designs.

- a. **CORNER Snap-Tight Quick Connector:**
This 2-piece "L" shaped connector joins two ends of the Bird-Zap Track together at any outside or inside 90° corner. The bottom half of the connector has 3 mounting holes that will accept 1/8" diameter nails or screws. The connectors can also be glued to the surface. Snap halves together over trimmed track.
- b. **STRAIGHT Snap-Tight Quick Connector:**
This 2-piece connector quickly joins two ends of the Bird-Zap Track together in a row – passing power from one track to the next. The bottom half has 2 mounting holes that will accept 1/8" diameter nails or screws. The top half provides 2 electrical connection points that can be used to pass power to adjacent runs of track or connect the track to the charger.
- c. **LOCK DOWN Snap-Tight Quick Connector:**
This 2-piece connector uses either nails or screws to hold the Bird-Zap Track to the installation surface. Each bottom half has 2 mounting holes that will accept 1/8" diameter nails or screws. The Bird-Zap Track runs over the installed bottom half of

the connector and the top half is snapped into place. Install every 1 to 2 feet along the run of the Bird-Zap Track.

I. Crimp Style Connectors:

Nixalite offers inexpensive, weather resistant crush-style connectors to make the track-to-track and track-to-charger electrical connections. A few of these crimp style connectors are included with each roll of Bird-Zap Track. Quantity packs can be purchased separately.

J. Mounting Systems:

The Track can be fastened to the all types of installation surface materials with an adhesive or with any of the Snap-Tight Quick Connectors that provide mounting holes for mechanical hardware.

K. For adhesive fastening, follow all of the surface preparation steps provided on the adhesive container. Make sure the leave gaps in the beads of adhesive to allow for water drainage under the track.

L. For mechanical fastening, use any of the Snap-Tight Quick Connectors. The bottom half of these connectors provide 2 or 3 holes for mounting hardware. Use the hardware that best suits the installation surface.

M. Tools & Accessories:

Nixalite offers the tools and accessories needed for an effective and safe installation. Each installation must include a digital voltmeter to test the Bird-Zap chargers and each length of track as it is installed.

2.3 – SURFACE CLEANING SYSTEM

A. Microcide-SQ: broad spectrum disinfectant, cleaner and deodorizer used to sanitize hard surfaces as well as fabrics and clothing. Use to kill a wide spectrum of organisms and disease causing bacteria. Microcide-SQ can be applied with Nixalite’s Tank Sprayers.

B. Microsan: anti-bacterial personal protection products to help prevent disease transmittal before, during and after working on and around surfaces contaminated with bird and animal wastes. Use to compliment personal protection equipment standards (PPE). Apply Microsan as directed by product labeling or literature.

PART 3 - EXECUTION

3.1 - INSPECTION

A. Visually inspect all installation surfaces. Make sure all surfaces are clean, dry and free from debris or other conditions that could impede the workflow of this section.

B. Notify architect of detrimental conditions. Do not proceed until these conditions have been corrected.

3.2 - PREPARATION

A. Field Measurements: Verify dimensions of each installation surface. Use Bird-Zap Shock Track Brochures and Installation Guidelines to make sure you have sufficient quantity of Bird-Zap components to properly protect the specified surfaces.

B. Make sure all installation surface finishing requirements have been accomplished before installing Bird-Zap Shock Track. Bird-Zap Shock Track should be about the last item installed on specified surfaces. DO NOT apply any surface coating or treatment (paint, sealer, etc.) over the installed Bird-Zap Shock Track.

- C. If installing a Plug-In Track Charger, make sure the electrical requirements and steps to protect the charger from the weather are already in place. Do not proceed until all measures are complete.
- D. Remove or relocate all plants, foliage or foreign objects that overhang the installation surfaces. Note all conditions that could adversely affect the installation and performance of the Bird-Zap Shock Track installation.

3.3 – SURFACE CLEANING

- A. All surfaces to be clean, dry and free of obstructions before Bird-Zap Shock Track is installed.
- B. If Bird Waste Is Present:**
Treat, neutralize and safely remove all bird waste from installation surfaces. Installer must follow all municipal, state and federal regulations regarding the proper removal and disposal of bird droppings and waste materials such as nests and dead birds.
- C. Use Nixalite’s surface cleaning products to neutralize any bird droppings, nests and related waste materials that may be present. Allow all surfaces to air dry completely, and then reapply to sanitize and deodorize the surface before proceeding. Strictly follow treatment instructions provided with Nixalite’s surface cleaning products.
- D. Use Nixalite anti-microbial and anti-bacterial personal protection products to help prevent disease transmittal when working around surfaces contaminated with bird droppings.

3.4 - INSTALLATION

- A. Install Bird-Zap Shock Track on the surfaces specified or shown on the plans.
- B. Position the chosen Zap-Track Charger(s) as close to the Bird-Zap Shock Track installation as possible. Solar chargers must be positioned so they will get at least 2-3 full hours of direct sunlight every day. Battery powered charges need to be located close to the 12 volt DC power source (battery not included). Plug-In chargers need to be either installed in a location protected from the weather or installed inside a NEMA 3R rated utility box for protection. If the 120 Volt AC outlets are installed in the weather, it must be a weatherproof outlet installed by a licensed electrician.
- C. Follow the track spacing and quantity recommendations provided on the Bird-Zap Shock Track brochure. The quantity and spacing of track is determined by the size of the birds, the depth of surface and the number of birds in the area.
- D. For small birds and/or heavy infestations of any bird species, you will need to install more rows of track, spaced closely together. For large birds, fewer rows of track will be needed. Refer to the Spacing Guidelines on the Bird-Zap Shock Track brochure.
- E. Install the Shock Track in straight rows or make sure that the track follows the contour or shape of the surface perfectly. Make sure that there are no excessive gaps or wrinkles in the Shock Track. Take your time, dry fit the track at least once before installing on the surface.
- F. Fasten the Shock Track to the surface using adhesive or the appropriate Snap-Tight Quick Connectors. Follow the Installation Guidelines provided by the manufacturer.
- G. Connect the Bird-Zap charger to the closest section of Shock Track with the Jumper Wire and Crimp Connectors or Snap-Tight Straight Quick Connectors. Connect each section of track together in a series circuit using the same crimps or Quick Connectors.

H. If the Bird-Zap Shock Track installation is in a place where the people might come into direct contact with the installation, install the available Warning Signs. These caution people that there is an active, high voltage bird control system in operation.

3.5 – ADJUSTMENTS / CLEANING

- A.** Bird-Zap Shock Track is an active electrical bird deterrent system and will require regularly scheduled inspections and if needed, maintenance. If installed as specified the system should be trouble free.
- B.** Occasionally, leaves may fall onto the track or birds may drop debris on the track in an attempt to build a nest. If this happens, begin a monthly inspection of the system to remove any debris and check all connections to prevent the system from becoming inoperable.
- C.** Do not operate the Bird-Zap Shock Track in deep snow or if any part of the installation is submerged in water.

Nixalite® of America Inc – 1025 16th Avenue – East Moline, IL 61244
Ph: 800.624.1189 Fax: 800.624.1196 Email: birdcontrol@nixalite.com
Website: www.nixalite.com

Copyright 2014 – Nixalite® of America Inc
Nixalite® is a registered trademark of Nixalite® of America Inc
Printed with pride in the USA