

ULTRASONIC FREQUENCY SWITCH

The ultrasonic sounds play regardless of the other setting you choose. HIGH, MED and LOW refer to the frequency of the ultrasonic sound waves. We recommend you begin on LOW, and then vary between the three every so often (during routine maintenance, for example).

PROGRAMMING EXAMPLE

Recording Switches: 1, 3, 5 and 6 to "ON" position
Results: Plays Sounds 1, 3, 5 & 6

Mode Switches:

1 = "OFF" position
2 = "ON" position (Medium), every 1 to 4 minutes
3 = "ON" position
4 = "OFF" position Operates during daylight hours only
5 = "ON" position In random, non-sequential order

VOLUME CONTROL

The unit has a volume control dial for the sonic (audio) sounds on the front panel of the unit. Turning the dial toward LOW will result in reduced sound output and rotating the dial toward HIGH will result in an increase in sound output.

CAUTION: Take care when turning the dial since the unit may be in an inactive state when the dial is rotated. It could then reactivate at a very high level of sound which could be painful to your ears.

POWER SWITCH

The power switch enables the unit to operate. Slide the switch to the ON position to start the unit. If you turn the unit OFF, be sure to leave it off for about 30 seconds before turning it back on to allow the electronics to properly reset.

TROUBLESHOOTING

PROBLEM	SOLUTION
Unit is on, but no sound is heard	<ul style="list-style-type: none">• Check volume settings• Check time of operation settings.• Check that at least one sound is selected to play.
Unit is on, but plays the same sound over and over, regardless of the settings	<ul style="list-style-type: none">• Reset the unit by turning it off for 30 seconds and then back on
Unit is <u>not</u> operating properly in the DAY or NIGHT mode	<ul style="list-style-type: none">• Double check Mode switch settings• Make sure photocell is <u>not</u> obstructed• Make sure the photocell is <u>not</u> affected by bright lights in either the front or the back of the unit.

Successful Long-Term Behavior Modification

Product success takes time to build. Bird and pest habits may take several days or weeks to break. Follow all suggestions for maximum efficacy. "Instant" tests do not replicate natural conditions and give no indication of the unit's success with the infestation.

Prepare for Successful Critter Control

Bird-X, Inc. has been recognized worldwide as the critter and bird control x-perts for 40 years. We have become experts through extensive experience and research. As a result, we are happy to analyze problems and make recommendations based on each customer's specific situation and needs. In addition, we provide the following recommendations for greatest success, even before activating the repeller.

Remove inducements. Clean the area of all evidence of critters or birds: nests, fledglings, droppings, dead birds, and the residential scent. Because critters, birds and their droppings can carry many diseases, use extreme caution when removing them. Do not breathe or come into direct contact with them. If you have questions about how to do this safely, consult an expert. (Adults are likely to return to their young in order to protect them or to assist them in leaving the area.) Remove food spillage, garbage, nesting material and other appealing items.

Survey the critters and/or birds to determine flight or ground path and time patterns, entries and exits, and nesting, feeding and roosting habits. This will suggest the unit placement, speaker direction and time of operation you should choose. Make educated guesses as to where the birds or critters will go when they are repelled from their current infestation, and consider additional units to cover these alternative areas.

Maintain a clean and changing environment. Periodically clean the area of nests and droppings, relocate or reposition the unit, vary the output, or turn off the unit for a short time.

Install early, before "season" begins, as it is easier to keep pests away than to rout them out once they have established a living pattern.

Use products synergistically. Two or more different kinds of devices (this repeller plus a visual scare product and/or a roost inhibiting device) will produce a synergistic effect -- i.e., in combination, the products will yield much greater effectiveness than the one alone. Contact us for information on "companion" products.

CAUTION: Bird droppings are unhealthy - even potentially fatal. At least sixty transmissible diseases have been associated with birds and exposure to their excrement. Prior to cleaning up any type of droppings, it is important to take all necessary protective measures, including but not limited to protective respiration devices, gloves, clothing and safety eyewear. Your health and safety are important: please seek professional advice and information appropriate to your situation. Never clean up or risk other exposure to droppings without using protection. Do not ask others to enter or clean up potentially hazardous areas without ensuring that they are similarly protected.

Limited Warranty

This BB-PRO unit is warranted against defects in material and workmanship for six months from date of purchase (extended warranty available). Bird-X will replace or repair, provided defect occurs under normal use. *Returns accepted only with authorization from our Chicago office.*



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BB-PRO INSTRUCTIONS P/N #655-0047-00 (Rev. H)

Digital Bird Repeller

BB-PRO™

PRIOR TO INSTALLATION

Your complete BB-Pro kit includes a control unit, power adapter and four speakers. Open the control unit by lifting the two latches on the side of the enclosure.

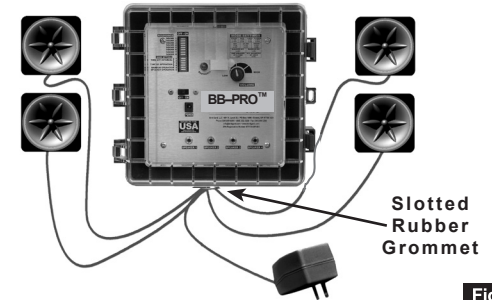


Fig. 1

Prior to operation, route the speakers and power cables from their respective jacks on the control panel down through the slotted rubber grommet in the lower part of the enclosure, as shown in Fig. 1.

IMPORTANT: Be certain that the power switch is in the OFF position and the audio volume control is set to the minimum (LOW) audio volume level (counterclockwise) as shown in Fig. 2 while plugging the speaker and power cords into the control unit.

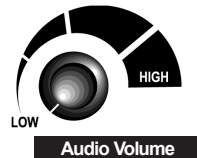


Fig. 2

HOW IT WORKS

Sonic and ultrasonic sounds sequence through all four speakers. Sonic sounds play according to the programming options you choose. Ultrasonic sounds are always active - day and night - regardless of programming, however they won't play during the sonic sounds.

INSTALLATION

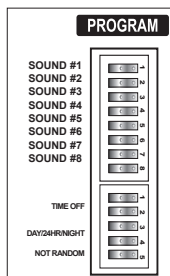
Important safety-related information:

- Do not install the device during rain or snow conditions.
- Installation shall be made in such a way that a power supply and the internal part of the control unit never be subjected to water or snow.
- Note that a power supply powered from 230 VAC is intended for indoor use only.

- Use the mounting hardware (included) to mount the control unit box to a wall, post or other vertical surface.

- 2) Plug the power adapter into an electrical outlet. The other end of the cable should already be plugged into the power jack located above POWER JACK on the front panel of the control unit box. The adapter shall remain readily operable. An optional battery cable may be used to connect the control unit to a 12-volt battery. If this is done, first connect the black battery clip to the negative terminal on the battery and then connect the red battery clip to the positive terminal. Both the connection to the electrical outlet (or battery) and the connection of the power cable inside the control unit must be protected from dripping or splashing water. Do not set objects filled with liquids on the control unit.
- 3) Speaker positioning: On a billboard or sign, you will most likely want to position speakers in between the double-sided sign, or in the back of a single-sided sign. Place two speakers high and two speakers low. Position them either in the center facing OUT or on the outside edges facing IN and ACROSS the sign. In this manner, birds will be constantly "exposed" to the greatest sound diversity without too much physical obstruction. If you're not sure exactly where you will want the speakers, we suggest temporary installations with wire ties until you determine where you will want them permanently. If the infestation is on a tower, awning, rooftop or anyplace else, follow the rough guidelines above: put some high and put some low, and have them face different directions for greatest sound variety.
- 4) Set the switches as desired. (See "PROGRAMMING YOUR BB-PRO" for complete details on how to program your bird repeller.)
- 5) Make sure the volume setting is set to **LOW** (all the way counter-clockwise).
- 6) Slide the SOUND FREQUENCY switch to the **HIGH** position. The unit will immediately turn on.
- 7) Adjust the volume to the desired level.
- 8) Close the cover and latch shut. Ensure that the cover is properly latched closed and do not open the cover during rain or other conditions that would expose the inside of the control unit to water.

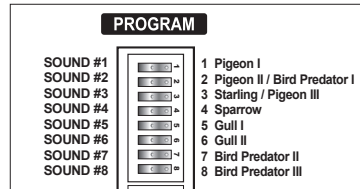
PROGRAMMING YOUR BB-PRO UNIT



To program your BB-PRO unit you will need a small screwdriver, toothpick, or other small, rigid object to move the switches in the switch array. The switch array is the switch bank located in the top left corner of the unit (under "PROGRAM").

A switch is ON if the switch is moved to the right-hand side. The switch is OFF if the switch is moved to the left-hand side.

SOUND SETTING SWITCHES



The Sound Setting Switches are the first eight switches in the switch array, to set the sonic (audio) sounds only.

Each switch has a recording number to the left of it that corresponds with the bird/sound descriptions listed on the foil label (see above example) located on the replaceable Memory Card with Sound Chip to the right of the switch arrays. For best results, choose a combination of both predator calls AND bird distress recordings to create the most natural scenario. We also recommend varying your choices periodically for greatest effectiveness.

NOTE: Your BB-PRO features a replaceable Memory Card with Sound Chip. You will notice that the sounds included on your BB-PRO unit are listed on a silver foil label affixed to the chip. To remove, simply pull Memory Card with Sound Chip straight out from the embedded socket. Then, if desired, insert a different Memory Card with Sound Chip by pressing firmly straight into the socket.

MODE SETTING SWITCHES

The Mode Setting Switches set the various modes of operation: such as the amount of time between playing predator calls and bird distress calls, when the unit will operate (day only, night only, or 24 hours), and whether the unit will operate in the random mode or normal mode.

Switch	Mode or Function
1	Sets the Delay Period
2	Sets the Delay Period
3	Sets the Time of Operation
4	Sets the Time of Operation
5	Turns Random Mode On or Off

Remember, whatever your choices, the ultrasonic sounds are always active.

DELAY SWITCHES

The two "Delay" switches are located just below the Bird switches in the switch array. When the unit is set to one of the various Delay modes, the unit will delay a number of seconds or minutes between recorded sounds.

The SHORT setting is appropriate for testing, but is NOT recommended for long-term success. Please note that the unit will play all of the selected recordings

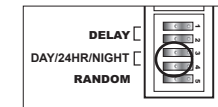


(either sequentially or non-sequentially, depending on the Random Mode) then it will go into a delay. The time the unit stays off depends on the Delay and the Random Mode settings. If the unit is operating in Random Mode, the unit will delay anywhere from the minimum value to the maximum value for that Delay setting. If the unit is not in Random Mode, it will delay only the minimum value. To set the Delay period (or delay interval), use the following settings on switches 1 and 2 in the Mode Function settings.

Switch 1	Switch 2	Delay Period
ON	OFF	Short
OFF	ON	Medium
ON	ON	Long
OFF	OFF	Extra Long
Mode	Min	Max
Short	17 sec	50 sec
Medium	1 min	4:15 min
Long	5:00 min	10:00 min
XLong	10 min	30 min

TIME OF OPERATION SWITCHES

The two "Time" switches are located just under the Delay switches in the switch array. 'Night Only' operates the unit at night and 'Day Only' operates the unit during the day. However, the photocell that senses the sunlight is susceptible to bright lights. Take care not to have bright lights shining towards the



unit since this can prevent the unit from operating properly. In '24-Hour Mode', the unit will operate continuously, regardless of the time

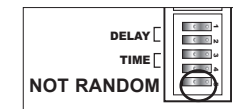
of day. To set the Time period for the unit to operate set switches 3 and 4 in the Mode Function settings to the following:

Switch 3	Switch 4	Mode
ON	OFF	Day Only
OFF	ON	24-Hour
OFF	OFF	Night Only

RANDOM OPERATION SWITCH

The "Random" switch is the bottom switch in the switch array. When operating in Random Mode, the unit will randomly play the selected recordings in non-sequential order. When the unit is not operating in the Random Mode, the unit will play the selected recordings in a sequential order.

The Random Mode is recommended to keep birds from



adapting to a preset pattern of sounds. To operate the unit in Random mode, set switch 5 in Mode settings as follows:

Switch 5	Mode Settings
ON	RANDOM (Mode ON)
OFF	NOT RANDOM (Mode OFF)