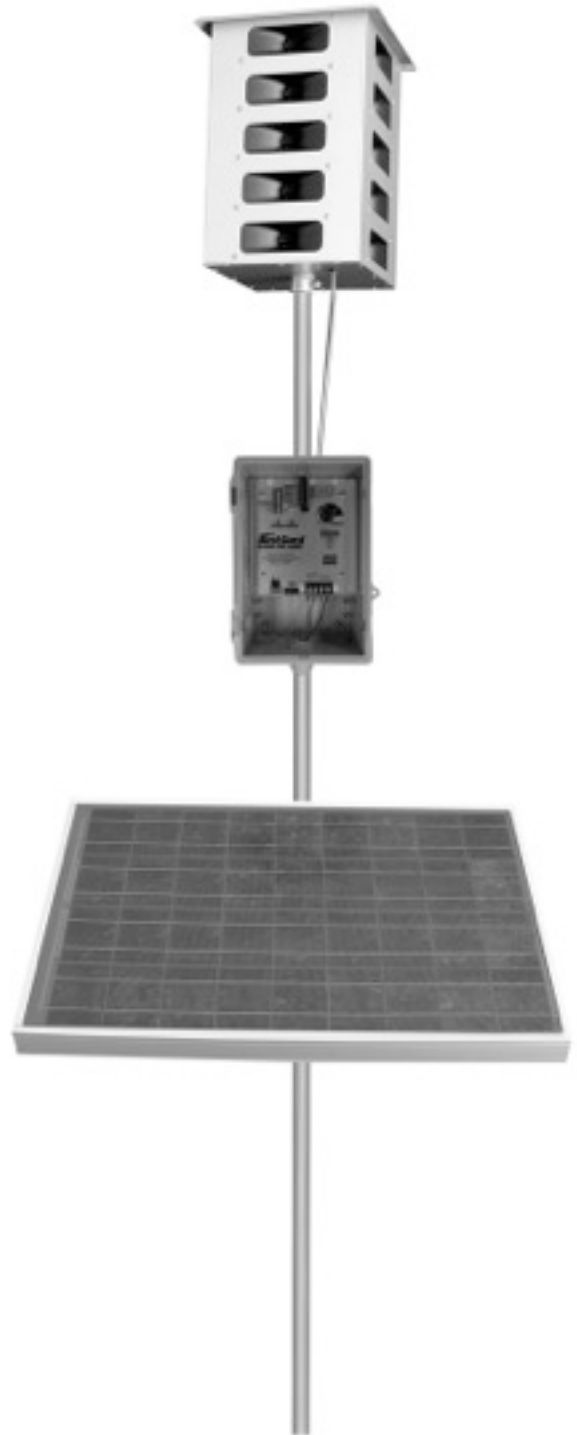




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Overview

Bird Gard utilizes the innate power of the natural survival instincts of birds to effectively repel them. Digital recordings of distressed and alarmed birds, along with the sounds made by their natural predators are broadcast through high fidelity weather-resistant speakers over the top of crops. This triggers a primal fear and flee response. Pest birds soon relocate to where they can feed without feeling threatened.

Your Bird Gard Super Pro Amp system consists of:

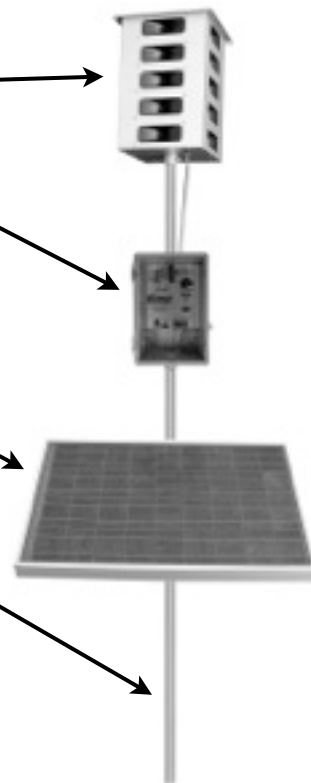
20-Speaker Tower broadcasts the bird sounds

Control Unit produces the bird sounds and contains all operational controls

Solar Panel recharges the 12-volt deep cycle battery

Items needed but not included:

- (1) **Mounting Pole** or **Mast** tall enough to raise the 20-Speaker Tower at least 5 feet above the top of the crops, trees or other obstructions
- (1) **12-volt Deep Cycle Battery** (RV/Marine) Group 27 or larger wet cell
- (1) **T-Post** or similar (Optional) may be needed to support the mounting pole
- (1) **Bailing Wire or zip-tie** (Optional) to secure the Mounting Pole to the T-Post



CAUTION: BIRD GARD SUPER PRO AMP IS CAPABLE OF PRODUCING SOUNDS UP TO 125 DECIBELS. PROPER HEARING PROTECTION MUST BE WORN ANYTIME THE UNIT IS TURNED ON.



Bird Control Management Guidelines

An active bird control management program is key to successfully repelling pest birds. Bird feeding patterns may take several days or weeks to break. Follow all suggestions for maximum effectiveness. Read all instructions prior to installation.

For best results:

- **It is extremely important to fully protect your entire crop from birds.** Any areas not fully protected will allow birds to begin feeding at the fringes of the sound coverage. They will soon become bolder and learn the sounds are nothing to fear. This will cause the effectiveness to diminish. Complete Bird Gard coverage forces birds to leave the area entirely.
- Install the Bird Gard unit at least two weeks before birds are attracted to your crop. It is much easier to keep birds away before they have found a food source than it is to repel them once they have developed a feeding pattern.
- Most birds begin feeding from the perimeter of a crop. Place Bird Gard Super Pro Amp units so the sound protection covers past the edges of the crop.
- Birds will often use tall trees for roosting and observation. If birds are in bordering trees it is necessary to position the units so the sound protection covers the trees as well.
- Mount the 20-Speaker Tower at least five feet above trees, crops and structures for maximum coverage. The higher the better. Sound will disperse or reflect off structures or foliage. Mount control unit out of direct sun, if possible.
- When first installed, run the Bird Gard units at FULL volume and on SHORT time off periods. This ensures maximum “bird stress” and creates a hostile environment.
- Watch for changes in bird activity and adjust the location of your Bird Gard unit if needed.
- **Check the battery and unit settings often to insure continuous bird control. Be certain that the system is not turned down or has a dead battery. Field hands or harvesters may turn down the volume.**
- Changing settings and switches often helps to prevent bird habituation. Periodically change switch settings of the eight sounds (turning them ON or OFF). NEVER turn OFF the distress calls of the target birds you are trying to repel and always keep at least one predator bird sound turned ON.
- If different bird species enter the protected area and begin causing damage contact us immediately for an updated Sound Card designed to repel the new invading birds.
- Remember that the Bird Gard system is a management tool, and should be used as part of your overall bird control strategy, sometimes in conjunction with other bird control techniques and devices.

Be aware that under extreme drought or other adverse conditions, birds will disregard all deterrents and risks in order to survive

**If you have any questions about the use or operation of this product
call us toll free at 888-332-2328 Monday - Friday 7:30 am-4:00 pm Pacific Time.**

Materials List

Item	Qty		Notes
Bird Gard Super Pro Amp Control Box	1		
Bird Gard Sound Card	1		Pre-installed in control box
20-Speaker Tower	1		
Control Box Mounting U-Bolts	2		1/4" x 1" x 2"
Control Box Brackets	2		
40-Watt Solar Panel	1		
Solar Panel Mounting Bracket	1		
Solar Panel Mounting U-Bolts	2		1/4" x 1 1/8" x 2"
Control Box Connector Cable	1		2 Wire 4 ft. Long
Battery Box	1		

Assembly

Note: You will find it easier to pre-assemble the following components prior to installation in the field.

Control Unit

1. Lay the Control Unit face down.
2. Attach the two Control Box Mounting Brackets to the back with the included screws (figure 1).

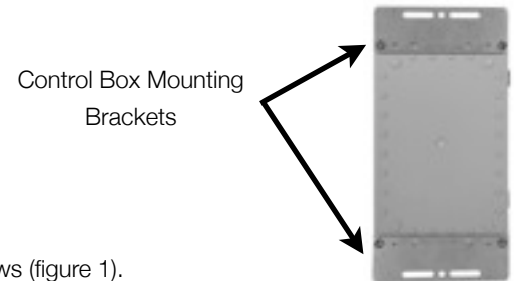


Figure 1

Solar Panel

3. Install the two Solar Panel Mounting U-Bolts in the Head of the Solar Panel Mounting Bracket (Figure 2)
4. Loosen, but do not remove the Carriage Bolts securing the movable Clamp Plates on the Solar Panel Mount Bracket.
5. Lay the solar panel on a flat surface with the glass side down.
6. Lay the Mounting Arm across the Solar Panel with the Clamp Plates down. Position the Mounting Arm at an angle so the Clamp Plates slide under the lip of the Solar Panel (Figure 3A).
7. Rotate the Mounting Arm and secure it to the Solar Panel by tightening the Carriage Bolts. (Figure 3B).

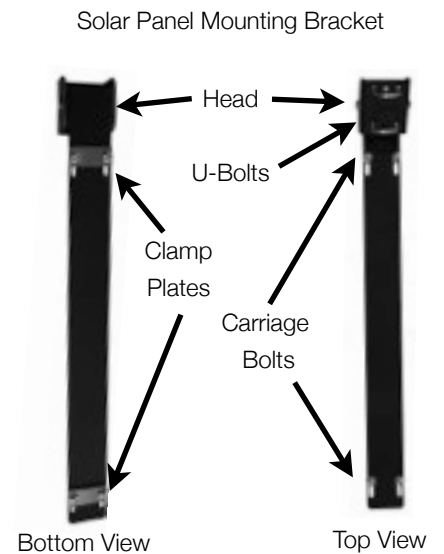


Figure 2

Clamp Plates slide under the lip of the Solar Panel

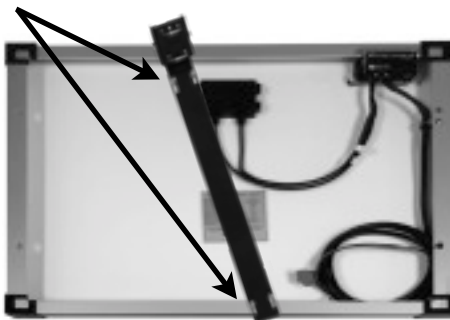


Figure 3A

Rotate Mounting Arm and tighten Carriage Bolts

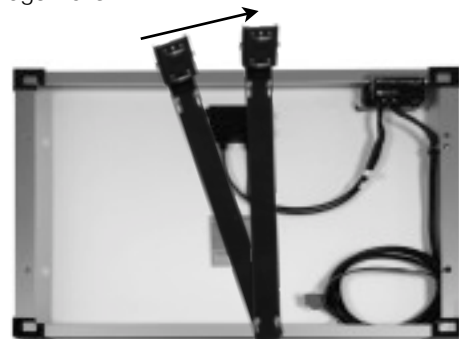


Figure 3B

Placement

Your Bird Gard Super Pro Amp will protect an area up to approximately 600 feet in all directions.

Factors to consider when selecting the best location include:

- Birds typically feed from the perimeter of the crop and work their way in. Place Bird Gard Super Pro Amp units so the sound protection covers all the way to the edges of the crop. For larger crops Super Pro Amp units should be positioned 400-500 feet inside the crop and spaced every 1,200 feet.
- Mount the 20-Speaker Tower at least 5 feet above terrain, crops, trees and other obstacles.
- Placing the Super Pro Amp on top of a hill or small rise will give you much better coverage than at the bottom of a valley. The greater the height the further the sounds will travel.
- Wind can blow the sound waves. If the area you need to protect has consistent wind coming from the same direction, position your Bird Gard Super Pro Amp more “upwind.”
- Trees surrounding crops provide birds with a safe perch that allows them to fly in, grab food and fly out. It is much more difficult to eliminate bird damage if the birds are able to use the surrounding trees as a staging area for attacks on your crops. Your Bird Gard unit should be positioned close to any trees bordering your crops. If birds are roosting in the trees at night the TIME OF OPERATION should be set to 24 HOUR.
- Lakes, rivers and wetlands are a favorite resting and hiding place for birds. Your Bird Gard unit should be placed so the sound thoroughly covers any areas where birds frequent.
- Neighbors, businesses and others may not appreciate hearing the bird sounds. At the limits of the effective range the sounds from your Bird Gard Super Pro Amp are at a level people may find annoying. Avoid placing the unit where it becomes a nuisance.

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Building a Mounting Pole or Mast

CAUTION: TALL POLES AND MASTS CAN BE HEAVY AND POTENTIALLY DANGEROUS. USE EXTREME CAUTION WHEN CONSTRUCTING OR WORKING AROUND TALL POLES AND MASTS. BIRD GARD LLC., ASSUMES NO RESPONSIBILITY FOR DAMAGES OR INJURIES.

Things to consider:

- The 20-Speaker Tower is designed to mount onto a 1 in. (outside diameter) pipe at least 14 in. long. 1 in. conduit works well as it is light, rigid, inexpensive and available in 10 ft. lengths making it ideal for low crops, vineyards and bushes.
- You will want to take down your Bird Gard unit after harvest and store it in a dry location until the next season.

A suggestion for masts up to 20 feet tall:

1. 3/4 inch Galvanized steel water pipe has a 1 inch outside diameter and is the correct size to fit inside the 20 Speaker Tower. It is often available in 20 ft. lengths from hardware and plumbing supply stores. If these are not available, 10 ft. lengths are common and can be fastened together with a threaded coupler. Assemble the poles on the ground.
2. Slide the 20-Speaker Tower over the pipe and tighten the set screw in the collar at the base.
3. Stand the pole assembly up just inside the drip line of a tree and securely tie the pole to a few heavy branches.
4. Drive a T-Post into the ground at the base of the pole and secure with wire.

For masts taller than 20 feet:

1. Use 20 ft. lengths of galvanized steel water pipe or similar, securely fastened together with threaded reducing couplers.
2. Starting with 3 in. pipe, step the size down with each length of pipe.
3. The last 10 ft. can be 1 in. (O.D.) conduit hose clamped to the final section of galvanized pipe.

A semi-permanent mast support can be made by digging a hole 4 ft. deep and 4 ft. round. In the middle of the hole sink a length of galvanized water pipe large enough that your mast will easily fit inside. Make sure at least 2 ft. of pipe is above ground level. Fill the area around the pipe with packed sand, leaving the last foot filled with concrete to form a cap over the hole. Your mast can be dropped into the galvanized water pipe “receiver” for support. At the end of harvest the mast can be lifted out and positioned on the ground for easy disassembly and storage.

Installation

Note: Foliage, trees, and other obstructions severely reduce the effective range of Bird Gard units. It is critical that the 20-Speaker Tower is mounted at least 5 feet above all obstructions to achieve the maximum protection.

Mounting Pole or Mast

1. The Mounting Pole or Mast will need to be supported by a T-Post, fence post, tree or other means. The Pole Support should be in place before proceeding.

20-Speaker Tower

2. Lay the 20-Speaker Tower on its side on the ground and cut the zip-tie securing the speaker cables.
3. Slide the 1 in. (outside diameter) Mounting Pole through the Collar at the bottom of the 20-Speaker Tower until it slides over the positioning bolt inside the top of the Tower (Figure 4).
4. Tighten the Set Screw in Collar securely.

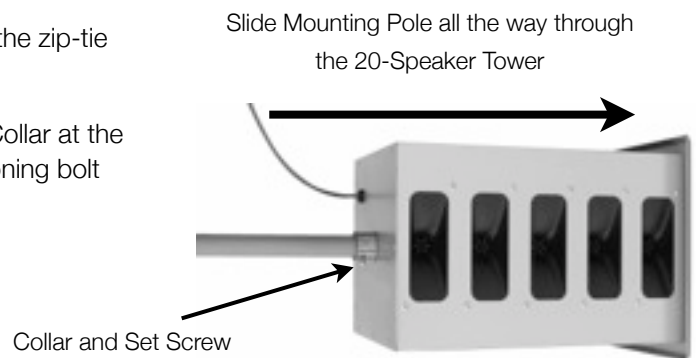


Figure 4

Solar Panel

5. Rest the lower end of the Mounting Pole on the Solar Panel Mounting Bracket approximately three feet from the bottom of the pole with the top of the solar panel facing the 20-Speaker Tower (Figure 5).
6. Lean up the Mounting Pole with the 20-Speaker Tower on top, against the Pole Support and fasten the Mounting Pole to the Pole Support securely with wire or other semi-permanent means.
7. Rotate the solar panel so it receives sunlight.

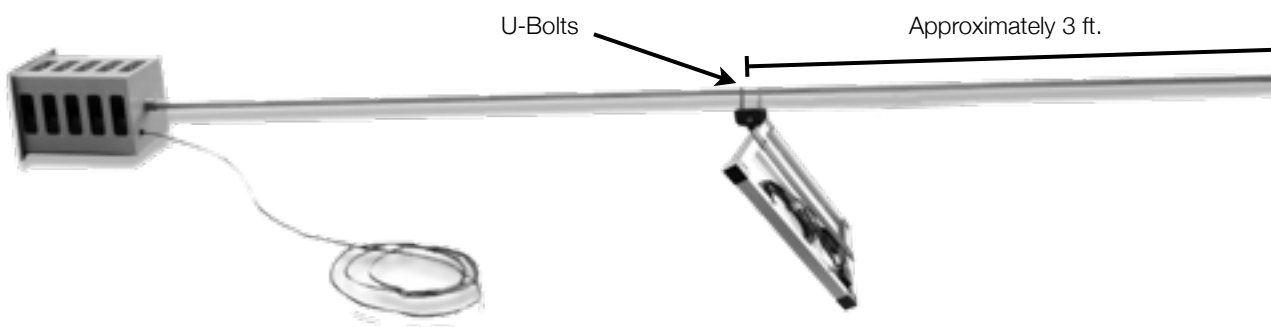


Figure 5

Control Box

8. Attach the Control Box to the Mounting Pole with the U-Bolts.
9. Feed the Speaker Cables through the Cable Strain Relief at the bottom of the Control Box. (Figure 6)
10. Attach the Speaker Cables from the 20-Speaker Tower to the screws marked "SPEAKER" on the faceplate of the control panel.
11. Locate the Control Box Connector Cable (the grey 2 lead cables) and feed one end through the Cable Strain Relief.
12. Connect the RED wire to the screw marked "+" and the BLACK wire to the screw marked "-" under "12V BATTERY" on the faceplate of the control panel.
13. **MAKE SURE THE POWER SWITCH IS TURNED OFF BEFORE ATTACHING BATTERY CABLES TO BATTERY.**
14. Connect the other end of the RED wire to the "+" terminal on the 12-volt Deep Cycle battery (not included). Connect the BLACK wire to the "-" terminal on the battery.
15. Hand tighten the Tapered Cinch Nut on the bottom of the Cable Strain Relief to insects and moisture out.

Control Box Connector
to Voltage Regulator

Cable Strain
Relief

Tapered Cinch
Nut

Speaker Cables

Figure 6

help keep

Solar Panel Connections

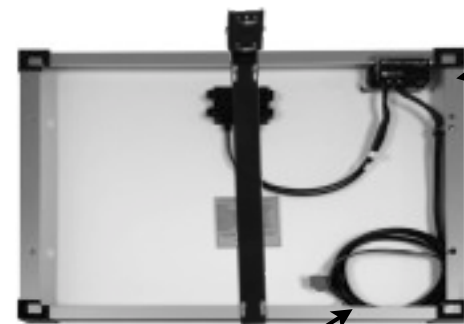
16. Cut the black zip-ties securing the RED and BLACK wires on the underside of the solar panel. (Figure 7)
17. Connect the RED wire to the "+" terminal on the 12-volt battery and connect the BLACK wire to the "-" terminal on the battery.

NOTE: If you are using a "Sealed Gel" 12-volt battery (instead of a Lead Acid battery) you will need to cut the indicated small BLUE wire on the attached voltage regulator. This prevents Sealed Gel batteries from being overcharged.

Failure to cut this wire can result in permanent battery damage. (Figure 8)

Figure 7

Solar Controller



RED and BLACK wires
connect to BATTERY



Cut Blue wire for
"Sealed Gel" batteries

Figure 8

CAUTION: Your Bird Gard Super Pro Amp is capable of producing sounds up to 125 decibels. Hearing protection must be worn anytime the unit is on!



Settings

Repelling birds requires regular monitoring and active management. Birds are intelligent and highly adaptable so it is important to create and maintain an environment the birds perceive as hostile and dangerous. This is achieved by playing the sounds frequently and at a high volume, otherwise the birds will not be fully repelled and will soon learn to adapt.

Below are the initial settings that should be used when your Bird Gard Super Pro Amp is first installed. Please see the “Bird Control Management Guidelines” section for more information.

Recordings

There are eight separate bird sounds contained on the Replaceable Sound Card. The label on the sound card lists each sound with a number corresponding to the eight “RECORDINGS” dip switches to the left of the Sound Card. Initially all RECORDING switches should be turned ON. If the target birds begin returning, periodically change switch settings for the eight sounds (turning them ON or OFF).

NOTE: NEVER turn OFF the distress calls of the target birds you are trying to repel and always keep at least one predator bird sound turned ON.

Mode Settings

TIME OFF INTERVAL controls the time off periods between each playing of the bird recordings.

Setting	Time Off Duration	Switch #1	Switch #2
SHORT	17-50 Seconds	ON	OFF
MEDIUM	1:00-4:15 Minutes	OFF	ON
LONG	5:00-10:00 Minutes	ON	ON
XLONG	10:00-30:00 Minutes	OFF	OFF

When the Bird Gard unit is first installed the TIME OFF INTERVAL should be set to SHORT to create the greatest sense of danger and move the birds out of the area the fastest. Once the birds have left the area completely for a week or more you may try increasing the TIME OFF INTERVAL gradually, but you must monitor the birds carefully. Switch back to SHORT at the first sign birds are returning.

TIME OF OPERATION controls when the bird recordings play.

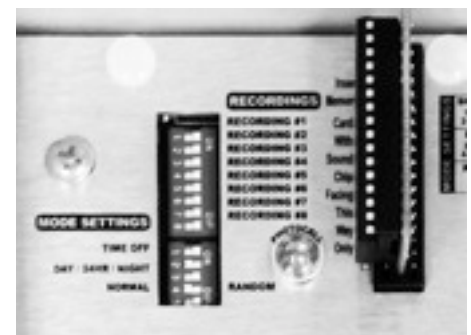
Setting	Switch #3	Switch #4
DAY ONLY	ON	OFF
24-HOUR	OFF	ON
NIGHT ONLY	ON	ON

In most cases birds are only active during the day so the DAY ONLY is recommended. If birds are roosting in bordering trees at night you will need to set the TIME OF OPERATION for 24-HOUR.

RANDOM OPERATION should always be turned ON.

Volume

Should always be set to as high as possible.



Recommended Settings

Troubleshooting

Problem	Possible Cause	Solution
No Sound	Volume turned down	Turn volume up
	Dead battery	Charge or replace battery
	Loose battery connection	Verify all battery connections are tight
	All RECORDINGS are turned OFF	Verify all RECORDINGS are switched to ON
	Sound Card not fully seated	Remove sound card and reinstall, making sure it is fully inserted into the socket
	Sound Card is installed backward	Unplug the sound card and reinstall with the label facing to the left
	TIME OF OPERATION set to DAY ONLY without enough light	Change TIME OF OPERATION to 24-HOUR
	Unit was not shut down before the battery was disconnected causing the unit to go into "SAFE MODE"	<ol style="list-style-type: none"> 1. Turn the POWER switch OFF 2. Disconnect the battery 3. Remove the sound card 4. Wait 30 seconds 5. Reinstall sound card 6. Reconnect the battery 7. Turn the POWER switch ON
Was working but stopped	The battery is dead	Connect the battery to a battery charger and see if it will hold a charge. Replace if necessary
	Solar Panel is not getting enough sunlight	Reposition the Solar Panel

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Warranty

IF YOU ARE NOT COMPLETELY SATISFIED, CONTACT THE PLACE OF PURCHASE OR OUR CUSTOMER SERVICE DEPARTMENT WITHIN 1 YEAR OF YOUR DATE OF PURCHASE FOR PROMPT AND COURTEOUS REPLACEMENT, REPAIR OR REFUND.

BIRD GARD LLC'S LIABILITY HEREUNDER SHALL BE LIMITED TO REFUNDING THE PURCHASE PRICE PAID BY CUSTOMER OR REPLACING THE PRODUCT, IN BIRD GARD'S SOLE DISCRETION, AND UNDER NO CIRCUMSTANCES SHALL BIRD GARD BE LIABLE FOR ANY CONSEQUENTIAL OR INCIDENTAL DAMAGES, OF ANY NATURE WHATSOEVER, ARISING FROM THE CUSTOMER'S USE OR OPERATION OF THE PRODUCT; PROVIDED, HOWEVER, THAT THIS LIMITATION MAY BE LIMITED BY STATE LAW.

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