

AgriProTech

Innovation dedicated to farmers' help and assistance

AVITRAC©OPERATING INSTRUCTIONS

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- **1.** Use your usual QR code reader or download a free QR code reader on your smartphone
- **2.** Launch the application, scan the QR code below and access AviTrac® **tutorials and demo videos**



Otherwise, connect directly to the AgriProTech Youtube channel at http://bit.ly/2zBShid

AviTrac® Operating instructions

You have just purchased a AviTrac® acoustic bird repeller. Reading this instruction manual will help you get the most out of your appliance. Please follow the instructions in these operating instructions and keep them in a safe place so that you can consult them at any time.

Your AviTrac® set includes:

- → An IP55 electronic box comprising:
 - 1. A 12V 5AH or 12V 7AH rechargeable battery (depending on the model)
 - 2. An electronic board with a screen and a rotary knob
 - 3. A memory card with repulsive sound signals
- → One rustproof metal chassis, removable and foldable
- → One or more loudspeaker(s) for scaring
- → One battery charger
- → Optional: power supply, solar panel

Attention: To open the waterproof case, you must remove the tamper-evident which serves as a warranty. If you open it, your device will no longer be under manufacturer's warranty.

If you have any problems with your AviTrac repeller call AgriProTech customer service on +33 (0)2 98 96 08 12 or send an email to contact@agriprotech.fr.

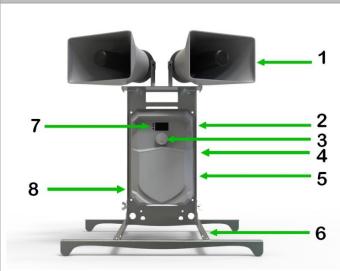
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I. The different components of the AviTrac® repeller

Set



- **1.** Speaker(s) (may vary by model speakers should be positioned horizontally)
- 2. Loudspeaker socket
- 3. Rotary knob for programming
- **4.** Power socket (for battery charging)
- **5.** IP55 waterproof case
- **6.** Removable, rustproof metal chassis
- **7.** Screen, luminosity sensor and LED (see details below)
- 8. Unique serial number label

Screen, LED and luminosity sensor



On the left side of the screen, from top to bottom, you will find:

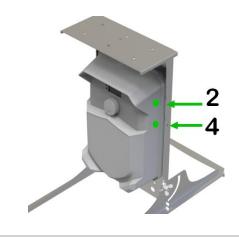
- the red LED which flashes every 20 sec. when the battery is too low and needs to be recharged
- the green LED that flashes twice when you confirm a program $\,$
- the luminosity sensor

Specific to AviTrac® 18S model



9. Y-cable

Speaker(s) and charging/power sockets



- **2.** Socket for the speaker or for the above Y-cable if there are two speakers.
- **4.** Socket for charger or main supply. This socket can also be used to connect the AviTrac® to an option such as the ManTrac or the solar panel.



II. Warnings

1) First use

The AviTrac® repeller must be used with care if there are herds nearby, as distress signals can create unpredictable reactions in some animals.

The audible repeller can emit sound signals up to 120 dBA at 1 meter. It is imperative not to remain in front of the loudspeaker(s) when it is emitting at maximum power.

The warranty will not be valid if the tamper-evident on the back of the case is not intact.

In order to avoid habituation effect, it is important not only to vary the sounds, but also the intervals between each signal. Only emit when necessary to maintain signal efficiency. To increase the surprise effect, be sure to move the device regularly, even by a few metres

You must leave **at least 200 metres** between repellers emitting at maximum power (~120 dBA @ 1 metre) and inhabited areas (this is the distance retained by some prefectoral decrees). It is advisable to place the device **taking into account the prevailing winds** so that they carry the sound towards the places to be protected and not towards houses. Also use **natural barriers** (hedges, embankments, rows of trees, etc.) to limit disturbance to the neighbourhood.

2) Battery

a) General

You need to fully charge your AviTrac® before using it for the first time. To do this, recharge it on 220V for about ten hours. Once the device is charged (the charger indicator light turns green), always unplug the charger from the device and from the wall socket.

To prevent damage to the battery, do not allow it to go completely flat. If the device is used every day, fully recharge the device **every 3 weeks**.



To turn off your AviTrac® bird repeller for storage or wintering:

- → Charge the battery fully
- → Deactivate the "programmable" and "luminosity" alarms (see the Programming chapter of the different Menus)

AviTrac® 9M: Do not leave more than 9 months without charging / **AviTrac® 18M and 18S**: Do not leave more than 12 months without charging

b) Lead battery specificity

The AviTrac® model contains a lead battery (ref. P0011, P0021 and P0031). This type of battery does not support deep discharges (below 20% of charge). If the battery falls below this rate of discharge, if it is drained completely and remains so for several days, it may be irreparably damaged.

c) Lithium battery specificity

The AviTrac® PLUS models (ref. P0041, P0051 and P0061) contain a 12V - 7.5AH Lithium Iron Phosphate (LiFePO4) battery. Here are a few things you should know in order to use it safely and optimise its life. The device is usually delivered with a battery charged to 30% of its maximum capacity. **You need to fully**

charge your AviTrac® before using it for the first time, otherwise the battery life will be reduced. To do this, recharge it on 220V for about ten hours.



Technical properties:

- → Number of life cycles: between 1500 and 2000 cycles depending on use.
- → The ideal operating temperature for a LiFePo4 battery is around 21°C but it can still be operated between 15°C and +60°C. In extreme conditions, the battery may lose up to 30% of its performance. The battery regains its performance as soon as the temperature drops.
- → Unlike other lithium batteries, LiFePo4 batteries do not present an explosion or fire hazard.

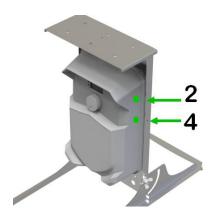


When the battery reaches the end of its life, it can be replaced. Contact AgriProTech Customer Service or your local dealer to order a new battery and receive a replacement guide and mounting hardware. Please note that to replace the battery it is necessary to remove the tamper-evident. Check that the 1-year manufacturer's warranty has expired.

3) The sounds

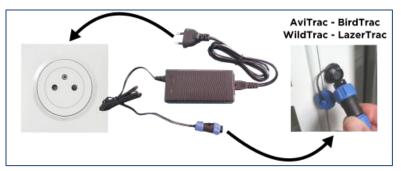
Some sound signals may seem unusual, but they are the result of extensive research into animal behaviour. Some sounds are emphasised because they are more effective than others. These signals are designed to 'confuse' unwanted animals. Indeed, they will be recognised as stressful, but the birds, not being able to identify or recognise them clearly, will eventually tire and leave the protected area. In the context of acoustic scaring, it is important to avoid the animals getting used to the sound. It is therefore necessary to vary the sounds emitted, as well as the intervals between each signal.

4) AviTrac® charger or power supply



By default, your AviTrac® is delivered with a quick charger (ref. A0911). You can also choose to equip yourself with a <u>power supply</u> (ref. A0921) for indoor use (ask your usual retailer).

To charge your AviTrac®, plug your charger (ref. A0911) or your power supply (ref. A0921) into an electrical outlet on the side of the waterproof case of your AviTrac® (bottom socket – see on the right).

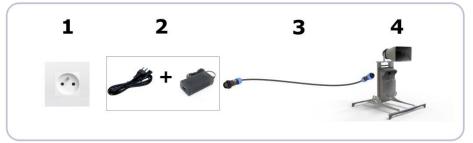


The charger and power supply are equipped with indicator lights that show the state of charge of the battery:

- > Red light: charging; Green light: Charged
- ATTENTION: Once your bird repeller is charged, always unplug the charger from the device <u>and</u> from the wall socket.



The AviTrac® battery charger and power supply are not waterproof. They should be used in a clean, dry place. If you wish to leave your device connected to the mains when outdoors, it must be connected to its power supply by a 5 metre (ref. 0961) or 10 metre (ref. 0962) waterproof cable.



- 1 Mains socket (indoors, protected from moisture)
- **2** Non-waterproof power supply, to be connected indoors, protected from humidity
- **3** 5 or 10 metre waterproof cable (can be connected end to end)
- 4 AviTrac®



III.Installation

1) Different parts of the metal chassis

In your package you will find the stainless steel chassis components of the AviTrac® bird repeller. It consists of the following parts:

Part and reference	Quantity	Illustration
Left foot A1	1	
Right foot A2	1	
Rails A3	2	
Waterproof case fixed on its metal rear plate A4	1	

1 bag of screws including:

Part, reference and unit	Illustration	Part, reference and unit	Illustration
M6 serrated flange nut Reference: B1 Quantity: 4		Hexagon socket button head screw with flange. (M6, length 10 mm) Reference: B2 Quantity: 8	
M6 wingnut Reference: B3 Quantity: 4			



2) Assembly of the metal frame

Step 1

Position the rails (A3) under the chassis feet (A1 and A2) and screw them together using the 4 screws B2 and the 4 notched bases B1



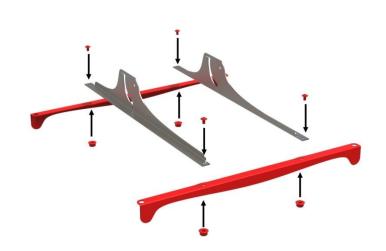


4 x



<u>Remark:</u> It is recommended to tighten the base screws **(B2)** with a 4 mm Allen key - below (not supplied).





Step 2

Then place the case on its metal plate (A4) between the feet A1 and A2, passing the "ears" through the marks on the feet. Slide them as shown in the illustration.

Secure them with wing nuts B3 and screws B2 in the notch provided:





2 x



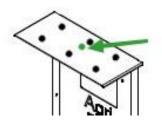




3) Installation of the speaker for AviTrac® 9M and 18M models

Point the cable of the speaker(s) downwards to reduce the risk of seepage into the "sockets" and **position the speakers horizontally** so that rainwater does not collect on them.

Step 3 Position the speaker (the speaker changes depending on the model) on the metal chassis cap, above the central hole.



Fix the speaker with a wing nut B3 and a screw B2:

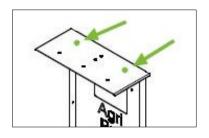




4) Installation of the speakers for AviTrac® 18S model

Point the cable of the speaker(s) downwards to reduce the risk of seepage into the "sockets" and **position the speakers horizontally** so that rainwater does not collect on them.

Step 3Position the speakers on the metal chassis cap, above the central hole.



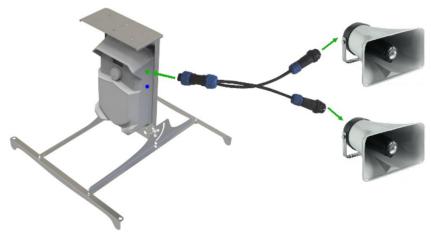
Secure the speakers with wing nuts B3 and screws B2 :







Once the speakers are attached to the top of the chassis, they connect to the 'Y-cable' provided:



It is possible to fold the chassis to store the system more easily. Be careful to do this gently so as not to damage the speakers.



IV. Programming

1) Switching the device on and off

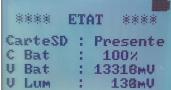
To **switch on** the device, press the centre of the rotary knob for a few seconds. The complete serial number is displayed, you can click again until you reach the home menu.

The 'Menu' screen appears and tells you whether the '**Programmable**' (a. on the right) and '**Brightness**' (b. on the right) alarms are active or inactive. Once in the Menu, turn the knob to navigate between the different programming panels.

The first ***Status*** panel shows:

- → The card is present
- → The battery level in %
- → Battery voltage in mV
- → Luminosity in mV





<u>Attention:</u> In order not to cause the emission of unwanted sound signals, it is important to choose an alarm type. Either one or two "**programmable**" alarms, or the "**luminosity**" alarm.



<u>Tip:</u> To stop a program in progress, press the rotary knob.

To put the device on standby, go to the main menu and press the rotary knob for 3 seconds. If you do not touch the rotary knob for 90 seconds, the unit will automatically go into standby mode.

To **switch off** your AviTrac® for storage or wintering: fully recharge the battery and deactivate the "programmable" and "luminosity" alarms (in the chapter Programming the different menus, see Menus 1 and 2).



2) Programming the different menus

	2) Programming the different menus			
Num	Screen and menu name	Programming		
1	Alarm activation 1 and/or 2 (Programmable alarms)	If you want to program the start and end time of the signal transmissions, activate this type of alarm. It is possible to program one or two operating time slots. The start and end times are programmed in the following menus (6 and 7).		
	2 O	 Press the knob to enter this menu Turn the knob to select active or inactive. Once you have chosen, press the knob. Press again to confirm your choice and move to the next menu or turn the knob to cancel. 		
2	Daylight wake-up (Activation of the luminosity alarm)	AviTrac® can be programmed for sunrise and sunset times. You must therefore activate this alarm so that the emissions are triggered according to the data from the light sensor.		
	**	 Press the knob to enter this menu Turn the knob to select active or inactive. Once you have chosen, press the knob. Press again to confirm your choice and move to the next menu or turn the knob to cancel. 		
3	N sound transmiss (Emission test)	This menu allows you to make sounds instantly without programming the start and end times. It can be used to test the volume, for example. The number of sounds (N) to be broadcast is therefore chosen randomly, according to the selected sound repertoires. From 1 to 9 signals can be sent in a row.		
		This "test" menu has no impact on the programming. Thereafter, the device will always emit only one signal at a time. The system is thus programmed to limit the chance of animals becoming used to the device.		
		 Press the knob to enter this menu Choose the number of sounds to emit by turning the knob. Once the desired number of sounds has been reached, press the knob. Press again to confirm your choice and move to the next menu or turn the knob to cancel. 		



4

Volume adjustment



It is strongly recommended to emit at the loudest level (level 30) when possible (no habitation within 200 m). The aim is to surprise the animals by emitting stressful signals.

- Press the knob to enter this menu
- Select the desired volume by turning the knob (*each volume step corresponds to 3 decibels*).
- Once the volume is selected, press the knob.
- Press again to confirm your choice and move to the next menu or turn the knob to cancel.

Here is a table giving you 'rough' equivalents to help you programme the most appropriate volume for your situation.

It is best to carry out tests at the end of the programming, using menu 3 - **Emission of N Sounds**. This will give you a clear idea of the possible impact on the environment.

AviTrac level	dBA @ 1 m.	Common noise equivalent
30	120	House alarm
28	114	Maximum sound level in a car
26	108	
24	102	Night club
22	96	Walkman listened to at full power
20	90	Motorbike nearby, tractor
18	84	Heavy car traffic, horns
16	78	Hoover, lawn mower
14	72	Noise of a moving car
12	66	Normal conversation, window on street
10	60	

5

Sound periodicity (Interval between each sound)



Setting the pause time between each signal transmission. Minimum interval: 3 min; maximum interval: 2h 59 min 59 sec.

It is not recommended to go below 20 minutes.

To be defined according to the pressure of the birds:

- Significant pressure (food nearby): 20 min.
- o Average pressure: 30 min.
- Weak pressure: 45 min to 60 min.
- Press the knob to enter this menu
- Program the seconds by turning the knob and press the centre of the knob to switch to minutes.
- Program the minutes by turning the knob and press the centre of the knob to switch to hours.
- Program the hours by turning the knob and press the centre of the knob to confirm.
- Press again to confirm your choice and move to the next menu or turn the knob to cancel.



7	Starting and stopping the alarm 1 (Programmable alarm 1) 1 Starting and stopping the alarm 2 (Programmable alarm 2) 2 1 1 1 1 1 1 1 1 1 1 1 1	 If you choose to activate the programmable alarm 1, program the start and end time of the sound emissions here. Press the knob to enter this menu Program the seconds by turning the knob and press the centre of the knob to switch to minutes. Program the minutes by turning the knob and press the centre of the knob to switch to hours. Program the hours by turning the knob and press the centre of the knob to confirm. Press again to confirm your choice and move to the next menu or turn the knob to cancel. If you choose to activate the programmable alarm 2, program the start and end time of the sound emissions here. This menu is programmed like the previous one.
8	Current time (Device time)	Be sure to set the time on the device if you have chosen to activate the programmable alarm. This menu is programmed like the previous one.
9	Sound selection Selection	 Selection of sound repertoires to be emitted according to the species to be scared away (details in the chapter on Selection of sounds emitted). Press the knob to enter this menu: the name of the first repertoire is displayed. To select or deselect a repertoire for broadcast, press the knob: An arrow appears in front of the repertoire name when it is selected and disappears when it is not. Press the knob to confirm the selection of a repertoire and move to the next one. Repeat this action until the repertoires are scrolled and you are asked to confirm. Press the knob to confirm your choice and move to the next menu or turn the knob to cancel.
1 0 1	Choice of language Option selection	 Press the knob to enter this menu. Scroll through the available languages turning the knob. Once you see the language of your choice, press the knob. Press again to confirm your choice and move to the next menu or turn the knob to cancel. This menu allows you to activate features linked to options. They are not supplied with the AviTrac® but can be purchased separately. The options available are: ManTrac, Detector (compatible with WildTrac), WiTrac option (remote triggering - custom made) and LazerTrac option
1	: —	 Press the knob to enter this menu Scroll through the available options by turning the knob. Once you see the option of your choice, press the knob. Press again to confirm your choice and move to the next menu or turn the knob to cancel.



1	Display contrast	Screen contrast adjustment.
1	Display contrast	> Press the knob to enter this menu
2	1	 Rotate the knob to select the contrast of your choice
	-(1)	 Press the button to confirm your choice
	~~	 Press again to confirm your choice and move to the next menu or
		turn the knob to cancel.
		Menu to reset the unit to factory settings.
1	Factory settings	
_		Press the knob to enter this menu
3		> Press the knob again to choose to delete the programming
	<u></u>	parameters and thus return to the original settings: the text
		"Delete!!!" appears.
		Please note that this choice will erase the time and your
		programming.
		> If you do not want to return to the original settings of the device,
		choose to retain the programmed settings by turning the knob: the text 'Retain settings' appears.
		 Once you have chosen the action to be taken, press the knob.
		 Press again to confirm your choice and move to the next menu or
		turn the knob to cancel.
		tarn the most columbia
		Please note that at the end of the procedure, the device will
		reset and emit a signal at maximum power to test the correct
		operation of the speaker. Point the speaker(s) to the side, as far
		away from your ears as possible. It is possible to stop this program
		by pressing the knob.
		Once the system is reset, it displays its serial number.
		→ You can skip this screen by pressing the knob
		→ Then a second pane appears with the words 'Press OK' at the
		bottom: press the knob
		→ At the bottom of the next pane you will see 'Turn Select': turn
		the knob → A signal is emitted at maximum power, stop it by pressing
		the knob again.
		→ The device goes into standby mode.
		The device goes into standby mode.



You can then switch it on again and program it in the usual way.

3) Emission intervals

It is important to use the sounds only for "intended purposes". Animals have a highly developed sense of observation, so if the signals are given too often, they may quickly get used to them. The aim is to surprise birds and other unwanted animals and to make the emission area hostile.

The recommended minimum beeping interval is 20/30 minutes. However, for short periods of time, it is possible to reduce this interval.

For information, the interval is on average XX minutes + an average randomness of 10% of this interval.

4) Selection of sounds emitted

There are several repertoires available in the 'Sound selection' menu. The repertoires to be issued should be selected according to the species to be scared off, according to the table below. The repertoires selected will be the same for the two operating time slots.

You can **change the selected repertoires** regularly to limit the habituation effect.

Each repertoire contains several signals and some work on several species.

Species to be scared off	Repertoires for distribution
Jackdaws, Rooks, Black Crows, Magpies, Jays, Robins	→ Synthesis Corvid→ Interspecific 1→ NaturalCalls 1
Gulls, Seagulls, Cormorants, Lapwing	 → Synthes Seabirds → NaturalCalls2 → Interspecific 1 → Discomfort 1
Starlings	 → Synthes Starlings → NaturalCalls 1 → Interspecific 1 → Discomfort 1
Wood pigeons	→ NaturalCalls 1→ Interspecific 1→ Discomfort 1
Diurnal birds of prey The 'NaturalCalls1' repertoire contains predator calls that can attract buzzards. It should therefore not be used if you want to protect free-range poultry farms, for example.	→ Interspecific 1→ Discomfort 1→ Synthesis Corvid

The contents of each repertoire are described briefly below:

- → Synthesis Corvid, Syntes Starlings and Synthes Seabirds: Distress calls of the target species, modified to keep only the most effective sounds for scaring. May repel other species.
- → Interspecific 1: Mixed signal creating a stressful atmosphere for many species.
- → **Discomfort 1:** A signal designed to confuse birds and prevent them from communicating with each other. This discomfort causes them to move away to a quieter place.
- → NaturalCalls 1: Natural calls of predators and raptors such as the black kite, the common buzzard and the sparrowhawk.
- → NaturalCalls 2: Distress calls from seabirds: gulls, lapwings, etc.



V. Maintenance

1) Device storage and battery maintenance

When not in use, the device should be configured with alarms off and the battery fully charged. It is also advisable to unplug the speaker(s) during the storage period.



Finally, the appliance can be stored in its original packaging when not in use.

2) Waste management

At the end of its life, the product must be recycled as used electronic equipment. Be sure to recycle the battery through the proper channel.

VI. Trouble-shooting

If a problem arises that is not mentioned above, or if you have any difficulties using your AviTrac® bird repeller, please contact customer service on +33 (0)2 98 96 08 12.

Problem encountered	Possible solution(s)
The AviTrac® is activated outside the programmed hours.	The 'luminosity' and 'Programmable' alarms are activated at the same time. The two alarms 'conflict' and cause the unit to malfunction. One of the two types of alarms must be deactivated. Details in the chapter Programming the different menus – Menu 1 and 2.
My device does not sound although the alarm is correctly programmed.	 The speaker is not properly connected The battery needs to be recharged If none of the above solutions work, it is possible to 'reboot' the device and return to the factory settings (see Factory Settings Menu). Be careful, doing so will erase your programming (time, transmission interval, selected repertoires, etc.) Details in the chapter Programming the different menus – Menu 13.
Despite a recent full charge, my device no longer lights up when I press the OK button rotary knob for a few seconds.	The device has not been charged for several months and the battery may be damaged. To find out, take the test below. → Connect the device to the mains using its charger or power supply. → Try to switch it on by pressing the knob for a few seconds. → If the device lights up when plugged into the mains but not when unplugged, the battery is no longer holding any charge. It needs to be replaced, contact AgriProTech customer service or your usual supplier.
The red LED next to the screen lights up regularly, by flash	If this LED is flashing, there are two possibilities: 1) You need to recharge your device quickly because the battery is discharged (the LED is triggered when the battery charge level is below 11.2 V) → Connect the device to the mains using its charger or power supply. 2) If the LED continues to flash despite charging, the error may be in the memory card of the device.
	Please contact customer service or your usual dealer.



VII. Warranty

The manufacturer's warranty is limited to one year for all purchases. The invoice serves as proof of purchase and must be kept by the buyer. Here's how to activate it:

1) If you bought your device from AgriProTech, your warranty is automatically activated.



- 2) If you bought your device from our network of resellers, it is very simple to benefit from the manufacturer's warranty:
- 1. Create your customer account at www.AgriProTech.fr.
- 2. Send us an email: The serial number of your device (see on the right), the invoice number, the date and the name of the place of purchase of your AviTrac® bird repeller. And that's that!

This warranty covers



The spare parts and supplies needed to repair defective products.

Labour for the repair of defects is also included in the warranty.

All defects in materials and mechanical and electronic components (e.g. defect in the AviTrac® electronic board).

The costs of transport shall be borne by the buyer.

The manufacturer's warranty does not cover



Failure due to an accident, misuse of the device or negligence on the part of the user (e.g. speakers pointing upwards where

water ends up seeping in - speakers should be oriented horizontally). A defect that does not prevent use (e.g. a dead pixel on the screen). Transport of the device without adequate protection. Incorrect installation of the device. Wear parts (rechargeable batteries, etc.).

Defective products corresponding to the above situations will be repaired or replaced subject to prior acceptance by customer service. It is therefore imperative to get in touch before returning any product on +33 (0)2 98 96 08 12. The costs of returning the goods shall be borne by the buyer.

Warranty is no longer applicable if:

- The serial number of the device has been removed or changed.
- The tamper evident on the back of the case has been removed or damaged.
- The device has been dismantled.
- The malfunction does not directly affect the operation of the device (e.g. dead pixels on the screen, etc.).
- The memory card has been replaced with a different model than the one supplied by AgriProTech.

The warranty does not cover the efficiency of the device. Indeed, no means of scaring can guarantee 100% effectiveness because many factors come into play (pressure from birds to feed, compliance with operating instructions, etc.).

It is advisable to combine several scaring methods (kites, scaring balloons, etc.) to make the threat as realistic as possible, especially when bird activity is very high. Finally, acoustic scaring is most effective when used preventively.



To avoid habituation effect of the birds, be sure to move your AviTrac® and change the repertoires issued regularly.

We want to know what you think!

You can send us your comments or ideas about our **AviTrac® bird repellers**

by mail to 7, rue Ernest Tibulle | ZA de la Villeneuve Braouic 29300 QUIMPERLE - FRANCE by email to contact@agriprotech.fr, or by telephone to +33 (0)2 98 96 08 12.

The AgriProTech team thanks you.

