# MARGO SUPPLIES MARGO ELECTRA

#### #1100 & #1200 - SCARE CANNON MANUAL



MARGOSUPPLIES.COM



1 - 888 - 652 - 1199

#### DISCLAIMER



THIS PRODUCT WAS DESIGNED AND INTENDED FOR THE SOLE PURPOSE OF WILDLIFE CONTROL AND MANAGEMENT. THE PROPER AND SAFE USE OF THIS PRODUCT IS THE SOLE RESPONSIBILITY OF THE OWNER AND/OR OPERATOR. THE SELLER ASSUMES NO RESPONSIBILITY OR LIABILITY FOR THE IMPROPER AND/OR ILLEGAL USE, RESALE, ANY PHYSICAL INJURY AND/OR PROPERTY DAMAGE RESULTING FROM DELIBERATE OR ACCIDENTAL DISCHARGE OF THE PRODUCT, OR MODIFICATIONS MADE TO THE PRODUCT, SELF-SUPPLIED MATERIALS USED ALONG WITH THE PRODUCT, CARELESS OPERATION OR MAINTENANCE NEGLECT OF THIS PRODUCT.

## **CANNON FEATURES**

- 120dB cannon blasts scare birds and keep them away.
- One 20lbs propane cylinder will provide over 15,000 detonations.
- Advanced digital clock for preset firing times and multi-shot bursts.
- Microprocessor controlled timing with a backup real time clock.
- Improved battery life, uses 2mA of power in standby for regular cannons and 12mA for radio versions.
- On demand firing mode helps to prevent bird habituation.
- 14 Amp/Hr battery provides 120 days of average use and 60 days for radio version.
- ► For Radio Controlled: 900MHz receiver provides up to 15.5km/9mi line of sight range.



## **CANNON UPGRADES**

- Electra Rotating Tripod (#1101) provides 360° coverage and elevates the cannon's blast. Using the tripod will increase the cannon's coverage to 30 acres.
- Tripod Mounted Solar Kit (#1102) and Solar Case Kit (#1103) provide continuous power and protects your battery from the elements.
- Electra with Radio Control (#1200) allows for on demand firing of the cannon.
- 99 Channel Transmitter (#1301) remotely activate cannon from a range of 15.5km/9mi, line of sight.

VISIT MARGOSUPPLIES.COM FOR A MORE COMPLETE LIST OF UPGRADES AND ACCESSORIES.



## **TIPS & TRICKS**

- Birds find it difficult to adapt to the confusion presented when using several deterrents together. Combine scare cannons with other different audio and visual deterrents for the best effect.
- Deploy cannons before your crops are damaged, not after. It's easier to keep birds out of the control area than to chase them out once they've been rewarded.
- Birds are most active at dawn and dusk.
- To reduce overall sound output and prevent habituation, restrict cannon use when birds are not active.
- A single cannon will protect up to 6 acres of high value crop from persistent birds.
- Relocate cannon frequently to prevent habituation. It should be moved every 2-3 days when birds are present.



## **SAFETY INFORMATION**

- Clear an area of 5m (15ft) surrounding the gas cylinder and cannon of all debris, including flammable and combustible material, such as dried weeds and grass.
- The area directly in front of the megaphone must be clear of all obstructions.
- Never place objects or look directly into the megaphone.
- > Never walk in front of or look into the barrel.
- Do not place objects on top of the cannon.
- > Do not operate cannon in an enclosed space.
- Keep fire and other sources of heat/ignition away from the cannon.

- Cannon should be on stable horizontal ground when in use.
- Only use LP Gas (propane) or butane gas.
  Keep canister upright. Do not place in a pit.
- Call the proper authorities/emergency services in case of a fire.
- Service cannon after 150kg (330lbs) of use.
- Replace the gas hose every 2 years. Contact Margo Supplies to order replacement.



## **INSTALLATION**

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- **1.** Attach **Red Metal Lid** (#ZE-M) to Cannon Body with the **Handle** (#91616).
- 2. Insert the **Plastic End Caps** (#91656) onto the end of the **Metal Legs** (#91636).
- 3. Attach the Left and Right Metal Legs (#91636) onto the cannon using 4 Butterfly Nuts.
- **4**. Make sure the Regulator and the Gas Cylinder both have clean connections.
- Connect the Gas Regulator (#9023) to your gas canister (not included) and snug with a 24mm wrench. Do not open propane valve.
- 6. Hook up cannon to power source.

- **7.** Keep the battery raised above ground level and sheltered from the elements.
- 8. The cannon is now ready for programming, if desired. Consult the following pages for further instructions.

## WARNING!

ALWAYS WEAR PROPER EAR AND EYE PROTECTION WHEN OPERATING THE CANNON

### **INSTALLATION**

 To fire the cannon, open the gas valve and then press the Red Hose Fracture Button on the Pressure Regulator (#9023).

#### THE HOSE FRACTURE BUTTON MUST BE PRESSED EACH TIME THE GAS IS TURNED ON



#### FOR WIRELESS MODELS:

- Operating frequency band 902 to 928 MHz.
- Ideal RF line-of-sight range up to 15.5km/9mi.
- ▶ Transmit power output 24 dBm (250 mW).

For 900MHZ equipped models, the following modem approvals apply:

- Innovation, Science and Economic Development Canada (ISED): 1846A-XB900HP
- United States (FCC Part 15.247): MCQ-XB900HP

## **INSTALLATION**

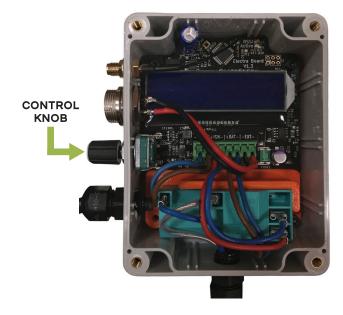
#### FOR WIRELESS MODELS:

- Connect the antenna and the antenna cable as shown below. Medium thread locker is recommended.
- 2. Ensure smooth operation of the lid without pinching the coaxial antenna wire inside.



## PROGRAMMING

1. Rotate the "Control Knob" to navigate the menu. The menu will reset to the homepage after 45 seconds without use. Settings are saved and stored in an internal memory.



2. When first turned on, the screen will flash:

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FIF	RMWAR	Ε:	1.	0

3. If equipped with radio control, the screen will also flash the following:

## \*MARGO SUPPLIES\* Wireless Enabled

4. The home screen will display a countdown until the next firing cycle and the battery voltage.

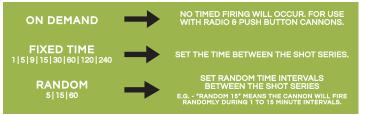


## PROGRAMMING

5. To test fire the cannon, navigate to the test fire screen and push the control knob. The cannon will fire up to 4 blasts. This screen also indicates the cannon's total fire count.

TEST FIRE Count 20

6. To set the intervals between firing cycles, use the following guide:



For custom firing cycles, inquire with Margo Supplies.

**7.** Factory timing is set to 15 minute intervals.

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8. For cannons equipped with wireless receivers, this additional menu is available to select the desired radio channel. The factory channel is 1 and 98 other channels can be programmed.

 Use this screen to set the number of shots per time interval. Options are selectable between 1-4 shots per interval. The factory setting is 2.

SHO	TS	1	CY	CLI	
2					

#### PROGRAMMING

10. The real time clock keeps track of time when the cannon is not connected to power. It is a 24hr clock that must be set manually. The internal battery keeps time for up to 100 days without power. Connect the cannon to power to recharge the clock's battery.



**11.** The real time clock is also used for Quiet Time intervals. To set, depress the control knob and move through the menu as directed. Set the start and end time as it relates to the real time clock. Some examples of Quiet times are:



Quiet between 10AM and 4PM (mid-day silence).

QUI	- 1	ΤI	ME	1	SET
10:	88	>	16:	00	

Quiet bet	tween 9P	M and	7AM (ove	rnight :	silence).
QUI 21:	ET 90		ME 07:		

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## MAINTENANCE

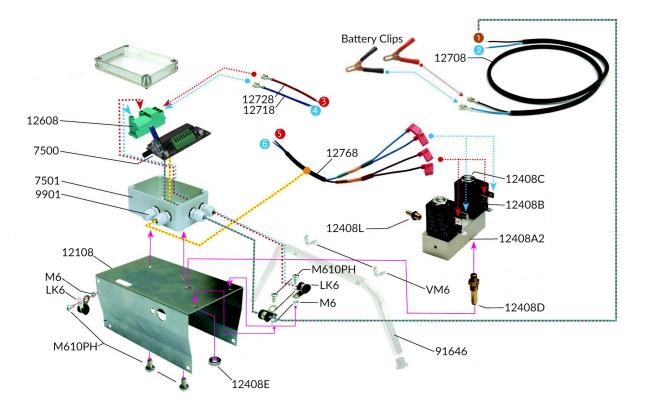
#### **IMPORTANT: DISCONNECT CANNON FROM GAS WHEN STORING**

A full maintenance check should be performed at least once a year. When the cannon is not in use, it should be stored in a cool, dry place.

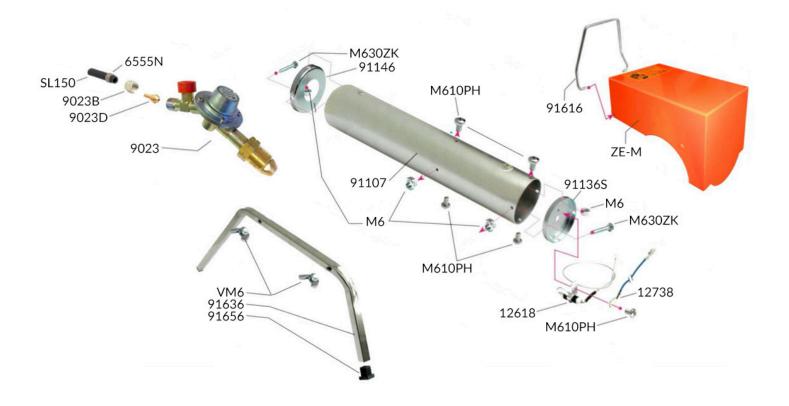
#### NOTE:

- Store in a dry area when not in use.
- Never use flammable cleaning agents on this device.
- Do not use a steam jet sprayer to clean.
- > Check the barrel of the cannon for mouse nests before use if it has been in storage.
- Ensure all nuts, bolts, and screws are tight.
- Inspect the gas hose for defects and leaks. Replace old or cracked hose with new hose. Only use specialty hose from Margo Supplies.
- > Check gas regulator for damage or leaks. Repair or replace parts before use.
- Check for corrosion on or around the Electrode (#12618). Clean with a wire brush or emery cloth.
- > Always wear hearing protection while operating on or while in the vicinity of the cannon.

#### PARTS DIAGRAM



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## **PARTS LIST**

MAIN BODY	MAIN BODY/ CONTROL UNIT			
12108	Main Body			
7501	Control Unit Enclosure			
9901	Cord Grip			
9093	Electra Control Unit			
7500	Printed Circuit Board			
12708	Battery Cable			
6555N	Hose Clamp			
LK6	Small Hose Clamp			
M610PH	Metal Screw (M6 x 10)			
M410CK	Metal Screw (M4 x 10)			
M3595Z	Metal Screw (M3.5 x 9.5)			
M6	Hexagonal Nut (M6)			
12778	Positive & Negative Battery Clips			

FRAME	
91107	Barrel
91136S	Rear Cover
91146	Iris Cover
ZE-M	Metal Lid
91616	Handle
91636	Base Frame (Left)
91646	Base Frame (Right)
91656	Сар
VM6	Butterfly Nut (M6)
M630ZK	Metal Screw (M6x30)
M610PH	Metal Screw (M6x10)
M6	Hexagonal Nut (M6)

## **PARTS LIST**

#### IGNITION

12608	Ignition Module
12618	Electrode
12718	10cm Blue Wire (Ignition)
12728	10cm Red Wire (Ignition)
12738	30cm Blue Wire (Ignition)
M610PH	Metal Screw (M6 x 10)

#### GAS REGULATOR

011	Protective Cover
9023	Complete Regulator Unit with HFP
9023B	3/8" Nut
9023D	Nipple
SL100	150 cm Hose

#### GAS VALVE

12409	Double Solenoid Valve (Complete)
12408A2	Double Solenoid Valve (Body)
12408B	Coil
12408C	Nut (Solenoid Valve)
12408D	Injector Nozzle
12408E	Nut (M12)
12408K	Filter
12408L	Supply Nipple
12768	Wire Harness (Double Valve)

## TROUBLESHOOTING

FAILURE	CAUSE	SOLUTION
	Gas tank valve is not open.	Open the gas valve.
	Gas tank is empty or does not have enough pressure.	Fill or replace gas tank.
	Hose Fracture Protector Button hasn't been pushed.	Push the Hose Fracture Protector Button (red) one or more times.
Cannon	Poor gas mixture.	Gas mixture in the gas tank is not correct, replace gas tank.
operates but there is no	Gas valve is blocked or partially blocked.	Open up blockage with a thin wire approx. 0.6mm in diameter.
explosion or sound.	Ignition gives a weak or no spark at all.	Check the Electrode for effectiveness. The porcelain base could be broken. Replace if necessary. Clean corrosion on any of the connection points between the barrel, electrode and the ground wire. Separate all pieces to clean contact points with an emery cloth. If the electrode is wet, be sure to dry it well.
	The gas valve will not operate.	Check connection points. If properly connected, call the dealer for repair.
	Debris in combustion chamber or other opening.	Remove debris and other blockages from around the cannon. Common instances are mouse or spider nests.

FAILURE	CAUSE	SOLUTION
Cannon is connected yet fails to operate.	Battery cable is not connected properly.	Ensure the battery terminals are connected. The black battery clip is negative and the red battery clip is positive.
	Low battery.	Recharge or connect a new battery.
Cannon works, but gives dull explosions.	Wind is too strong; gas/air mixture is disturbed.	Place cannon down wind, out of the wind or behind a screen.
	Gas valve is blocked.	Open blockage with a thin wire approx. 0.6mm in diameter.
Cannon	The coupling nut on the regulator is not tight.	Tighten the coupling nut.
is leaking.	Gas hose is damaged.	Replace the hose.
Poor radio	Antenna placement is off.	Ensure the antenna is standing as high as possible.
Poor radio reception.	Cannon placement is off.	Ensure cannon is not placed near high voltage power lines or other high power equipment.

#### Contact Margo Supplies for replacement parts or for complicated repairs.



# MARGO SUPPLIES

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