



# ***CO2-Gun***

*Manual 1.2*

*As of May 2019*



# PREAMBLE

Dear Explo Customer,

Please read through these sets of instructions carefully, before using your devices. It contains many Informations which are to help you getting to know your system.

We ask you to follow the safety and usage notes carefully.

Should you have any questions, or any confusions arise during the usage of the devices, which cannot be answered by this manual, please do not hesitate to contact us either by phone or mail.

A lot of fun with your new effects device wishes you,

*Your Explo Team*



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## 1 GENERAL INFORMATION ABOUT THE CO2-GUN

### 1.1 FUNCTION OF THE CO2-GUN

The CO2-Gun is a simple device, used to create CO2-fog-effects.

A standard CO2 bottle is connected via a CO2-fit hose (available separately) to the CO2-Gun. Afterwards, the CO2 is ejected by pulling the trigger, creating the fog effect.

### 1.2 USES AND POSSIBILITIES

The CO2-Gun can be used indoors, as well as outdoors, and in any weather. Your places of usage can be concerts, stage shows, or special effects for theatrics and sports events (eg: Entering of the players at a football match or ice-hockey).



## 2 DESCRIPTION OF THE CO2-GUN

### 2.1 COMPONENTS OF THE CO2-GUN



Components of the CO2-Gun	
1	Hose connector (pre-installed quick-coupling)
2	High pressure pistol grip with trigger
3	Front grip
4	Ejection pipe



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## 2.1.1 DESCRIPTION OF COMPONENTS

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### 2.1.1.1 HOSE CONNECTOR

The hose connector can be used to connect a CO2 fit hose via the pre-installed quick coupling. Many hoses of different manufacturers can be used, and if interested we can offer you a hose in any preferred length, with or without a CO2 bottle connector. Generally our CO2 hoses use a 3/8" connector, onto which a quick coupling and CO2 bottle connector can be mounted.

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### 2.1.1.2 HIGH PRESSURE PISTOL GRIP WITH TRIGGER

The high pressure pistol grip blocks the CO2 flow through the CO2-Gun (normally closed). By using the trigger, the CO2 is released and will create the CO2 fog effect.

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### 2.1.1.3 FRONT GRIP

The front grip is used for a stable hold on the effect device. It is mounted on a Rail-system, stemming from the military sector, and can be dismantled if necessary.

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### 2.1.1.4 EJECTION PIPE

The ejection pipe focuses the CO2-stream. At the exit of the pipe, the effect is created.



## 3 USING THE CO2-GUN

### 3.1 PREPARING THE DEVICE FOR THE SHOW

Nothing is more frustrating than an empty CO2 bottle at the venue. Therefore, the following should be checked before driving to the show:

#### Checklist before the show

Do I have the necessary number of CO2-Guns with me?

Do I have the necessary number and length of CO2 hoses with me?

Do I have the CO2 bottles with me, and are they filled?

Are the devices and accessories in working condition? (Optical check, and if necessary a try with pressurized air)

If the above questions were answered with YES, you are one step closer to a successful show.

### 3.2 USAGE AND POSITIONING OF THE CO2 BOTTLES

The general safety precautions for the usage of CO2 should be adhered to, as well as the instructions of the manufacturers safety sheet.

Generally, the CO2-Gun must have enough space between it, and any living beings or objects, so that they may not be harmed by the usage of the device. The manufacturer recommends a distance of 6meters radial, and 0,5meters around the effect. However, the instructions according to any acting department and safety personnel take precedence.

If the safety distances are not adhered to, coldness might pose a threat.



### 3.3 CONNECTING THE CO2 BOTTLES

The CO2 bottles should be placed atop firm and even ground, and be proofed against accidental tipping (eg. by using tension belts). Direct sunlight and heat should be prevented, since the pressure rises with the temperature. In case of cold, the bottles should be kept warm.

The CO2 hose should first be connected to the CO2-Gun, and then to the CO2 bottle. While connecting the bottle, the trigger should not be pulled.

It is recommended to check the setup with a leak tightness spray, and do a test shot to remove excess air from the hose.



### 3.4 TRIGGERING THE CO2-GUN

The usage of the CO2-Gun is made exclusively via the trigger of the pistol grip. Shortly before the show, the CO2 bottle can be opened to allow for a flow of carbondioxide.

As long as the trigger is pulled, CO2 will be ejected from the effect device.

You should always adhere to the safety distances.

### 3.5 DISMANTLING THE SETUP

After using the device, you should first close the valve at the CO2 bottle. **Air out the hose, by triggering the CO2-Gun until no more fog effect appears.**

Only after airing out, you can remove the CO2 bottle, or remove the hose from the CO2-Gun. Never transport systems under pressure.

### 3.6 STORING THE SYSTEM

Store the CO2 bottles in adherence to any laws and guidelines that adhere to the storage of CO2 bottles. The manufacturer of the bottles, as well as the safety datasheet will inform you about these.

The CO2-Guns should ideally be stored at room temperature.

Clean the devices before storage.

## 8

### 3.7 CARING FOR THE DEVICES

The devices should be cleaned after the show. Remove any dirt and let the devices dry. The usage of pressurized air can help with that tremendously.





## 4 GENERAL SAFETY NOTES

The device may only be used if it is in good condition. Defective devices must be repaired by either the manufacturer, or an accredited service partner. Under no circumstances may such devices be used.

The CO<sub>2</sub>-Gun is intended for dual handed use (pistol- and frontal grip), and should be used as such. The CO<sub>2</sub>-Gun should only be used by trained personnel. We dis advise from letting kids or drunk persons handle the device.

The safety distances mentioned in the manual are to be adhered. All persons taking part in the gasprojector show(Actors and the likes) should be made aware of the safety distances, dangers and basic function of the device.

Before usage, the system should be checked for leak tightness, to prevent an unwanted escape of CO<sub>2</sub>. Should CO<sub>2</sub> be escaping at an unwanted location, all safety valves should be closed, and the dangerous area be left.

## 5 RECOMMENDED SAFETY DISTANCES

Ejection direction	Recommended distance
In effect direction	6 meters*
Radial around the effect	0,5 meters*

\*) The safety distances mentioned above are meant for loving beings and objects, that could be harmed by the CO<sub>2</sub> effect.

When used by trained pyrotechnical personnel, the safety distance mentioned above, can be changed according to local circumstances. For the positioning and calculation of the safety distances, the user is responsible in the end. We recommend talking to the local safety personnel.

## 6 TECHNICAL DATA

CO <sub>2</sub> -Gun	
Measurements	500x60x215mm
Weight	1,8kg
Case	Aluminium
CO <sub>2</sub> -hose connector	Hydraulics coupling, G 3/8", ISO 7241-1B
Fuel	Liquid-CO <sub>2</sub>



# **EG-Conformity declaration**

According to the Low Voltage Directive **2014/35/EU** and to the EG-guidelines for electromagnetic tolerance (EMC Directive) **2014/30/EU**

## **Manufacturer and representative**

explo  
Harald Kulterer  
Völkermarkterstrasse 240  
9020 Klagenfurt am Wörthersee  
Österreich  
+43 (0) 463 / 32 2 45

The sole responsibility for the issuing of this conformity declaration lies with the manufacturer.

## **Item of this declaration**

*Name:* CO2-Gun  
*Type and marketing name:* CO2-Gun  
*Model:* v1.0  
*Serial number:* 19-01000 to 19-09999

## **Applied norms:**

EN 60950-1:2006 / A1:2010+A2:2013+A11:2009+A12:2011  
EN 61000-3-2:2015-03  
EN 61000-3-3:2014-03

*Function:* The CO2-Gun is a handheld effect device used to create CO2 fog effects. The CO2-Gun is fueled by liquid CO2 (riser pipe from bottle).

**We hereby declare that the described machine, in its concept and build, as well as the variant brought onto the market by us, adheres to the basic safety- and healthguidelines of the EG-guidelines 2014/35/EU and 2014/30/EU. This declaration is void for any modifications made to the machine not coordinated with us.**

This declaration has been handed in in Klagenfurt a.W., on the 15.05.2019 by Mr. Harald Kulterer (Owner Explo Ignition systems).

  
IGNsystems  
Völkermarkterstraße 240  
9020 Klagenfurt a. W. / AUSTRIA  
Tel.: +43 (0)463 / 32 245