

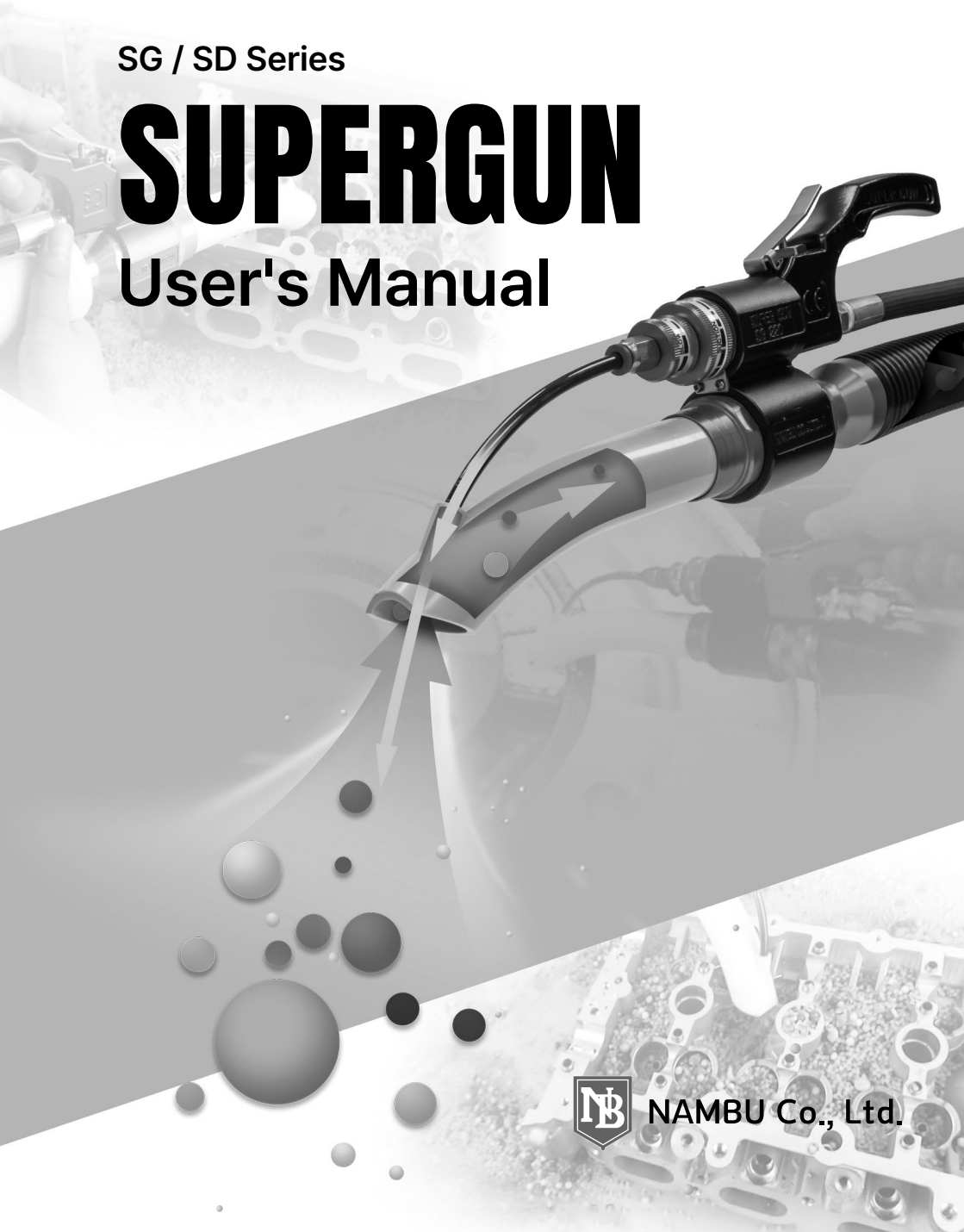
Replace Airgun with SUPERGUN!

CE ISO 9001

SG / SD Series

SUPERGUN

User's Manual



NAMBU Co., Ltd.

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01. Product features

Functional

- SUPERGUN has three functions: blowing, suction, blowing and suction.
- Excellent quickness makes it suitable for automation systems.
- It is possible to blow and suck in solids, gases, liquids, etc., and adjust the intensity of the function, and you can choose one among three types.
- It is possible to transfer and dust collection of liquids, gases, solids, etc.
- The inlet can be changed and replaced in various shapes to suit the intended use.

Affordability

- It is a semi-permanent product and has low maintenance costs.
- Tanks are optional, not mandatory, and can be used with alternative containers.

Safety

- SUPERGUN uses compressed air as a power source, does not use electricity, So it does not cause problems even if it is used for a long time, and there is no risk of electric shock.
- It is a versatile airgun that is essential for environmental improvement.
- There is no risk of explosion because there is no rotating body.

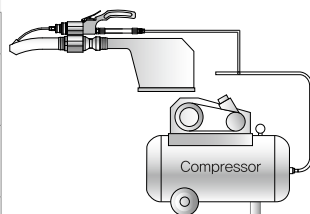
Convenience

- It has a simple structure and is easy to use.
- It is small and lightweight, making it convenient to move.

02. Terms of use

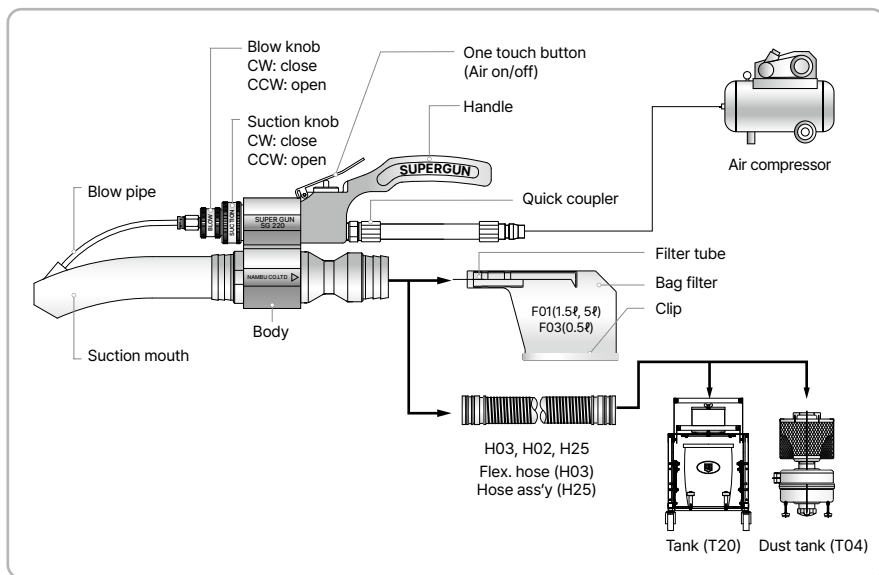
☑ Compressor Specifications

Model	SG10X/SD100	SG22X / SD220 / SD360
Output	5.5kW(7.5hp) or more	7.5kW(10hp) or more
Working pressure	4kgf/cm ² (57psi) or more	4kgf/cm ² (57psi) or more
Air consumption	934ℓ/mm or more	1,272ℓ/mm or more
Air hose	Ø8 or more	Ø12 or more
Tank capacity	150ℓ or more	150ℓ or more



03. Schematic diagram

Structures of SG10X / 22X



04. Functions and how to use

04-1. Suction function

- (1) Check the close status of the Suction & blow knob. (Closed state: rotate in close direction)
- (2) Connect the Quick coupler to the $\varnothing 12$ Air hose to the air inlet port.
- (3) Adjust the desired strength within 1/2 rotation of the suction knob. (Max: 1/2 turns)
- (4) After bringing the suction mouth close to the target material, operate it on / off with one touch button. (Toggle switch)

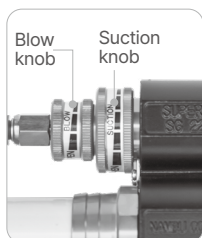
04-2. Blowing Function

- (1) Check the close status of the Suction & blow knob. (Closed state: rotate in close direction)
- (2) Connect the Quick Coupler to the $\varnothing 12$ Air hose to the Air inlet port.
- (3) Open the Blow knob. Adjust the desired strength of the Blow knob within 1/2 rotation. (Max: 1/2 turns)
- (4) After bringing the blowing mouth close to the target material, operate it on / off with one touch button. (Toggle switch)

04-3. Suction and spraying function

- (1) Check the close status of the Suction & blow knob. (Closed state: rotate in close direction)
- (2) Connect the Quick couple to the Ø12 Air hose to the air inlet port.
- (3) Rotate the suction knob 1/2 in the Open direction.
- (4) When using the simultaneous function of blowing and suction while operating on / off with one touch button after bringing the mouth close to the target substance, the suction force should be stronger than the blowing.
- (5) Simultaneous suction and spraying function application cases
 - Corners where the suction power does not reach, blind holes, etc.
 - If the hole is deep, lengthen the blow pipe to the depth of the hole.

04-4. Shapes and models according to function



SG220 / SG100
Choice of suction /
blow / suction and blow



SG221 / SG101
Suction only



SG222 / SG102
Constant suction /
selective blow



SG103 / SG223
Amplified blow
(Direction change)

04-5. Model-specific functions

Model \ Functions	Suction	Blow	Suction + Blow	Suction + Ion blow	Amplified blow	Direction change	Mounting	Remarks
SG100 SG220	●	●	●					
SG100M SG220M	●	●	●				●	Automation system
SG101 SG201	●							
SG102 SG202	●		●					
SG102G SG222	●			●				Static electricity removal
SG102MG SG222MG	●			●			●	Static electricity removal, Automation system
SG103 SG223	●				●	●		Confined and small space, Direction change
SG221F	●							Floor use exclusive
SD Series	●						●	Automation system

04-6. MULTI DUST COLLECTOR (T20, CT20)

(1) Position adjustment of the container

- Check the top diameter (\varnothing 285~ \varnothing 315mm) and height (360~380mm) of the container
- Height adjustment: Dust collection container base up/down adjustment.
- Adjustment of the container stopper moving forward or backward until the lower diameter of the vessel is centered on the base.

(2) How to use CT20

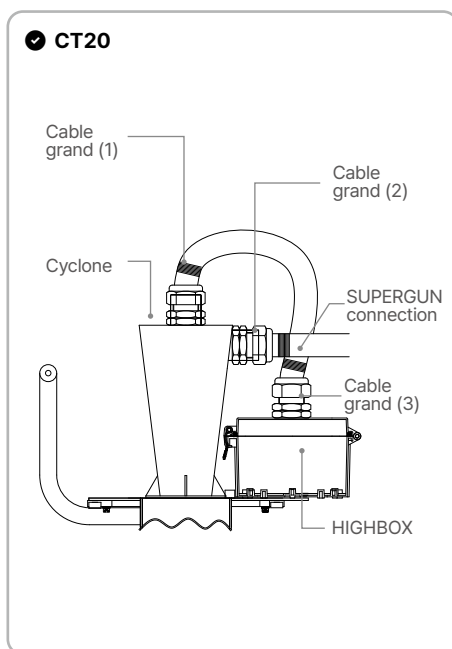
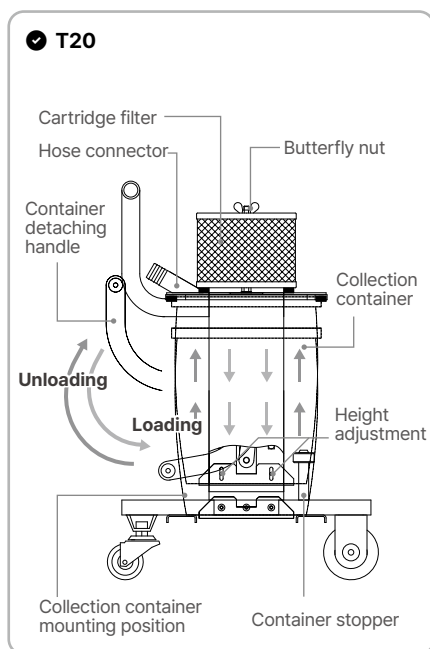
- Connect hose of cable gland (1) and cable gland (3)
- Connect cable gland (2) with SUPERGUN
- Make sure the lid of the HIGH BOX is closed.

(3) Container mounting

- Place the dust collection container on the base and remove the container
- Lower the handle down. (Check the upper packing fit)

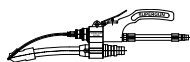
(4) Separate the container

- When emptying the debris collected in the container, raise "the container detaching handle" and remove the container.

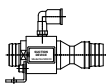


04-7. Configuration according to dust collection method

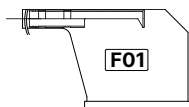
☛ Type 1 : With dry, small quantity



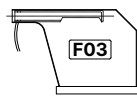
Potable type
SG10X / SG22X



Mounting type
SD100 / SD220 /
SG100M / SG220M

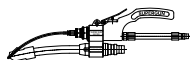


Bag filter (holding pouch)
F01 (1.5ℓ)

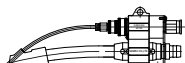


F03 (1.5ℓ)

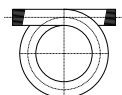
☛ Type 2 : With dry, in large quantities



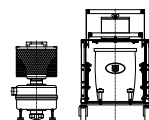
Potable type
SG10X / SG22X



Mounting type
SD100 / SD220 /
SG100M / SG220M



Hose
H20(Ø16) /
H25(exclusive 100S Ø19) /
H03(Ø32)

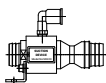


Tank
T04(Clean room use exclusive 4ℓ)
/ T20(20ℓ)

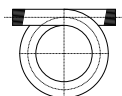
☛ Type 3 : When alternative container is used



Potable type
SG10X / SG22X



Mounting type
SD100 / SD220 /
SG100M / SG220M



Hose
H02(Ø16) / H03(Ø32)
exclusive hose

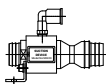


Alternative container (Sack, Tank)
Tank
Air vent installation

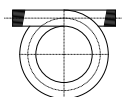
☛ Type 4 : For large amounts of dust and liquids



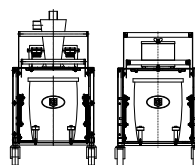
Potable type
SG10X / SG22X



Mounting type
SD100 / SD220 /
SG100M / SG220M



Hose
H20(Ø16) /
H03(Ø32)



Tank
Cyclone / T20(20ℓ)

05. Vacuum level and air consumption

● SG10X / SG22X / SD360

Model		Working pressure	4kgf/cm ²	5kgf/cm ²
			57psi	71psi
SG10x Series*	Vacuum level	mmHg	250	290
		mmAq	3,400	3,944
	Air consumption	ℓ/min	430	520
		SCFM	15	19
SG22x Series**	Vacuum level	mmHg	110	140
		mmAq	1,496	1,904
	Air consumption	ℓ/min	570	720
		SCFM	21	26
SD360	Vacuum level	mmHg	70	90
		mmAq	951	1,223
	Air consumption	ℓ/min	1,250	1,500
		SCFM	45	54

* SD100 vacuum level increased by approximately 20% over SG100

** SD220 vacuum level increased by approximately 20% over SG220

* The higher the pressure, the higher the vacuum degree and quantity of air consumption.

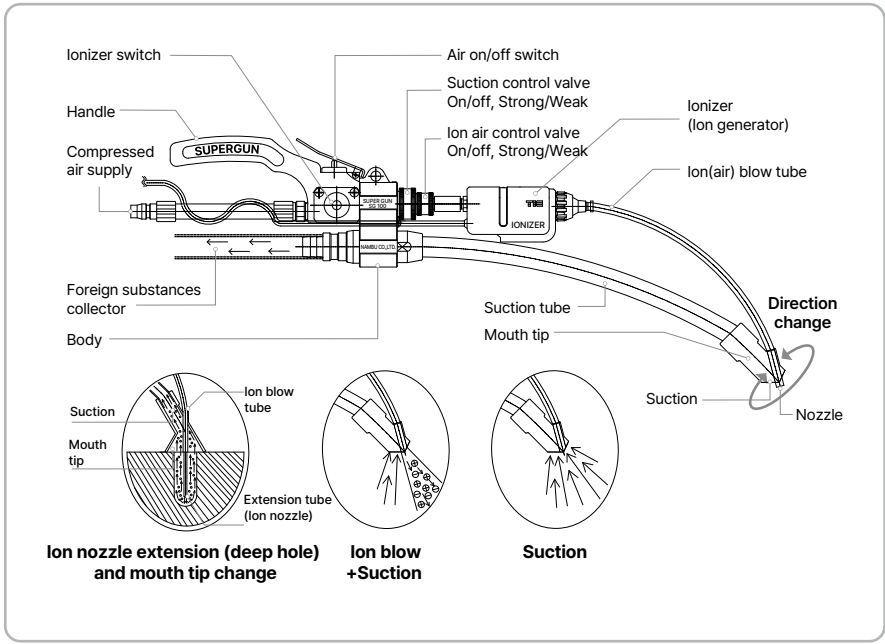
06. Field of use

- Sites where environmental improvement and safety accident prevention are required.
- On site using Airgun and vacuum cleaners.
- Wherever there should be a cleaning room (electronics, semiconductors, research labs, etc.).
- Processing and assembly sites (shipbuilding, aircraft, automobiles, electrical and electronics, steelworks, iron steelmaking, etc.).
- Food and confectionery, milling, cosmetics, woodworking, chemistry, tobacco manufacturing related sites
- Excellent quickness, so use with automation system.
- For removing chips and residues from places such as deep holes.
- Automotive and electrical and electronic mechanics.
- Where a small amount of foreign substances affects the product or in a small space
- Removes up to 99.97% of fine dust (0.3 μ m).
- Place where oil mist and explosive gas exist (explosion-proof)
- Ion gun: Pre-painting treatment, electronics assembly, plastic, semiconductor, LCD, automotive, printing, optical lens, coating, PCB, film fiber, pulp, etc.
- Jet gun: clean, dry, cool, transfer, wash, mix

07. Composite ion gun

- Models SG102MG, SG102G, SG222MG and SG222G are equipped with an ionizer for ionic air jetting (removal of static electricity), and intensity control.

Example of product name and mouth use



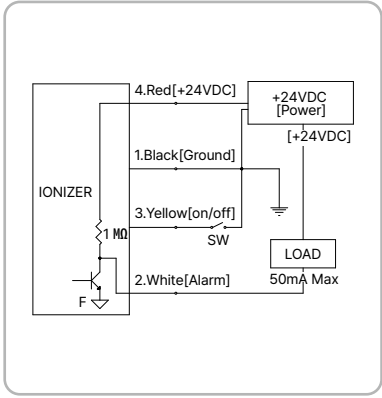
Operation method

Classification	Suction	Ion blow + Suction
Suction control valve	Always	Open
Ion air control valve		Close

Product operation status display

LED color	Light	H.V. State	Ion Emission
Red	ON	NG	NG
Green	OFF	Good	Good

Composite ion gun circuit diagram



✔ Specifications

Classification	Specifications
Pressure voltage	+24VDC
Ion generation method	Piezo HF-AC
Operating frequency	50kHz
Ion balance	< ± 15V
Ion balance adjustment	Auto
Discharge time	1.0sec. at 15cm (Air 3kgf/cm ²)
Display function	HV LED(G/R)
Discharge Pin	Titanium
Discharge Pin replacement	Only Pin
Air pressure	max. 5kgf/cm ² (N2, CDA)
Jet power	128ℓ/min(Air 3kgf/cm ²)
Air injection outer diameter	Ø6
Quantity of ozone generation	Under 0.05 ppm at 100mm

08. Precautions

Please observe the safety precautions in the manual before using this product.

- The suction function does not operate without a bag filter or flexible hose.
- Must not aim directly at a person using function as a spray. (Causes injury)
- Do not step on or throw the product during use.
- Do not use Bag filter (F01 / F03) directly with wet substances.
- The manufacturer is not responsible for failures caused by factitious disassembly or assembly.
- However, if there is any damage or breakdown during transportation, contact the place of purchase immediately.
- Wear earplugs when using for a long time. (AA Noise: 85dB at air 4kgf/cm²)
- Do not use it when there is a person close to the direction of the outlet.
- When sucking liquid, use a T20 tank, and when not in use, immediately clean it with a cartridge filter cleaning device before storing it.
- Before use, completely remove the outside dust from the air shower room before use.

09. Emergency measures

When suction power is insufficient

- Check if there is a blockage in the suction mouth and outlet, then remove it.
- Check whether the air pressure (pressure: 4kgf/cm² or more) and the feed flow are normal.
- It is effective when using an auxiliary tank.
- Check the tank capacity of the compressor in use. (See air consumption.)
- SG22X / SD220 / SD360: Compressor 7.5kW or more, Hose Ø12mm or more, Tank capacity 150ℓ or more are recommended
- SG10X / SD100: Compressor 5.5kW or more, Hose Ø8mm or more, Tank capacity 150ℓ or more are recommended
- When the air pressure is high, the vacuum degree increases, use the higher air pressure.
- Check whether the air discharge of the bag filter is smooth.
- In the event of blockage, clean or replace the filter.
- Bag filter's estimated lifespan : about 750~950 hours

10. Inspection report

Item	Contents
Manufacturer	Nambu Co., Ltd.
Address	12, Pyeongsan-ro 78beon-gil, Uichang-gu, Changwon-si, Gyeongsangnam-do ,51389, Republic of Korea
Model / Type reference	SUPERGUN
Serial number	
Test result	P
Date of issue	
Inspector	
Approver	Nambu Co., Ltd.

Item	Conditions	Knob operation	Vacuum level (mmAq)
Suction (4kgf/cm ²)		P	
Blow (4kgf/cm ²)		P	-
Suction and blow			P
Overpressure (11kgf/cm ²)		P	-
One touch button		P	-
Quick coupler		P	-
Finishing		P	-
Noise		4kgf/cm ²	
		85dB	

Note

1. If the test item meets the necessary conditions: P(ass)
2. If the test item does not meet the required conditions: F(ail)
3. If the test item does not apply the test object: N(A)

11. Warranty

Warranty benefits

- In order to benefit from the one-year warranty, the original purchaser must date this warranty and submit it as a purchase receipt to the manufacturer or local supplier within one year from the date of purchase.

Warranty period

- This warranty period is valid for one year calculated from the date of supply of the product from the supplier.
- There are no labor costs required of the purchaser for one year from the date of supply by the supplier.

Warranty conditions

- No warranty conditions apply to Accessory. (Bag filter, Flexible hose, Mouth, Cartridge filter, Hose plug socket, Rubber tube, etc.)

Paid repairs

- If this product is used inappropriately or altered.
- When the original part or accessory is replaced or used with an accessory or form of accessory that is not approved or recommended by the manufacturer.
- If the equipment is used against the manufacturer's instruction manual .
- Damage caused by nature (including mishandling).
- When it is determined that it has been repaired or altered by an unauthorized person or equipment.
- When it is determined that the product has been abused, accidentally, mishandled, or that the serial number has been removed or erased.

Warranty

- If normal use is performed in accordance with the contents of this manual, but a function problem occurs.

Warranty outside of Korea

- Any request for service shall be sent to the supplier from whom the product was purchased.
- If the Product is purchased outside of South Korea, the service request may be selected by the local supplier who will supply the warranty service under conditions limited by the contractor (warranty period, parts payment, work cost, etc.).

Service needs

- When service is required under this warranty, it must be provided with reasonable proof of the date of purchase.

Product name		
Serial number		
Where to buy		
Date of purchase		
Customer information	Name	
	Contact information	
	Address	



NAMBU Co., Ltd.



12, Pyeongsan-ro 78beon-gil, Uichang-gu, Changwon-si,
Gyeongsangnam-do, 51389, Republic of Korea

Tel : + 82-55-291-8620

Fax : + 82-55-291-8614

Email : nambu@supergun.co.kr

Web : www.supergun.co.kr

Thank you for choosing this product. We, NAMBU Co., Ltd., will do our best for the best quality with strict inspection so that you can always be satisfied with our products. SUPERGUN is protected by patent law. This manual is subject to change without notice for product performance.