iwata

Revolution

AIRBRUSH SERIES

HP-AR | HP-BR | HP-CR | HP-CR3 | HP-SAR | HP-BCR
Operating Instruction Manual

IR102-IM-SHP

IWATA 5 WAYS TO SPRAY

EFFORTLESS COVERAGE™

手頃で手軽

Iwata Revolution Series and NEO For Iwata Series airbrushes deliver soft, effortless coverage at low air pressures. Fine atomization is achieved with the smallest of air compressors, making these airbrushes a simple choice for medium spray applications and for anyone wanting to start airbrushing for the first time.

NEED ASSISTANCE ?

If you have any issues or warranty service questions, contact your local ANEST IWATA affiliate before returning to your place of purchase.

ANEST IWATA-MEDEA, INC.
Portland, Oregon U.S.A.
+1-503-253-7308 (M-F)
info@iwata-medea.com
www.iwata-airbrush.com

ANEST IWATA SOUTH-EAST ASIA CO., LTD.
Bangkok, Thailand
+66-(0)-2643-2870
www.anest-iwatasoutheastasia.com

ANEST IWATA SOUTH AFRICA (PTY) LTD.
Johannesburg, Republic of South Africa
+27-11-463-2169/2265/2223
www.anest-iwata.co.za

ANEST IWATA CORPORATION
Yokohama, Japan
+81-(0)45-591-1111
www.anest-iwata.co.jp

ANEST IWATA STRATEGIC CENTER
Cardano al Campo, Italy
+39-0331-733120
www.anest-iwataeu.com

ANEST IWATA SHANGHAI
Shanghai, China
+86-(0)21-6407-9713 / 15 / 16
www.anest-iwata-sh.com

ANEST IWATA RUS LLC
Moscow, Russia
+7-495-938-77-28
www.anestiwata.ru

ANEST IWATA AUSTRALIA PTY LTD.
Mt. Druitt, NSW
+61-(02)-9853-2000
www.anest-iwata.com.au

ANEST IWATA (U.K.) LTD.
Neots Cambs, England
+44-(0)1480-405419
www.anest-iwata.co.uk

ANEST IWATA MOTHERSON LTD.
Uttar Pradesh, India
+91-(0)120-4600500 / 14 / 17
www.anest-iwata.co.jp

CENTURY TRADING CO., LTD.
Seoul, Korea
82-2-2163-0300
www.centrading.co.kr



Iwata Revolution HP-AR

- *Internal mix airbrush*
- *Ergonomic handle*
- *Spray pattern from .75" down to hairlines*
- *Smaller nozzle and needle combination allows for detailed spraying in smaller areas*
- *Redesigned trigger mechanism and larger needle chuck nut for easy assembly*
- *Replaceable internal PTFE needle packing for use with solvent-base paints*
- *Gravity feed airbrush designed for quick changes of custom mixed colors*
- *Best for spraying small amounts of color in small areas*



Iwata Revolution HP-BR

- *Internal mix airbrush*
- *Ergonomic handle*
- *Spray pattern from .75" down to hairlines*
- *Smaller nozzle and needle combination allows for detailed spraying in smaller areas*
- *Replaceable internal PTFE needle packing for use with solvent-base paints*
- *Gravity feed airbrush designed for quick changes of custom mixed colors*
- *Best for spraying small amounts of color in small areas*



Iwata Revolution HP-SAR

- *Siphon feed, single action airbrush*
- *Perfect for those seeking high performance in a single-action design*
- *Great for single color applications in moderate size to background spraying*



Iwata Revolution HP-BCR

- *Internal mix airbrush*
- *Ergonomic handle*
- *Spray pattern from 1.5" down to fine lines*
- *Larger nozzle and needle combination allows easier spraying of heavier, thicker paints*
- *Replaceable internal PTFE needle packing for use with solvent-base paints*
- *Siphon feed model makes it easy to swap bottle of specific colors quickly*



Iwata Revolution HP-CR

- *Internal mix airbrush*
- *Ergonomic handle*
- *Spray pattern from 1.5" down to fine lines*
- *Larger nozzle and needle combination allows easier spraying of heavier, thicker paints*
- *Replaceable internal PTFE needle packing for use with solvent-base paints*
- *Gravity feed airbrush designed for quick changes of custom mixed colors*
- *Versatile for moderate detail to background spraying*



Iwata Revolution HP-CR3

- *Internal mix airbrush*
- *Ergonomic handle*
- *Spray pattern from .75" down to hairlines*
- *Smaller nozzle and needle combination allows for detailed spraying in smaller areas*
- *Replaceable internal PTFE needle packing for use with solvent-base paints*
- *Gravity feed airbrush designed for quick changes of custom mixed colors*

Compressor

Choose an appropriate compressor for your Revolution airbrush. The Iwata Sprint Jet and Smart Jet compressors are good beginner's choices and will provide approximately 20-30 psi of air pressure to the Revolution.

Assembly (BCR, SAR)

1. Screw the airhose onto the compressor.
2. Screw the airhose onto the airbrush.
3. If using a Power Jet, Power Jet Lite or Power Jet Pro compressor, adjust the pressure to between 30 and 45 psi.
4. Check for any air leaks in the compressor or airhoses.
5. Fill the bottle with Medea Airbrush Cleaner, or the appropriate solvent for your paint.
6. Attach the bottle to the airbrush by pushing the bottle stem into the bottle joint of the airbrush body.
7. Point the airbrush away from you.
8. Press down on the main lever (#6 or #7) to start the flow of air through the airbrush.
9. BCR: Pull back on main lever to open the nozzle of airbrush.
10. SAR only: Unscrew the fluid adjustment knob (#15) to open the airbrush nozzle and press down on trigger.
11. Spray cleaning solution through the airbrush to rinse out any residual pre-testing pigment.

(AR, BR, CR, CR3)

1. Screw the airhose onto the compressor.
2. Screw the airhose onto the airbrush.
3. If using a Power Jet, Power Jet Lite or Power Jet Pro compressor, adjust the pressure to between 30 and 45 psi.
4. Check for any air leaks in the compressor or airhoses.
5. Place a few drops of cleaner into the gravity cup or slot.
6. Point the airbrush away from you.
7. Press down on the main lever (#6) to start the flow of air through the airbrush.
8. Pull back on the main lever to open the nozzle of the airbrush.
9. Spray cleaning solution through the airbrush to rinse out any residual pre-testing pigment.

Fine-Line Spray (AR, BR, BCR, CR, CR3)

1. Depress the main lever (#6) to start airflow.
2. Position the airbrush close to the surface, between 1/16 and 1/2 inch is common.
3. Pull the main lever back slightly to start the flow of paint.

Line thickness can be controlled by adjusting the distance between the airbrush and the surface and also by varying the paint flow by manipulating the main lever's position.

An extremely narrow line can be obtained by carefully removing the needle cap (#1) and positioning the airbrush closer to the surface.

CAUTION: The needle and nozzle are very delicate. Even a slight bend on the tip of the needle can adversely effect the spray pattern.

Fine-Line Spray (SAR)

1. Depress the main lever (#7) to start airflow.
2. Position the airbrush close to the surface, between 1/16 and 1/2 inch is common.
3. Unscrew the fluid adjustment knob (#15) slightly to start the flow of paint.

Line thickness can be controlled by adjusting the distance between the airbrush and the surface and also by varying the paint flow by manipulating the fluid adjustment knob's position.

Wide-Line and Background Spraying (AR, BR, BCR, CR, CR3)

1. Depress the main lever (#6).
2. Position the airbrush further away from the surface, from 1/2 to 6 inches is common.
3. Pull the main lever back much farther releasing more paint to cover the bigger area.

Increase the distance between the airbrush and painted surface to control the line's width. Increasing the air pressure will also effect the spray width. The Revolution's maximum usable line width is approximately 2-1/2 inches.

Wide-Line and Background Spraying (SAR)

1. Depress the main lever (#7).
2. Position the airbrush farther away from the surface, from 1/2 to 6 inches is common.
3. Unscrew the fluid adjustment knob (#15) back much farther releasing more paint to cover the bigger area.

Increase the distance between the airbrush and painted surface to control the line's width. Increasing the air pressure will also effect the spray width. The Revolution's maximum usable line width is approximately 2-1/2 inches.

Ergonomic Handle

The ergonomic handle (#13 and #14) is a special feature on the Revolution. It helps prevent fatigue from extended airbrush use and provides a balanced feel in your hand.

Stippling

Iwata airbrushes are designed to produce a wide range of stippling textures.

1. Unscrew the needle cap (#1).
2. Unscrew the nozzle cap (#2).
3. Adjust the air pressure between 5 and 50 psi.

Lower air pressure will give you coarse stipple whereas higher pressure will provide a fine stipple effect. Paint viscosity will also effect the stippling texture.

Air Pressure

For the Revolution, working pressures generally vary between 20 and 60 psi, depending on what type of work is being done and what textures are desired. A good working pressure may average around 25 psi. The viscosity of the paint and your desired spray characteristics will also effect your ideal pressure. As a general rule, larger amounts of paint or thicker paints, will be sprayed with higher pressures.

WARNING: Do not exceed 100psi.

Paint Preparation

For non-specific airbrush paints proper preparation, including filtering the paint through a nylon mesh, is recommended for best performance. Paint should be thinned with its proper solvent. It is best to prepare paint relatively thin and make repeated passes across the work to achieve the desired shade. This will also improve the quality of your work and decrease the cleaning time of your airbrush.

Safety Tips

- Always spray in a well-ventilated area.
- Do not spray solvent-based (flammable) paints around open flames.
- Use the appropriate respirator to safely filter out the paint vapors particular to the kind of paint you are using.
- Wear eye protection to prevent paint contact with eyes.
- Never use air pressure that exceeds the airbrush's limit. (98 psi)

MAINTENANCE

1. Remove the paint bottle.
2. Attach a bottle containing the appropriate cleaning solution.
3. Spray until the solution sprays clear.
4. Remove the bottle of cleaning solution.
5. Spray air until the airbrush sprays dry.
6. Attach a bottle containing the next color.
7. Repeat cleaning procedure when finished.

1. Dump out the color cup's excess paint.
2. Rinse the cup with the appropriate cleaning solution.
3. Use a paper towel to wipe out any left-over paint.
4. Fill the bottom of the cup with cleaner.
5. Spray cleaner until the spray is clear.
6. Add the next color to the color cup.
7. Repeat cleaning procedure when finished.

1. Unscrew the handle (#13) from the airbrush body.
2. Loosen the needle chucking nut (#12).
3. Gently pull the needle (#11) straight out.
4. Fold a soft cloth damp with cleaner over the needle.
5. Rotate the needle to gently wipe the residual paint off.
6. Carefully insert the needle into the airbrush until it seats fully against the nozzle (#3).
   - If the needle stops abruptly, retract and examine the trigger mechanism for proper assembly and re-insert the needle.
7. Tighten the needle chucking nut finger tight.
   - Pull the main lever back and forth to visually confirm the needle's ability to move.
8. Screw the handle back onto the airbrush body.

1. Unscrew the handle (#14) from the airbrush body.
2. Loosen the needle chucking nut (#12).
3. Gently pull the needle (#11) straight out.
4. Fold a soft cloth damp with cleaner over the needle.
5. Rotate the needle to gently wipe the residual paint off.
6. Screw the fluid adjustment knob (#15) fully into the airbrush body.
7. Carefully insert the needle into the airbrush until it seats fully against the nozzle (#3).
   - If the needle stops abruptly, retract and examine the trigger mechanism for proper assembly and re-insert the needle.
8. Tighten the needle chucking nut finger tight.
9. Screw the handle back onto the airbrush body.

MAINTENANCE

Before Each Session

Spray water or the appropriate paint solvent through the airbrush to make sure the airbrush is working properly.

After Each Session

Or any time the airbrush becomes clogged:

1. Increase the air pressure.
2. Spray cleaning solution for a short time.
3. Clean the needle if necessary

Cleaning the airbrush this way helps clean the paint passage, the nozzle and the needle thoroughly.

Periodically

To ensure smooth main lever action lubricate the needle (#11) and the main lever mechanism (#6 or #7) regularly.

1. Unscrew the handle (#13 or #14).
2. Loosen the needle chucking nut (#12).
3. Remove the needle.
4. Coat the needle lightly with a high-quality lubricant, like Medea Super Lube.
5. Wipe the needle with a soft, clean cloth, leaving a light coat of lube behind.
6. Re-insert the needle gently into the airbrush.
7. Tighten the needle chucking nut.
8. Screw the handle onto the airbrush body.

Drip one drop of lube into the slot directly behind the main lever and as close to the main lever as possible.

DO NOT over-lube the needle or the main lever mechanism, since it is possible to transfer excess lube into the nozzle causing severe paint flow problems.

DO NOT use light machine oil or WD-40 for lubrication. These will cause the needle to stick as it moves through the needle packing o-ring.

CAUTION: If it becomes absolutely necessary to dismantle the airbrush remember that in most situations tools are not needed.



NEVER soak your entire airbrush in any liquid. NEVER store your airbrush with spray medium or cleaning agents in the fluid cup.

TROUBLESHOOTING PROCEDURES

Symptom	Problem	Solution
•Bubbles in color cup or bottle	•Loose nozzle cap	•Tighten (#2) finger tight
	•Improper nozzle to body connection	•See nozzle (#3) to reseat the nozzle
	•Cracked or damaged nozzle	•See nozzle (#3) to replace the nozzle
•Double Line	•Dried paint on needle tip (Tip-Dry)	•See cleaning the needle
	•Dirty airbrush	•See cleaning the airbrush between colors •See cleaning the needle
	•Debris on nozzle tip	•See nozzle (#3) and clean nozzle with toothpick
	•Bent needle	•See needle (#11) to replace needle
	•Cracked or damaged nozzle	•See nozzle (#3) to replace the nozzle
•Not Spraying	•Loose needle chucking nut	•Finger tighten (#12)
	•Needle stuck	•Pull/break-free needle (#11)
	•SAR only: Reset needle	•See cleaning the needle (SAR)
	•Improper air pressure	•See specific compressor instructions to raise or lower the air pressure
	•Paint too thick	•See paint preparation
	•Bottle vent hole is plugged	•Use pushpin to unclog vent hole
	•Clogged nozzle	•See nozzle (#3) and clean nozzle with toothpick
	•Cracked or damaged nozzle	•See nozzle (#3) to replace the nozzle

⚠ **Nozzle contains Nickel.**

TROUBLESHOOTING PROCEDURES		
Symptom	**Problem**	**Solution**
•Skipping	•Dried paint on needle tip (Tip-Dry)	•Clean with cotton swab dipped in cleaner
	•Pigment too thick	•See paint preparation
	•Air pressure too high	•See specific compressor instructions to lower the air pressure
	•Improper nozzle to body connection	•See nozzle (#3) to reseat the nozzle
	•Dirty airbrush	•See cleaning the airbrush between colors •See cleaning the needle
	•Cracked or damaged nozzle	•See nozzle (#3) to replace the nozzle
•Spattering	•Dried paint on needle tip (Tip-Dry)	•Clean with cotton swab dipped in cleaner
	•Pigment build-up in needle cap	•Unscrew #1 and clean with cotton swab
	•Air pressure too low	•See specific compressor instructions to raise the air pressure
	•Pigment too thick	•See paint preparation
	•Dirty airbrush	•See cleaning the airbrush between colors •See cleaning the needle
•Trigger sticks (back and forth)	•Dirty airbrush	•See cleaning the airbrush between colors •See cleaning the needle
•Trigger sticks (up and down)	•Dried out air valve packing o-ring	•Lube trigger shaft

⚠ **Nozzle contains Nickel.**

REPLACEMENT PARTS AND ACCESSORIES

Nozzle (#3)

In time, the nozzle may wear or be damaged and may need to be replaced.

1. Unscrew the handle (#13 or #14).
2. Loosen the needle chucking nut (#12).
3. Gently pull the needle (#11) part way back. It doesn't need to be fully pulled out.
4. SAR Only: Screw the fluid adjustment knob fully into the airbrush body.
5. Unscrew the nozzle cap (#2)
6. Unscrew the nozzle counter-clockwise with the provided wrench.
7. Screw the new nozzle into the airbrush body with your fingers.
8. Slightly tighten the nozzle with the provided wrench.
   • DO NOT OVER TIGHTEN!
9. Screw the nozzle cap onto the airbrush body.
10. Push the needle all the way forward until it seats with the new nozzle.
11. Tighten the needle chucking nut.
12. Screw the handle onto the airbrush body.

TIP: Keep a spare nozzle on hand for unforeseen accidents.

⚠ **Nozzle contains Nickel.**

Needle (#11)

Iwata needles are made of precision ground and hardened stainless steel that will withstand prolonged usage. They are, however, subject to easy physical damage because of the long tapered, extremely fine tip. If the needle point becomes severely bent, it must be straightened before pulling it back through the nozzle. If not, the bent needle might damage the nozzle as it's pulled through.

TIP: Keep a spare needle on hand for unforeseen accidents.

Preset Handle

(Optional Accessory for AR, BR, BCR, CR & CR3)

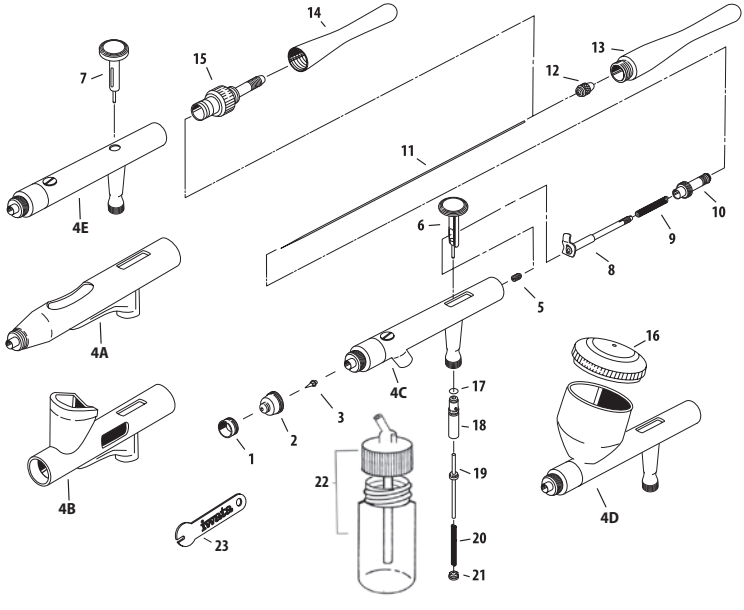
The Preset Handle replaces the handle (#13). A threaded adjusting screw mounted behind the handle limits the distance the main lever can be pulled back. This provides accurate control of paint volume and is especially useful when doing repetitive, precision work.

Quick Disconnect (Optional Accessory)

A quick disconnect joint is screwed onto the airhose and a quick connect adapter is screwed onto each airbrush. When using multiple airbrushes the quick disconnect joint facilitates changing airbrushes on the same airhose quickly.

Color Bottles (Optional Accessory for BCR and SAR)

Iwata offers a wide assortment of bottles for every application.


14
15
7
13
12
11
6
10
9
8
5
4E
4A
4C
16
17
18
3
2
1
19
22
4B
4D
20
23
21

#	ITEM DESCRIPTION		PRICE CODE	ITEM #	HP-AR	HP-BR	HP-BCR	HP-CR	HP-CR3	HP-SAR
1	Needle Cap	R3	A	I7012	■	■	x	x	■	x
		R5	A	I7011	x	x	■	■	x	■
2	Nozzle Cap	R3	C	I7022	■	■	x	x	■	x
		R5	C	I7021	x	x	■	■	x	■
3	Nozzle	R3	E	I7042	■	■	x	x	■	x
		R5	E	I7041	x	x	■	■	x	■
4A	HP-AR Body*		-	-	■	x	x	x	x	x
4B	HP-BR Body*		-	-	x	■	x	x	x	x
4C	HP-BCR Body*		-	-	x	x	■	x	x	x
4D	HP-CR / HP-CR3 Body*		-	-	x	x	x	■	■	x
4E	HP-SAR Body*		-	-	x	x	x	x	x	■
5	Needle Packing Screw Set (PTFE)	R3	B	I1257	■	■	x	x	■	x
		R5	B	I7251	x	x	■	■	x	■
6	Main Lever		C	I6121	■	■	■	■	■	x
7	Main Lever		C	I6122	x	x	x	x	x	■
8	Needle Chucking Guide w/Aux Lever		C	I1157	■	■	x	x	■	x
			C	I7151			■	■	x	x

#	ITEM DESCRIPTION		PRICE CODE	ITEM #	HP-AR	HP-BR	HP-BCR	HP-CR	HP-CR3	HP-SAR
9	Needle Spring		A	I1351	x	x	■	■	x	x
			A	I1352	■	■	x	x	■	x
10	Spring Guide		A	I7701	■	■	■	■	■	x
11	Needle	R5	B	I6171	x	x	■	■	x	■
		R3	B	I0751	■	■	x	x	■	x
12	Needle Chucking Nut		A	I1202	■	■	■	■	■	■
13	Ergonomic Handle		D	I7191	■	■	■	■	■	x
	Preset Handle		D	I1552	OPT	OPT	OPT	OPT	OPT	x
	Preset Cutaway Handle		G	I1556	OPT	OPT	OPT	OPT	OPT	x
14	Ergonomic Handle			I7192	x	x	x	x	x	■
15	Fluid Adjustment Knob		D	I7221	x	x	x	x	x	■
16	Lid		C	I6181	x	x	x	■	■	x
17	Air Valve O-ring		B	I5801	■	■	■	■	■	■
18	Valve Guide Body		B	I6081	■	■	■	■	■	■
19	Air Valve		A	I6091	■	■	■	■	■	■
20	Air Valve Spring		A	I0351	■	■	■	■	■	■
21	Air Valve Guide Screw		B	I6111	■	■	■	■	■	■
22	Bottle 1 oz / 30 ml		-	A4701	x	x	■	x	x	■
23	Spanner		A	I1651	■	■	■	■	■	■

■ = yes x = no OPT = optional

**Replacement parts not available.*



All Iwata airbrushes are warranted against all manufacturing defects of material and manufacture or workmanship for a period of FIVE years from date of purchase. This warranty does not cover needles, nozzles, o-rings and internal packings since these parts need to be replaced occasionally due to normal wear. Any other parts or materials that are or become defective so as not to be usable within this period will be repaired or replaced. This warranty does not cover damage caused by negligence or airbrushes which have been altered or abused in any way.

iwata

www.iwata-airbrush.com

©2026 Anest Iwata-Medea, Inc. All rights reserved.