

maxell

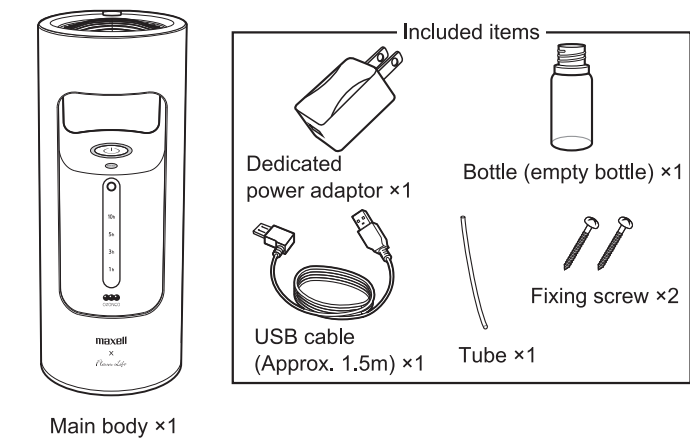
Anti-Bacterial Air Freshener with Aroma Diffuser Function

MXAP-FA100

Instruction Manual

Thank you for purchasing this MAXELL product. Before use, make sure to read this Instruction Manual and use the product correctly and safely. If additional information is included in other attached documents, make sure to see it.

Confirmation of packaged items



1 Introduction

Keep the following in mind when reading the Instruction Manual.

- This Instruction Manual may be subject to change without prior notice.
- In order to improve the product, external appearance or part of the specifications may be subject to change without prior notice.
- Unauthorized duplication of part or all of this Instruction Manual without permission is prohibited except for the case of personal use. In addition, do not reprint this Instruction Manual without permission.

Disclaimer (See the warranty certificate for details of the warranty.)

- We assume no responsibility for any damage caused by fire, earthquake, action by any third party, other accidents, customer's intention or fault, incorrect use, or use under other abnormal conditions.
- We assume no responsibility for any damage caused by any usage not described in this Instruction Manual.
- We assume no responsibility for any damage caused by malfunction due to combination with connection equipment and devices.
- This product is not intended for use with equipment and devices related to human life such as medical equipment and devices, nuclear equipment and devices, aerospace equipment and devices, transportation equipment, and equipment and devices which require a high standard of reliability. We assume no responsibility if this product is used for the control systems of these types of equipment and devices and if any injury or fire occurs due to failure of the product.

Ozone concentration (ppm)	Influence
0.01	Person who has a sensitive sense of smell senses ozone odor.
0.02	Senses ozone odor (acclimates after a while).
0.06	Environmental baseline concentration of photochemical oxidant (Japan Ministry of the Environment)
0.1	Senses strong ozone odor. Irritation to nose and throat. Acceptable concentration in working environment (Japan Society for Occupational Health)

*With reference to the ozone handbook of the Japan Ozone Association
※Ozone concentration of the product is designed to be 0.06ppm or less.
(When the product is used in a space described in the recommended applicable range of the installation method in "2 How to use.")

2 Safety Precautions

	WARNING	Indicates the degree of danger in which incorrect handling may result in death or serious injury*1 to a user.
	CAUTION	Indicates the degree of danger or the state of damage in which incorrect handling may result in slight injury*2 to a user or damage to property*3.

*1: Serious injury means injury with aftereffects such as loss of sight, burns, electric shock, bone fracture or poisoning and injury which requires hospitalization or long-term hospital visits for medical treatment.
*2: Slight injury means injury, burns, or electric shock which does not require hospitalization or long-term hospital visits for medical treatment.
*3: Damage to property means consequential damage related to house, household goods and livestock or pets.

Examples of Symbol		Symbol  prohibits an action in handling of the product. Specific prohibited content is shown in or near the symbol by picture or words. (Example:  Do Not Disassemble)
		Symbol  forces a user to perform an action based on the instruction in handling of the product. Specific content forced is shown in or near the symbol by picture or words. (Example:  Disconnect a plug from the outlet.)

**WARNING**

- Do not use the product in a place where a ventilation system is not available.
- Do not place any object within 30cm from the ozone outlet and the aroma spraying port.
- Do not bring your face close to the ozone outlet and the aroma spraying port.
- Select an operation mode suitable for a space in which the product is used. Confirm the recommended applicable range, and do not use the product in a space narrower than this range.
→ See the recommended applicable range of the installation method in "4 How to use." Use of the product in an improper environment may result in a hazard to the human body or pets, and damage to property.
- Do not use the product in a place where there is any flame, oily smoke, inflammable gas or metallic dust. Otherwise, ignition or smoking may occur.
- When using or storing the product, keep it out of the reach of children. Otherwise, electric shock or injury may occur.
- When using the product in an environment where a small animal may live, pay special attention to the condition of any small animal.
- Note that items that rust easily and natural rubber will easily deteriorate if they are exposed to ozone.
- When concerned about an ozone-specific odor or feeling any change in physical condition such as a headache during use, stop use of the product and ventilate the room. Also, consult a doctor.
- A person having an existing medical condition such as asthma should consult a doctor before use.

**WARNING**

When an abnormal condition or failure occurs

- Stop use of the product immediately when an abnormal condition or failure occurs, and disconnect the power adaptor from the outlet.**
When sm oke, abnormal odor or noise emits from the product, or when water or a foreign substance has entered inside the product, immediately stop use of the product and disconnect the power adaptor. Use of the product as it is may result in smoking, heat generation, ignition or electric shock.
- Stop use of the product immediately at the time of dropping or breaking.**
Use of the product as it is may result in heat generation, ignition, electric shock or injury.

Installation and use

- Do not use the product in a place where a ventilation system is not available.**
- Confirm the recommended applicable range, and do not use the product in a space narrower than this range.**
→ See the recommended applicable range of the installation method in " 2 How to use."
- Do not place any object within 30cm from the ozone outlet and the aroma spraying port.**
Use of the product in an improper environment may result in a hazard to the human body or pets, and damage to property.
- Do not use the product in a place where there is any flame, oily smoke, inflammable gas or metallic dust.**
Otherwise, ignition or heat generation may occur.
- Do not use the product in a humid place.**
Do not use the product in a bathroom, on a beach, on a waterfront or outdoors. In addition, do not use the product in a room where a humidifier operates excessively. Otherwise, electric shock or ignition may occur.
- Do not use the product in a place where water may be splashed over the product.**
Otherwise, electric shock or ignition may occur.

Main body, power adaptor and USB cable

- Do not repair, alter or disassemble these parts.**
Otherwise, heat generation, ignition, electric shock or failure may occur.
- Keep dry.**
Dot not wet these parts with water or pour water on them. Otherwise, heat generation, electric shock or failure may occur.
- Do not put into a fire.**
Do not throw these parts into a fire or heat them. Otherwise, heat generation or ignition may occur.
- Do not put these parts into a refrigerator.**
Otherwise, failure may occur.
- Do not put these parts into a cooking appliance including a microwave oven or a high pressure container.**
Otherwise, smoking, heat generation or ignition may occur.

When using or storing these parts, keep them out of the reach of children and animals.
Otherwise, electric shock or injury may occur.

Do not use these parts with wet hands.
Otherwise, electric shock or failure may occur.

Main body

- Take power only from the USB port.**
Use the included power adaptor. Using other power exceeding the rated 5V of the USB may result in heat generation, ignition, failure, electric shock or injury.

**WARNING**

Main body (continued)

- Do not insert your finger or any foreign substance (such as metal) into the ozone outlet, inlet, and aroma spraying port.**
Otherwise, electric shock or injury may occur.
- Do not put drinking water, cigarette ash or combustible objects into the inside of the main body from the ozone outlet, inlet, and aroma spraying port.**
Otherwise, electric shock or ignition may occur.
- Do not cover the ozone outlet, inlet, and aroma spraying port with a hand or an object.**
Otherwise, electric shock or failure may occur.
- Do not remove the bottle adaptor and the essential oil bottle during operation.**
If they are removed during operation, essential oil may blow out and contaminate the surrounding area.
- Do not intentionally inhale the essential oil sprayed from the aroma spraying port.**
Because the essential oil is concentrated and highly purified oil, physical condition may be affected. (For example, you may feel ill.)

Power adaptor and USB cable

- Use only the dedicated power adaptor and USB cable.**
Otherwise, electric shock or ignition may occur.
- Use these parts only with the specified voltage.**
Otherwise, electric shock or ignition may occur. Input power for the power adaptor of the product is AC100-240V.
- Do not use a loosened outlet.**
Do not use an outlet which is loosened when the power adaptor is inserted. Otherwise, electric shock or ignition may occur.
- Do not cover the power adaptor with a cloth or cover.**
Otherwise, heat may be trapped and the case may be deformed, resulting in electric shock or ignition.
- Do not use a damaged power adaptor and USB cable.**
Otherwise, electric shock or ignition may occur.

Make sure to insert the power adaptor completely.
Use of the product with the power adaptor incompletely inserted may result in electric shock or fire.

Maintenance

- Before caring for the product, make sure to disconnect the power adaptor.**
Otherwise, electric shock or ignition may occur.
- Periodically remove dust on the power adaptor.**
Periodically remove dirt and dust. Otherwise, humidity may cause an insulation defect, resulting in a fire.
- Make sure to disconnect the power adaptor if the product will not be used for a long time.**
Otherwise, insulation deterioration may result in electric shock or fire from a short circuit.

**CAUTION**

Installation and use

- Do not place the product in an unstable location.**
Do not place the product on an uneven stand or on an inclined surface. Otherwise, the product may drop or fall, resulting in injury or failure. In addition, essential oil may spill or splash from the spraying port, and may contaminate the surrounding area.
- Do not place the product in a humid or dusty place.**
Do not place the product in a bathroom, near a humidifier or cooking counter or in a dusty place. Otherwise, heat generation, ignition or electric shock may occur.
- Do not place the product near a TV set or radio.**
Otherwise, image distortion or noise may occur.
- Do not place the product in direct sunlight or in a place with abnormally high temperatures.**
Otherwise, the surface of the device and parts may deteriorate, and additionally, heat generation or ignition may occur. Do not place the product in a closed vehicle, in direct sunlight or near a heating appliance such as a stove.
- Do not turn on the product when condensation occurs on the product.**
A rapid change in environmental temperature may result in condensation inside the product. When condensation occurs, leave the product for a while with the power off.
- When using the product in an environment with pets, consult a veterinarian.**
Sprayed essential oil may affect pets.
- Install the product in a place where essential oil is not directly sprayed on walls, furniture, electric appliances, curtains and clothes.**
Sprayed essential oil may dissolve coatings or leave stains. If essential oil adheres, immediately wipe it off.
- When hanging the product on a wall, make sure to fix the product securely.**
When hanging the product on a wall, make sure to fix the product securely in order to prevent it from dropping. Otherwise, injury or failure may occur.

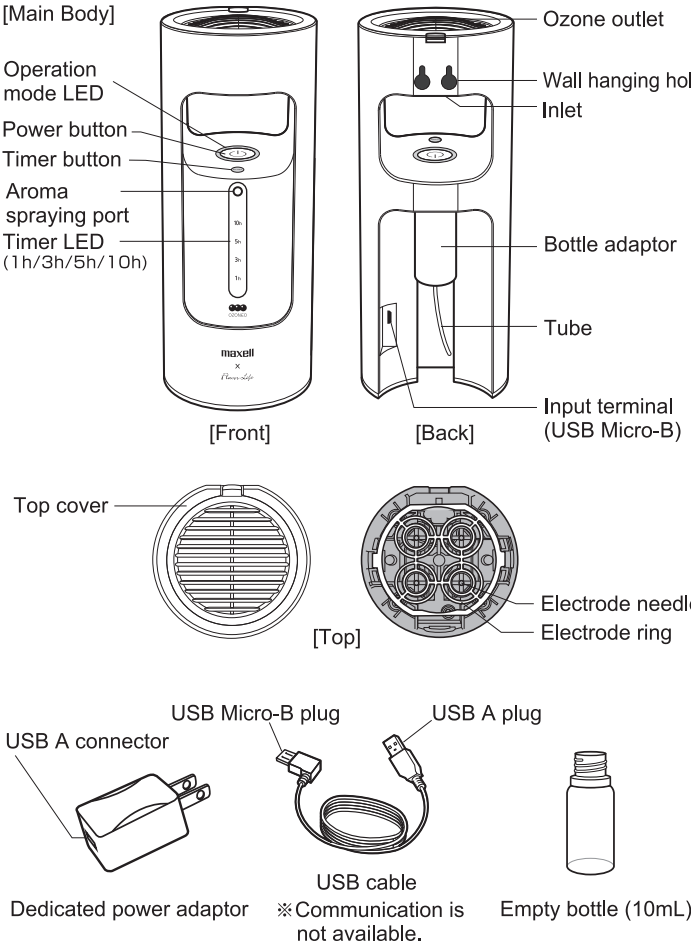
Bottle

- Do not drop, give impact or apply excessive force to the bottle.**
Otherwise, the bottle may be damaged, resulting in injury.

Maintenance

- Do not use chemicals.**
When wiping the main body, do not use benzine, thinner or alcohol, etc. In addition, do not use an electrical contact cleaner. Otherwise, the exterior may be damaged and parts may dissolve.
- When removing the bottle adaptor, make sure to remove the USB cable in advance.**
If the bottle adaptor is removed with the USB cable connected, the USB cable may strike with your hand, resulting in injury.

3 Name of Each Part



4 How To Use

[Recommended Applicable Range]
Confirm the area of a room where this product is to be used before installation. Use the product only in the recommended applicable range.
Anti-bacterial deodorizing mode: Approx.10 ~ 23m²※
Aroma diffuser mode : Approx.10 ~ 66m²※
(Low: 10m² / Mid: 23m² / High: 66m²)

※Guides based on our test results (Effectiveness differs depending on the ambient environment and operating time.)

Operation mode	LED display
Aroma diffuser mode (Low: 10m²)	Flashes green (One time)
Aroma diffuser mode (Mid: 23m²)	Flashes green (Two times)
Aroma diffuser mode (High: 66m²)	Lights up green
Anti-bacterial deodorizing mode	Lights up blue

※The power is turned OFF and the operation mode LED goes off when an abnormal condition occurs.

Use of essential oil

- Make sure to use essential oil of the corresponding natural plant constituent 100%. (See the table below.) Do not use aroma oil containing perfume or synthetic perfume. Use an undiluted solution of essential oil.

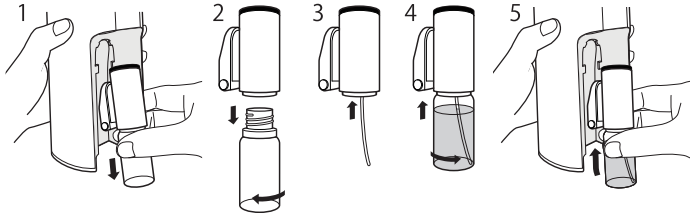
Corresponding essential oil (Produced by Flavor Life Co., Ltd.)	
Oil name	Model No.
Citrus Clear	BOZAR01971
Herbal Refresh	BOZAR01972
Floral Relax	BOZAR01973

- Essential oil is concentrated and highly purified oil. Pay sufficient attention to handling. For handling of the essential oil, read the Instruction Manual of the essential oil used.
- Essential oil may dissolve plastics and coatings on furniture or leave stains if spilled.
- Sprayed essential oil may affect pets. When using the product in an environment with pets, consult a veterinarian before use.

[How To Install The Essential Oil Bottle]

1. Remove the bottle adaptor from the main body.
2. Remove the empty bottle from the bottle adaptor.
3. Install the tube to the bottle adaptor.
4. Remove the cap and the dropper of the essential oil bottle used, and install the bottle to the bottle adaptor. At this time, securely install the bottle so as to prevent looseness. In addition, confirm that the tube has not slipped off, and set so that the tube reaches the bottom of the essential oil bottle.
5. Install the bottle adaptor to the main body.

- * When removing and installing the bottle adaptor, do not connect the USB cable to the main body.
- * Do not tilt the essential oil bottle with the bottle installed to the bottle adaptor. Otherwise, essential oil may spill.
- * When essential oil adheres to the main body, power adaptor and USB cable, immediately wipe it off.

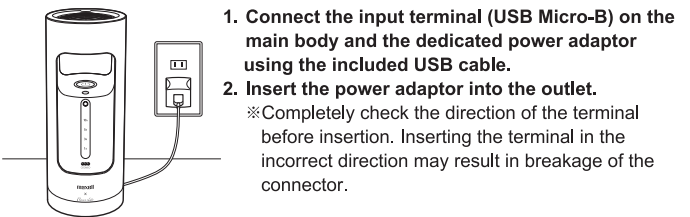


[How to install]

- **Standing**
Install the product in a desired place.
- **Wall hanging**
Use the included screws to install the product on the wall.

Caution
• When installing the product, read the safety precautions and install the product correctly. • When using on a wall hanger depending on the type of wall, the product may not require the included screws. If sufficient strength cannot be ensured with the included screws (ex. in case of a gypsum board or thin plywood board), purchase commercial dedicated hardware (hanger) suitable for each wall material and install the product.

[How To Connect]



[How To Operate]

Operation mode is switched by pressing the power button. Set a desired mode and use the product.

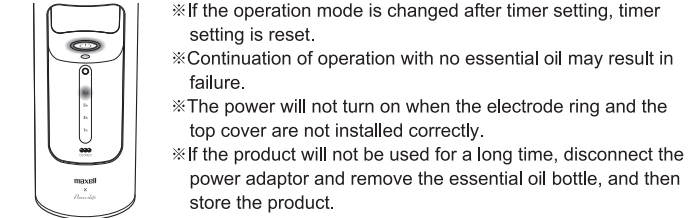
- **Operation mode**

Power Button	Operation Mode	LED	Timer
Press one time (when turning on the power)	Aroma diffuser mode (Low)	Flashes green (One time)	Selectable
Press two times	Aroma diffuser mode (Mid)	Flashes green (Two times)	Selectable
Press three times	Anti-bacterial deodorizing mode	Lights up blue	Fixed to 8 hours
Press four times	Power OFF	Goes off	

※ To switch to the aroma diffuser mode (High), when the timer button is held (for 3 seconds) within 30 seconds after the power is turned on, the green LED lights up and the mode is switched.

- **Aroma diffuser mode**

The aroma diffuser mode allows for timer setting (1h/3h/5h/10h). Press the timer button after setting the operation mode and set a desired time.



- ※ If the operation mode is changed after timer setting, timer setting is reset.
- ※ Continuation of operation with no essential oil may result in failure.
- ※ The power will not turn on when the electrode ring and the top cover are not installed correctly.
- ※ If the product will not be used for a long time, disconnect the power adaptor and remove the essential oil bottle, and then store the product.

- **Anti-bacterial deodorizing mode**

The anti-bacterial deodorizing mode is an operation fixed to 8 hours by the timer. When using this mode for a time shorter than 8 hours, turn off the power during the operation.

- ※ This product produces a slight hiss sound during operation, however, this is not an abnormal condition. The operation sound may be larger in a humid environment.
- ※ When operation becomes unstable due to contamination on the electrode ring and electrode needle, the operation mode LED goes off and the operation is stopped.
- ※ The power is not turned on when the electrode ring and the top cover are not installed correctly.
- ※ If the product will not be used for a long time, disconnect the power adaptor, and then store the product.

WARNING
• Do not use the product in a place where a ventilation system is not available.
• Use the product according to the area of the room.
• When using the product in an environment with pets, consult a veterinarian before use.
• When the aroma is strong, stop use of the product. Ventilate the room if necessary.

5 Maintenance

[Before Maintenance]

When doing the product maintenance, make sure to stop operation, disconnect the power adaptor from the outlet and disconnect the USB cable from the main body.

[Maintenance for the main body]

Remove contamination using a cloth moistened with neutral detergent and water, and wipe with a soft and dry cloth. Do not use benzine, thinner or alcohol, etc.

[Maintenance for the electrode ring and electrode needle]

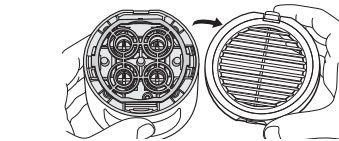
In order to use the product comfortably, maintain for these parts regularly. When operation becomes unstable due to contamination on the electrode ring and electrode needle, the operation mode LED goes off and the operation is stopped. We recommend you maintain for these parts once or twice a month depending on the operating environment.

Caution
• Be careful not to pinch or injure your fingers when removing or installing parts.
• Be careful not to be injured by touching the electrode needle.
• When cleaning the product, do not touch the electrode needle by finger or bend the electrode needle.
• When cleaning the electrode ring, do not damage it.
• Securely install the top cover and electrode ring. Insufficient installation may result in malfunction or failure.
• If the product is continuously used with the electrode ring and the electrode needle contaminated, contamination may become hard to remove. If contamination is hard to remove, remove contamination with a toothbrush using kitchen detergent.

[Maintain Procedures]

1. Stop operation, disconnect the power adaptor from the outlet and disconnect the USB cable from the main body.

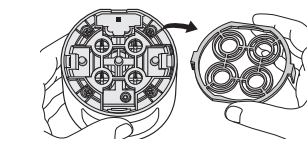
2. Remove the top cover.



4. Wash the removed electrode ring with water using a toothbrush or a cotton swab.



3. Remove the electrode ring.



5. Remove contamination and dust adhering to the electrode needle using a cotton swab.



6. Completely dry and install the electrode ring.
7. Install the top cover.
8. Connect the USB cable and the power adaptor.

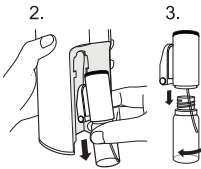
[Maintenance For The Bottle Adaptor And Tube]

(Maintenance is also recommended when the type of essential oil is changed.) We recommend you maintain for the bottle adaptor and the tube once or twice a month depending on the operating conditions. Neglecting these parts for a long time may cause clogging. In addition, liquid may leak during operation, therefore, maintain for these parts regularly. Maintenance is also recommended when the type of essential oil is changed.

Caution
• Be careful not to pinch or injure your fingers when removing or installing parts.
• Be careful not to spill essential oil when removing or installing parts.
• If the aroma seems weak even after maintained, purchase a new bottle adaptor.

[Maintain Procedures]

1. Stop operation, disconnect the power adaptor from the outlet and disconnect the USB cable from the main body.
2. Remove the bottle adaptor.
3. Remove the essential oil bottle from the bottle adaptor.
4. Pour ethanol into the included empty bottle, and install it to the bottle adaptor.
 - Use commercial "ethanol for disinfection."
 - Pour ethanol up to about 1/3 to 1/4 of the empty bottle as a reference.
5. Connect the USB cable and power adaptor, and operate the product in the aroma diffuser mode (High) for one hour.
6. Remove the empty bottle after completion.
7. If sticky build-up occurs around the aroma spraying port, wipe it out.
8. Install desired essential oil, and connect the USB cable and the power adaptor.
 - ※ Aroma may remain around the aroma spraying port even after maintained.
 - ※ When changing the type of the essential oil, you are recommended to purchase a new bottle adaptor.



6 Troubleshooting (If failure is suspected, check the following)

Phenomenon	Cause	Solution
The product does not operate. (LED does not light up.)	Power is not turned on.	• Use the included power adaptor. • Connect the power adaptor and the USB cable correctly and securely. → See 4 [How to connect].
	The electrode ring or the top cover is not correctly installed.	Install the electrode ring and the top cover correctly and securely. → See 5 [Maintenance].
	The electrode ring or the electrode needle is contaminated.	Clean the electrode ring and the electrode needle. → See 5 [Maintenance].
Abnormal sound is heard. (Anti-bacterial deodorizing mode)	The electrode ring or the electrode needle is contaminated.	Clean the electrode ring and the electrode needle. → See 5 [Maintenance].
Aroma is not produced. Aroma is weak. (Aroma diffuser mode)	The bottle adaptor is not correctly set.	Install the bottle adaptor correctly and securely. → See 4 [How to install the essential oil bottle].
	The tube for the bottle adaptor has slipped off.	Install the tube to the bottle adaptor correctly and securely. → See 4 [How to install the essential oil bottle].
	The tube for the bottle adaptor is contaminated.	Maintenance is need. → See 5 [Maintenance]. If the condition is not improved even after maintained, replace the bottle adaptor and the tube.
	There is no essential oil.	Refill essential oil. → See 4 [How to install the essential oil bottle].

7 Specification

[Main Body]

Input Voltage/Current: DC5V/0.5A
Outside Dimensions: Width 81 × Depth 81 × Height 202mm
Mass: Approx. 400g (not including an aroma bottle)
Ozone Generation: Approx. 1.3mg/hr
Consumed Power: Approx. 2.5W
Operating Temperature Range: 5–40°C (No condensation)

[Dedicated Power Adaptor]

Input: AC100-240V 50/60Hz
Output: DC5V/1A

※ Deodorizing, anti-bacterial and virus elimination effectiveness is described on the following website.
http://www.maxell.jp/consumer/mxap-fa100_01.html

[USB Cable]

Cable length: Approx. 1.5m

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