

Aderans

New Hair Dryer “KAMIGA” Launched

The 5th Collaborative Development Between Aderans and Sharp

96% of Professionals (Hair Stylists) Gave High Marks

—Makes Hair and Scalp Soft and Supple—

N-LED Sonic KAMIGA

Red and Blue LED Attached, Double KASSA for Better Scalp Care

Reduces Around 50% of Drying Time*2

and Around 96% of Static Electricity*4

—Nationwide Launch on May 20—

Aderans Co., Ltd. (headquartered in Tokyo, Japan: Group CEO, Representative Director and President Yoshihiro Tsumura), promoting the wellness industry of hair, beauty and health, and Sharp Corporation (headquartered in Osaka, Japan: President & COO Katsuaki Nomura), the electronics manufacturer is to launch the hair dryer which is the joint development product of both companies on Thursday, May 20, 2021 at nationwide Aderans and Ladies' Aderans salon, Aderans Official Online Shopping Site (<http://www.aderans-shop.jp/shop/>), Amazon, Rakuten Ichiba, PayPay Mall and home appliance stores (to be added).

Aderans has been developing beauty care appliances which are the hybrid of our hair care technology and the exclusively patented technology of Sharp including Plasmacluster*1 ion technology.

This time, N-LED Sonic KAMIGA, the hair dryer will be newly launched following the launch of N-LED Sonic which also was jointly developed with Sharp Corporation.

The product is equipped with two nozzles to spread the air over wide area and to dry hair quickly, Sharp's unique technology called Sensing Dry Mode to automatically control the temperature of the airflow for the purpose of minimizing heat damage and over-drying, N-LED beam®, the LED light source and Aderans's original KASSA-Attachment called Kamiga Hand and Kamiga KASSA. The most significant feature of the hair dryer is that it is equipped with an operation mode called KAMIGA Mode which brings scalp spa experience at home, along with hair drying function.



Moreover, the airflow from two nozzles enables to reduce drying time by around 50%*² compared to Aderans's N-LED Sonic, the hair dryer launched previously.

Static electricity in hair is reduced by around 96%*⁴ with Plasmacluster ions*³. By brushing your hair with KASSA-Attachment, Plasmacluster ions are sent to hair and scalp fully as well as red and blue light emitted by N-LED beam®.

■ Benefits of N-LED Sonic KAMIGA

➤ Equipped with KAMIGA Mode to Treat Yourself to Scalp Spa

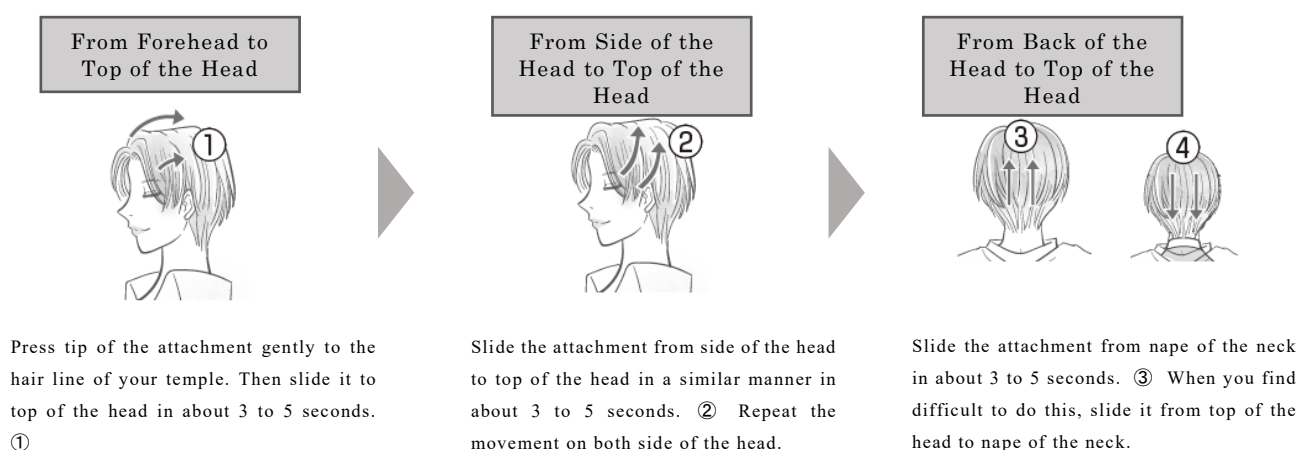
The most significant feature of N-LED Sonic KAMIGA is that you can experience scalp spa while KAMIGA Mode is activated with Kamiga Hand or Kamiga KASSA attached to the hair dryer which are included in the package. When you brush your hair with KASSA-Attachment (non-automatic), the massage stimulates your scalp and brings a comfortable sensation while sending Plasmacluster ion and red and blue LED light fully to hair and scalp. There are two types of KAMIGA Mode: Kamiga Sensing Mode for scalp treatment with gentle air at around 50°C and Kamiga Gentle Cold Air Mode ideal for scalp treatment with soft cold air when you are feeling hot such as after taking bath or on a hot summer day. Users can choose the mode according to preference. Kamiga Sensing Mode switches to Kamiga Scalp Mode when KASSA-Attachment is put on to the hair dryer.



< How to Use KAMIGA Mode >

Move the hair dryer smoothly and do not continue blowing the same place. The trick is to not press the attachment against scalp too hard and stick with a range of motion that feels comfortable.

*Once a day, around five minutes per day of use is recommended. Please avoid long-time use or use with too firm pressure since it may lead to damaging your scalp.



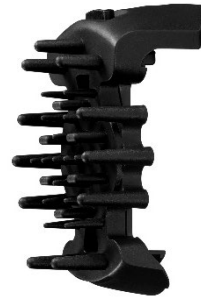
➤ Two Types of KASSA-Attachment Stimulate Scalp with Comfortable Sensation

N-LED Sonic KAMIGA comes with two different attachment: Kamiga Hand and Kamiga KASSA, to enhance the experience of scalp treatment more than that of N-LED Sonic. KASSA came from gua sha, a tool to scrape people's skin with right strength used in China since around 2500 years ago. Kamiga Hand has human-fingers-inspired 12 long protrusions. By sliding it up, down, left and right or by bouncing it, scalp will be stimulated with comfortable feeling. Sliding

the attachment upward from the hair line is also recommended. Kamiga KASSA is the attachment with short protrusions for treating particular area of scalp. The protrusions are made of silicon and have different elasticity and shape so that you can stimulate the area you want selectively. It is also recommended to use after hair growth products are applied.



Kamiga Hand



Kamiga KASSA

➤ **N-LED beam® installed**

4 red LED light sources of 630 nm wavelength researched and developed by Aderans, the professional of hair are installed. 4 blue LED light sources are also installed. When KAMIGA Mode is activated, N-LED beam® is emitted fully on hair and scalp while air is blown.



N-LED beam®

*Aderans conduct cooperative research and development with Osaka University on N-LED beam®.

➤ **Succeeded to Reduce 50%*₂ of Drying Time by Adopting Quick Dry Method of Spreading Air Over Wide Area**

A quick dry method called Drape Flow which makes the air blow out from two nozzles to spread hair in various directions into drape-like shape and send air over wide area to dry hair quickly is adopted. This technology took hint from a hair drying technique in hair salon holding 2 hair dryers in one hand intended to reduce hair drying time*₅. By adopting this method drying time was reduced by 50%*₂ compared to our previous model, N-LED Sonic. Thanks to the nozzles being designed in short shape, the unit is light weighted and does not cause fatigue even after long time use.



➤ **Auto-sensing Function Which Measures Distance Between Hair and Hair Dryer and Controls Temperature Automatically is Installed**

Temperature and way of using hair dryer to dry hair required differs according to the conditions of hair, hair styles such as long hair and short hair, or seasons. This product is equipped with Sensing Dry Mode to minimize heat stress*6 and over-drying. When the mode is activated distance sensor measures the length between nozzles and hair and automatically controls the wind temperature. Keratin (type of protein that makes up your hair) begins to denature at around 55°C when hair is wet. Sensing Dry Mode controls the temperature of hair surface and keeps it under about 55°C regardless of the distance between hair dryer and hair. The hair dryer automatically controls the wind temperature to minimize heat stress of hair and provides you excellent drying experience which keeps your hair healthy. The short nozzles make the body of the hair dryer compact, easy to hold and maneuver.



➤ **Plasmacluster ions Help Reduce Static Electricity by Around 96%*4**

Plasmacluster ions help reduce static electricity caused in hair when you comb your hair by around 96%*4 and make your hair smooth and easy to manage. They also protect hair cuticles, keep hair color from fading*7 and prevent split ends and breakage*8. Strong wind from the hair dryer brings plenty of positive and negative ions of Plasmacluster surrounded by water molecules to hair. Eventually, your hair stays moisturized*9 and becomes shiny*10 and smooth.

➤ **Beauty Mode to Automatically Control Temperature in order to Adjust to Season's Change Installed**

For those who want to make their hair shiny, Beauty Mode which automatically switch warm and cool air is recommended. There are two types of Beauty Mode: Seasonal and Normal. When you choose Normal, the hair dryer blows hot and cold air in turns automatically, free from room temperature influence. When you choose Seasonal, the hair dryer switches warm and cold (temperature adjusted to season's change) air automatically by monitoring the temperature of surrounding air.

Beauty Mode Seasonal	Winter	Spring, Fall	Summer
	Hot Air Slightly Warm Air	Hot Air Cold Air	Mildly Warm Air Cold Air

➤ Designated Stand Also Serve as Tidy Cord Storage

Kamiga Stand which is included in package frees both your hands when you use the hair dryer. It can also be used as power cord storage after use.



- * 1 “Plasmacluster” and “Device of a cluster of grapes” are trademarks of Sharp Corporation.
- * 2 ● Test method: Get hair on mannequin head absorb 40 grams of water and blow turbo power air (HOT) to measure average time required to reduce the water by around 75% (standard of Sharp). ■ Test result: Drying time of our previous model (N-LED Sonic, launched in 2017) was 12.23 minutes while that of N-LED Sonic KAMIGA was 5.95 minutes. Drying time was reduced by around 50%. ◆ Tested by: Sharp Corporation
There are differences in reducing drying time depending on conditions or users.
- * 3 Plasmacluster effects vary depending on usage environment (temperature, humidity, absence/presence of air conditioner and ventilation system), product characteristics, and product usage (operation mode, operation duration, etc.).
- * 4 ● Test method: First cause static electricity in human hair bundle by brushing it. Then the statics were measured 3 times each before and after the use of N-LED Sonic KAMIGA. ■ Test result: After brushing initial voltage of statics were measured at an average of 9.3kV while after the usage of the hair dryer the voltage of statics were measured at an average of 0.3kV, reduced by around 96%. ◆ Tested by: Industrial Research Institute of Niigata Prefecture
- * 5 There are differences in reducing drying time depending on conditions or users.
- * 6 Heat damage is reduced as the result of reducing heat stress. Heat stress is indicated by the temperature of 55°C or more and time of hair being exposed. 55°C is the temperature where keratin begins to denature when hair is wet.
- * 7 ● Test method: Expose dyed hair to ultraviolet radiation and warm air of hair dryer equivalent to about 2 months. Measure the color difference before and after brushing. ■ Test result: When the colors of samples exposed to air from the hair dryer without Plasmacluster ions (air blower only) and with Plasmacluster ions were compared, the latter degree of color fading was reduced by around 70% (1.9 to 0.5). ◆ Tested by: Sharp Corporation
- * 8 ● Test method: Expose dyed hair to warm air of hair dryer equivalent to about 2 months while brushing them. Observe surface of hair by electron microscope and count the number of split ends and breakage. ■ Test result: When compared with samples exposed to air of the hair dryer with Plasmacluster ions, samples exposed to air without Plasmacluster ions (air blower only) had more damages. This indicates that Plasmacluster ions protect hair cuticles. When compared with samples exposed to air of the hair dryer without Plasmacluster ions (air blower only), samples exposed to air with Plasmacluster ions were less in number of split ends or breakages. The reduction was around 50% (48 to 21). ◆ Tested by: Sharp Corporation
- * 9 ● Test method: Blow hair with cold air from the hair dryer for around 5 minutes. Calculate the change of moisture in hair between immediately after use of the hair dryer and after around 8 hours. ■ Test result: When moisture in hair immediately after use of the hair dryer is 100%, the moisture in hair after around 8 hours was 96% on samples exposed to air without Plasmacluster ions (air blower only) and 101% on samples exposed to air with Plasmacluster ions. This indicates that the latter maintained same amount of moisture with hair immediately after cold air was blown and that Plasmacluster ions help retain hair moisture. ◆ Tested by: Sharp Corporation
- *10 ● Test method: Measure hair shine before and after brushing hair of human subjects while blowing them with warm air of the hair dryer for about 5 minutes and compare the difference. ■ Test result: When hair was exposed to air without Plasmacluster ions (air blower only), decrease in shine were observed while when hair was exposed to air with Plasmacluster ions increase in shine were observed. ◆ Tested by: Sharp Corporation

■ Product Overview

N a m e: N-LED Sonic KAMIGA

Date of launch: Thursday, May 20, 2021

C o l o r: Italian Red

S t o r e s: nationwide Aderans and Ladies' Aderans salon, Aderans Official Online Shopping Site (<http://www.aderans-shop.jp/shop/>), Amazon, Rakuten Ichiba, PayPay Mall and home appliance stores (to be added)

Tax included price: 47,300 JPY

➤ Specifications

Model name: AD-HR03

Input voltage, frequency: AC100V, 50Hz-60Hz

Wattage: 1200W (when HOT/TURBO is on)

High heat temperatures: approx. 95 °C (when room temperature is 30°C and HOT/DRY is on)

Air volume: approx. 1.1 m³/min. (when TURBO is on)

Weight: main unit approx. 665g (cord included), Kamiga Hand approx. 85g, Kamiga KASSA approx. 53g, nozzle for hair setting approx. 43g, Kamiga Stand approx. 190g

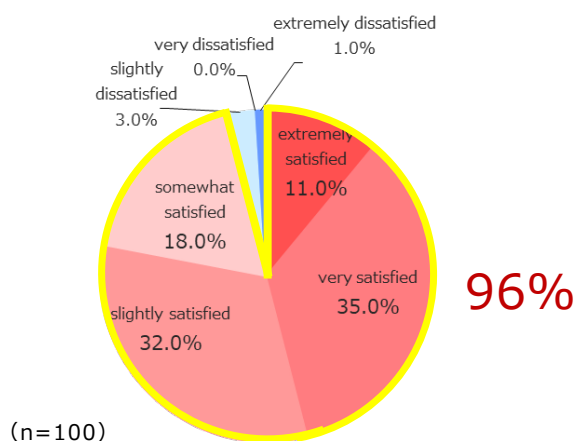
Power cord length: approx. 2.5m

Accessories: Kamiga Hand, Kamiga KASSA, nozzle for hair setting, Kamiga Stand, user guide and warranty certificate, unit cleaning brush

< For Your Reference >

Home use tests were concurrently conducted with the launch of N-LED Sonic KAMIGA with 100 hair stylists. 96% of the subjects answered to the questionnaire that they were overall satisfied (ranging from extremely satisfied to somewhat satisfied), in other words, almost all were satisfied.

Question: How happy are you with the product for testing as a whole? Please choose the answer that fits your experience. (single answer).



< Outline of Survey >

- Respondents: 100 hair stylists in Japan
- Survey Period: Monday, March 1, 2021– Wednesday, March 25, 2021
- Survey Method: home use test

*New products were sent to respondents. After around a week of use, respondents completed online questionnaire. The products were sent back following the end of the survey.

< Media Inquiries >

Group CSR and Corporate Communications Office, Aderans Co., Ltd.

TEL: 813-3350-3268 E-mail: pr@aderans.com

Aderans website: <https://www.aderans.co.jp/corporate/english/>