

Rossmax, a leader in the global healthcare market, is committed to developing and supplying premium diagnostic products. We focus on following business fields and the product and service portfolio consists of diagnostic solutions in the field of

prevention • monitoring • therapy • professional



From pioneering research and product development to highly efficient manufacturing, shipping and logistics, our operational excellence is a crucial key to the success.

With the only fully integrated factory in the industry, we pride ourselves on world-class manufacturing capabilities and end-to-end process controls.

The distribution network covers more than 76 countries and the products are clinically validated and approved based on latest quality standards.

Rossmax Group

rossmax
TAIWAN

rossmax
SWISS

rossmax
INDIA

rossmax
JAPAN

rossmax
America

rossmax 脉博士
CHINA



Rossmax International Ltd.
12F., No.189, Kang Chien Rd.
Taipei 114, Taiwan
Tel +886 2 2659 7888
Fax +886 2 2659 7666
info@rossmax.com

Rossmax Swiss GmbH
Tramstrasse 16
9442 Berneck, Switzerland
Tel +41 71 747 11 93
Fax +41 71 747 11 91
emea@rossmax.com

www.rossmax.com

As a technology leader
we are committed to assure clinical validations and approvals

For further information about our complete Rossmax's technologies, please visit www.rossmax.com/Technologies

Blood Pressure Monitor
PATENTED

PARR Technology

For Arrhythmia patients



Pulse Arrhythmia (PARR) technology specifically detects pulse arrhythmia, including Atrial Fibrillation (AF, AFib), Atrial and / or Ventricular Premature Contractions (PC), Tachycardia (TACH), and Bradycardia (BRAD). Pulse Arrhythmia may be related to cardiac disorders, needs medical attention and thus early diagnosis is of paramount importance. The PARR technology detects arrhythmia during regular blood pressure checks without any additional user skills, user interaction and measurement prolongation. Beside the blood pressure determination a specific pulse arrhythmia determination is provided with PARR.

Blood Pressure Monitor
PATENTED

Digital Korotkoff Technology

Dual-sensor system



DK Technology is a combination of the traditional Oscillometric method and Korotkoff sound method. With a microphone built into the arm cuff, DK Technology actually listens like your doctor when taking a reading. Exclusive DK Technology delivers ultimate accuracy by using both pressure and sound. The monitor is supported with an advanced „dual-sensor“ cuff system. It has been shown that a device using the auscultatory method has the potential to match the gold standard method more closely than devices using oscillometric methods.

Blood Pressure Monitor
PATENTED

Rest Condition Detector

HSD



HEMODYNAMIC STABILITY DETERMINATION (HSD) - eliminates all possible blood pressure measurement error caused by mental and physical stress and avoids unnecessary multiple measurements to attain an average of your blood pressure. The lack of rest condition, which is detected by the HSD technique, is the most common error in the blood pressure diagnosis. The blood pressure results have to be obtained in sufficient rest condition in order to have an accurate medical judgement of a patient's blood pressure status.

Blood Pressure Monitor

Movement Detector

Body movement indication



The "Movement Detector" helps reminding the user to remain still and is indicating any body movement during measurement. The specified icon appears once a "body movement" has been detected during and after each measurement.

Such detector helps to remind the user to remain still during the measurement process and increases the accuracy of the measurement.

Blood Pressure Monitor

Real Fuzzy

Real comfort and accuracy



Real Fuzzy Technology determines ideal cuff pressure based on one's systolic blood pressure and arm size. Users no longer need to pre-set the inflation level before measurement. The technology eliminates arm discomfort through unnecessary high inflation settings and also prevents inaccurate readings caused by erroneous cuff inflation levels.

Digital Gauge
PATENTED

Digital Pressure Gauge (Mandaus II)

Convenient, durable and accurate!



Different from other gauge, the Rossmax Digital Gauge's marker feature ensures the accuracy during the measurement. The Digital Gauge is able to record the Korotkoff sound for measuring systolic / diastolic pressure and then the blood pressure would be displayed on LCD, reducing misdiagnosis resulted from time difference.

The digital operation and display design clearly indicates the pressure, heartbeat and deflation rate on the same LCD display. The backlight screen design is convenient for users that need lighting. And the large, clear LCD display is also more user-friendly and is shock and water resistant for professional use.

Blood Pressure Monitor

Talking

Full vocal guidance



Based on personal demand the talking function can be switched on or off. The unit offers a full talking guidance from start until the blood pressure is displayed.

Blood Pressure Monitor

AM/PM Averaging Mode

Advanced 7/14/21/28 day memory mode



The exclusive AM/PM averaging memory mode provides you with a variety of options for reviewing your measurement history, including AM/PM Averaging. It calculates and displays 7/14/21/28 days average for measurements taken in the morning (AM) and nighttime (PM). Blood pressures can provide important information about how your blood pressure changes throughout the day. The monitor stores 28 days of Morning and Nighttime Averages for each user.

- MORNING AVERAGES between: 4:00 AM and 11:59 AM.
- NIGHTTIME AVERAGES between: 6:00 PM and 2:00 AM.

Blood Pressure Monitor

Smart Sense

Advanced air control system



Smart Sense Technology utilizes an advanced air control system. The electronic deflation valve delicately controls the deflation rate. It allows the monitor to detect and analyze pulse signals as well as adjusting cuff pressure during deflation. This significantly aids in making more precise analysis, improving accuracy silently and efficiently and is very comfortable for the user too.

Blood Pressure Monitor

Automatic and Auscultatory Mode

Switchable



In the auscultatory mode the cuff will be automatically inflated. During deflation the Korotkoff sound will be detected manually with the stethoscope and the marker. Systolic and Diastolic values will be displayed on the device which can be used for fully automatic measurements as well.

Blood Pressure Monitor

Additional Benefits Blood Pressure Monitors



✓ The Rossmax Blood Pressure Monitors are equipped with innovative blood pressure **risk indicator**, which visually indicates the assumed risk level (prehypertension / stage 1 hypertension / stage 2 hypertension). The ergonomic **cone-shaped cuff** promotes blood pressure measurement to a whole new easy and delightful experience. Knowing the importance of recalibration to the units and the users, Rossmax developed the **world's first mobile calibration system**. Simply connect the unit to the system, with its intuitive operation, now the recalibration is only a matter of seconds. **Five years** warranty is offered on the product range.

✓ The **100% self-built active valve** offers better pressuring control and less power consumption.

Active valve	Passive valve
<ol style="list-style-type: none"> 1. Driven by electric power 2. Normally open, but can be 100% closed 3. De-pressuring rate can be controlled 4. De-pressuring rate can be constant at different pressure level (linear valve) -> good for blood pressure measurement 	<ol style="list-style-type: none"> 1. No electric power is needed 2. Normally open, but cannot be 100% closed 3. De-pressuring rate cannot be controlled 4. De-pressuring rate is high at high pressure and low at low pressure (nonlinear valve) -> not ideal for blood pressure measurement

✓ On all our devices the state of the art own manufactured **pump** offers a very low noise level

Advantages of own pump manufacturing

1. Optimized design for Blood Pressure Monitors (pressuring time, power consumption)
2. 100% self-built g better quality
3. Low noise
4. High reliability

✓ Own **cuff** and bladder manufacturing

Any challenges with regard to cuff and bladder manufacturing we are more than keen to face.

1. Air tightness 100% test
2. Bladder life sampling test (310 mmHg, pumping 10'000 times)

✓ The advantages of Rossmax's **tooling** can be summarized as follows:

1. Experienced engineering resources
2. Sufficient CAD / CAM evaluation facility
3. Careful mechanical design / mockup / tray shot review
4. Advanced tooling building process
5. Precise plastic injection manufacturing
6. Stricter tooling / injection criteria
7. Complete product dropping / vibration / life / reliable test

Blood Pressure Monitor

Validation ESH & BHS



Internal and local validations as well as proofs from well recognized institutions (such as BHS, ESH) confirm the accuracy, safety, stability, reliability and high performance of the entire product range. The Rossmax blood pressure monitors can be fully recommended for an application in the pregnant population too.

Manufacturer / Model	Validation Details
Rossmax / Accumed	ME/AB/AC/AD/AE/AF/AJ/MJ/MW-701, MA/MR/MV-801, AK/AT/AW/MG/MH/MJ-150, AD761, AU941, AV151, AV351, AC761f, AW151, MA350, MA351, MC100, MR250, MH901, MW821 *(D)
	-- BHS A/A, International Protocol



ESH Validation available for Upper Arm and Wrist Watch Blood Pressure Monitors.

Device	Classification	Recommendation
Rossmax ME 701 series	Osc, A/A, Pass, At rest	Recommended
Rossmax Mandaus II	LCD Display, Pass, At rest	Recommended
Rossmax S150	Wrist, Pass, Study (30) protocol violations corrected	Recommended

Thermometer

PATENTED

PLUG & SECURE Probe Cover For ear thermometer



The patented "PLUG & SECURE" probe cover can offer an easy and accurate ear temperature measurement. Users can easily assure the probe cover is attached and the appliance is ready to use.

The well-designed heat insulation probe can ensure accurate, consistent reading and short interval between each measurement.

Clinical validation complies with ASTM 1965-98 and PrEN 12470-5.

Thermometer

Contact Free Probe Cover Replacement Design For ear thermometer



Easy to replace a new ear probe cover before each measurement without touching the probe cover film to avoid cross-contamination.

Thermometer

Continuous Scanning Ear Mode For ear thermometer

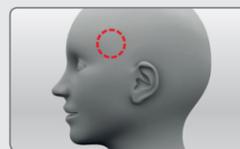


The continuous ear scanning mode views the entire ear canal and looks for the highest temperature that can be detected.

Simply press and hold the start button for 3 seconds, gently rotate the probe inside the ear canal in a circular manner and the most accurate reading will appear.

Thermometer

Advanced Infrared Measuring System For non-contact temperature measurement



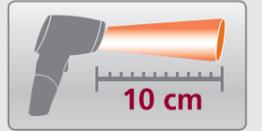
The advanced infrared temperature measuring technology provides safe, accurate, reliable and hygienic readings for measuring both forehead temple and object temperature.

The forehead temple temperature reading lookup table was calculated and developed based on systematic skin clinical data statistics to accommodate fever and non-fever subjects, under different operating environment.

The one second measurement thermometer without contacting skin is a suitable choice for obtaining body temperature and prevents cross contamination by measuring around 5 cm from the forehead temple.

Thermometer

Telephoto Temperature Measurement For non-contact temperature measurement



Rossmax new gun type non-contact temple forehead thermometer provides a consistent and longer distance (within 10 cm) temperature measurement without skin contact.

Calibration Service

Complete Line of Calibrator and Tester For blood pressure monitors, thermometers and nebulizers

In order to ensure the accuracy of each device, Rossmax developed a complete range of calibration devices and testers.



CalPro



Neb Tester



ThermoCal

Nebulizer

PATENTED

Valve Adjustable Technology

Control nebulization rate



The proprietary adjustable valve is able to deliver medications of different viscosity level according to every user's conditions and needs at ease. Our VAT technology allows users to adjust different levels of nebulization rate ranging from 0.10 – 0.40 μm at consistent particle size.

The nebulization rates can be adjusted by the user in a very easy way without exchanging parts. High nebulization rate/full open is for high viscosity medications and high breathing capacity user while low flow rate with close valve will be more appropriate for kids / infants with lower breathing capacity.

Thanks to the reduction of wasted medication, VAT is also recommended for respiratory disorders such as COPD (Chronic Obstructive Pulmonary Disease) and Asthma as well as intensive use in general.



Nebulizer

PATENTED

Mesh Technology

Portable, quiet and convenient



Rossmax Mesh nebulizer is built with patented technology. The Mesh nebulizer uses electricity to vibrate a piezo that moves liquid formulations through a mini aperture plate to generate very fine aerosol medication for respiratory treatment. The battery operation, the portable design and the very quiet performance makes Rossmax Mesh nebulizers very convenient and effective.

Nebulizer

Mini Pump

Tailor-made for mini nebulizer



The mini pump is a brand new design for small portable nebulizer. The components of the pump are of the highest quality and manufactured by Rossmax Japan. Moreover, the pump is tailor-made which means that the pump's characteristics and functionality can be set and adjusted to meet nebulizer specifications.

Nebulizer

Low Noise

With silencer and vibration-absorber design



Possibly the lowest dB value among the compressor nebulizers. All the noise and vibrations are significantly reduced via the unique silencer and vibration-absorber design.

Nebulizer

Consistent Particle Size

For efficient respiratory treatment



The average particle size of our nebulizer with VA Technology is around 2.1 μm (MMAD), and FPD (Fine Particle Dose) is above 81% tested by Cascade Impactor which ensures more efficient and effective treatment. Please review the table below:

Aerosol performance tested with 0.9% saline			
Cascade Impactor		Malvern Spraytec	
MMAD	FPD	Dv(50)	FPD
2.1 μm	81.39%	3.18 μm	78.1%

FPD: Fine particle dose, the percentage of particle size less than 5.0 μm
* Tested by NB500



Malvern Spraytec :
Laser diffraction-based particle sizing method



Cascade Impactor :
Mechanical impact-based particle sizing method

1988	• Foundation of Rossmax Taipei, Taiwan.	
1992	• Rossmax is the first company outside Japan who manufactures WRIST BLOOD PRESSURE MONITORS and an innovative DUAL-USER MEMORY FUNCTION	
1994	• Rossmax was granted the FDA and was the second wrist blood pressure monitor manufacturer who entered the US market	
1996	• European CE MARK received and certified as a MDD COMPANY	
1997	• REAL FUZZY technology for upper arm blood pressure monitors	
2000	• SMART SENSE technology with advanced air control system	
2003	• DIGITAL PRESSURE GAUGE (Mandaus II)	
2005	• DIGITAL KOROTKOFF TECHNOLOGY Dual Sensor System • IRREGULAR HEARTBEAT TECHNOLOGY (IHB) • CAL PRO calibration system to ensure accuracy for blood pressure monitors	  
2006	• TALKING FUNCTION with full vocal guidance	
2007	• VALIDATION ESH & BHS with highest possible AA grade	
2008	• REST CONDITION TECHNOLOGY (HSD)	
2009	• AM/PM AVERAGING MODE	
2011	• MOVEMENT DETECTOR TECHNOLOGY	
2012	• AUTOMATIC & AUSCULTATORY SWITCHING MODE • PLUG & SECURE PROBE COVER DESIGN • CONTINUOUS SCANNING EAR MODE • CONTACT FREE PROBE COVER REPLACEMENT • ADVANCED INFRARED MEASURING SYSTEM for non-contact temperature measurement • VALVE ADJUSTABLE TECHNOLOGY to control nebulization rate	     
2013	• MESH TECHNOLOGY for nebulizer • MINI PUMP for mini-piston nebulizer • TELEPHOTO TEMPERATURE MEASUREMENT • THERMOCAL calibration system to ensure accuracy for thermometers	   
2014	• PARR TECHNOLOGY for blood pressure monitors	   
2015	• BLUETOOTH & WIRELESS OPEN APP SOLUTION	

since 1988
ACCURACY

