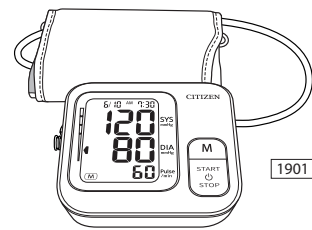


INSTRUCTION MANUAL FOR CITIZEN CITIZEN DIGITAL BLOOD PRESSURE MONITOR CHUG330

Thank you very much for purchasing CITIZEN product. This device is a non-invasive blood pressure monitor by oscillometric method and is intended to be used for home use. It can measure the systolic blood pressure (SYS), the diastolic blood pressure (DIA) and the pulse rate.



- Please read all of the information in this instruction manual before operating the device.
- Be sure to have this instruction manual to hand during use.



SYMBOL EXPLANATIONS

: Type BF applied part : Keep dry

: Warning : Caution

: Refer to instruction manual before use.

: Waste electrical products should not be disposed of with household waste. Please recycle where facilities exist. Check with your local authority or retailer for recycling advice.

: Manufacturer Name : CITIZEN SYSTEMS JAPAN CO., LTD. Address : 6-1-12, Tanashi-cho, Nishi-Tokyo-shi, Tokyo 188-8511, Japan

: Factory Name : CITIZEN SYSTEMS (JIANGMEN) CO., LTD. Address : Building 6, 399 Jinxing Road, Jianghai District, Jiangmen, Guangdong, China

: European representative Name : EMERGO EUROPE Address : Prinsessegracht 20, 2514 AP The Hague, The Netherlands

: The CE marking indicates the conformity of the product with the Union legislation applying to the product and providing for CE marking.

SAFETY PRECAUTIONS

Be sure to read the following instructions before using the device.

- Warning indicates a potentially hazardous situation which it may result in death or serious injury.
- Caution indicates a potentially hazardous situation which it may result in injury or property damage. The property damage refers to consequential damage to buildings, household, belongings, livestock, and pets.

- Consult your physician before using the device if you have following conditions such as heart disease, cardiovascular disease, common arrhythmias, such as atrial or ventricular premature beats or atrial fibrillation, arterial sclerosis, poor perfusion, diabetes, pregnancy, preeclampsia, renal disease, weak pulse, experiencing mastectomy, other blood circulatory diseases, or if you use a cardiac pacemaker.
- Do not use measurement results for self-diagnosis and self-treatment. Always consult your physician.
- If the battery fluid gets in your eyes or on your skin, rinse it off with water immediately and then receive treatment from your physician.
- Do not use the device on the injured arm or the arm under medical treatment.
- Do not attach the cuff on the arm while on an intravenous drip or blood transfusion.
- Do not share the cuff with other infective person to avoid cross-infection.
- Do not use the device in the vicinity of flammable gases such as those used for anesthesia. It could ignite the gases and cause an explosion.
- Do not use the device in enriched oxygen environments such as a hospital's hyperbaric chamber or oxygen tent. It could ignite the oxygen and cause a fire.
- The air hose of the cuff or the AC adapter cord may cause accidental strangulation in infants.
- Do not use the device for any purpose other than measuring blood pressure.
- Do not attempt to disassemble, repair or modify the device or the cuff.
- Do not use the device for infants or persons who cannot express their intentions.
- Do not measure your blood pressure consecutively or frequently. It causes blood congestion and you will not get a correct reading. Wait at least a few minutes before measuring again.
- If you feel there is something abnormal with your body or you start to feel unwell during measurement, discontinue use and consult your physician.
- If the irregular heartbeat indicator appears frequently, consult your physician about your health.
- Press the "START/STOP" button to reduce the pressure immediately or remove the cuff if it does not start deflating during the measurement.
- Do not use device near a mobile phone, other devices that emit electromagnetic fields or in high electromagnetic environment. This could cause malfunction.

Some models of this device may utilize an AC adapter. In cases where the AC adapter may be used, please read the following precautions.

- When the product will not be used, unplug the power plug from the power outlet.
- When disconnecting the power plug from the outlet, do not pull the power cord. Always disconnect it by holding the power plug.
- Do not insert or disconnect AC adapter from power outlet while your hands are wet.
- Do not use the AC adapter if the power cord or plug is damaged or the plug is loose in the power outlet.
- Wipe off any dust on the power plug.
- Do not apply excessive force to the power cord or twist it, or tie the power cord in a bundle during use.
- Please use the dedicated AC adapter (model: AC-230CZ).

GENERAL REMARKS

- Be sure that the cuff size is appropriate to your arm circumference before attaching the cuff. Refer to the "SPECIFICATIONS" for the size.
- If you feel urinate, do so before measuring your blood pressure.
- Take five or six deep breaths and then relax before measuring your blood pressure. If you are tense when taking measurement, you will not get a correct reading.
- Your blood pressure will be elevated if you are anxious or irritated, suffering from lack of sleep or constipation, or have just taken some exercise or eaten a meal.
- Do not measure your blood pressure after smoking, bathing or drinking alcohol, coffee or tea.
- Measure your blood pressure where the room temperature is around 68°F/20°C. Do not measure your blood pressure when it is below 50°F/10°C or above 104°F/40°C in the room.
- Measure your blood pressure when you are relaxed and still. Keep the cuff at the height of your heart and do not move your arm and talk.
- Analyzing blood pressure data gathered over a long period is more important than just checking one measurement. Choose the time of day that you are most likely to be able to maintain taking measurements and try to measure your blood pressure at the same time every day.

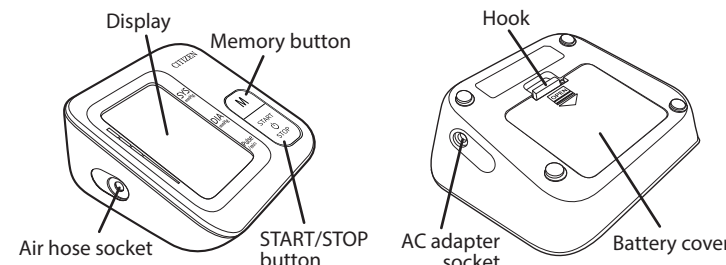
NAMES OF PARTS

The device and its accessories

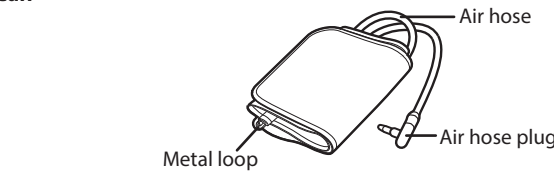
Make sure that the package contains all the following items.

- Blood pressure monitor unit
- Instruction manual and EMC technical data
- 4 AAA-size batteries for demonstration purpose only
- Cuff (model: SCN-012)

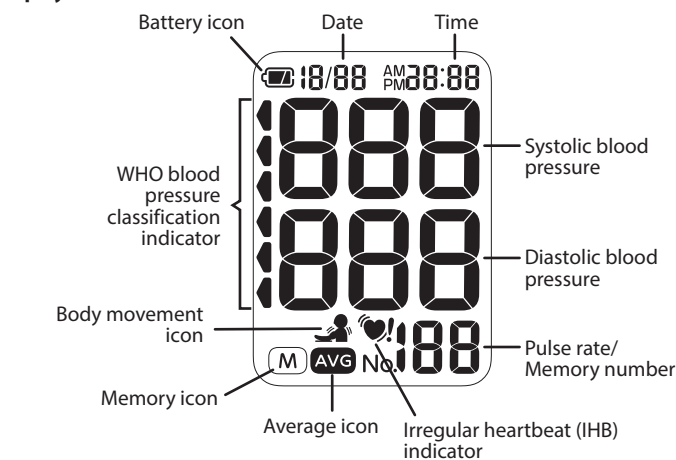
Main unit



Cuff



Display



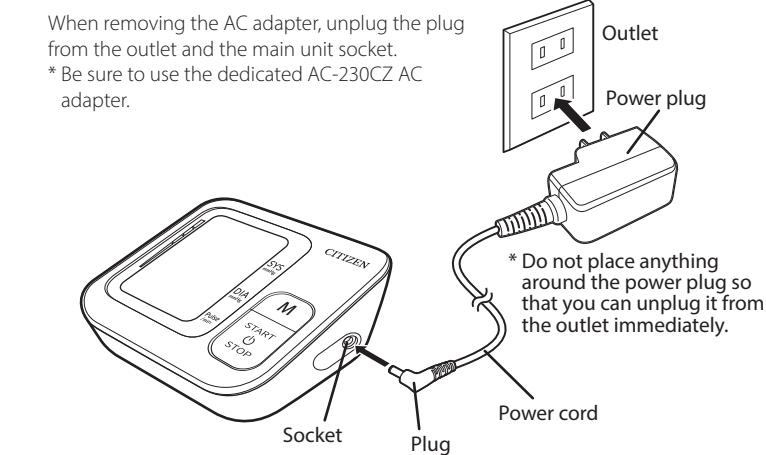
INSERT THE BATTERIES AND AC ADAPTER

– USING BATTERIES –

- 1 Remove the battery cover.**
Place a finger on the hook, and pull the cover toward you to open.
 - 2 Insert the batteries.**
Be sure to insert the batteries into the negative ⊖ side with the protruding springs first so as not to mix up the positive ⊕ and negative ⊖ terminals.
 - 3 Close the battery cover.**
Fit the lugs into the recesses and close the battery cover until you hear a click.
- * When the battery icon or is displayed, or nothing appears in the display, replace all 4 batteries with new ones at once. In case rechargeable battery is used, please charge it.
 - * Do not use any other kind of battery other than that alkaline, manganese, nickel hydrogen, and do not mix them up.
 - * In the case of battery replacement, the memory is preserved even if the batteries are replaced.
 - * Insert the batteries then set the clock.
 - * Blood pressure measurement is possible even without setting the clock. By setting the clock, you can record daily measurement results together with the time.

– USING AC ADAPTER –

Insert the AC adapter plug into the AC adapter socket on the device.



Notes on using AC adapter

Even when using the AC adapter, it is recommended to insert the batteries. If you unplug the AC adapter from the outlet or main unit without batteries inserted, the date and time will be reset. (Memory is preserved.)

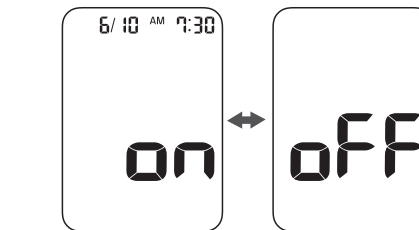
TIME AND DATE ADJUSTMENT

This device can store measurement results together with the time and date of measurement. The clock can be displayed all the time, which is useful for remembering to take measurement at the same time every day for managing your daily health. * If you make measurements without setting the clock, the date and time will not be recorded in the measurement results, and only the blood pressure measurement results are recorded in the order of measurement.

- 1 Year**
After inserting batteries, press and hold "Memory" button for more than 3 seconds, value of the year begins flashing. Press the "Memory" button repeatedly to increase the value of the year. When the upper limit that can be set is exceeded, the display returns to the lower limit value that can be set. Press the "START/STOP" button to confirm the year setting and value of month begins flashing.
- 2 Month**
Press the "Memory" button repeatedly to increase the value of the month. Press the "START/STOP" button to confirm the month setting and value of date begins flashing.
- 3 Date**
Press the "Memory" button repeatedly to increase the value of the date. Press the "START/STOP" button to confirm the date setting and value of hour begins flashing.
- 4 Hour**
Press the "Memory" button repeatedly to increase the value of the hour. Press the "START/STOP" button to confirm the hour setting and value of minute begins flashing.
- 5 Minute**
Press the "Memory" button repeatedly to increase the value of the minute. Press the "START/STOP" button to confirm the minute setting. Then, 12H or 24H begins flashing.
- 6 12H or 24H**
Press the "Memory" button repeatedly to choose the 12H or 24H. Press the "START/STOP" button to confirm time format setting. ON or OFF begins flashing.

7 With or without time display

Press the "Memory" button repeatedly to choose with or without time display. Press the "START/STOP" button to confirm time display setting.



* Time modification

When time modification, finish all time setting first and press and hold the "Memory" button for more than 3 seconds. Then, value of the year begins flashing. Follow the above setting operations.

ATTACH THE CUFF

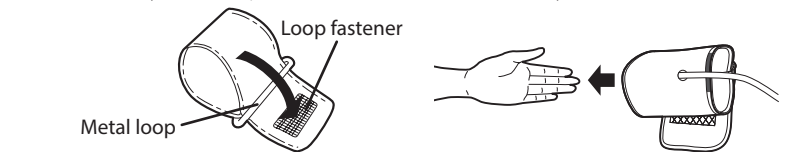
1 Insert the air hose plug into the main unit.

* Do not bend the air hose during measurement, which may cause inflation error or harmful injury due to continuous cuff pressure.

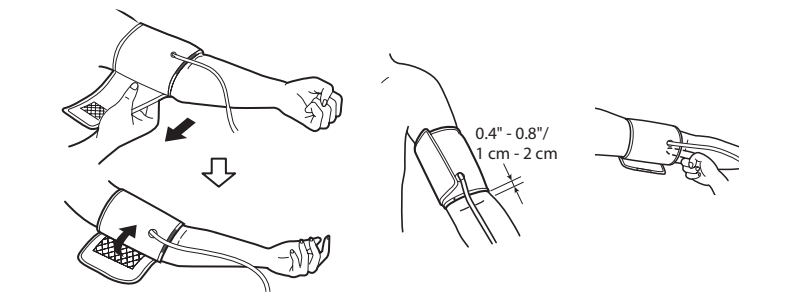
2 Attach the cuff.

Unroll the cuff and put the end of the cuff through the metal loop so that the side with the hook and loop fastener is on the outside.

- * Be sure that the cuff size is appropriate to your arm circumference before attaching the cuff.
- * Attach the cuff over a bare arm or a thin sleeve.
- * If you roll up your sleeve, your upper arm will be constricted and this affects your result.
- * The blood pressure value is likely to differ between the right arm and left arm. Measure your blood pressure with the same arm each day.

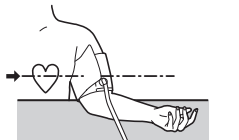


- (1) Attach the cuff around your arm so that the air hose comes to the palm side and center of your arm. Adjust the position where the hem of the cuff is 0.4" - 0.8" / 1 cm - 2 cm above your elbow.
- (2) Pull the end of the cuff outwards so that the cuff is snug around your arm and then secure it with the hook and loop fastener. The appropriate tightness of attaching cuff is that if you can readily slide a finger between the cuff and your arm.




3 Adjust your posture.

- Seat comfortably with your feet flat on the floor and do not cross your legs.
- Place your arm on a table or similar surface with your forearm extended.
- Position your arm so that the cuff is at the same height as your heart.
- Place your hand so that your palm is facing upward and your fingers are relaxed.
- Do not move your body or talk during the measurement.
- When measuring your blood pressure while lying down, lie face up, straighten your arm and relax.

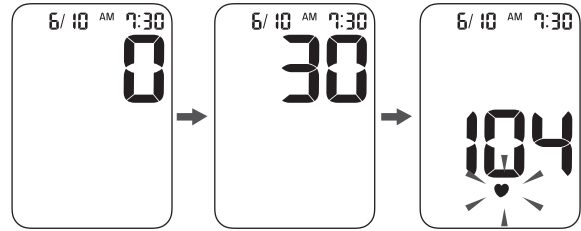


MEASURE YOUR BLOOD PRESSURE

1 Press the "START/STOP" button to start measurement.

All digits are displayed. Then the cuff begins pressurizing automatically.
* The  icon that displays when all digits are displayed is not a battery replacement notification.

*  indicator will begin flashing when a pulse is detected.




* If you feel abnormal, or when you want to stop measurement, press "START/STOP" button, then the cuff will deflate and measurement stops.



* If pressing the "START/STOP" button does not release the air, unplug the air hose plug from the main unit and remove the cuff from the arm.

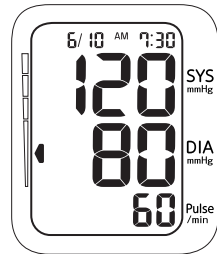
* **Pressurization in manual mode:** Press and hold the "START/STOP" button and release it at the pressure value where you want to stop (about 40 mmHg higher than the maximum blood pressure) to stop the pressure at that pressure. The pressure upper limit is 280 mmHg.

2 The measurement result is displayed.

Once measurement is completed, the cuff deflates and the measurement result is displayed. If there is no error in the measurement result, the device stores the result automatically.

* If the  icon displays, the measurement result is not included in the average value calculation.

* If the  or  indicator displays in the measurement result, please refer to "INDICATORS".





3 Finishing measurement.

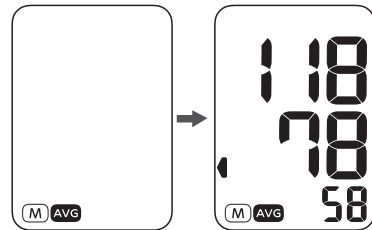
Press "START/STOP" button to turn the device off or it will turn off automatically after approximately 3 minutes.

CALL THE MEASUREMENT RESULTS

60 measurement results can be stored in memory. The average value is calculated automatically to help you for managing your daily health.

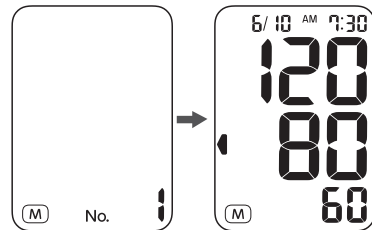
1 Average value

Press the "Memory" button, the  and the  icons are displayed, and soon, the average value of last 3 measurements appears.



2 Past result

Press the "Memory" button repeatedly to see your past results. After memory number appears, result is displayed. Each time you press the "Memory" button, an older result comes up.



Press the "START/STOP" button to finish memory mode.

3 Delete result

- Deleting one result -

Display the measurement result that you want to delete and then press and hold the "Memory" button for 4 seconds or more. When deletion is complete, "CL" displayed on the screen changes from blinking to lit. When "CL" is lit, deletion is complete, so release the "Memory" button. Do not remove the batteries while deleting the memory.

- Deleting all results -

After displaying the measurement results, press and hold the "START/STOP" button for 4 seconds or more while holding down the "Memory" button. When deletion is complete, the "ALL CL" displayed on the screen changes from blinking to lit. When "ALL CL" is lit, deletion is complete, so release the buttons. Do not remove the batteries while deleting the memory.

INDICATORS

1 Irregular heartbeat (IHB) indicator



The irregular heartbeat (IHB) indicator is displayed after measurement ends if an irregular heartbeat is detected during measurement.

Correct measurement may not be possible if your heartbeat fluctuates greatly during measurement. If the irregular heartbeat indicator is displayed, measure your blood pressure again while relaxed and still.

If the irregular heartbeat indicator appears frequently, consult your physician about your health.

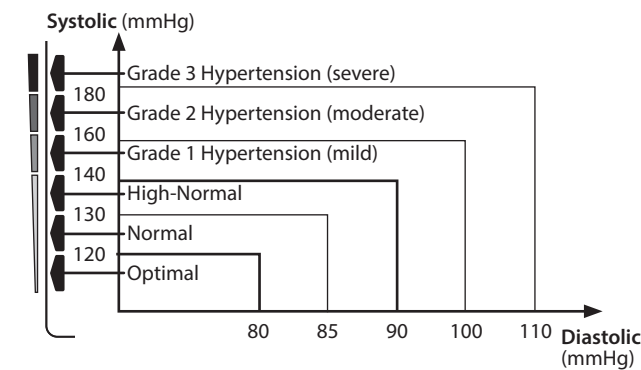
2 Body movement icon



If a large pressure change is detected due to movement of the body or arm during measurement, it will be displayed after the measurement is completed.

3 WHO blood pressure classification indicator

The blood pressure classification indicator has six levels which the grades classified by World Health Organization (WHO).



STORAGE, CLEANING AND MAINTENANCE

- Do not store the product in locations exposed to direct sunlight, high temperatures, low temperatures, high relative humidity or excessive amounts of dust. Refer to the "SPECIFICATIONS" for the detailed storage conditions.
- Make sure to store the product where children, pets cannot reach and or pests are not there.
- Do not drop the device or the cuff and give any shocks or vibrations.
- Do not bend the cuff or the air hose excessively. The pressurization failure may result.
- Remove the batteries if the product will be left unused for a long period of time. There is a risk of failure due to fluid leaking from the batteries.
- Do not wash or get wet the cuff as well as avoid to get water into the air hose. The failure may result.
- Do not clean the device or the cuff with alcohol, thinners or benzine, as this could damage the product.
- In case the device or the cuff gets dirty, wipe off the dirt with cloth moistened with a neutral detergent, then wipe it with a dry cloth.
- It is recommended that the product is inspected every two years to ensure proper function and performance.

DISPOSING








- When disposing of the device and cuff, do so properly in accordance with the local rules and regulations for where you live.
- When disposing the battery, please help to protect natural environment by respecting national and/or local recycling regulations.

TROUBLESHOOTING


Troubleshooting 1

Display	Possible cause	Solution
No response when you press button or load battery.	Incorrect operation or strong electromagnetic interference. Low battery	Take out batteries, and insert all batteries in correct direction again. Change the batteries.
Unable to take measurement	The cuff position was not correct or it was not properly tightened. Pulse is not detected.	Attach the cuff correctly and try again.
	Speaking, arm or body movement, angry, excited or nervous during measurement.	Try again when calm and without speaking or moving during measurement.
	The device may not be able to measure the pulse of persons with an extremely weak pulse or persons with arrhythmia.	Consult your physician.




Troubleshooting 2

Display	Possible cause	Solution
	The cuff is not properly tightened.	Attach the cuff correctly and try again.
	The pulse cannot be detected because the cuff is not fitted properly.	
	Measurement cannot be performed because there is excessive pressure on the sensor.	
	Cuff pressure above 281 mmHg.	If the pressure does not fall automatically during measurement, press the "START/STOP" button to stop the measurement and remove the cuff.
	Low battery	Change the batteries.
	Pulse rate is out of measurement range. The pulse was (39 bpm or less, or 181 bpm or more).	Attach the cuff correctly and take a deep breath and relax to take measurement again.
	The device is not working properly.	Please contact the local distributor.

SPECIFICATIONS

Model number	CHUG330
Measurement system	Oscillometric method
Display	Digital display type
Measurement localization	Upper arm
Cuff	Soft cuff (SCN-012)
Cuff circumference range	22 cm - 32 cm (8-3/4" - 12-1/2")
Measurement range	Pressure 0 - 280 mmHg Pulse 40 - 180 pulse/min
Accuracy	Pressure ±3 mmHg Pulse ±5% of reading
Inflation	Automatic inflation by internal pump
Deflation	Automatic speed deflation system
Rated voltage	6V DC (--- : direct current)
Exhaust	Electromagnetic quick exhaust valve
Power supply	4 x 1.5 V --- SIZE AAA batteries (R03, LR03), AC adapter (option) (model: AC-230CZ)
Battery duration	Approx. 300 times (Alkaline), Approx. 150 times (Manganese)
Automatic power off function	Approx. 3 mins. (after activated)
Main unit dimensions	110 (W) x 47 (H) x 104 (D) mm
Weight	Unit Approx. 210 g w/o batteries Cuff Approx. 130 g
Operating conditions	Temperature 10°C - 40°C
	Humidity 15% - 85%RH
	Barometric pressure 700 hPa - 1060 hPa
Storage conditions	Temperature -20°C - 60°C
	Humidity 10% - 95%RH
Electric shock protection	Internal power unit/class II equipment (when using AC adapter)
Applied part	 Type BF (Cuff)
Mode of operation	Continuous operation
Memory	1 x 60 readings, Average of last 3 readings
Protection against ingress of water	IPX0
Accessories	Cuff, 4 AAA batteries (R03) for demonstration purpose, Instruction manual and EMC technical data

* This device corresponds to the below standards: IEC 60601-1/EN 60601-1 (Medical electrical equipment - Part 1), IEC 60601-1-2/EN 60601-1-2 (Medical electrical equipment - Part 1-2), EN 1060-3 (Non-invasive sphygmomanometers - Part 3).

Main specifications of AC adapter	
Input:	100 - 240 V AC 50/60 Hz 0.12 - 0.065 A Indoor use only
Output:	6 V DC 700 mA 
Operating temperature and humidity:	10°C - 40°C/15% - 85% RH * Do not use in humid or wet places.
Storage temperature and humidity:	-20°C - 60°C/10% - 95% RH AC adapter plug polarity (positive tip polarity)
Operating pressure range:	700 hPa - 1060 hPa 
	Class II equipment 

- CITIZEN is a registered trademark of Citizen Watch Co., Ltd. Japan.
- Design and specifications are subject to change without notice.

CITIZEN SYSTEMS JAPAN CO., LTD.

6-1-12, Tanashi-cho, Nishi-Tokyo-shi,
Tokyo 188-8511, Japan

E-mail: sales-oe@systems.citizen.co.jp
http://www.citizen-systems.co.jp/