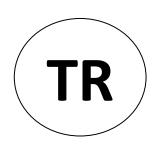


# **Installation and User Manual**



Pellet and Wood Central Heating Stoves

# **Model TPW-23**



Tested according to DIN EN 14785

For efficiency and emission, see enclosed declaration of conformity!



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#### 1. INTRODUCTION

Pellet stoves and boilers are easy-to-use domestic heating appliances. They are fully automatic and can be used inside as well as outside the house. These heating units combines pleasure with a fireplace view. These are independent heating units that provides heat dissipation of radiators.

You have a stove with European Standards Quality Certificate.

Please read the user manual, carefully.

It includes information on product functions and easy-to-use information.

Use of these informations increases the product quality and extend its life. You can properly protect the fuel and the environment.

Warranty of the product depends on the right use of installation and instructions as described in the guide.

We recommend you to keep this guide in order to reach the information about the correct use of the stove at the beginning of every winter.

#### 2. FEATURES

<b>Technical Features</b>	TPW-23
Power	25KW
Boiler connections out-in	1"- 3/4"
Hot water	1/2"
Operating pressure	1-1,5 bar
Flue pipe diameter	100 mm
	20 kg pellet
Fuel capacity	8 kg wood
Efficiency	94%
Electricity	230 V-50Hz
Weight	260 kg
Boiler capacity	35 lt

#### 3. WARNING

- USE ONLY 6MM NATURAL PELLETS MANUFACTURED ACCORDING TO DIN PLUS STANDARTS.
- DO NOT USE 8MM OR 10 MM PELET, OLIVE SEEDS, CHERRY SEEDS, HAZELNUT SHELL ETC.



- CLEAN THE FIRE POT EVERYDAY.
- THE FLAME TRANSMISSION PIPES MUST BE CLEANED IN 3-4 DAY PERIODS WITH THE BRUSH SUPPLIED WITH YOUR STOVE OR BOILER.
- AT THE END OF THE WINTER, GENERAL MAINTENANCE AND CLEANING (WITH THE BRUSH) MUST BE CARIED OUT AND THE FUEL STORAGE MUST BE EMPTIED.
- DAMAGES CAUSED BY USING INAPPROPRIATE PELLET AND NON-REGULAR CLEANING ARE NOT COVERED BY WARRANTY.
- THE FROST PROTECTION OF THE PUMPS WORKS WHEN THE HEATING WATER DROPS BELOW + 5° C, AND TO PREVENT BLOCKING FROM CORROSION AND SEDIMENT, THE SYSTEM AUTOMATICALLY OPERATES THE PUMP FOR 3-10 SECONDS EVERY 24 HOURS. THEREFORE, DO NOT UNPLUG THE PRODUCTS DURING THE WHOLE YEAR.

#### 4. INSTALLATION AND CONNECTION

#### 4.1 GENERAL INFORMATION

All the inspections for the pellet stove are done according to the stipulated standards. It complies with the prescribed parameters related to combustion efficiency and flue gas emissions. The product mentioned in this manual has been tested by the approved bodies according to EN 14785 Standard.

The packaging of the stove protects the product from damage in the best possible way. However, the stove or its accessories may still be damaged during transport. Therefore, after removing the stove from the package, check whether it is complete and undamaged. In case of any damage, notify your dealer.

#### 4.2 SAFETY

- \* Product must be installed by an authorized person.
- \* Before installing the product, it should be determined whether the bearing capacity of the floor to be installed is durable to the product. In case of insufficient bearing capacity, appropriate measures should be taken. If the floor where the stove is to be installed is flammable or heat-sensitive, you should place a base (eg marble or glass base).
- \* Care must be taken to ensure that the ventitlation conditions of the place where the product is installed and frost protection measures are taken (such as antifreeze)



- \* The pellet stove can operate in conjunction with the existing multiple chimneys. In addition, the stove should not be connected at places such as the aspirator chimney and ventilator.
- \* Product needs to be connected to the chimney with a shortest distance.
- \* Always check the water level in the stoves and radiators with the manometer before the first installation (1 1.5 bar range).
- \* The central heating boilers and stoves cannot be used without water. Our company is not responsible for damages caused by running without water.
- \* In order to get better heat efficiency and extend the life of the product, qualitative pellet and wood fuel should be preferred. Do not use moist or wetted pellet, sawdust, coal etc.
- \* Since the pellet stoves are designed according to the interior spaces and give heat to the environment, they should not be installed in places such as bathrooms, shelter, cellar.

#### 4.3 INSTALLATION AND CONNECTION

\* Installation must be done by an authorized person. Pellet stoves or boilers are fully automatic products. Expansion vessel, circulation pump, thermostates, safety valve and safety switches are readily installed inside the product. Ignition is made by a resistance and fuel is fed by an auger.

## 4.3.1 Electricity

The electricity must be 230V / 50 Hz. Our company is not responsible for any damage that may occur in case of any voltage drop or rise. We recommend taking necessary measures as it does not include the warranty.

### 4.3.2 Sanitary

It is recommended that the radiator installation connection needs to be carried out by an authorized person for regular and comfortable operation. Our company is not responsible for any damage related to the installation.

After the safety precautions and precautions described above, the pellet stove or boiler can be installed up to last a few radiators without using too many elbows with the installaton line pipes 1 "- 3/4" METAL or PVC pipes. In this way, the hot water will circulate more easily and the temperature in the radiators is felt in a short time. 1/2 " METAL or PVC pipes can be used. The installation of the main pipes to the pellet stove should be securely connected to the radiators by using the fittings as shown in the diagram (Gland, nipple, valve). After the connection is done the system will be filled with water by the authorized person. After the installation, the leakage in the



installation, radiators and valves should be checked and the air in the installation should be emptied. This all needs to be done by the authorized person.

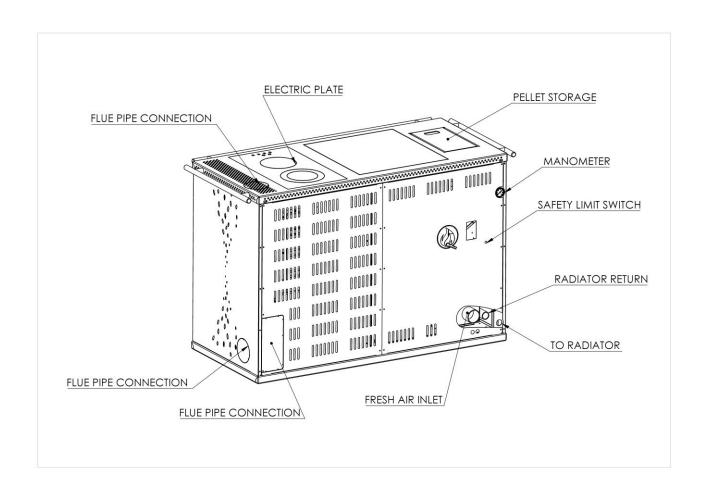
\*According to the weather conditions of the region, it is recommended to use 1/3 portion antifreeze against corrosion and freezing.

### 4.3.3 Flue pipe connection

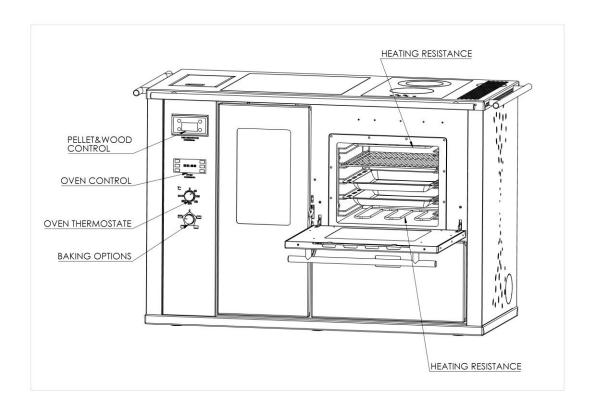
We recommend the use of a stainless steel flue pipe for the flue connection. The pellet stove can operate in conjunction with the existing multiple chimneys. In addition, the stove should not be connected at places such as the aspirator chimney and ventilator. The chimney can be given directly out of the pellet stove at a short distance, or it can be connected to the existing chimney at short distance.

#### ATTENTION !!!

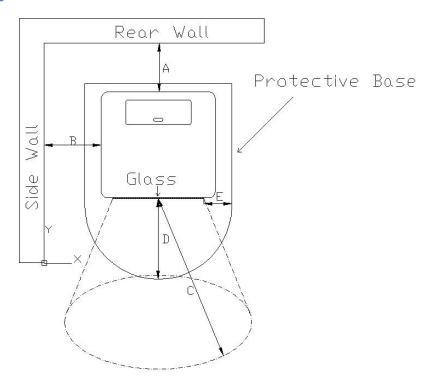
THE PIPE AND ELBOWS USED UP TO THE CHIMNEY OUTPUT AND INPUT NEEDS TO BE THE SAME DIAMETER. BY THE INPUT OF THE CHIMNEY A REDUCTION MUST BE USED. MAXIMUM 4 METERS PIPES AND 2 ELBOWS NEEDS TO BE USED. PIPE JOINTS SHOULD BE TAPED TO CONNECTOR OR ALUMINUM BAND.







## **4.3.4 Minimum Safety Distances**



While installing the stove, the fire regulations and chimney's instructions must be complied. For any related questions please ask the chimney installer. Minimum distances to be observed in flammable or heat-sensitive materials (eg furniture, wallpaper, wood panels) (see diagram below) are:

#### **A** 25cm from rear wall



- **B** 15cm from lateral wall and
- **C** 80cm from the radiation area (front side of the product)

Flammable materials and furniture should not be placed at a distance of 80 cm in the radiation area (C) of the flame monitoring cover.

This distance can be reduced to 40 cm when the protection panel is placed between the stove and the materials that are likely to burn.

Minimum distances for flammable materials and furniture are indicated on the product label and must not be exceeded. If the floor where the stove needs to be installed is flammable or heat-sensitive, you should place the product on the ground protection plate (eg marble or glass base).

In this case the minimum dimensions of stove bottom plate (look at drawing) should be:

- **D** 50cm (front length)
- **E** 30cm (lateral length from the inner edge of the fire chamber cover)

You can order the floor protection plate from seller when you require.

#### **5. CONTROL PANEL**

#### **5.1 KEYS AND FUNCTIONS**



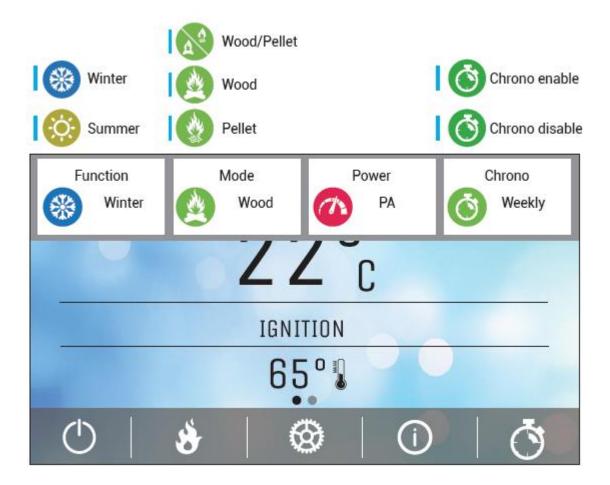


The screen will be accessed when swiped to the left



The active ones are displayed in green, inactive in black.

The main screen will be accessed when scrolled down



This screen is displayed in the Summer-Winter Menu, combustion management and the level of the Pellet or wood mode is shown.



# **5.2 MAIN DISPLAY AND BUTTONS**

ON/OFF - RESET	Ф	Pressing this symbol in the lower left corner of the screen will display "Swipe to Open", the system will start when you swipe. If there is an error in the system, touch this symbol again to remove the error, then "Swipe to unblock" will be displayed
OFF	0	When the on/off button is pressed, this symbol appears on the screen to swipe. This symbol becomes red when the stove is off.
SETTINGS	❷	Used to access the Settings Menu.
CUSTOMIZE	$\odot$	This menu is used to customize the Panel Settings, Display and system menu.
CHRONO	Ō	It allows to set the start and extinguishing time of the system at the desired time on desired days.
INFO SCREEN	(i)	When this symbol is touched, information such as flue outlet temperature and water temperature is displayed.
IGNITION RESISTANCE	*	When the symbol is green, it indicates that the ignition resistor is active.
AUGER	***	This symbol indicates that the auger is active when the symbol is green.
PUMP	0	This symbol indicates the pump is active when the symbol is green
VALVE		This symbol indicates that the valve is active when the symbol is green (not used)
V2 OUTPUT	6	This symbol indicates that the clappes motor is active when the symbol is green.
AUX 2 OUTPUT	2	This symbol indicates that the AUX2 output is active when the symbol is green (not used).
AUX 3 OUTPUT	(3)	This symbol indicates that the AUX3 output is active when the symbol is green (not used).
EXTERNAL CHRONO	(IR)	When the symbol is green, it indicates that the external chrono is active (not used).



SAMPLE VISUALS; When you touch the info button one time following messages will be shown on the screen;

The sample is visual, ignore the numbers.



#### **5.3 MENUS AND SYMBOLS**

	Return to main menu		Save and exit menu.
<b>→</b>	Return to the previous menu	X	Exit menu without saving.

#### **5.4 ERROR CODES AND EXPLANATIONS**

NOTE: If you recieve an Error Code please check the related parts and the values. After you solve the problem touch the power button for 3 seconds. If the Error Code keeps existing, please contact your service.

In wood mode, all the Error Codes except Er04 and Er05 in locks the operation of the boiler.



Error		
Code	Explanation	Solution
Er01	Safety limit thermostat error/boiler temperature exceeds 90°C.	Check the valves and the circulation pump. Push the black tip of the safety limit thermostat inside, which is on the back side of the boiler.
Er02	Chimney emission safety switch error	Check chimney connections and emission.
Er03	Chimney outlet temperature drop or auger blockage error	Check whether the fuel is supplied by the auger in the combustion chamber. (If the fuel does not come, the auger may need to be checked, please contact the dealer)
Er04	Boiler water over temperature error	Check plumbing valves and circulation pump.
Er05	Chimney outlet high temperature error/flue temperature sensor error or cleaning error	This error occurs when the calibration values are increased or when the general cleaning time is reached. Please clean all the parts of the product.
Er07	Chimney emission fan motor error	Check that your chimney is not clogged. Reset the product by pressing P1 button for 3 seconds, if the error still persists, contact your dealer.
Er08	Chimney emission fan motor encoder error	Reset the product, contact your dealer if the error still persists.
Er09	Low water pressure in the boiler	Check the manometer, add the missing water.
Er10	High water pressure in the boiler	Check the manometer, reduce the water pressure by removing the water from the air vent valve or the drain valve
Er11	Date and time error	Check the time and date
Er12	Ignition failed	This error can occur due to the impurity of the resistance or pot, check the resistance and clean the pot.
<b>Er15</b>	Security Fault Low Voltage	Check the voltage waves.
<b>Er16</b>	RS485 communication error	Call your service.
Er18	Pellet level sensor error.	Check the pellet storage and add pellet.
Er52	Input-Output Module Error (I2C)	Call your service.



#### **5.5 MENU FUNCTIONS**

Press the symbols on the touch screen to enter the menus. To save the changes press button. Press button to exit from the menu.

# 5.5.1 Settings menu

Press button to enter the settings menu. In the settings menu, you can set the heating power, heating management, timer and manual loading.

#### 5.5.2 Combustion menü



	There are 3 functions in this section; pellet mode, wood mode and combi mode.
	<b>Pellet Mode:</b> Only pellet fuel is used.
OPERATION	<b>Wood Mode:</b> Only wood fuel is used, fire starts manually.
	<b>Combi mode:</b> Fire starts with pellet and then continues with
	wood.
PELLET POWER	This section contains the Power (1-6 and Auto options)
WOOD POWER	options where the combustion power of the fuel is selected.
	Auger menu is used for loading speed of the pellet
AUGER CALIBRATION	adjustments. You can move the screen left / right to adjust the
	pellet loading speed deceleration or acceleration values in the
	display (+ 505). Press the button to save the data and
	to exit . To exit without saving press the button .
	Menu used for flue fan speed adjustment. You can move the
	screen left / right to adjust the pellet loading speed
FAN CALIBRATION	deceleration or acceleration values in the display (+ 505).
	Press the button to save the data and to exit. To exit
	without saving press the button .



# **5.5.3 Combustion management**

Boiler Thermostat	Press the boiler thermostat to enter the sub-menu. You can move the display to the right / left to change the boiler thermostat value	
	(max 75 - min 50). To save the changes touch button.	
	Touch button to exit menu.	
	Touching 'Summer-Winter' enables you to enter the sub-menu. If	
	you touch 'Winter' you choose the 'Winter mode' and save by	
Summer-Winter Menu	touching button. Touch button to exit menu. The summermode is not used.	
	mode is not used.	

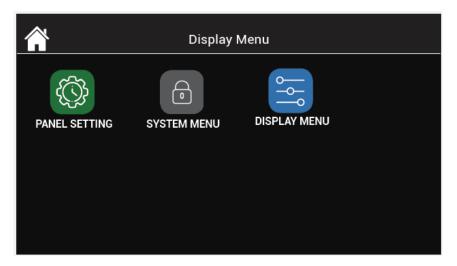
# **5.5.4 Manual loading**

This menu is used to transmit the fuel from the fuel storage to the fire pot. This will be activated by touching the symbol on the right side of the menu.

#### 5.5.5 Customization



By touching this symbol, the screen below will exist



# **5.5.5 Display settings**

TIME AND DATE	To set the time for daily use, you can change the time zones and date by sliding the screen. You must confirm it with the button.
LANGUAGE	Language options are available in this menu, tap the language you want to use to select it.

# 5.5.6 System menu

**ONLY FOR AUTHORIZED SERVICE** 

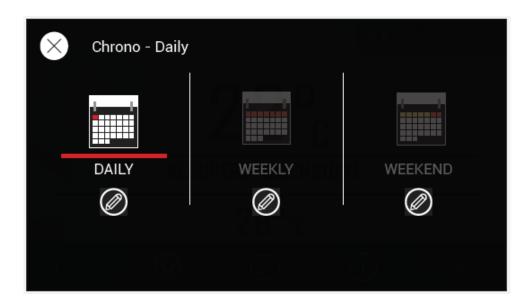


#### 5.5.7 Display menu

This menu is used to set functions such as screen brightness, minimum brightness, and sound.

#### 5.5.8 Chrono menu

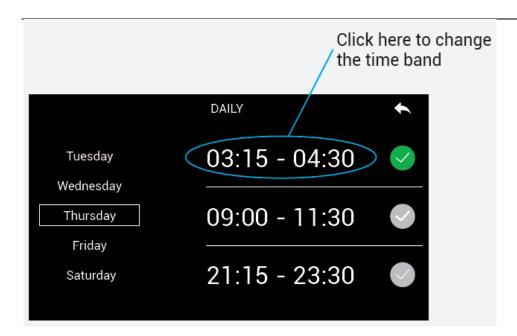
To enter this menu, press the on the lower right corner of the main menu. In order to be able to set the time, first check that your time and date are correct. When you enter the menu you will see the following screen.



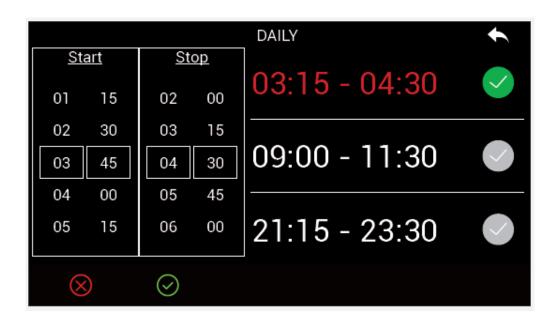
Tap Daily, Weekly or Weekend to select the desired timing interval. The inactive time

range will be gray. To enter and edit the mode press symbol. When it is in Daily mode, you can select the working day you want from Monday, Tuesday, Wednesday...Sunday. In the weekly mode, you will see the Monday to Sunday option on the second line covering all days of the week. In weekend mode, you'll find Monday to Friday-(covers all days in the range) and Saturday-Sunday (which includes two days).





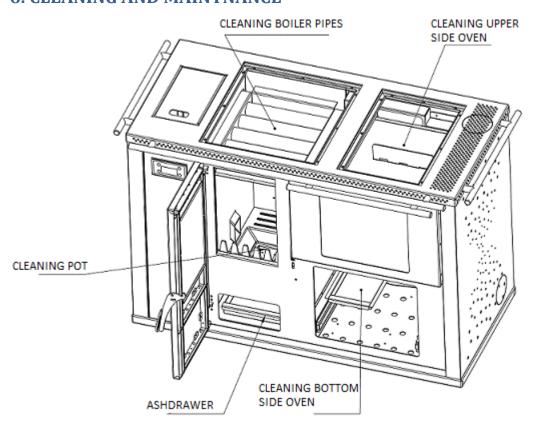
After selecting the time mode, this screen will appear (the text will change according to the selected mode). We can select the working day we want by scrolling the screen. When we touch the opening and closing hours, the screen will be displayed.



Set the desired hours from the Start and "Stop" section on the left with pressing button. After the selected hours are displayed on the right side, the check box next to the time zones is touched and activated.



## **6. CLEANING AND MAINTNANCE**



Cleaning sections	Cleaning Frequency
Flame Pipes cleaning	Once a week
Ash drawer cleaning	Daily
Combustion pot cleaning	Daily
Oven bottom and top cleaning	Twice a year
Oven cleaning	Once a year

#### **6.1 FLAME PIPES CLEANING**



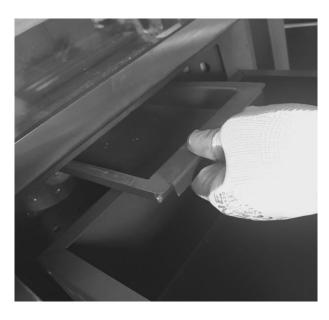
Remove the metal plate on the product's upper table and brush the exchanger pipes with the brush provided with the stove or boiler. Do this once a week.



#### **6.2 ASH DRAWER CLEANING**



Ash drawer under the fire pot must be emptied daily.



Open the oven door and empty the ash drawer located on the upper side of the oven.

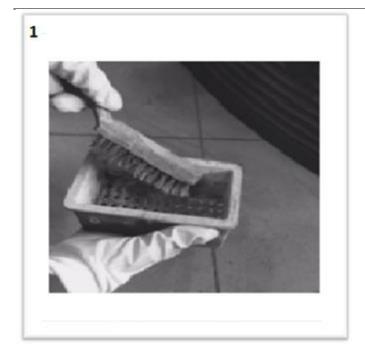
#### **6.3 COMBUSTION POT CLEANING**

Carefully open the lid of the product so that the ashes are not spilled out, clean them with a vacuum cleaner (see picture 2). Make sure that the electricity is turned off and that it to stove is cold.

Clean the burner pot with the help of a wire brush (picture 1)

Make sure that the combustion pot does not accumulate in the pellet and does not affect the ignition. Pot cleaning should be done daily.









It is advised to clean the grate daily.

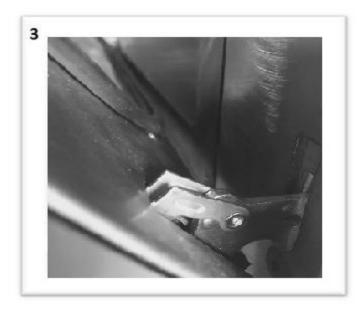
#### 6.4 OVEN CLEANING AND OVEN SECTION CLEANING

The oven section needs to be cleaned once a year. First the oven door and then the oven section must be removed. In order to remove the cover, the hinges must be removed by hand or by a metal part and then the cover must be closed and removed.











In order to remove the oven section after the cover, the screws and the oven section must be removed. After the dismantling, these sections should be cleaned with a wire brush.











After cleaning, the oven section and then the oven door must be reinserted. Heat-resistant silicone should be used in the oven frame when installing the compartment screws.

To clean the oven top, the cleaning cap (metal part) in the products' upper table be removed and cleaned with the help of a brush twice a year.

In order to clean the oven bottom, the door under the oven must be opened to remove the drawer. The section should be cleaned twice a year.



#### 7. GENERAL WARRANTY POLICY

ARAL MAKİNA MADENİ EŞYA SAN. VE TİC.LTD. ŞTİ provides warranty to the buyer within the framework of legal provisions. 2 (two) year warranty period against production defects starts from the actual delivery date. An invoice must be presented for inclusion in the warranty.

# Pump + glass + electric current high/low voltage resulted to a digital card failure + user errors are not covered by the warranty.

In case of any damage related to production in our product, our company will try to repair this damage as soon as possible within the warranty period or it will replace the problematic part. Only spare parts approved or supplied by the manufacturer must be used.

After the warranty period, our company will continue to serve you in the necessary conditions.

You are kindly requested to inform the relevant dealer where you have purchased the product from with the model number printed on the label on the back of the product.

The company reserves the right to make changes to the product after publication of this manual.

CONSUMER