



OUTDOOR SERIES

Uninterruptible Power System

**Line Interactive UPS
2000VA**

USER MANUAL

1. PREFACE

The product is line interactive UPS with the newest technology and powerful function for outdoor environments. The LINE INTERACTIVE UPS is with AVR function allows input voltage range from 75% to 125%, including on line voltage boost-up buck down. It is ideal protection equipment for critical connected loads with a pure sinewave output.

2. SAFETY WARNINGS

For the user own safety. The safety of data and this product, read the following safety instructions carefully before using the UPS system!

- This system has been designed to provide all the necessary safety conditions needed to protect electronic office equipment including information systems. In case of any questions refer to your authorised technical service representative.
- In order to avoid any damage to the equipment, it is advised to transport it in own packing.
- Battery's energy cannot be cut by the user. For to get energy from the output, the unit should be separated from the mains.
- In the case of urgency, the best way of the cut the Uninterruptible Power Supply is to take the button from I to OFF, then take off the power supply from the mains.
- Please avoid batteries from the fire. It is flammable.
- Do not open or mutilate the battery, released electrolyte is harmful to the skin and eyes. It may be toxic.

- A battery can present a risk of electric shock and high short circuit current. The following precaution should be observed when working on batteries
 - *Remove watches, rings or other metal objects.
 - *Use tools with insulated handles.
 - *Wear rubber gloves and boots.
 - *Do not lay tools or metal parts on top of batteries.
 - *Disconnect charging source prior to connecting or disconnecting battery terminals.

CAUTION:.....

Risk of electric shock, do not remove cover. No user serviceable parts inside, Refer servicing to qualified service personnel.

WARNING

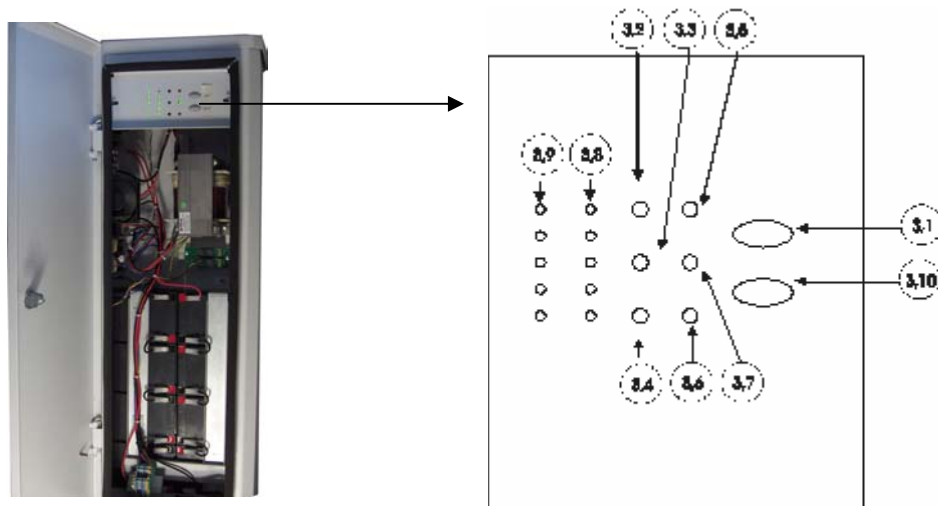
To reduce the risk of fire, replace only with the same type rating of fuse.

WARNING

To reduce the risk of fire or electric shock, install in temperature and humidity controlled indoor area of conductive contaminants.

3. INTRODUCTION

FRONT PANEL



3.1 ON/TEST Button

Press the button more than 3 seconds to turn the UPS on or press the button less than 1 second to activate the UPS's self-testing.

3.2 OVERLOAD indicator (RED LED)

The LED illuminates when the loads are over the capacity of UPS

3.3 BACK-UP indicator (GREEN LED)

The LED illuminates when the UPS is supplying battery power to the loads

3.4 REPLACE BATTERY indicator (RED LED)

The LED illuminates when the UPS's battery is no longer useful and must be replaced.

Note: When battery replace, disconnect the utility power then open the case and take notice of the battery's polarity while install the new battery to avoid short circuit.

3.5 INPUT VOLTAGE HIGH indicator, AVR (Automatic Voltage Regulation) is on (YELLOW LED)

The LED illuminates when the input voltage is high and regulated the voltage supplied to the load by UPS

3.6 LINE NORMAL indicator (GREEN LED)

The LED illuminates when the input is normal

3.7 INPUT VOLTAGE LOW indicator, AVR (Automatic Voltage Regulation) is on (YELLOW LED)

The LED illuminates when the input voltage is low and regulated the voltage supplied to the load by UPS

3.8 LOAD LEVEL indicators

The LEDs illuminates depending on the load level

3.9 BATTERY LEVEL indicators

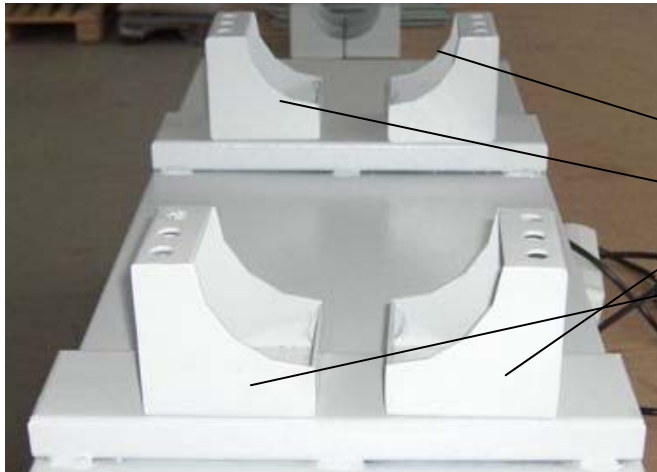
The LEDs illuminates depending on the battery capacity

3.10 OFF button

Press the button to turn off the UPS

4. CONNECTION

4.1 MOUNTING



Wall mounting components to be settled according to mounting places by using related equipment. Mounting size to be adjusted according to pole's scales.



The connection screws to be connected by mounting equipments. The connection screws have to pass on two surfaces.



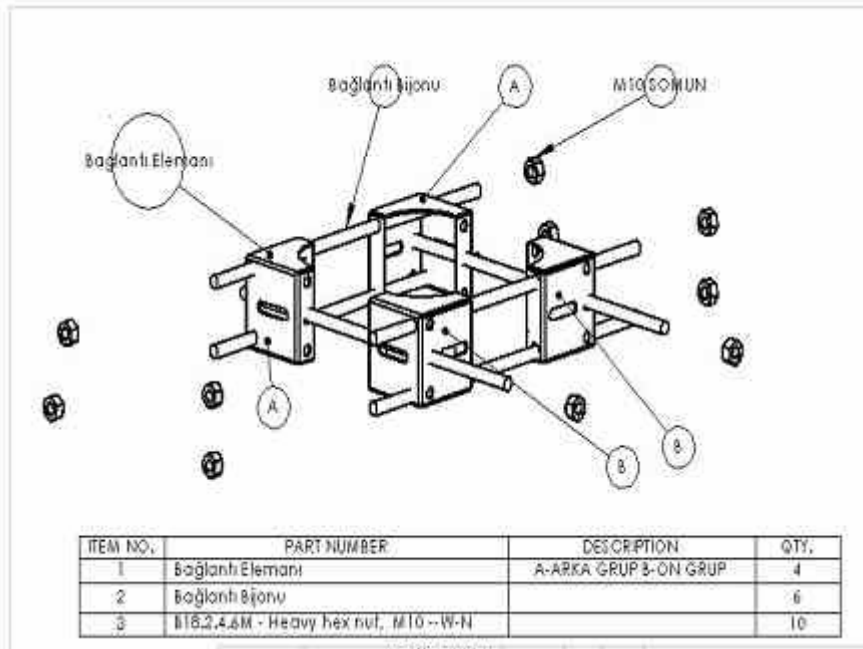
The other equipments of pole connections to be mounted according to pole's scales.



Connection screws at the rear of the cabinet

Connection equipment to be mounted at the rear of box

After this process, screws to be tightened according to required measurement.



5. INSTALLATION

5.1 INSPECTION

Inspect the UPS upon receipt.

5.2 PLACEMENT

Install the UPS in a protected area with adequate airflow and free of excessive dust. Do not operate the UPS where the temperature and humidity is outside the specified limits.

5.3 CHARGE THE BATTERY

The UPS charges its battery whenever it is connected to utility power. For best results, charge the battery for 4 hours in the initial use.

5.4 CONNECT THE LOADS

Plug the loads into the output connectors on the rear of the UPS. To use the UPS as a master on/off switch, be sure all of the loads are switched on.

Caution: Avoid connecting a laser printer or plotter to the UPS with other computer equipment. A laser printer or plotter periodically draws significantly more power than when idle and may overload the UPS.

6. OPERATION

6.1 SWITCH ON:

With the UPS plugged in, press and hold the ON/TEST button more than 1 second until "LINE NORMAL" LED lit to switch the UPS on. The UPS perform self-testing each time when it is switched on.

6.2 SWITCH OFF

Press the OFF button more than 3 seconds until the "LINE NORMAL" LED and "BACK-UP" LED off.

6.3 SELF-TEST

Use the self-test to verify both the operation of the UPS and the condition of the battery. In normal utility power, press the ON/TEST button less than 1 second and UPS performs a self-test function.

7. ALARMS

7.1 BACK-UP

When BACK UP mode becomes active the YELLOW LED illuminates. The alarm stops when the UPS returns to LINE NORMAL operation.

7.2 LOW BATTERY

In BACK UP mode when the battery energy runs low, the LED illuminates until the UPS shuts down from battery exhaustion or returns to LINE NORMAL operation.

7.3 OVERLOAD

When the Ups is overloaded (the connected loads exceed the maximum rated capacity) the UPS emits continuous alarm to warn an overload condition. Disconnect nonessential load equipment from UPS to eliminate the overload.

7.4 BATTERY REPLACEMENT

When the batteries not pass the SELFTEST, UPS give continuous alarm and REPLACE BATTERY LED illuminates. To replace the battery inform the authorized technical service or see Part 9.

8. MAINTENANCE

- Please keep clean the UPS and clean with vacuum periodically.
- Clean with soft and not humidity.
- Please check the connections monthly.
- Please protect from the rain, sunshine and humidity.
- Please keep away from the fire.
- Do not put anything on the UPS.
- Please make it work 0-40C

9. BATTERY CHARGE

UPS can work 3-5years without change the battery.

Please follow the instructions below for easy battery replacement

- Unplug unit from AC power source and disconnect all connected equipment.
- Disconnect AC power cord from unit.
- Please take off the screws from the right side of the UPS.
- Carefully lift top cover off and place to side. Be careful do not touch any inner components when changing the battery.
- Remove the 2 connecting wires from the battery.
- You can easily remove the battery from the unit.

Caution: Do not dispose of battery in fire

Caution: Do not attempt open the batteries.

Attention: the following precautions should be taken when replacing the batteries.

Remove watches, rings and etc.

Use tools with insulated glove.

- Put the new battery into place of the old battery in the same position.
- Attach the red cable into positive (+); attach the black cable into negative (-) through the battery.
- For to assemble of the UPS again; you must follow step by step 5,4,3
- For the installation of the UPS you must follow the directions, which belongs to the guidebook.

10. STORE

10.1 STORE CONDITIONS:

Store the UPS covered and upright in a cool, dry location with its battery fully charged the ups for at least 4 hours. Remove any accessories in the accessory slot and disconnect any cables connected to the computer interface port to avoid. Unnecessary draining the battery.

10.2 EXTENDED STORAGE

During extended storage in environments where the ambient temperature is -15 °C to +30 °C, charge the ups's battery every 6 months.

During extended storage in environments where the ambient temperature is -15 °C to +45 °C, charge the ups 's battery every 3 months.

INPUT	Power rating	2000VA
	Voltage	220V, ±25%
	Frequency	50 or 60Hz ±5%
OUTPUT	Voltage	220V ±5%
	Frequency	50 True 60Hz ±0.5%
	Voltage regulation AVR	The AVR increase automatically output voltage 15% if the mains voltage falls down -9% or -25%. The AVR decrease automatically output voltage 13%, if the mains voltage increase 9% or 25%.
	Transfer-time	2/4 ms.
PROTECTION AND FILTERING	Lightning Protection	320 joule, 2ms.
	Overload Protection	The UPS shout down automatically if the load current exceeds %110 for 30 seconds or %130 for 3 seconds.
	Input	Fuse agaist overload and short circuit.
	Short circuit	Automatic shout down of the output and input fuse protection.
BATTERY	Type	Maintenancefree 8*12Ah 12V batteries
	Typical Charging time	4 hours (%90 of the full capacity)
	Protection	Automatic self-test&descharge protection. Replace the battery indication.
	Back-up time	25 min.(100%) / 1 hour (50%)* (Dependence to the load)
	Netto weight Kg	
PHYSICAL SPECIFICATION	Dimensions	outdoor 2000 320Wx215Dx870H mm
ENVIRONMENT	Acoustical noise	<45dBA (1m far from the UPS)