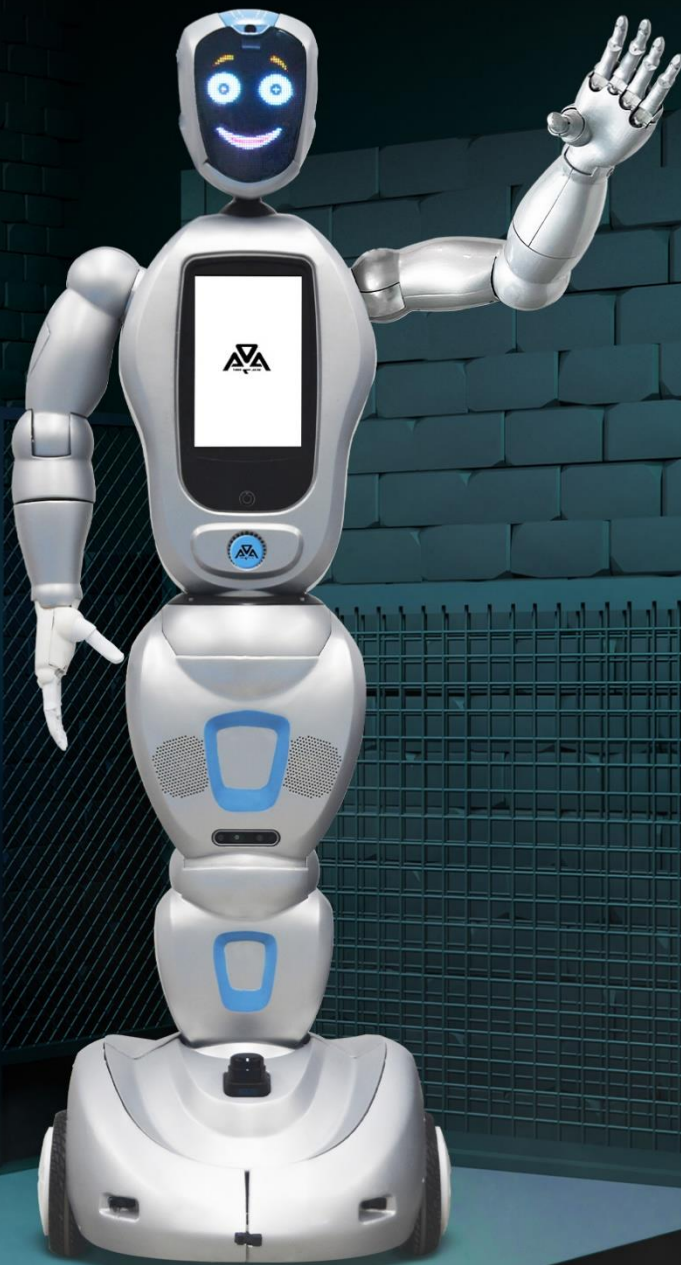


SOCIAL ROBOT  
**ADA-7**  
MANUAL USER GUIDE



444 40 80 [www.akinrobotics.com](http://www.akinrobotics.com)



[akinrobotics](https://www.akinrobotics.com)

## GENERAL INFORMATION

### ADA-7 SOCIAL ROBOT

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Before using the ADA-7 Social robot, please read the user manual carefully, if necessary, ask for support at <https://www.akinrobotics.com/en/request-suggestion-form> Complete the process steps by following the installation and service instructions exactly. ADA-7 is a humanoid social robot that has a high-resolution dynamic LED face and interacts with people by sensing it with its face detection feature. With the UniDirectional microphone on it; It converts the questions and orders coming from outside into text with “speech to text”, extracts it in artificial intelligence, and transmits the obtained information to the user via voice in 4 different languages. In addition, with the 2 Lidar and Realsense cameras on it, it navigates autonomously without hitting anything. In this way, it accompanies people to their destination. It easily grasps objects with its movable hand structure. With its ergonomic waist structure, it can easily perform movements that require bending, standing and turning from the waist. It interacts with your guests by tracking skeletons with advanced artificial intelligence technology.

**This guide is based on the current version and you can access the latest version information and all the details about the ADA-7 Robot at**

<https://www.akinrobotics.com/social-robot-ada-7>



## GENERAL INFORMATION

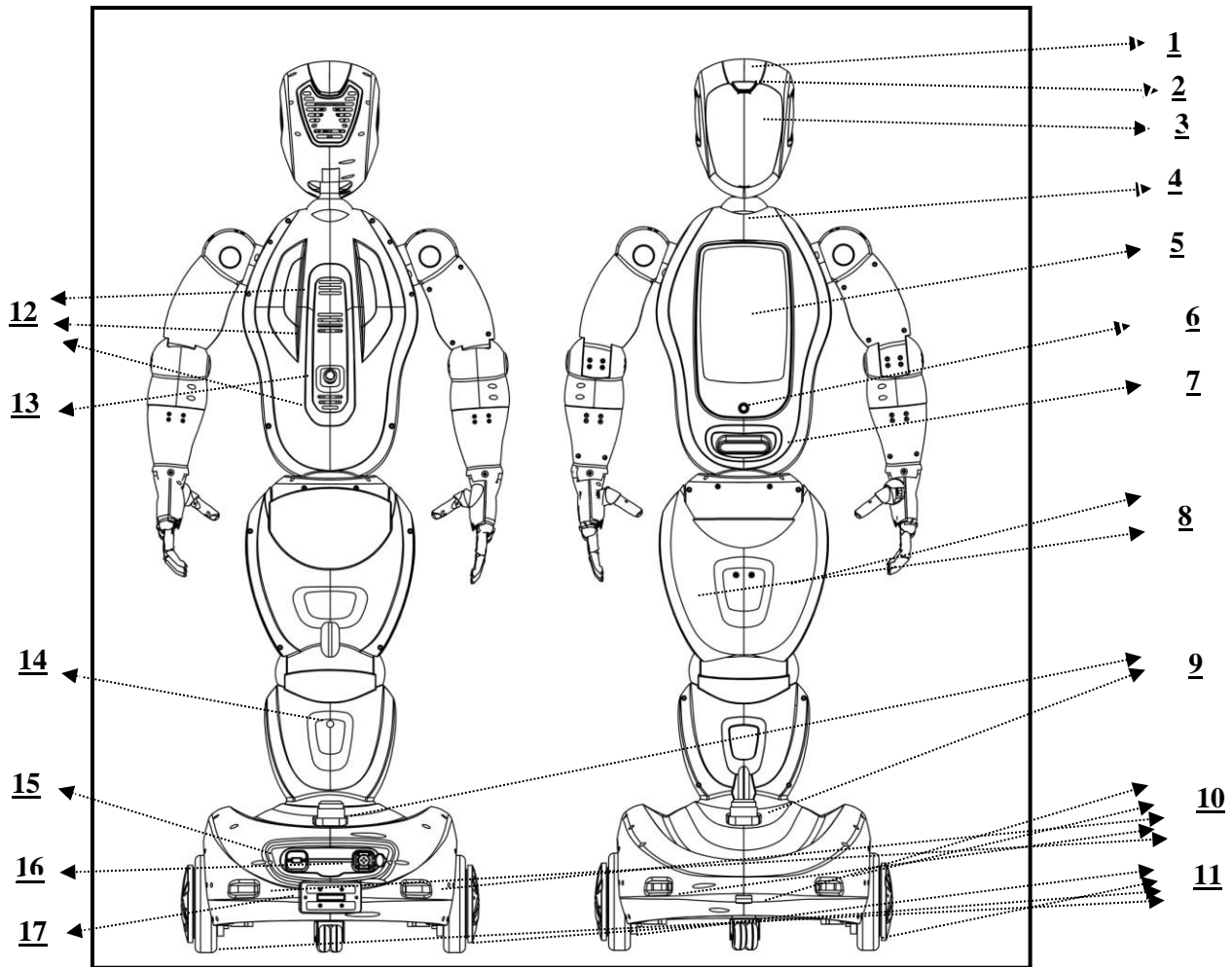


FIGURE 1

- |                                    |  |
|------------------------------------|--|
| 1. <b>PETTING SENSOR</b>           | : Sensor area interacted with by touching the robot.                   |
| 2. <b>2D CAMERA</b>                | : It is a camera that provides a 160° view to the robot. <b>LED</b>    |
| <b>FACE SCREEN</b>                 | : It is a different color option and a moving face indicator.          |
| 3. <b>MICROPHONE</b>               | : It allows the robot to detect sounds coming from the environment.    |
| 4. <b>TOUCH SCREEN</b>             | : It is the tool where the desired interface is added to the           |
| robot and interaction is provided. |  |
| <b>ON/OFF</b>                      | : ON/OFF Button  |
| 5. <b>3D STEREO VISION CAMERA</b>  | : It is a camera that provides 3D scanning and viewing angle.          |
| 6. <b>SPEAKER</b>                  | : This is the part where the sound output of the robot is              |
| provided.                          |  |
| 7. <b>LIDAR</b>                    | : It is a motion and position detection sensor.                        |
| 8. <b>SENSORS</b>                  | : The area where the drop and crash sensors are located.               |
| 9. <b>WALKING MECHANISM</b>        | : It is a walking area consisting of 2 wheels and two drunk            |
| mechanisms.                        |  |
| 10. <b>VENTILATION</b>             | : It is the area where the heat circulation of the robot is provided.. |
| 11. <b>EMERGENCY STOP BUTTON</b>   | : The button to turn off the working system of the robot in            |
| emergencies.                       |  |
| 12. <b>CAMERA</b>                  | : It is the camera that enables the robot to approach the              |
| autonomous charging station.       |  |

13. **USB AUX** : It is the connection point of the additional equipment of the robot.
14. **CHARGING POWER INPUT** : It is the power cable port.
15. **AUTONOMOUS CHARGING PAD** : The area that allows the robot to charge autonomously.

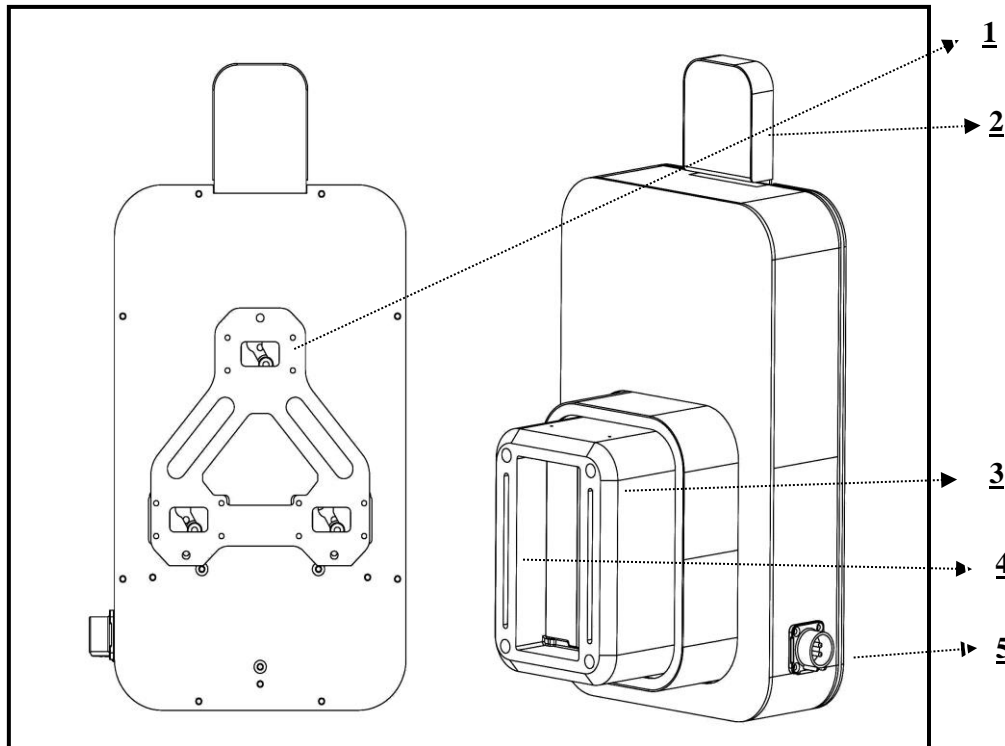
















FIGURE 2

1. **CONNECTION APPARATUS** : It is the wall connector of the robot autonomous charging unit.
- QR BARCODE** : It is used to determine the autonomous charging point position of the robot.
- MOVING PROTECTION AREA** : It is the area where the robot autonomous charging pins are protected.
2. **HEIGHT ADJUSTMENT FIELD** : This is the area where the robot autonomous charging pins are set.
- ENERGY INPUT** : It is the area where the energy connection to the autonomous charging unit is made.

## TECHNICAL FEATURES

	WEIGHT	65 KG
	HEIGHT	166 CM
	CHARGING VOLTAGE(Charger)	AC: 220 V- 50 Hz
	CHARGING VOLTAGE (Robot)	DC: 28,8V 21A
	OPERATING HEAT RANGE	5°C ~ 45°C
	OPERATING HUMIDITY RANGE	10%-50%
	BATTERY	LITHIUM ION (LI-ION)
	SPOKEN LANGUAGES	TURKISH- ENGLISH- RUSSIAN- ARABIC
	ACTIVE WORKING TIME	8 HOURS
	CHARGING TIME	4 HOURS
	MOTOR QUANTITY	2 BLDC MOTOR/15 SMART ACTUATOR
	SENSOR QUANTITY	105
	INTERFACE SOFTWARE	AR-GUI/AR-DISEGNER
	SOFTWARE	AR-CONTROL/AR-CORE ROBOLIZA/AR- VIEW



## PACKAGE OPENING AND ACTIVATION

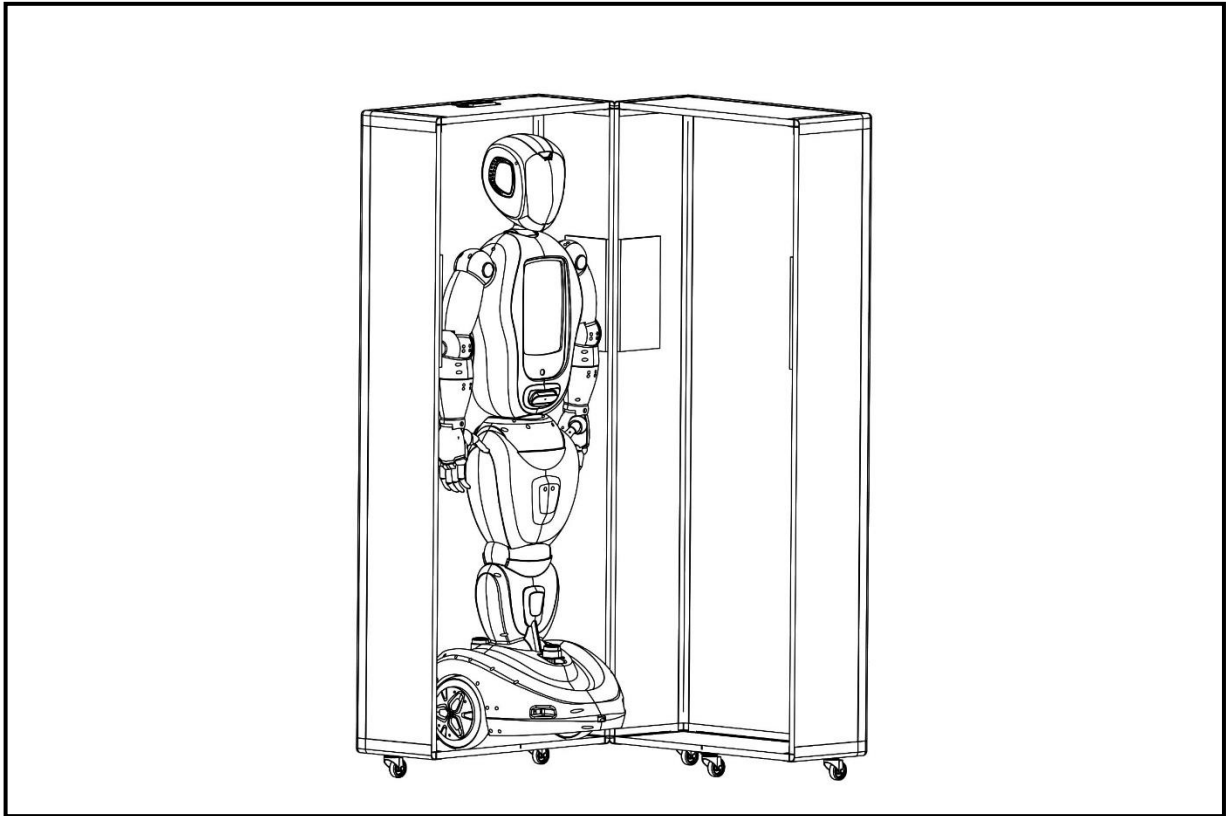


FIGURE 3

1. The ADA-7 Social robot must be transported vertically in its original crate. Product weight and central balance are provided by the original box and the protection sponges inside. During transportation to different locations, it must be placed and transported in the crate by following the instructions given.

After the delivery of the ADA-7 Social robot, the crate is unlocked and the aluminum parts on the robot's shoulders are held and pushed forward to allow it to come out of the protection sponges. With the help of a ramp, the aluminum parts are kept on until the wheels are fully seated on the ground.

**WARNING:** The robot is 65 kg. The instructions must be followed in order to avoid falling and slipping due to balance problems while being removed from the crate. When the robot is fully pressed to the ground, the aluminum parts on both shoulders are held and separated from the crate on a flat surface.

2. Press and hold the ON/OFF button for 5 seconds. First, the face LEDs will be turned on, then the interface software will be activated on the screen. Wait during these processes, which will take about 1 minute.
3. Before operating the ADA-7 Social robot, it must be ensured that it is adequately charged. The charge percentage can be followed on the front screen of the robot. To charge the robot, take it to the area where the autonomous charging unit is installed. Here, your robot will approach the charging unit itself and start charging.
4. The charging power cable must be connected to the charging power input on the autonomous charging unit. The other power end must be plugged into a 220 volt mains socket that complies with local standards. Total charging time is about 4 hours.

## WARNING AND PRECAUTIONS

Before and during use of the ADA-7 Social robot, the following instructions must be followed.

1. Before starting to use the robot, read the user manual. Act in accordance with all instructions.
2. Make sure that the floor on which the robot will move is flat, dry and smooth. Do not operate or leave the robot on slopes, ramps, wet surfaces and uneven surfaces. Otherwise, tipping may occur and the safety of the product and the safety of the people around may be endangered.
3. The robot weighs about 65 kg and interacts with its environment after being activated. It can move back and forth, to the side, to raise and lower its arms, and move its head. Even if the sensors inside the robot, which recognize the obstacles around it, prevent the robot from harming others, the robot should not be approached more than 1 (one) meter. Otherwise, it may cause unwanted injury.
4. The inside of the robot is equipped with a completely electronic design and there should be absolutely no water contact with the robot. Otherwise, heating, deterioration and flammable effects may occur in the working parts.
5. Never throw a foreign object into the robot.
6. The robot should be turned off during cleaning and should be cleaned with a dry, soft cloth. Chemicals containing alcohol and ammonia should never be used..
7. The robot must be operated and maintained within the temperature and temperature range specified in the technical specifications. Otherwise, working parts may be damaged..
8. The robot is designed for indoor use. It should not be exposed to environments such as sun heat, rain, snow, humidity.
9. The robot should never be operated or moved during charging..
10. When a heating problem is observed above the operating temperature of the robot during operation, the robot should be turned off immediately and help should be sought by calling the technical support unit..
11. No clothes should be put on the robot. The fan gaps on the robot should never be closed. Otherwise, fire hazard may occur due to high temperature, the robot may become inoperable..
12. Do not use a worn or damaged power cord.
13. If the lithium-ion battery inside the robot is damaged and leaking, never intervene and ask for help by calling the technical support unit..

## WARNING SIGNS



Elektrical Hazard



Read the user manual before starting to use.



Only authorized operator is allowed to use.



Lithium ion battery is in hazardous waste class and must be disposed of in accordance with the relevant legislation..



May ignite on contact with water.



Heavy load, do not lift.



## HANDLING AND STORAGE

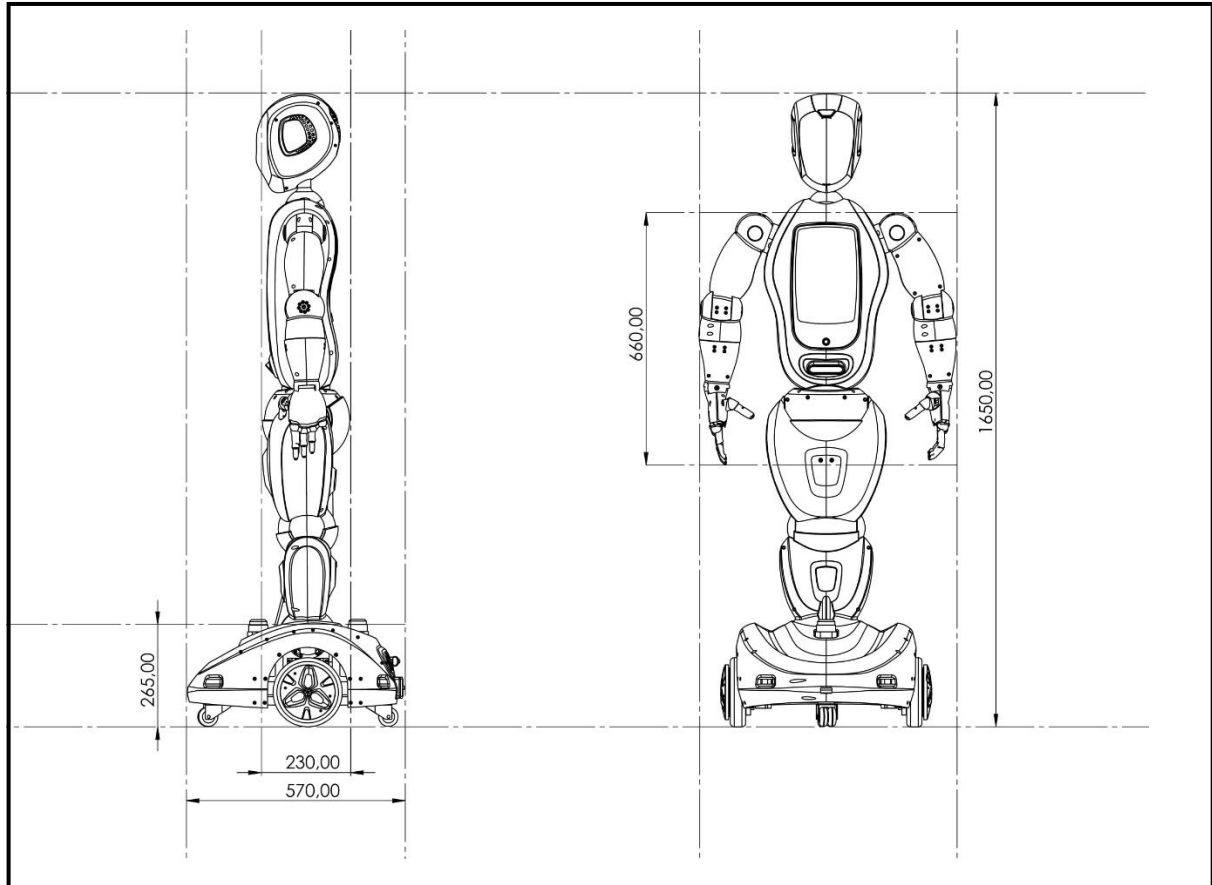


FIGURE 4

- ADA-7 Social robot dimensions are as given in FIG.-4.
- The dimensions of the transport box of the robot are 60cm x 70cm x 176cm as given in FIGURE-3..
- The robot must be transported upright and fixed in the transport area.
- The robot is upright, well-packed in the transport case, and suitable for land transport, air transport, sea transport, and other transportation.
- The robot is suitable for transportation and storage in a temperature range of 5 °C to 45 ° C and a relative humidity of 10%-50%.

## **MAINTENANCE-REPAIR-CLEANING**

- ✓ Do not interfere with technical problems that may occur in the ADA-7 Social robot and ask for help by calling the technical support unit.
- ✓ If the lithium-ion battery inside the robot is damaged and leaking, never intervene and ask for help by calling the technical support unit.
- ✓ The robot should be turned off during cleaning and should be cleaned with a dry, soft cloth. Chemicals containing alcohol and ammonia should never be used.

## **WARRANTY CONDITIONS**

1. The services to be provided during the warranty period are also included in the sales contract, and the warranty certificate is accepted as the basis for the sales contract.
2. Warranty Certificate must be kept by the customer during the warranty period. If the document is lost, a second document will not be issued. In case of loss, the repair and replacement of the robot and its apparatus will be made for a fee.
3. Warranty terms start from the delivery date of the robot and apparatus and are guaranteed for 1 year against manufacturing defects.
4. Robots and apparatus are delivered to the customer in working condition. It is commissioned on-site and necessary trainings are given to the relevant personnel. Initial setup and initial training are provided free of charge.
5. The repair of robots and apparatus within the scope of warranty is done by sending them to the factory with the transportation company that our company has contracted with. Transportation and accommodation expenses of the service personnel in on-site services belong to the customer. The cost of working time spent on the road is added to the service fee and the collection is made in advance.
6. In case of malfunction of robots and apparatus for which the warranty period continues, it is determined by our company whether the malfunction is caused by the fault of the customer or the manufacturer, and it is reported in a report to be prepared by our company.
7. In the event of a manufacturer's fault detection of robots and apparatus that continue within the warranty period, repairs are made at the manufacturer's expense. In case of fault detection, all costs belong to the customer.
8. Defects caused by the use of robots and apparatus contrary to the terms in the user manual are not covered by the warranty.
9. Damages caused by mains voltage/faulty electrical installation are not covered by the warranty.