

*iRobot* 

iRoboť

# Important Safety Instructions

Looj is a gutter cleaning device, use only as intended. For residential use only.

- READ ALL INSTRUCTIONS BEFORE USING LOGJ.
- This device has been tested and complies with FCC rules. Changes or modifications not expressly approved by the manufacturer will void your authority to operate this product.
- Prevent electric shock! During the course of Looj's operation, the product may get wet. Be certain it is dry before opening battery case to prevent potential shock injuries or burns.
- · Always wear safety goggles when operating.
- Looj will be throwing material clear of the gutter. Keep yourself and others out of path of flying debris. Make sure debris path below the gutter is clear of property or objects.
- Always use the belt clip when carrying Looj, and keep both hands on the ladder while climbing and descending the ladder.
- Do not expose remote control handle to water.
- Robot is water proof up to one foot of water, do not submerge in deeper water.
- Do not expose the robot to water if battery door is not secured to prevent damage to Looj.
- Do not attempt to service Looj yourself. Refer all non-routine servicing to qualified service personnel. Visit www.lrobot.com/support for more information.
- Looj is expressly not intended for children. Looj is not a toy. Do not sit
  or stand on this device. Small children and pets should be supervised
  if Looj is in use.
- Keep loose clothing, hair and body parts away from Looj while operating.
- Do not use this device near fire, or high heat.
- · Always remove the battery before long-term storage.
- · Use only iRobot Looj batteries and chargers to charge this device.
- Charge using standard US (120V AC) outlet only. Do not use with any type of power converter — any such use will immediately void the Warranty.
- Do not use the charger if the cord or plug is damaged.
- Charge indoors only.

⚠ IMPORTANT: Make sure you read and follow all safety instructions and labels from your ladder manufacturer before attempting to use Loo]. Failure to do so may cause serious injury or death.

## **Ladder Safety**

- IRobot Looj enables you to clean a single run of gutter with one ladder position. Choose the safest ladder position possible along each run.
   Safe ladder positions are away from power lines, tree limbs, or other hazards, and provide a level surface to rest the ladder.
- Always inspect the ladder before you use it. Never use the ladder if it is damaged, broken or bent.
- Make sure the ladder is away from electrical wires, tree limbs, doors, or any other hazards when it is extended.
- Do not lean over the side of the ladder when using Looj. Never over-reach.
   Always keep yourself balanced and centered over the ladder at all times.
- Keep both feet and one hand firmly on the ladder while placing Looj in the gutter and operating Looj.
- · Keep the handle on Looj when placing it in and removing it from the gutter.
- Do not place Looj in the gutter while standing on a roof unless you are secured to the roof with a safety harness in accordance with the manufacturer's instructions.

## Welcome

## iRoboť

Dear iRobot® Looj™ Owner,

Welcome to the world of iRobot. As an owner of the iRobot Looj Gutter Cleaning Robot, you join a growing group of people around the globe who, like you, are discovering an easier way to clean their gutters.

The use of practical robots that help you in and around your home is a new reality. We encourage you to share your feedback as we continue to develop new and ground-breaking robots. Here's what you can do to participate in our efforts:

- Communicate with us if you have questions, comments or require support. Contact us at www.irobot.com.
- Register online at www.lrobot.com/register or by mail (see included card). You'll be among the first to hear about our newest robots, product enhancements, and special offers.

Thank you for joining the robot revolution. We look forward to your valued input as we continue to deliver groundbreaking products that will change and improve your world.

On behalf of the entire iRobot team,

Colin Angle Co-Founder and CEO iRobot Corporation

4 iRobot Looj Owner's Manual

www.lrobot.com

----

# Important Tips A Before you use Looj, please read "Important Safety Instructions" on pages 3 and 4. For Best Performance

## Charge the battery for 15 hours prior to using. Unplug after 15 hours of charging.

- For long-term storage, keep Looj in a cool, dry place and remove the batteries from the robot and handle. Do not keep the battery plugged into the charger during storage.
- Clean Looj after each use.
- To avoid overspill and sludge accumulation, clean your gutters at least once per season. Clean regularly in areas where heavy debris is collected.
- For the densest clogs, reverse Looj, allow it to eject debris over gutter, and drive it forward. Repeat this process until the clog is cleared.
- . Use fresh AAA batteries in the remote control handle for maximum range.

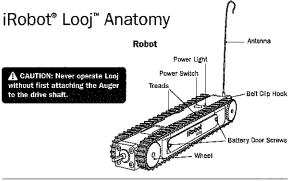
⚠ If Looj's auger stops spining and produces a loud clicking sound, the clutch is slipping. Turn off the auger and reverse Looj to avoid damaging the clutch.

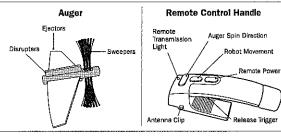
To see helpful operating and maintenance videos of Looj, please visit our website: www.irobot.com

## *iRobot*

# Table of Contents

Important Safety Instructions	3
Important Tips	6
Anatomy	8
Product Description	9
Charging and Installing the Battery	10
Using the Remote Control Handle	12
Attaching the Auger	13
Using iRobot Looj	15
Troubleshooting	19
iRobot Customer Care	20
Limited Warranty	22





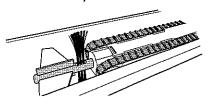




Belt Clip

iRobot Looj Owner's Manual

# **Product Description**



iRobot Looj is a powerful robot designed to clean gutters. Looj eliminates multiple climbs up and down the ladder. No more moving the ladder every six feet, or overreaching at dangerous heights. Looj has a number of features designed to make gutter cleaning simple and easy. Looj's ergonomic handle detaches for wireless control of the robot. The included belt clip lets you keep two hands on the ladder as you climb.

Cleaning Power: The robot uses a three-stage auger to remove clogs, lift out the debris, and brush your gutters clean. Spinning at 500 RPM, the high speed auger disrupts, lifts, and tosses debris out of your gutters.

Remote Control Convenience: The remote control gives you complete forward and backward control of the robot. You can also control the spin direction of the auger to make sure that gutter debris is tossed in the correct direction away from the roof.

iRobot Looj works in most standard gutters with straps or ties mounted at least 21/4" above the bottom trough. Looj is compatible with standard K-style and half rounds mounted with lower supports.

Tip: Remove items such as balls, large rocks, and tree branches by hand.

Attempting to force Looj through solid debris could damage the robot.

www.irobot.com

## *iRobot*

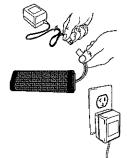
# Charging and Installing the Battery

Before you use Looj, charge the included 7.2V battery pack for 15 hours.

Looi batteries are designed to power Looj through 150 linear feet of gutter on a single charge, including the time to drive Looj back and forth during cleaning.

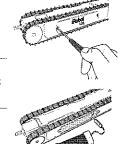
Do not leave Looj's battery plugged into the charger for more than 15 hours, as it may reduce the battery life.

For long term storage, iRobot recommends that the battery be fully charged then removed from the robot and stored in a cool, dry place.



# To Install battery pack:

- Loosen screws and remove battery door
- Make sure the battery end caps are on the battery. The end caps ensure a tight fit of the battery into the compartment.
- Connect the battery connector to the connector inside the robot's battery compartment and insert the battery into the robot battery compartment



## iRoboť

- Remove all batteries and store in a cool dry place when not in use.
- Do not leave battery charging for more than 15 hours. Doing so may decrease battery life.
- The battery naturally looses charge while being stored. After storing for a season without charging, you will need to recharge the battery for 15 hours prior to using.
- Battery life can be improved by only charging the battery when it is fully depleted. See www.irobot.com/support for more details on the Looj batteries and charging.

# Using the Remote Control Handle

The remote control handle detaches from Looj and is used to command the robot from a distance of up to 75 feet, depending upon interference and environmental conditions. The remote control handle keeps your hands clean and makes it easy to place the robot in and out of the gutter using only one hand, Install two AAA alkaline batteries (not included) in the remote control handle before operating.

Always use the same brand of batteries in the remote control handle. Don't mix battery types or brands. Use fresh batteries for maximum performance and range.

Insert AAA batteries into the remote control handle as shown,

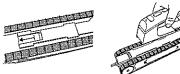


## To attach the remote control handle to Looj:

- Hold the remote control handle and align the front edge with the mark on the robot.
- 2. Slide the remote control handle onto the robot.



3. Let go when you hear a snap indicating that handle is in place.

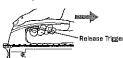


ndle is securely attached to the robot before picking up the robot.

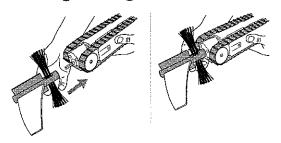
iRobot Looj Owner's Manual

## To remove the remote control handle from Looj:

Press release trigger and slide remote control handle away from auger.



# Attaching the Auger



Push the auger onto the robot shaft until you feel it snap into place or

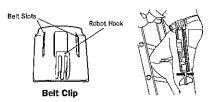
www.irobot.com

## *iRobot*

## Attaching the Looj Belt Clip

The Looj belt clip is designed to hold Looj while you climb up and down the ladder. Always use the belt clip or the optional holster accessory (see below) when using Looj on a ladder.

To use the belt clip, remove your belt and thread it through the belt slots. The robot hook should be on the bottom of the clip when attached to your belt. Attach the robot to the robot clip.

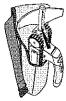


A CAUTION: Never use Looj on a ladder whold the robot while you climb or descend.

## Looj Holster Accessory (optional, not included in all models)

Use the Looj Holster Accessory as a storage device and to keep your clothing clean while carrying Looj. The holster includes a belt and a pouch to hold the fully assembled Looj and remote control handle. There is also a loop on the back for hanging.

- Fold antenna underneath antenna hook on the remote control handle before placing
- Place Looj in the holster with the auger facing up.



# Using iRobot® Looj™

## Always test Looj before using It.

Prior to using Looj, try driving forward and backwards. Try spinning the auger in both directions. Note the lights on the remote control handle and on the robot blink during transmission.

Also, practice attaching and detaching the handle as described on page 12.

## Using Looi

- 1. Attach Looj to the belt clip or place Looj into hoister.
- The optimum spot for ladder placement is away from wires, hazards, on flat ground, etc. Read and follow ladder instructions provided by the ladder manufacturer before using a ladder. See "Important Safety Instructions" section for more details.
- 3. Climb the ladder.
- Place Looj into the gutter and clear debris with the robot so that Looj rests on bottom of gutter. Clear all debris in front of the ladder before starting auger to avoid being sprayed

# A CAUTION: Wear safety glasses when using Looj to protect your eyes from debu

- Switch the power switch on the robot to turn it on. The power light should be green to indicate that its battery is charged. A red power light indicates that you should charge Looi's pattery.
- Detach the remote control handle.

- Press the remote power button. The light on the remote control handle blinks when it is transmitting signals to the robot.
- Once Looj is clear of the ladder, choose the desired rotational direction by pressing the auger spin direction button on the remote control handle.
- TIP: Note that one direction will spin the debris away from the house and the other direction will spin the debris onto the roof. Test the spin direction before driving the robot down the gutter.
- Ensure that the auger is spinning and tossing debris out of the gutter and away from your home.
- Press and hold the robot movement button in the forward direction to begin cleaning the gutter. Drive the robot forward and backward down the gutter to remove the debris.

## **Handling Dense Clogs**

Looj can handle most debris found in your gutter. Occasionally, there may be heavy debris that will not clear in a single pass. Should this situation arise, it's important not to force the robot into the debris.

TIP: If you hear a loud clicking sound and the auger stops spinning, the auger's clutch has slipped, immediately turn off the auger and reverse Looj if this occurs. Once you are clear of the debris, proceed with cleaning.

To handle heavy clogs, leave the auger on and drive the robot slowly forward until the auger contacts the clogged debris. Allow the auger to eject a small amount of debris. If Looj gets stuck or if the clutch slips, reverse direction and allow the auger to clear away the debris it has loosened. Repeat this process until the clogged debris is fully cleared.

For more detail, photos and videos please visit our website at: www.irobot.com

A CAUTION: If Looj begins to climb up over debris, STOP MOVING THE ROBOT forward and back it up. If you drive the robot over debris and up the side of the gutter, you risk it falling out of the gutter which may cause injury.

16 iRobot Looj Owner's Manual

A CAUTION: Excessive operation of the Auger while the clutch is slipping (clicking) will cause permanent damage to the robot.

- Once Looj reaches the end of the gutter, drive it back to you.
   Keep the auger spinning to drive under the gutter straps
- Switch the power switch off on the robot and turn the remote power off.
- Attach the remote control handle to remove Looj from the gutter and clip Looj to the belt clip before descending.
- Descend the ladder following safety instructions from ladder manufacturer.

## **Cleaning Looj**

Make sure the battery door is securely closed before cleaning, Looj is designed to be easily cleaned with a hose or under a faucet. No chemicals should be used to clean Looj. Prior to cleaning, remove the remote control handle and treads from the robot. Clean any debris from Looj's wheels.

Looj's remote control handle should be cleaned with a damp cloth only. The remote control handle is not waterproof. Damage may occur to the electronics if it is sprayed with water or submerged.



 $\pmb{\mathbb{A}}$  CAUTION: The remote control handle is not waterproof, Clean the handle with a damp cloth only.

A CAUTION: Always keep the battery door closed when cleaning to avoid damage to the product or battery.

www.irobot.com

17

## *iRobot*

## Storing Looj

Store iRobot Looj in a cool, dry place. After charging store Looj and its battery between 50' and 80' F (10'-26' C). Excessive heat or cold may reduce battery life and product performance. For best results, we recommend removing both the battery pack from the robot and the batteries from the remote control handle when the product is stored.

## iRoboť

# Troubleshooting

Refer to the chart below to resolve Looj's problem. If the problem is not resolved, visit **www.lrobot.com/support** (page 20).

Observation	Likely Cause	What to do
Remote transmission light does not light up on the remote.	Batteries were inserted incorrectly or have depleted, Power may not be on.	Check the battery orientation or replace with fresh batteries. Switch the remote power button to the "on" position.
Robot is not responding to the remote control handle.	Robot power is off or there is radio interference between the remote control handle and robot.	Check to see that both power buttons are on and both robot and remote control handle lights are flashing when a remote button is pressed. If not, try to improve reception by raising the remote control handle above the height of the gutter while operating.
Auger will not insert into robot.	Insertion hole is clogged.	Clean out hole with toothpick or forced air.
Auger stops spinning and loud clicking sound is heard.	Clutch has slipped on Auger.	Immediately turn off the auger and back up the robot away from any debris. Try spinning the auger in a clear area to test it.
Auger is spinning but robot is not moving. Clicking sound is heard.	Robot movement has stopped to protect the robot track motors. The clutch has slipped on the robot track wheels.	Retrieve robot, clean the wheels and test it on the ground to make sure it is operating properly before placing back into the gutter,

## Indicator Lights

Robot Power Light	What it means
Solid Red	Battery is low. Turn off auger immediately and recharge battery.
Blinking Red	Battery is low and robot is receiving data (commands) from the remote. Turn off auger immediately and recharge battery.
Solid Green	Power is on, battery level is ok.

Remote Transmission Light	What it means	
Solid Green	Power is on.	
Blinking Green	Remote control is sending data (commands) to the robot.	

## iRobot Customer Care

If you have questions or comments about this product please contact iRobot before contacting a retailer.

Please visit www.lrobot.com for support tips, frequently asked questions, or information about accessories and other iRobot products. We would like to hear from you,

## Should you still need assistance:

- · Visit the iRobot support site at www.lrobot.com/support
- . Call our customer care representatives at 877.855.8593

### iRobot Customer Care Hours:

- Monday Friday 9AM 7PM Eastern Time
- · Saturday 9AM 6PM Eastern Time

FCC Notice: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- · Regrient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the manufacturer, dealer, or an experienced radio/TV technician for help.

 $oldsymbol{\Lambda}$  WARNING: Changes or modifications not expressly approved by iRobot could void your authority to operate this product,

20 iRobot Looj Owner's Manua!

www.irobot.com

## *iRoboť*

## *iRoboť*

# LIMITED WARRANTY TO ORIGINAL PURCHASER

This iRobot brand product, as supplied and distributed by iRobot Corporation, and delivered as manufactured, in the certon to the original customer purchaser, is warranted by iRobot Corporation against manufacturing defects in materials and workmanship for the qualifying imitted warranty period as follows: One year LABOR AND PARTS: This limited warranty begins on the original date of purchase, and is valid only on products purchased and used in North America, and does not include Installation, removal or reinstallation. Warranty repairs must be performed by iRobot Corporation's authorized service center. To receive warranty service, the original dated bill of sale must be presented upon request as proof of purchase to iRobot Comporation's authorized service ecenter. To obtain warranty service, support or other information, please visit our website at www.frobot.com or by ceiling 877-855-8593. lichoot Corporation will repair or replace this product, at our option and at no charge with new or reconditioned parts, if found to be defective during the limited warranty period specified above. To request service, the purchaser must contact iRobot Corporation for problem determination and service procedures. IRobot Corporation does not warrant uninterrupted or error-free operation of the product. All replaced parts and products become the property of iRobot Corporation and must be returned to IRobot. Replacement parts and products assume the remaining original warranty, or 60 days, whichever is longer. This limited warrants overs manufacturing defects in materials and workmarship encountered in normal, and, except to the extent otherwise expressly provided in this statement, non-commercial use of this product and shall not apply to the following, including but not limited to damage which occurs in shipment; applications and uses for which this product was not intended; failures or problems which are caused by products or equipment mot supplyined by iRobot Corporation, evidents, and such as a caused by a development of

IRobot Looj Owner's Manual www.irobot.com

\_\_\_\_\_\_



Get iRobot accessories at: **800.727.9077** or visit **store.irobot.com** 

© 2007 Robot Corporation, 63 South Avenue, Burlington, MA 01803. All rights reserved.
Robot is a registered trademark of Robot Corporation. Log is a trademark of Robot Corporation.
Patents Pending