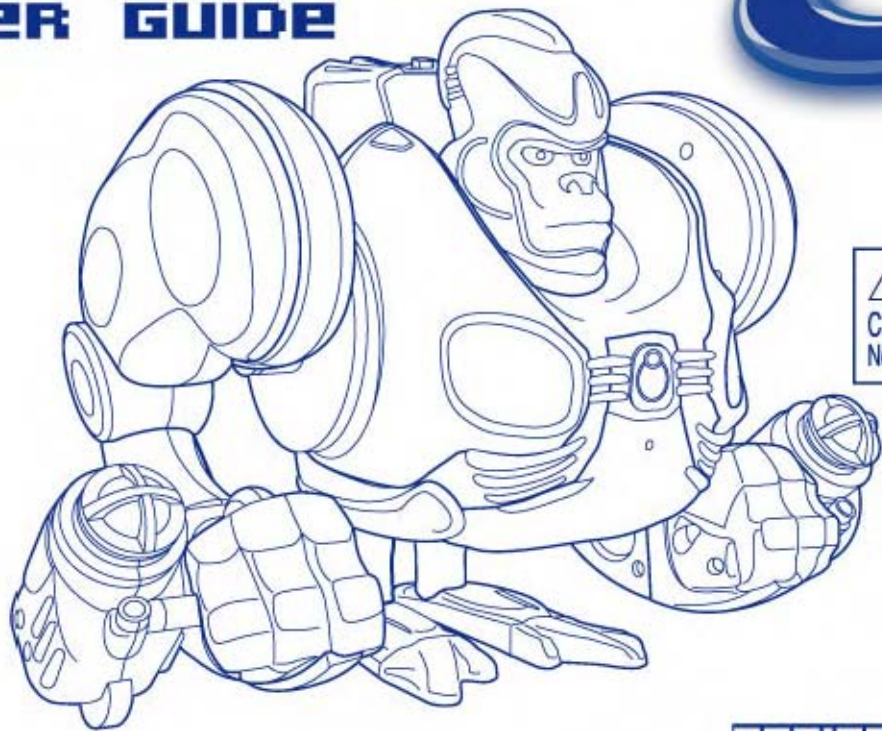


PRIME-8

POWER GUIDE



WARNING:

CHOKING HAZARD - Small parts.
Not for children under 3 years.

B+

ACTION ROBOT

ROCK AND RULE

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BEFORE YOU GET STARTED

READ this Guide

REMOVE launchers from Prime-8's fists

REGISTER online at www.prime8robot.com

CONTACT US

Prime-8 is a unique mobile robot and your experience is very important to us. If you have questions or concerns about Prime-8's functionality, please contact Bossa Nova Robotics' Customer Service at www.prime8robot.com/support.

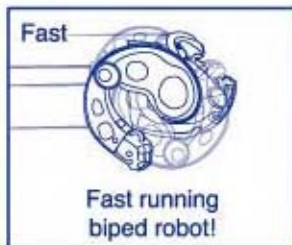
Please keep this Guide for future reference.

PRIME-8

Prime-8 is an action robot – he is a gorilla robot built for speed, fun and interactivity.

Prime-8 comes from a distant planet, and he is the most advanced robot of the Prime-X elite robot program.

Prime-8 is on a mission to protect and entertain Earth's youth.



IMPORTANT SAFETY INFORMATION

- NEVER put your fingers between Prime-8's feet and bottom.
- NEVER run Prime-8 with launchers attached. ALWAYS remove launchers before running.
- NEVER hold Prime-8 during operations. ALWAYS keep a safe distance (at least 1 m / 3ft) from his rotating arms.
- WARNING: Rockets may fire during installation.
- NEVER point rockets at the eye or the face.
- Prime-8 is designed for ages 8 and up. Younger ages require adult supervision.
- Prime-8 uses infrared technology (IR) to sense motion, detect obstacles, and receive remote control commands. Prime-8 may not work properly under direct sun-light and under some fluorescent lights.
- DO NOT make Prime-8 collide with objects, furniture or walls. Collisions cause damage to the objects and to the robot himself.
- Obstacle avoidance is OFF when using the remote controller.
- Prime-8 runs on hard floors and carpets. However, animations work best on hard floors.
- Prime-8 turns itself OFF after 12 minutes of inactivity. Toggle the power switch to restart.
- If you place Prime-8 on his back, belly or head, you MUST press the 'Stop' button on the remote controller to make him stand up.
- Periodically examine Prime-8 for potential hazards such as cracked, damaged, or broken parts. In the event of such damage, Prime-8 must not be used until the damage has been repaired.
- Do NOT
 - Abuse, throw, drop, or violently shake Prime-8, or wet him.
 - Place Prime-8 near heat or flames, or in sand, soil, or mud.

IMPORTANT BATTERY INFORMATION

Package Content:

- 1 Prime-8
- 1 Remote Controller
- 2 Rocket Launchers
- 2 Rockets

Battery Information:

Prime-8 uses 8 AA LR6 batteries (not included).

Remote Controller uses 3 AAA LR3 batteries (not included).

We recommend using good quality Alkaline batteries.

Battery Installation:

- Unscrew the battery cover using a Phillips screw driver.
- Place batteries in correct polarity.
- Rescrew battery cover.



Important Battery Safety Information

- | | |
|---|---|
| • Batteries should be replaced by adults. | • Do not try to recharge non-rechargeable batteries. |
| • Respect the correct polarity (+) and (-) as indicated. | • Remove batteries if Prime-8 will not be used for some time. |
| • Replace all batteries of the same type / brand at the same time. | • Rechargeable batteries are to be removed from Prime-8 before being charged. |
| • Use only fresh batteries of the required size and recommended type. | • Rechargeable batteries are only to be charged under adult supervision. |
| • Do not dispose of batteries in fire. Batteries might explode or leak. | • Exhausted batteries are to be removed from Prime-8 and the remote controller. |
| • Do not mix old and new batteries or different types of batteries. | • Do not short-circuit the supply terminals. |

QUICK START

1. REMOVE rocket launchers and remove stickers from launchers (if applicable).



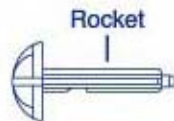
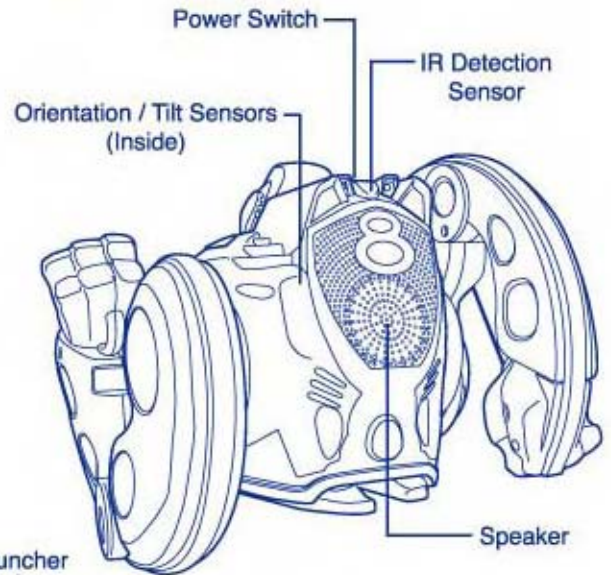
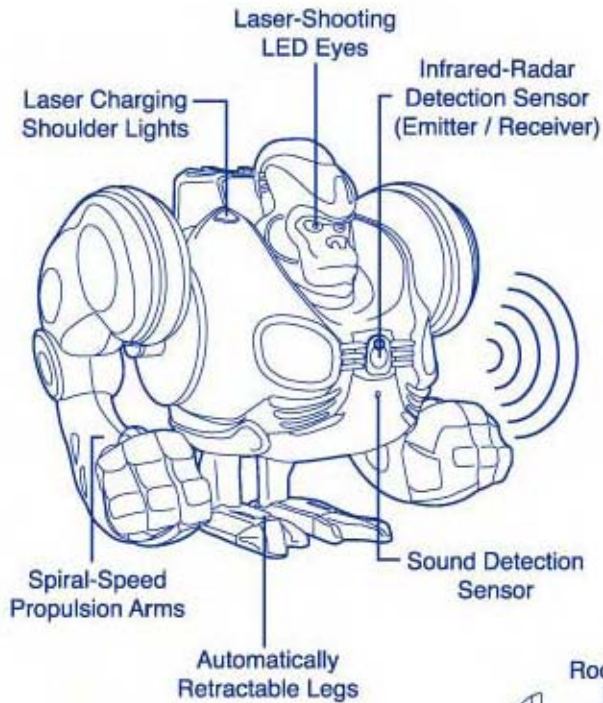
2. Insert batteries in Prime-8 and the remote controller.
3. Turn ON Prime-8.



4. Press and hold 'Forward' (▲) on the controller and start having fun!

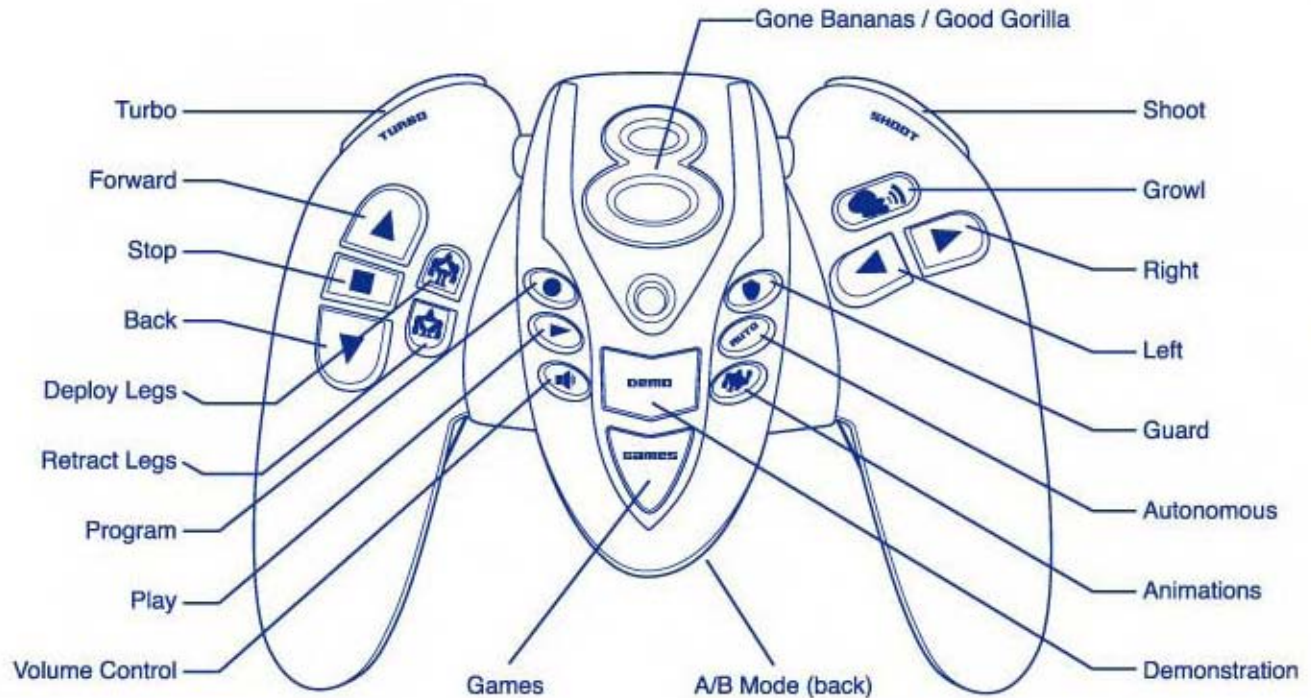
Caution : This is an infrared controlled product and it is necessary to point the remote controller at Prime-8 to work properly.

PRIME-B



IR Sensing Range: up to 60 cm / 2 ft

REMOTE CONTROLLER



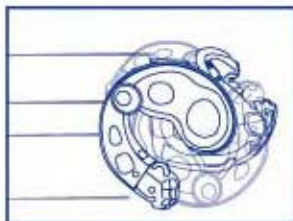
See page 14 for a full list of functions

Controller Range: up to 3 m / 10 ft

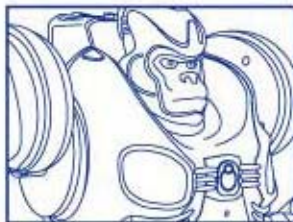
TO: YOUNG ROBOTICISTS

RUNNING

Prime-8 is an awesome action robot that runs fast, fires rockets, plays games, interacts with you, and explores the environment all on his own!



Prime-8 is your friend and protector. He is strong and on a mission to keep you safe. He is also funny and loves to make you laugh.



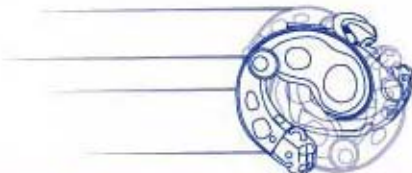
Prime-8 has attitude! He is typically a Good Gorilla, friendly and fun. But from time to time he becomes mad and... Goes Bananas!

GRRR



Important: Press 'Stop' [■] to exit most functions and features. If the robot is on his back, belly, or head, press 'Stop' [■] and he gets back on his feet automatically.

- Press and hold 'Forward' [▲] to make Prime-8 run. Press '**TURBO**' at the same time to accelerate even more.
- Press 'Left' [◀] / 'Right' [▶] while pressing 'Forward' [▲] to steer. To steer harder, release the 'Forward' [▲] button. Can you go through a doorway?
- Press 'Stop' [■] to make Prime-8 stop instantly. To stop slowly, simply release the 'Forward' [▲] button.
- Press 'Backward' [▼] to see him backtrack with truck-like sounds.
- Press '**SHOOT**' when Prime-8 stops to fire lasers from his eyes, and press 'Growl' [👊] to scare pets away!



Tip: If you long-press '**SHOOT**', Prime-8 charges the lasers before shooting.

PRIME-8 PERSONALITY

Prime-8 has a strong and changing personality.

Most of the time, Prime-8 is a Good Gorilla. He is friendly and will make you laugh.

But if you press the '8' button, he becomes maaaaad and Goes Bananas! He pounds his fists and roars from the top of his lungs. See his eyes glow red!

You can also make him Go Bananas by waking him up from sleep, or laying him on his back or belly.

Tip: Tickle his belly when he lies on his back and see what happens!

Press '8' again and Prime-8 returns to his senses and becomes Good Gorilla again. The eye lights turn off and you hear the brain circuitry working again.

Good Gorilla




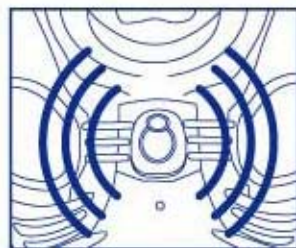
Gone Bananas



GUARD MODE

Prime-8 is on a mission to protect you from intruders.

1. Position Prime-8 in the middle of your room's doorway
2. Press 'Guard'  and Prime-8 makes a car alarm sound signaling that his Motion Detection sensor is armed and ready.
3. Stay behind the robot and attach Rocket Launcher (L) to his left fist and Launcher (R) to his right fist.
4. Carefully load rockets in each launcher.
5. If intruders walk in, Prime-8 will sound an alarm, fire the rockets and scare them with a loud growl!
6. Don't forget to remove the launchers before making Prime-8 run!



Firing Range: up to 2m / 6ft

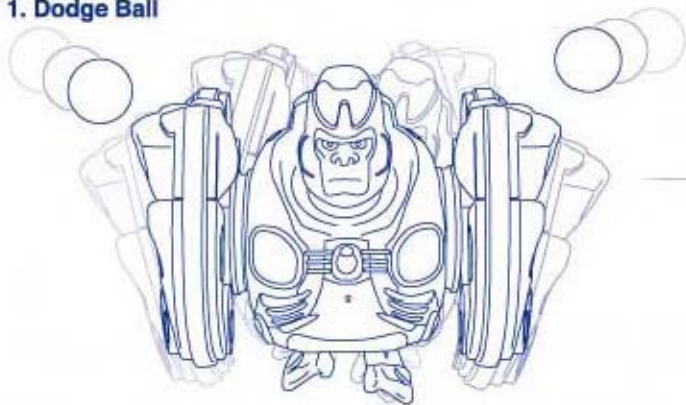
WARNING: Rockets may fire during installation. NEVER point rockets to the eye or face.

ACTION GAMES

One of Prime-8's unique features is that you can play games with him.

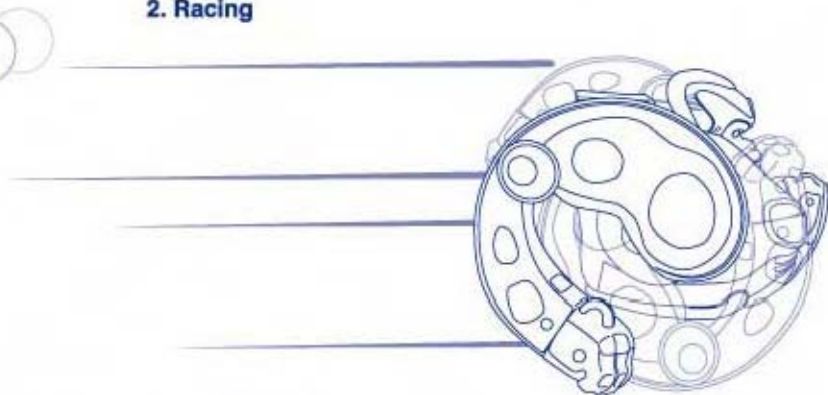
Grab the controller and let's have some fun! Press 'Games'  repeatedly to go from game to game. Prime-8's eyes and shoulders blink in Games Mode. Press 'Stop'  to exit.

1. Dodge Ball



When you enter the Dodge Ball game, Prime-8 makes the indicative sound of falling pins. You too have to make Prime-8 fall like a pin! Try to hit his blue centerpiece with a soft ball (or a rocket that *you* fire), and he tries to avoid it. If you only hit his armor, he laughs at you! But if you hit the centerpiece, he falls down in agony.

2. Racing



Indicative Sound: Engine Start

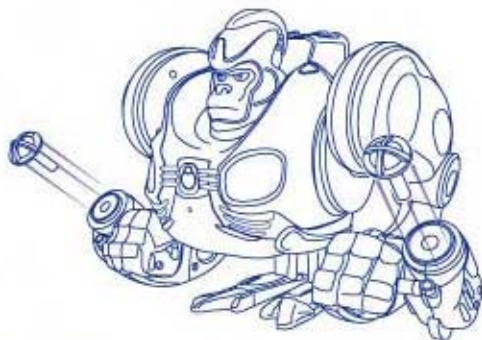
Line up Prime-8 head to head against other robots. When you press '**SHOOT**', he will do the countdown and explode out of the gates! Who's the world's fastest robot?

Running distance: approximately 3m / 10ft. Obstacle avoidance is ON.

ACTION GAMES





Master Prime-8's speed, maneuverability and strength to win!

3. Target Shooting



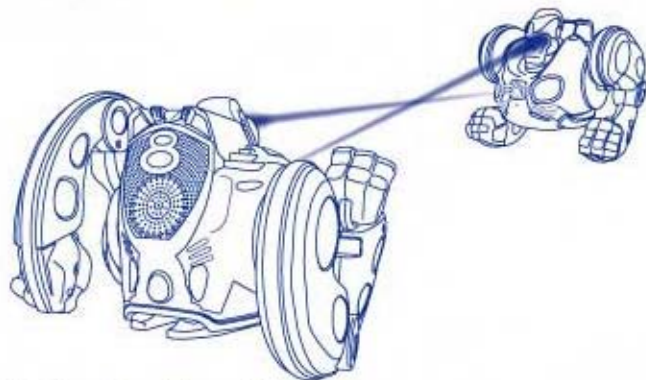
Indicative Sound: Rocket Firing.

Cut out targets from the package and place them in front of Prime-8.

Install the rocket launchers, load the rockets, and guide the firing! Aim using the 'Forward' , 'Backward' , 'Left'  and 'Right'  commands, and press '**SHOOT**' to fire.

Visit www.prime8robot.com to discover secret tips and new features.
Watch videos to learn new tricks!

4. Laser Tag



Indicative Sound: Laser Shooting.

Chase other robots and shoot lasers at them. Don't forget to toggle 'A/B' modes* - if your friend is A, you should be B. Shoot the chest to score, score 6 points and you win! If your opponent runs away, shoot the back to cripple him, and quickly maneuver to shoot his chest and score.

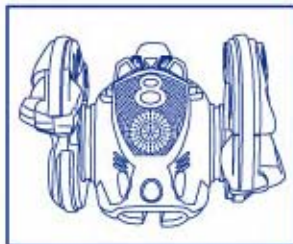
*A/B Mode: To set your robot to mode A, turn OFF the robot and slide the A/B switch on the controller to A. Turn ON the robot and press any button, the robot is now in mode A. To play with a friend, ask them to place their robot in mode B.

INTERACTIVITY

Prime-8 responds to you and to the environment depending on his personality.

Don't forget - you change his personality by pressing '8'.

Good Gorilla: Clap for him, and he responds with a tap dance! The more you clap, the longer the dance. Put him on his head to see what happens!



Gone Bananas: Boy is he mad. If you pass in front of him, he shoots lasers at you!



BEHAVIORS

Prime-8's behavior changes entirely with his personality!


Good Gorilla: Press the 'Animations' button and see him Fart! Press 'Animations' again and discover how entertaining he is :) Press 'Stop' to exit.




Gone Bananas: Press the 'Animations' button and he pounds the floor in a show of supreme strength. Press 'Animations' again to see him do boot camp training exercises, including lifting weights, doing push ups, and even swimming the backstroke!



PROGRAMMING

Don't forget that you can program Prime-8 to do your tricks.
Press 'Program'  and Prime-8 blinks his eyes and shoulders and makes a programming sound.

Press the buttons on the controller in the sequence you want the robot to execute them. You can program up to 10 commands.

Press 'Play'  and off he goes! He follows the steps you programmed – can you make him run into another room and scare the cat?


Press 'Program'  at any time during programming to exit and save your moves.



Note :


- Obstacle avoidance is OFF.
- Prime-8 forgets programmed actions if he is powered off.

DEMO & SELF AWARENESS

Press the 'Demo'  button and watch Prime-8 do break dancing and an impressive set of athletic behaviors. Beware, sometimes he can be really silly!

15
ANIMATIONS!



Prime-8 is also self-aware. If he trips when running, he apologizes and rights himself up. Prime-8 does not automatically right himself up when you manually put him on his back, head or belly. Press 'Stop'  to get him back on his feet.

TO: EXPERIENCED ROBOTICISTS

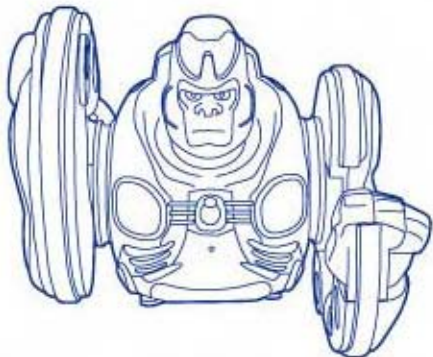
If you are passionate about robots and like to discover how they work, you are at the right place.

Here, you will learn about the robotic technologies inside Prime-8 and see how to use his incredible features.

You will see that Prime-8's AniMotion Robotics technology is a unique biped balancing technology that allows him to run fast.



Prime-8 is also full of sensors – some detect the environment (roboticists call them exteroception), and others sense the robot's internal state (proprioception).

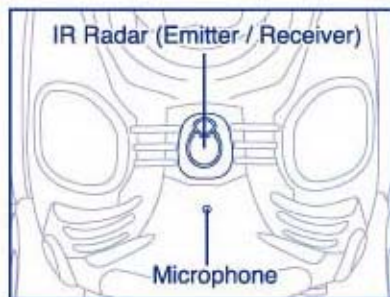


SENSORS

Environment Sensors (Exteroception)

IR Radar: IR emitter / receiver located in the chest. Detects motion and objects. This is how Prime-8 avoids obstacles and detects intruders.

IR receiver: Located on the back. Senses commands sent from the remote controller and other robots. This sensor allows Prime-8's to play laser tag and perform synchronized dances.




Microphone: Located in the chest under the IR Radar. Senses sounds and impacts. The microphone allows Prime-8 to respond to you and to detect the impact of a ball in the Dodge Ball game.

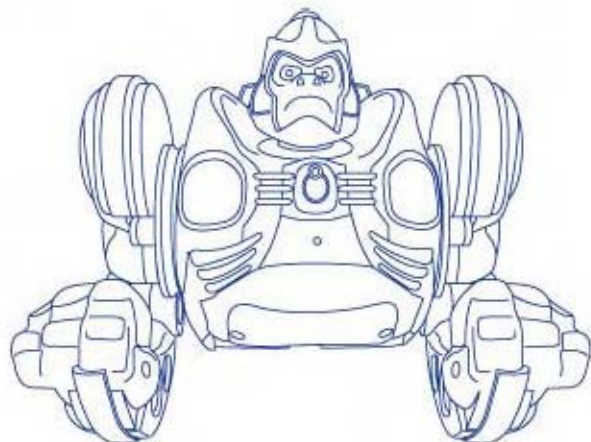
Internal Sensors (Proprioception)

Tilt Sensors: Detect Prime-8's orientation. Prime-8 uses tilt sensors to stand up from being on the back, belly or head.

Position Sensors: Sense the position of Prime-8's arms so the robot can coordinate dances and all other animations.

ANIMATION ROBOTICS

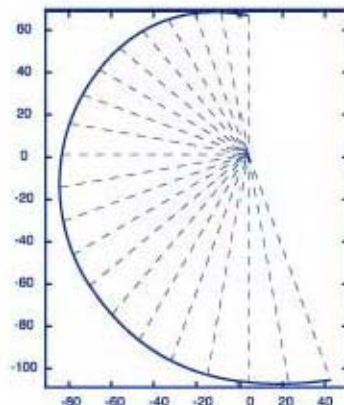
Did you know that Prime-8 is the first biped that doesn't need large feet or any sensor to balance? Press 'Retract Legs'  to see how Prime-8 balances effortlessly on his arms. This technology is called AniMotion.



To achieve balancing, Prime-8's weight is distributed very carefully (including the batteries!), and his arms are shaped as a precise spiral.



Ground Reaction



Prime-8's Spiral Arm Profile



AniMotion is a patent-pending robotic technology licensed from Carnegie Mellon University in Pittsburgh, USA. It inherits more than five years of research at Carnegie Mellon's Robotics Institute and other universities. This multi-million dollar research program pioneered high-dynamics mobile legged robots, and provides the technology that makes Prime-8 run with power and speed over multiple floorings.

ADVANCED COMMANDS

Are you ready to explore Prime-8's 100+ functions, features and animations?

MOBILITY COMMANDS

Forward / Back	Move forward / backward
Forward + Turbo	Accelerate
Stop	Stop motors immediately
Left / Right when running	Steer left / right
Left / Right when not running	Turn in place left / right
Left / Right + Turbo	Turn in place left / right at speed

FUNCTION COMMANDS

Games	Cycle through four games: 1) Dodge Ball, 2) Racing, 3) Target Shooting, 4) Laser Tag
Guard	Guard room by detecting motion and firing rockets at intruders
Program	Program up to 10 motions and behaviors
Play	Play back programmed motions and behaviors
Volume Control	Cycle through High / Low / Mute volumes Default: High
A/B	Toggle between A and B modes to play with two robots

ANIMATION COMMANDS

8	Transition back and forth between Good Gorilla and Gone Bananas
Retract Legs / Deploy Legs	Move both legs Up / Down
Retract Legs / Deploy Legs + Left / Right	Move the robot's Right / Left leg Up / Down
Animations	Every press produces a new animation. Good Gorilla animations are different from Gone Bananas.
Demo	Dance followed by 14 additional animations
Demo Long Press	Three-robot synchronized dance
Demo while starting the robot	Multiple animations that repeat until batteries become empty
Auto	Autonomously explore surroundings, detecting and avoiding obstacles, and performing animations
Shoot	Shoot laser, fire rockets, start race, depending on function
Shoot Long Press	Charge laser before shooting
Growl	Roar loudly with menacing voice and animations

ADVANCED ANIMATIONS


DEMONSTRATION MODE

1. Break Dance	9. Crawl on Back
2. Fart	10. Spin on Feet
3. Pound the Floor	11. Stretch on Back
4. Swim Backstroke	12. Do Push Ups
5. Stretch on Head	13. Lift Weights
6. Tap Dance	14. Drum Dance
7. Stand Up Funny	15. Bossa Nova
8. Spin on Belly	

Press 'Demo'  to see these animations.

AUTONOMOUS MODE

Good Gorilla	Gone Bananas
1. Fart	1. Pound the Floor
2. Break Dance	2. Stretch on Head
3. Drum Dance	3. Do Push Ups
4. Tap Dance	4. Lift Weights
5. Swim Backstroke	

Press 'Auto'  for the robot to explore the room autonomously. Every 2 obstacles, he does one of these animations.

ANIMATIONS

Good Gorilla	Gone Bananas
1. Fart	1. Swim Backstroke
2. Spin on Belly	2. Pound the Floor
3. Tap Dance	3. Stretch on Head
4. Shoot Fly	4. Do Push Ups
5. Crawl on Back	5. Lift Weights

Press 'Animations'  repeatedly to go from one animation to the next.

IDLE MODE

Good Gorilla	Gone Bananas
1. Shoot a Fly	1. Pound a Fly
2. Tap Dance	2. Pound the Floor
3. Drum Dance	3. Lift Weights
4. Funny Stand Up	4. Growl
5. Sniff the Environment	5. Radar Scan
6. Express Boredom	

Leave Prime-8 alone and he executes one of these animations every few seconds. After 2 minutes, he gets bored and sleeps.

ADVANCED INTERACTIONS

SOUND AND IR INTERACTIONS

Situation	Reaction
Robot on Back + Clap	Robot pounds the floor and Goes Bananas
Robot on Back + Tickle belly	Robot laughs and becomes Good Gorilla
Robot on Belly + Clap	Shakes feet and Goes Bananas
Robot on Head + Clap	Sneezes
Robot Sleeping + Clap	Goes Bananas
Robot Standing + user hand in front of chest for 5 seconds	Sneezes
Robot Standing + 1 Clap or 1 Motion detected (e.g. hand wave)	Robot wonders what's going on and responds
Robot Standing + Multiple Claps or Multiple Motions detected	Tap Dance: Number of taps \approx number of claps or motions detected
Robot Standing + 1 Clap (Gone Bananas)	Growls
Robot Standing + Multiple Claps (Gone Bananas)	Grunts: Number of grunts \approx number of claps
Robot Standing + 1 Motion detected (e.g. hand wave in front of belly) (Gone Bananas)	Scans the horizon and shoots lasers
Robot Standing + Multiple Motions detected (Gone Bananas)	Shoots Lasers: Number of lasers \approx number of motions

TILT SENSOR REACTIONS

Situation	Reaction
Place on Back	Robot pounds the floor and Goes Bananas
Place on Belly	Shakes feet and Goes Bananas
Place on Head	Farts
Place on Feet	Hums a short song
Robot on Back + 'Stop'	Recovers to standing position
Robot on Belly + 'Stop'	Recovers to standing position
Robot on Head + 'Stop'	Recovers to standing position



TROUBLESHOOTING

Q: Prime-8 is having difficulty getting back on his feet, whereas before he could do it easily.

A: This is a sign that the batteries are running low on power. Please change the batteries by referring to Page 3 of this Guide.

Q: Why is Prime-8 unable to do some of his animations on carpet?

A: Prime-8 is designed to run over thick and thin carpets as well as hard floors. However, animations work best on hard floors. Use fresh batteries for best performance.

Q: Why does Prime-8 fall asleep when trying to get back on his feet?

A: When Prime-8 is on his back, belly or head, he will make three attempts at standing up. If he doesn't succeed, he gets bored and falls asleep.

Q: Prime-8 seems to have stopped responding.

A: Simply toggle his power OFF then ON again. If this doesn't solve the problem, then it is time to change batteries.

Q: Prime-8 stops running spontaneously.

A: Make sure Prime-8 is not under direct sun-light or under high-intensity neon lights.

Q: When Prime-8 is doing an animation, he doesn't respond to controller commands.

A: Just press 'Stop' to exit any animation and then send controller commands.

Q: What is the significance of Prime-8's LED lights?

A: When the lights are ON, Prime-8 is Gone Bananas. When they are OFF, he is a Good Gorilla. When the lights blink, he is playing Games, or is in Autonomous, Programming, or Guard modes.

Q: Why does Prime-8 fall forward after running?

A: For safety, if you press 'Stop', all the motors stop immediately and Prime-8's inertia makes him fall forward. This is normal operation and Prime-8 recovers automatically.

Q: How do I know which game Prime-8 is playing?

A: Pay attention to the sound when you press the 'Games' button. Each game starts with a descriptive sound. See Pages 8 -9.

Q: I lost a Rocket, what do I do?

A: Head over to www.prime8robot.com for help on where to purchase additional rockets.

Q: I am trying to play Laser Tag with my friend but he controls my own robot!

A: You and your friend should be in different A/B modes. See Page 9.

Q: I love one particular animation, how can I play it again and again?

A: Press 'Animations' repeatedly to go to your favorite animation.

Q: Why has Prime-8 lost my programmed moves?

A: Prime-8 forgets your program after you turn him OFF.

Q: How many tricks can I program Prime-8 to do?

A: You can program up to 10 moves or tricks.

Q: Why is Prime-8 not making any sounds?

A: You must have hit the Volume Control button by mistake!

Q: Can I make Prime-8 run faster?

A: Yes – press 'Turbo' at the same time as 'Forward'.

Q: Prime-8 does not run properly when the launchers are attached.

A: It is dangerous to run Prime-8 with the launchers. ALWAYS remove them before running.

Q: Can I play with Prime 8 on a wet surface?

A: No, you should keep Prime-8 in a dry environment.



Manufactured by Bossa Nova Robotics Limited, Hong Kong.
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BOSSA NOVA
ROBOTICS



18



Let's care for the environment:
The wheeled bin symbol indicates that the product
must not be disposed of with other household waste.
Please use designated collection points or recycling
facilities when disposing of the product.

Support: support@i-loverobots.com
www.i-loverobots.com
www.bnrobotics.com

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