




TP-638-290

GPK-32 INSPECTION ROBOT

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TABLE OF CONTENTS

SAFETY GUIDE	3
Safety Precautions	3
LEGAL INFORMATION	3
SECTION 1 - SETUP	4
Video Tutorials	4
Unpacking and Activation	4
Video/Picture Retrieval.....	4
SECTION 2 - OPERATION.....	5
Camera and Movement Controls.....	5
Video Mode & Photo Mode	5
SECTION 3 - CHARGING	5
Charging the Robot & Monitor.....	5
SECTION 4 - TROUBLESHOOTING	6
Robot is Unresponsive.....	6
Video Display is Not Working.....	6
SECTION 5 - ACCESSORIES	6
Wheelie Bars	6
Roll Cage.....	6
ADDITIONAL NOTES	7

SAFETY GUIDE

Thank you for purchasing this product!



WARNING - Before using the robot read this guide to ensure correct usage and operation. Always store this manual in a safe place for future reference. Incorrect handling of this robot could cause personal injury or physical damage. The manufacturer assumes no responsibility for any damage caused by mishandling that is beyond normal usage defined in these manuals of this product.

NOTE - The information in this manual is subject to change without notice.

- The manufacturer assumes no responsibility for any errors that may appear in this manual.
- The reproduction, transmission or use of this document or contents is not permitted without express written authority.



This symbol indicates an additional warning (including caution).



This symbol indicates a prohibited action. The content will be clearly indicated in an illustration or nearby.

Safety Precautions



Do not operate the robot if it isn't working properly.

If you notice something unusual when operating the robot, immediately stop and turn the unit off. Contact our technicians at info@sdrobots.com and explain the issue. This includes smoke, strange odor, damage to the chassis or components etc.



Be careful when operating around children and animals

Children and animals may not understand that the robot has moving parts. Exercise caution when operating the robot and remain aware of your surroundings.



Do not expose interior to liquid or insert foreign objects

- Do not place the robot near water while interior is exposed (ex. flooded area, bathroom etc.).
- Do not insert any foreign objects into the robot.
- Avoid placing the robot into a container/bag/case that contains objects besides its own components.



Be careful when interacting with internal components of the robot.

The robot contains moving and electric components. Modification and/or disassembly of the robot could result in personal injury. **ALWAYS** disconnect the power before working on the robot.



Do not drop, throw, or otherwise cause an impact to the robot

The robot contains moving components, wiring, and electrical systems. If the robot is dropped or otherwise receives an impact, internal components could be damaged. If the robot is dropped or otherwise falls and is damaged, turn it off immediately.



Pinching hazard

The drive systems have very powerful motors. There are many pinch points! If fingers or hands are inside the drive section while on, injury may occur.

LEGAL INFORMATION

Accurate content is important to the authors of this document. If you find an error or an item that needs clarification report it to www.superdroidrobots.com

- SuperDroid Robots, Inc is not responsible for special incidental, or consequential damages resulting from any warranty or under any legal theory, including, but not limited to lost profits, downtime, goodwill, damage to, or replacement equipment or property, or any cost of recovering, reprogramming, or reproducing any data stored. **ANY LIABILITY SHALL BE LIMITED TO REPLACEMENT OF DEFECTIVE PARTS.** SuperDroid Robots, Inc. is further not responsible for any personal damages, including, but not limited to bodily and health damages resulting from any use of our products.
- SuperDroid Robots, Inc. makes no representations as to the fitness of its products for specific uses. **ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE IS HEREBY EXCLUDED.**
- Agreements shall be construed in accordance with the laws of the State of North Carolina, and the rights and obligations created hereby shall be governed by the laws of North Carolina.
- In the event a dispute or controversy arises, such dispute or controversy (including claims of default) shall be brought in the courts of Wake County, North Carolina and the plaintiff hereby agrees to this choice of venue.

The following section contains a list of non-warrantable items. Any procedure covered in this section will void the coverage warranty of the robot, or robots, you have purchased.

- Removal of the lid, or access to the interior of the robot is considered abuse and neglect and as such will void warranty; Unless otherwise instructed by SuperDroid Robots.
- Using the robot for purposes that it is not intended, or in any situation that could cause damage outside of the normal wear and tear of the robot, will not be covered under warranty and be seen as neglect of the robot system.
- Improper maintenance and overall disregard to the upkeep of the robot can harm, and/or cause severe damage to the robot, leading to malfunctions and/or destruction of the functionality of the robot.
- Located throughout the entirety of this document are other warranty voidable perimeters displayed by RED text Any of which will again cause an immediate void of the warranty and disqualify repairs of the robot.

NOTE

Ensure all ordered items are in package. While performing first-time setup place robot in a clear space.

SuperDroid Robots Inc. is incorporated in Wake County, NC USA
 SuperDroid Robots also does business as Team Half-Life
 SuperDroid Robots is a registered trademark of Team Half-Life.
 Prior to purchasing review our Terms (<https://www.superdroidrobots.com/terms.html>)

Video Tutorials

SuperDroid Robots has a series of video tutorials on the basic setup and operation of the GPK-32 inspection robot. We recommend you watch these tutorials while unpacking and setting up your robot!

SCAN THE QR CODE TO THE RIGHT TO WATCH OUR TUTORIAL VIDEOS. ALTERNATIVELY, YOU CAN VISIT THE SUPERDROID ROBOTS YOUTUBE CHANNEL AND FIND OUR 'GPK-32 INSTRUCTIONAL VIDEO MANUAL'.



Unpacking and Activation

NOTE

The configuration you chose for your GPK-32 will determine the accessories included. Additional accessories can be requested by contacting SuperDroid Robots.

The GPK-32 typically arrives in a durable travel case, complete with foam inserts for the robot and all accessories. Take note of how everything is packed. This will help when storing or transporting your robot and it's accessories.

1. Check that all your ordered items are included in the package.
2. Place the robot on a level surface or on blocks so that the tracks/wheels can rotate freely.
3. See **SECTION 5** for instructions on installing optional accessories.
4. Insert the provided SD card into the rear of the GPK-32's camera. It should be inserted with the metal contact points facing up. Figure 1A shows the location of the SD card slot.
5. Before moving forward make sure the 4 **switches** at the **top** of the controller and the **left** joystick match Figure 1C. That means flip the 4 switches to the UP position and push the left joystick to the DOWN position.
6. Power on the controller using the Power switch. Figure 1B shows the location of the power switch on the FLYSKY controller.
7. To turn on the video monitor, flip the switch located on the back of the monitor. Then press the power button on the front of the monitor. See Figure 1D to see the location of this button.
8. Power on the robot and allow it several seconds to power on. See Figure 1E for location of this switch.
9. Before placing the robot on the ground, read through the Operations section and test the controls to make sure the robot moves as anticipated.

SD CARD - THIS SIDE FACES UP



Figure 1A



Figure 1B



Figure 1C



Figure 1D



Figure 1E

Video/Picture Retrieval

To view the saved videos or pictures remove the SD card from the RunCam and insert it into a SD card reader connected to a computer. There will be two folders, one with videos, and one with pictures.

Do not plug the RunCam camera into a computer and do not connect to the RunCam camera wirelessly. Doing so can cause issues with the settings that allow the camera to function properly with the robot.

SECTION 2 - OPERATION

NOTE Practice operating the robot in front of you to understand how the movement controls work. This will help when operating the robot out of view using the camera.

Camera and Movement Controls



Figure 2A

LEFT JOYSTICK - This joystick controls the camera tilt system. Pushing forward or back on the joystick causes the camera to tilt up or down.

RIGHT JOYSTICK - This joystick controls the movement of the GPK-32. Push forward or back to move the robot in those directions. Pushing the joystick left or right rotates the GPK-32 in place.

Video Mode & Photo Mode

The camera is controlled by the two outer most switches at the top of the controller. They are the two shorter switches and will be referred to as the **LEFT** and **RIGHT** switch. Each time one of those two switches is flipped, either up or down, an action will be performed.

If an SD card with free space is in the camera when the robot is turned on, the camera will automatically start recording. A red circle will appear in the upper right of the monitor, along with a red timer to show how long you have been recording. To **take a picture while recording**, flip the **right** switch once. "Capture Done" will flash on the screen to indicate a picture was taken. Wait about 5 seconds between each picture.



To **STOP** the recording flip the **left** switch once. The red circle will go away, and the numbers will change to white and display how much recording time is left on the SD card. In video mode the left switch will always start or stop the recording.

The right switch changes functions when the camera isn't recording. When flipped it will change the camera between **Photo Mode** and **Recording Mode**.

Recording mode will show "1080/60" at the top of the monitor and Photo mode will show "4M".

To take a photo in photo mode, flip the **left** switch. The screen will flash black to indicate a photo was taken. In Photo mode, you only need to wait about 2 seconds between pictures. Use Photo mode for still pictures with no video recording.

SECTION 3 - CHARGING

Charging the Robot & Monitor

TO CHARGE THE ROBOT'S BATTERIES

- Follow the DeWalt instructions to charge the removable 20v battery packs.

TO CHARGE THE MONITOR

- Before charging the video monitor, make sure it is powered off using the power switch on the back.
- Plug the provided charger into a 120v outlet and insert the barrel plug into the charging port on the back of the monitor, next to the power switch.
- The light on the monitor will turn red while it is charging. Once the light is no longer red, the monitor is done charging.

THE REMOTE CONTROLLER IS POWERED BY AA BATTERIES.



SECTION 4 - TROUBLESHOOTING

NOTE

Take care when you handle or operate the robot. It is highly recommended that the operator practice in a safe environment to get comfortable with the controls before using it in a live environment.

Robot is Unresponsive

First try turning everything off and waiting 30 seconds before turning it back on again.

If that does not work, the system may need charging. Allow the system to recharge for 1-2 hours, then try to restart the robot. If there are still issues with batteries not taking a charge, you may need to replace them.

Video Display is Not Working

If the video is not working and you are sure the camera and video monitor are on, it's possible something has changed the input mode on the video monitor. When the monitor is first turned on, it will display the mode in the upper left-hand corner of the screen. The mode should be "RF". If the mode is not "RF" then press the return button to cycle through the menu until it returns to "RF". You should set the "Band:" to "RACE" and the "CH:" to "8".

Scan the QR Code below to visit our support page for help, advice, and general support. Contact our team at info@sdrobots.com!



SECTION 5 - ACCESSORIES

Wheelie Bars

The wheelie bars improve the GPK-32's ability to maneuver over obstacles. Your GPK-32 comes with a tool to attach and detach bars from the chassis.

TO ATTACH THE WHEELIE BARS:

1. Insert the two bars into the brackets indicated in Figure 5A.
2. Use the provided tool to tighten the screws until secure.



Figure 5A

Roll Cage

The roll cage helps protect the camera if the robot rolls over. We recommend that you keep the roll cage on except in low clearance scenarios.

TO ATTACH THE ROLL CAGE:

1. Insert the roll cage bars into the brackets on either side of the camera system.
2. Tighten the screws on the front of the bracket to secure the roll cage.

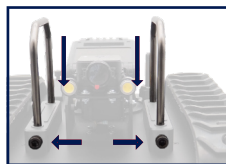
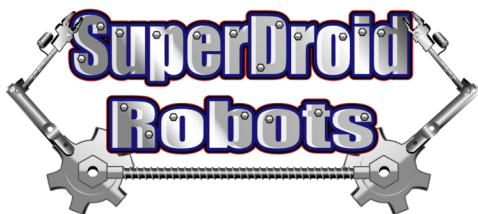


Figure 5B

ADDITIONAL NOTES



CONNECT WITH US ON SOCIAL MEDIA

TAG US AND SHARE YOUR ROBOT EXPERIENCE!



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