RIDGETEC

Instruction Manual

Model: Lookout LTE 4G DUAL
Cellular Camera Model

PLEASE READ CAREFULLY BEFORE USING CAMERA

Thank you for Purchasing your RidgeTec Camera

*Please check our website periodically for Firmware Updates to ensure your camera has the most up to date version. We are continually working to improve the camera function and image quality.

The RidgeTec Lookout is a high quality digital surveillance camera. It has been precisely engineered and tuned to provide you with optimal and consistent performance. This camera will provide high quality digital pictures and video with sound for applications such as home, cabin, business surveillance, animal monitoring for hunting and research. It features a highly sensitive Passive Infra-Red (PIR) motion sensor and numerous options to configure the camera to meet your specific needs.

Item Check List	- Camera - LTE Antenna x 2 - Standard size SIM card (inserted) - Nylon mounting strap
Needed for Operation	- Twelve (12) AA Lithium Batteries - or 9V to 12V external power - Standard size SD or SDHC Card (up to 64GB)

*We recommend Energizer Lithium batteries to maximize camera performance, extend battery life and reduce damage due to leaking alkaline batteries.

SPECIAL HANDLING PRECAUTIONS

CAMERA: This camera is a precision piece of equipment.

- Do not attempt to open camera case yourself.
- Avoid dropping and physical shock.
- Avoid using the camera in extreme weather conditions.
- Do NOT submerge the camera in liquids.
- Carefully clean debris from camera lens, PIR, and LED flash to maximize performance.
- DO NOT use cleaning solvents as they will damage the surfaces.
- To avoid condensation from forming on the lens or electrical components when relocating the camera between dramatic environmental changes (temperature or humidity), first place the camera inside a sealed plastic bag then relocate it.
- If excessive condensation forms, remove SD card and batteries and do not operate until camera is dry.

Batteries: Remove batteries when storing camera. Doing so reduces the risk of battery acid leaks and battery depletion.

- **Do not combine old and new batteries, different brands or types when operating the camera.**

LCD SCREEN: Avoid exposing screen to direct sunlight or high temperatures as LCD damage may occur.

Antenna

IR LED Flash

Day/Night Sensor

PIR sensor

Camera Lens

LED indicator

Battery Compartment

SD Card Slot

SIM Slot

Control Buttons: Up, Down, Left, Right

Padlock Hole

Switches: OFF/SETUP/ON

Motion sensitivity switch

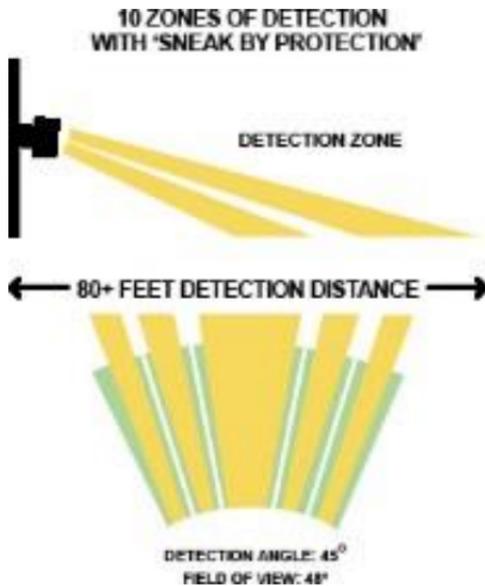DC 9-12V Port

CELLULAR INFORMATION:

This camera contains a LTE 4G cellular module with 3G HSPA+ backwards compatibility to transmit pictures and videos directly from the camera to the photo management system and mobile app. Contact customer support if you need exact cellular band information.

A SIM card (provided with camera) is required to transmit photos/videos. Please visit https://portal.ridgetec.com/help/plans for information on current pricing.

MOUNTING CAMERA:

This camera can be mounted with the included nylon strap or achieve maximum versatility with an optional Swivel Bracket. Camera can also be secured with cable lock and/or custom security box designed specifically to incorporate the use of the optional Swivel Bracket (all sold separately).

It is recommended to mount the camera 3-4 feet above desired target and ~30 - 50 feet away for maximum sensitivity in most scenarios. Adjustments may be required depending on object size and surroundings. PIR motion detection distance changes based on ambient temperature and setup. Higher ambient temperatures will reduce PIR motion sensitivity thereby requiring the camera to be closer to the desired target. Mounting the camera too high or angling the camera above or below the target zone may result in animals or humans going under or above the PIR motion detection range.

**10 ZONES OF DETECTION
WITH 'SNEAK BY PROTECTION'**

DETECTION ZONE

← 80+ FEET DETECTION DISTANCE →

DETECTION ANGLE: 45°
FIELD OF VIEW: 48°

Position the camera parallel to the ground to maximize the IR lighting potential. Place the camera at a 45° degree angle to trails or roads to improve target detection and photo quality. Using Swivel Bracket (sold separately) provides optimal versatility when mounting the camera.

The Lookout contains a PIR sensitivity switch on the bottom of the camera to adjust between High, Medium, and Low sensitivity. If you are getting too many false triggers try selecting a lower sensitivity.

GETTING STARTED

Please visit the following link for complete instructions on setting up camera on the portal:
https://portal.ridgetec.com/help/quick-start

SD MEMORY CARD

The camera supports both standard size SD and SDHC memory cards up to 64 GB. **The camera does not have any internal memory and will not work without a SD card inserted.**

1. Open camera
2. Insert SD card with orientation as inscribed in the plastic next to slot on camera
3. Push gently until card clicks into place
4. Press card again to remove, after you her the click a spring will eject it

Note 1: Ensure SD card is NOT in locked position.
Note 2: Format SD card in camera before using each time. This will create a file on the SD card where the camera will save images to.
Note 3: It is always recommended to test the SD card by taking some pictures to ensure SD card works properly before leaving camera for extended periods of time.

WARNING: Make sure camera is OFF when adding or removing SD memory card.

BATTERIES

This camera is designed for Lithium batteries for optimal performance (rechargeable batteries may not have sufficient voltage to run the camera properly). An AC to DC power adapter or DC power cord (sold separately) can be attached to the bottom port of the camera.

Insert 12 AA batteries while ensuring polarity (+ -) is correctly oriented.

Note: 9V or 12V DC power can be applied. It is recommended to remove internal AA batteries when using external power to reduce a possible battery leak. Solar panels DO NOT charge batteries directly located in the camera but are often used to charge an external 12V battery.

CHECKING BATTERY LEVEL

Battery level can be viewed in bottom left corner of display when the camera is in SETUP mode.

TESTING AND WORKING MODES

The camera has three modes: OFF, SETUP and ON Modes.

1. Turn switch to middle position to access SETUP mode. The camera will initially enter Live Preview Mode. If the camera beeps, it means either no SD card is inserted or the SD card is not inserted properly. The SD card needs to be inserted or reinserted to continue.

   When in SETUP mode, the blue light may flash erratically, this is normal operation designed to test and select motion detection. You can use this feature to dial-in the sensitivity of your camera. It will flash when it detects any motion. (WARNING: Don't forget to turn camera to ON mode when you have completed this step)

2. Turn switch to ON mode for activation. A blue LED light will blink for 5-10 seconds before the camera will enter its normal operation.

MENU OPERATIONS AND SETTINGS

MAIN MENU

The Menu has 3 graphical submenus: **I. Network Tab** for Cellular Setup, **II. Camera Tab** for Stand-Alone Camera Configuration, and **III. Tools Tab** for Camera Maintenance

IMPORTANT: When in Cellular mode the Lookout is managed completely by the web portal/mobile app; these settings cannot be modified on the camera itself and MUST BE configured through the web portal/mobile app.

LIVE PREVIEW

This option allows the user to view contents the camera will capture when activated. Pictures/videos can be captured using the "OK" button while in this mode. This camera is equipped with a **Day Color Mode** and **Night IR Mode** while in Live Preview. It is recommended to minimize the use of Night IR Mode to avoid battery depletion.

1. This mode is the default mode when the camera is first switched to the SET position. If you are already in main menu, push MENU button to enter LIVE PREVIEW mode.

PHOTO MODE

a. Push 'Right arrow' button (you will see photo icon)

b. Push UP Arrow to switch between Day Color and Night IR Mode
c. Push OK button to capture pictures

VIDEO MODE
a. Push LEFT Arrow button (you will see video icon)
b. Push UP Arrow to switch between Day Color and Night IR Mode
c. Push OK button to start and stop video capture

2. Push MENU button to return to menu

PHOTO / VIDEO PLAYBACK

This feature allows the user to view pictures and video stored on the SD card. User can pause, stop, rewind, and fast forward video during playback.

1. During LIVE PREVIEW mode push the DOWN arrow to access PLAYBACK
2. Use LEFT and RIGHT arrow to select captured video/picture and push OK to select
3. Pictures display a Camera in bottom left corner while Videos display a film strip icon in bottom left corner.
   VIDEOS
   a. Push OK to SEND video over network
   PICTURES
   b. Push OK to SEND photo over network
4. DOWN arrow returns you to LIVE PREVIEW mode
5. Push MENU button to return to menu when in LIVE PREVIEW mode

I. CELLULAR SETUP

This menu is for selecting/deselecting and testing the cellular network. Note: The service provider is dictated by the supplied SIM and WILL NOT work with an unauthorized SIM.

ICCID

You will need this number to activate your camera at: https://portal.ridgetec.com/login
It can be located in the Menu under the Network Tab.

Cellular Mode

Turn Cellular Mode ON or OFF. If turned OFF, you can use camera without SIM card and cellular function. Stand-alone features will then be enabled allowing all the configurations previously available on the Portal/Mobile App.

NOTE: Disable Cellular Mode when not subscribed to the network service. Doing so prevents unnecessary communication attempts causing batteries to deplete.

Network Test
This sends an "echo test" to the Ridgetec portal to ensure your camera is connected to the internet.

Report Test
This sends a status report (Heartbeat) to the Ridgetec Portal to ensure your data plan and ensure the camera is registered properly. An error may indicate a missing plan, verify the plan you added is correct or use the "Add Plan" to prepare the camera for registration.

II. NON-CELLULAR SETUP

CAMERA MODE
This camera can be set to capture still pictures OR video.
1. Select CAMERA MODE
2. Select PHOTO mode or VIDEO mode

PHOTO RESOLUTION
Photo resolution can be set at (4:3): 12MP, 8MP or 5MP or (16:9): 6MP, or 4MP.
1. Select PHOTO RESOLUTION
2. Select desired photo resolution and push OK to set

PHOTO BURST
This feature allows the camera to take from 1-3 photos in rapid succession following each trigger.
1. Select PHOTO BURST
2. Push OK
3. Select desired number of photos per trigger and push OK to set

BURST DELAY
You can change the interval between subsequent photo bursts: 250ms, 500ms, 1s, 3s
1. Select BURST MODE
2. Push OK
3. Select desired delay between photo burst photos

FLASH

This feature adjusts the shutter speed to provide brighter images (more motion blur) or darker images (with less motion blur): BRIGHT, BALANCED, LOW BLUR

1. Select FLASH
2. Push OK
3. Select desired flash setting

VIDEO RESOLUTION

Video mode includes High Definition HD720p or HD1080p

1. Select VIDEO RESOLUTION
2. Select desired setting

VIDEO LENGTH

Video length can be set in 1 sec increments from (5s – 10s). Longer video lengths will deplete battery power and memory more quickly than lower lengths especially at night when the flash is required.

1. Select VIDEO LENGTH
2. Select desired video length and push OK to set

VIDEO SOUND

Video sound recording can be turned ON or OFF.

1. Select VIDEO SOUND
2. Select ON or OFF and push OK to set

QUIET TIME

Also known as, "Time Interval or Delay Time", this feature puts the camera to sleep after capturing an image for a selected period of time before it can be re-activated by motion. Times vary from 0 seconds to 60 minutes.

1. Select QUIET TIME
2. Select desired 'quiet time' and push OK to set

NOTE: The camera is only able to do one thing at a time; it has one internal processor. When in cellular mode, the camera must finish transmitting the image before it can capture a subsequent image. Average transmission speed will range from 10 seconds to 1 minutes depending on the network strength and congestion at that time and location.

NOTE: The camera will wait for the Quite Time period before it can be triggered by motion when first turned ON.

DUTY TIME

This feature allows the user to program the camera to turn ON and OFF at a specified time.

1. Select DUTY TIME
2. Select ENABLE to set up Duty Time or DISABLE to cancel Duty Time
   SET ACTIVE TIME for each day of week
   Set camera ACTIVE time for each hour of the day (highlighted RED = ACTIVE, greyed = NOT ACTIVE)
3. Push 'check mark' to select ALL; Push X to deselect ALL
4. Push SAVE once complete

Note: For 24 hour activity: Disable Duty Time

TIME LAPSE

This feature allows the camera to take pictures at a pre-set time interval (5 min to 12 hours) and record or send them over the network.

NOTE: When in cellular mode, it is important to understand the cellular limitations.

1. Select TIME LAPSE
2. Select ENABLE to set up time lapse or DISABLE to cancel time lapse
3. Set START TIME and END TIME and push OK to set
4. Set INTERVAL and push OK to set
5. Push LEFT arrow button to return to menu

III. ADDITIONAL SETTINGS

LANGUAGE

Select your desired language

DATE / TIME STAMP (greyed out when in cellular mode)

This allows the user to have the date, time, and temperature stamped onto each photo or video.

1. Select TIME STAMP
2. Select NO or YES and push OK to set

SET DATE / TIME (greyed out when in cellular mode)

This feature allows the user to set the display format for date and time, as well as set the current date and time.

1. Select SET DATE / TIME
2. Select one of the three menu options:
3. Push LEFT arrow button to return to menu when finished

DATE FORMAT

- Select the desired Date Format and push OK to set

TIME FORMAT

- Select desired Time Format and push OK to set

SET DATE / TIME

- Set date and time using UP, DOWN, RIGHT and LEFT arrows and push OK to set

TEMPERATURE (greyed out when in cellular mode)

Allows the user to select either Fahrenheit or Celsius temperature measurement.

1. Select TEMPERATURE
2. Select Fahrenheit or Celsius and push OK to set

FORMATTING SD CARD

Formatting the SD card **removes all files** on the memory card and prepares it for use in the camera. It is recommended that the SD card is formatted in the camera prior to each use.

1. Select FORMAT
2. Select YES to format SD card
3. Push OK to proceed with formatting SD card

DEFAULT SET

This feature resets the camera to factory default settings.

CAMERA INFORMATION

Select CAMERA INFORMATION from main menu

STORAGE

Displays SD memory card USED SPACE and FREE SPACE

FIRMWARE VERSION

Displays the current camera firmware version

CAMERA NAME

You can provide a customized name for the camera

IMEI

This is a unique identifier for your camera and may be needed by customer support.

UPGRADE

User can upgrade camera firmware. Place firmware files on 'EMPTY' SD card. Insert card into camera and Select UPDATE. More detailed instructions can be found on our website.

Additional Notes:

- The signal strength of the mobile network may vary with location and time of day, which may lead to failures in sending pictures. Rain, rainstorms or bad weather may cause poor signal reception. Be sure to set up camera at a location with strong network coverage to ensure the most consistent performance.

ADDITIONAL INFORMATION

TRANSFERRING PICTURES AND VIDEO TO A COMPUTER:

SD memory card can be removed and inserted in a computer or card reader (ALWAYS ensure camera is OFF before removing) and transferred to computer or SD card reader.

TROUBLESHOOTING

1. **Cannot connect to network**
   i. Try restarting the camera allowing it to search for signal, camera will timeout after 3 minutes
   ii. Move to a different location and try again
   iii. Try a stronger antenna
   iv. Make sure the Sim is inserted correctly, align the shape of the SIM with the molded form on the top of the plastic shell that houses the SIM slot. Fully insert the SIM until it clicks.
2. **I get more pictures saved to the SD card than transmitted to my phone number and/or email address**
   i. After capturing a photo, the camera will attempt to transmit the photo a few times before aborting and prepare to capture another photo. The camera has a sophisticated photo review system that will look for missed photos and attempt again in the future when reception is stronger.
   ii. Poor reception or busy network signals may result in poor connectivity at certain times and places.
   iii. Move camera to different location and test connection strength.
   iv. Consider purchasing a stronger antenna.
3. **I get pictures transmitted periodically / not consistent**

<ol start="4">
I cannot get the camera to transmit pictures properly

    v. The cellular network reception strength will change throughout the day; when the network is busy, the range and strength of reception will decrease.

    vi. Try a stronger antenna

    vii. Contact our customer support to review the camera log files

4. I cannot get the camera to transmit pictures properly

    i. Ensure your account is setup correctly and your camera is attached to your account at: https://portal.ridgetec.com/login

    ii. Follow camera setup at: https://portal.ridgetec.com/help/quick-start

5. The camera shows full or partial reception bars and I get login failure or no pictures transmitted

    i. Although the camera may show full or partial cellular power, the network may be busy at the time of transmission and login; keep trying or move to another location.

    ii. In some instances, the camera may show good reception, but the cellular bandwidth is too small to transmit pictures at that time. Trying at a later time or moving to a different location may help.

    iii. Consider a high gain antenna or move to a different location.

6. The camera does not turn ON

    iv. Ensure batteries are inserted properly with correct polarity and fully charged. If possible test each battery with battery tester. Approximately 1.7V each for new Lithium AA batteries.

    v. Ensure SD card is properly inserted and not in locked position

    vi. Cold temperature may decrease battery output sufficiently to prevent camera from turning ON; check batteries and ensure they are rated for cold temperature

7. Beeping Noise when camera turns ON

    i. Insert SD card

    ii. Ensure SD card is not locked

    iii. Format SD card in camera

    iv. SD card may not be compatible

8. Camera will not take pictures or stops part way even with full batteries

    i. SD card is not formatted correctly; format SD card in camera

    ii. Ensure SD card is not locked

    iii. Ensure SD card is not full

    iv. SD card is faulty or incompatible (up to 64GB); try different SD card and/or brand. Faulty or incompatible SD cards may cause system conflict, system crash, and battery drain. Always format SD card in camera and try different SD cards if problem persists.

v. Batteries do not have enough power to activate picture/video sequence

9. Batteries run down quickly

 i. Avoid poor quality alkaline and rechargeable batteries, avoid mixing different brands and ages of batteries as battery life will be adversely affected. Different brands of batteries will perform differently than others; try other battery brands to find what works best for your environment.
 ii. Consider a larger antenna to help transmit photos/video faster.
 iii. Reduce number of picture burst and/or reduce video length.
 iv. Ensure batteries are fully charged; test batteries with tester if possible
 v. In cold temperatures, the battery life becomes shorter
 vi. SD card may have jammed causing battery to drain; use different SD card and/or brand

10. SD card is not recognized in camera

 i. If the SD card is formatted on a computer or other camera, it may not be recognized by this unit. Use this camera to format the SD card
 ii. Ensure that SD card is not greater than 64 GB in size
 iii. Ensure SD card is not locked
 iv. Try different brand of SD card for compatibility

11. Low Power problems

When the camera power is low the system will not be stable, you may observe abnormal screen displays or automatic camera reboot. Change your batteries.

12. Camera fails to detect motion.

 i. Adjust PIR sensitivity switch on bottom of camera (High, Medium, Low)
 ii. Ensure batteries test full; replace batteries if necessary
 iii. Ensure SD card is NOT locked and compatible with camera; take test pictures in 'Live Preview' mode.
 iv. Ensure 'Quiet Time' is set correctly
 v. Ensure Duty Time is not Enabled incorrectly
 vi. Ensure camera is mounted correctly. Note: hot weather, humidity, and rain will reduce PIR sensing distance; move camera closer if required.
 vii. Typically mounting the camera at a height of 3-4 feet will maximize detection distance, this will depend slightly on the size of game you are trying to observe.
 viii. Camera may be angled up too high or too low thereby allowing subjects to walk under or over the PIR motion detection window; adjust camera position and try again.

13. Images are blurry (stills or motion)

i.   Ridgetec offers some of the best picture quality. Although we try to cover every scenario, it is important to realize that different environments and conditions will affect the picture quality.
ii.   Try adjusting your Flash setting to 'Low Blur'
iii.   Blurry still images may result from interference with focal points; for example distance from camera, trees, brush, may affect focus point.
iv.   Fog, condensation, water drops, snow, dust, direct sunlight, etc can all reduce picture quality.
v.   Motion blur may result when object moves too quickly. Blur will be compounded during night and low light situations.

14. Night images are dark

i.   Ensure batteries are fully charged. Use Lithium AA batteries.
ii.   Cold temperature will reduce battery output to IR lights.
iii.   Remove brush, grass, and other debris that may prevent IR light from reaching its potential.

15. Too many empty pictures/video or false triggers

i.   Adjust PIR sensitivity switch on bottom of the camera to lower position.
ii.   Ensure camera is mounted on a solid surface; trees and surface may move in wind causing camera to trigger falsely.
iii.   Adjust camera height and angle.
iv.   Remove brush and branches from detection zone that may be triggering camera.
v.   A close running animal/human may make it across detection zone before triggering the camera
vi.   Sunlight and heat waves may result in certain scenarios of false triggers; position camera in different location.

SPECIFICATIONS

- 4G LTE and 3G HSPA+ Cellular Module
- Lens: FOV = 50
- Photo resolution: (4:3) 12MP, 8MP, 5MP or (16:9) 6MP, 4MP (programmable)
- Photo burst: 1-3 photos per trigger (programmable)
- Burst Delay: 250ms, 500ms, 1s, 3s
- Flash: Bright, Balanced, Low Blur
- Video resolution: HD720p or HD1080p
- Video length: 5-10 sec
- Fast trigger time (0.2 sec)
- 54 No Glow Black Flash infrared LEDs
- Multi-zone PIR detection range: up to 80+ feet
- Color daytime and black & white nighttime pictures
- Date, Time, Temperature & Moon Phase image stamp
- Low power consumption, standby battery lifetime up to 12 months
- External memory : SD/SDHC card up to 64 GB (not included)
- Video sound recording
- 9V - 12V DC power port
- 12 x 1.5 volt AA batteries (not included)
- Low battery indicator
- Mounts with strap, security box, & cable lock
- Playback pictures and videos
- 2.4" true color TFT display
- User-friendly interface, 6 buttons control
- Time Lapse
- Duty Time

WARRANTY INFORMATION and TERMS AND CONDITIONS

The buyer agrees to the following Terms and Conditions when purchasing Ridgetec products. Terms and conditions may be updated or changed at times. These terms and conditions constitute conditions to the use of Ridgetec products. Please refer to website for complete Terms and Conditions.

This Ridgetec equipment has been tested and found to comply with the limits set forth by the Federal Communications Commissions (FCC) rules. Operation is subject to the following conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. The Ridgetec equipment can radiate radio frequency energy that may cause interference to radio communications and equipment.

In no event shall Ridgetec be liable to any party or any person, except for replacement or repair of the product, for the cases, including but not limited to below: 1) any damage and loss, including without limitation, direct or indirect, special, consequential or exemplary, arising out of the use of this product. 2) personal injury or damage caused by the normal use or neglect operation of this product. 3) inconvenience or any loss (including loss of profit) arising if photos are not transmitted or displayed for any reason including failure of the Ridgetec product. 4) any problem, inconvenience, loss, or damage resulting when the Ridgetec product is combined with other third party products. 5) any claim or legal action brought forth by any person due to violation of privacy resulting from the use of this product. 6) loss of photos and/or data from Ridgetec servers or third party companies.

Ridgetec offers a one (1) year warranty on the hardware of its products. A product that is deemed defective due to defects in materials or workmanship through normal use will be subject to either repair or replacement by Ridgetec. This warranty is void if the product has been tampered or opened by anyone other than a Ridgetec technician. Furthermore, warranty does not cover product failure resulting from improper use, abuse, or accident. Ridgetec is not responsible to warranty damage that results from battery leakage, battery explosion, or damage that results from power surge, power fluctuations, or damage resulting from low or high voltage disruptions. Ridgetec is not responsible for damage resulting from SD memory card or cellular SIM card use or improper insertion. A Return Material Authorization (RMA) number and form will be required before Ridgetec will receive and process product for repair or replacement. The buyer will be notified if the product is deemed not defective and product will be returned to the buyer at the buyer's expense.

*RMA number is required for all returns.

If the product is beyond the warranty period, the price for repairing or replacing may vary. International customers pay different amount of shipping & insurance. We will send detailed shipping information along with the RMA number. Include with your camera the RMA form and a copy of your dated cash register receipt or other proof of purchase.

*Please contact us if you have any questions or problem while using the camera before you request a RMA number and send the camera back for repair.

Some problems may be solved easily with help from customer service.

CAMERA REPAIR

Repairs for damages not covered by the warranty will be subject to a charge. Please contact RidgeTec to discuss repair options not covered under warranty.

CUSTOMER SERVICE CONTACT:

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