

Hydraulic Inspection Vehicle Explorer (HIVE) Vehicle User Guide



‘Culvert Inspector’

Overview

This guide is intended to help answer questions users may have in the field after face-to-face training. This guide is not intended as a full training document, but a supplement to previous training. For any questions or issues not answered by this document, please contact the HIVE vehicle coordinator.

HIVE Coordinator:

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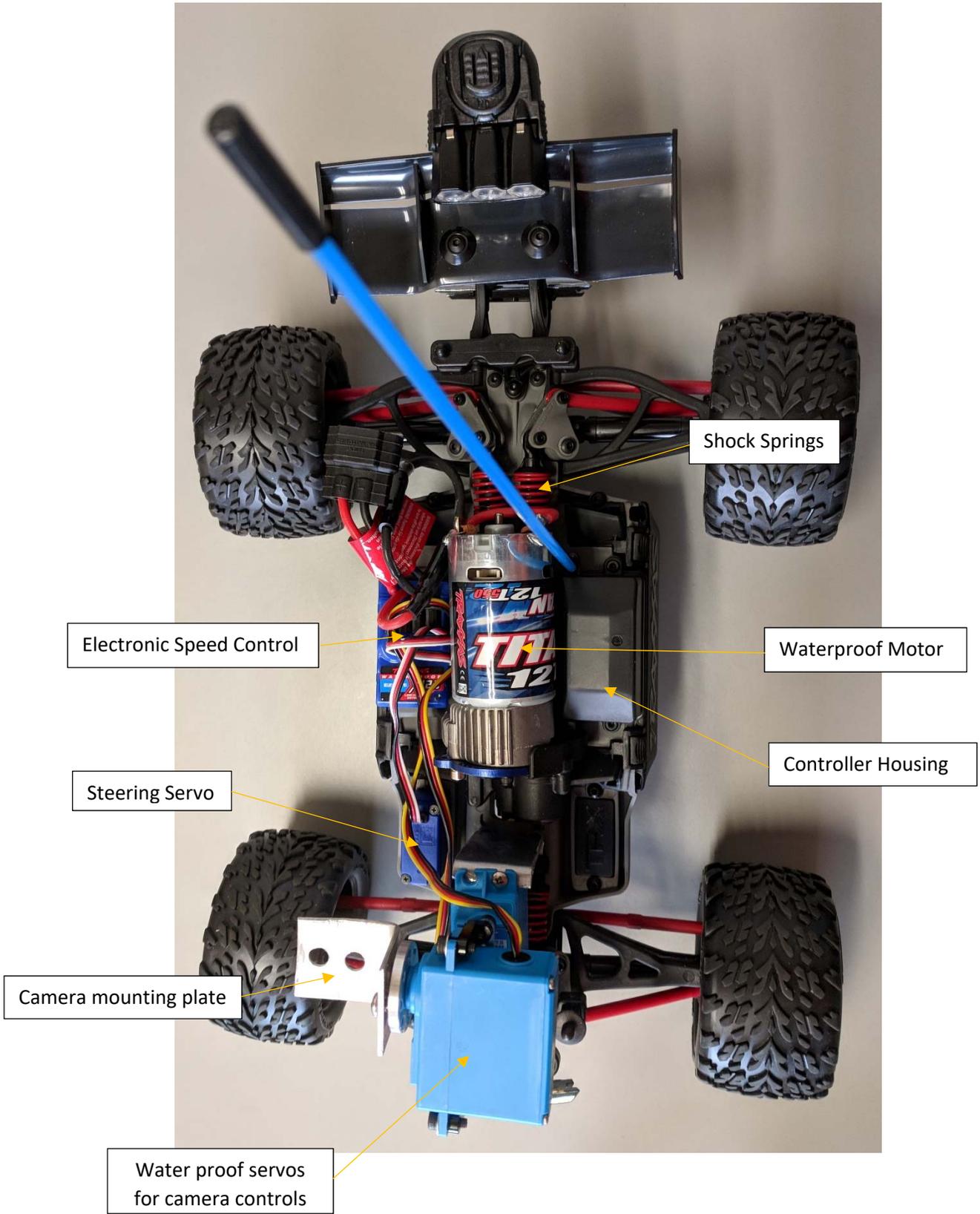
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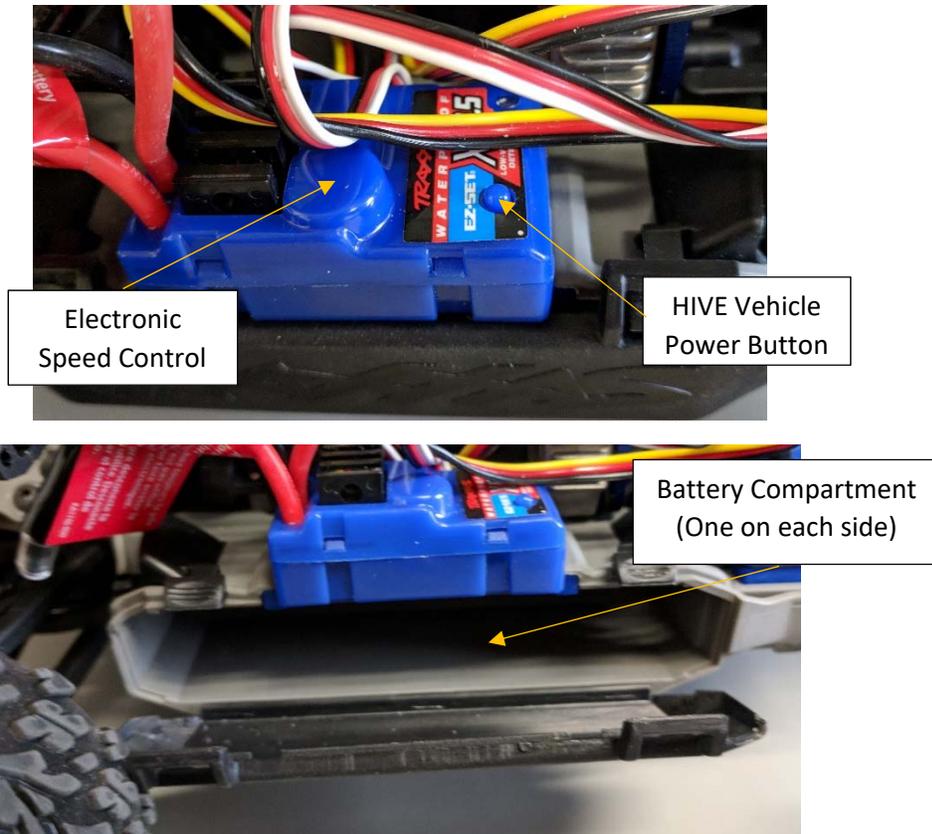
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HIVE Vehicle

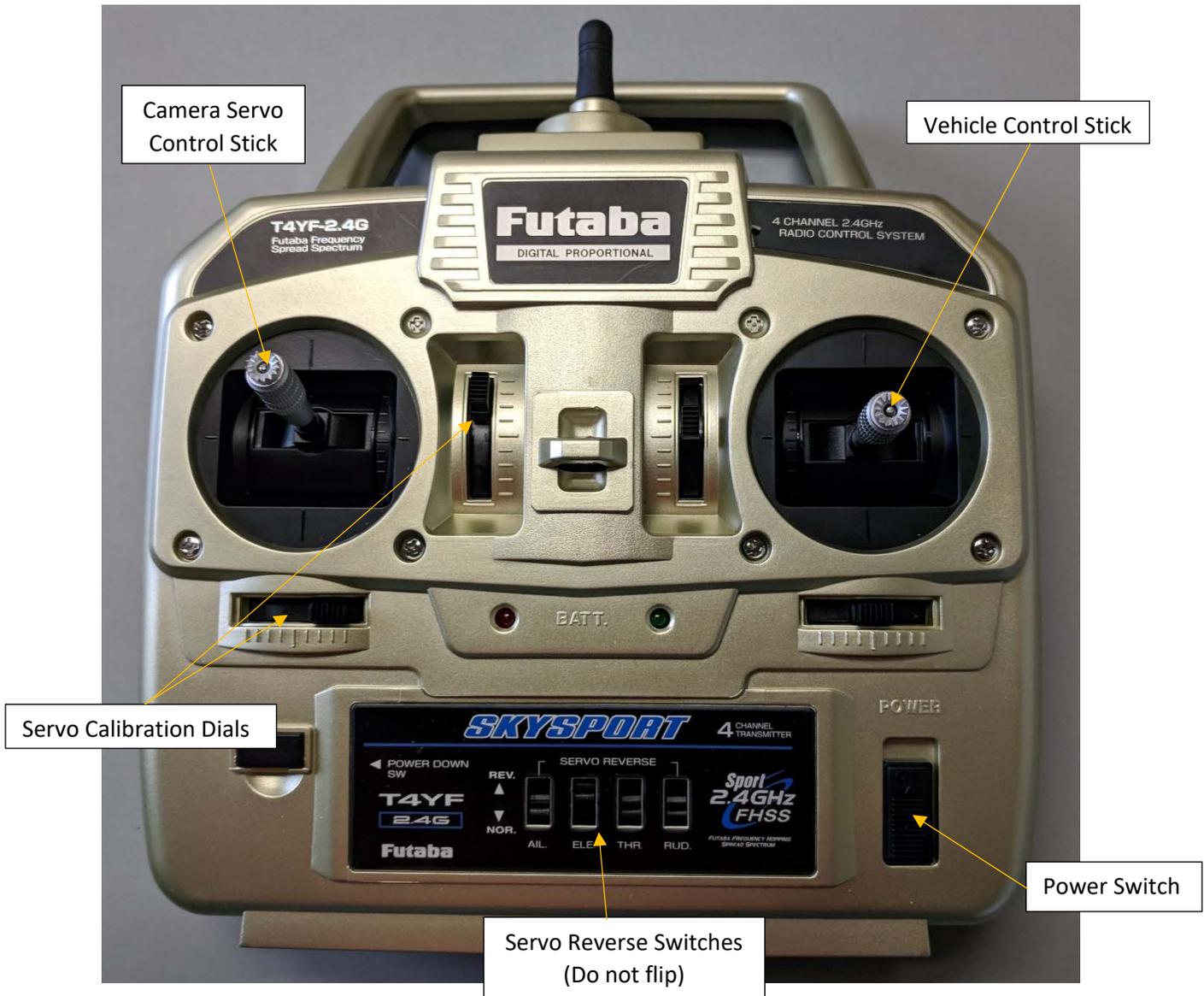




Vehicle usage tips:

- Turn on transmitter before vehicle
- Turn vehicle onto “Training Mode” before using. To turn on to Training Mode, hold power button down until red light flashes 3 times, then release.
- Ensure battery cords are not pinched by compartment door.
- Make sure plastic body is secured to body mounts using clips before using

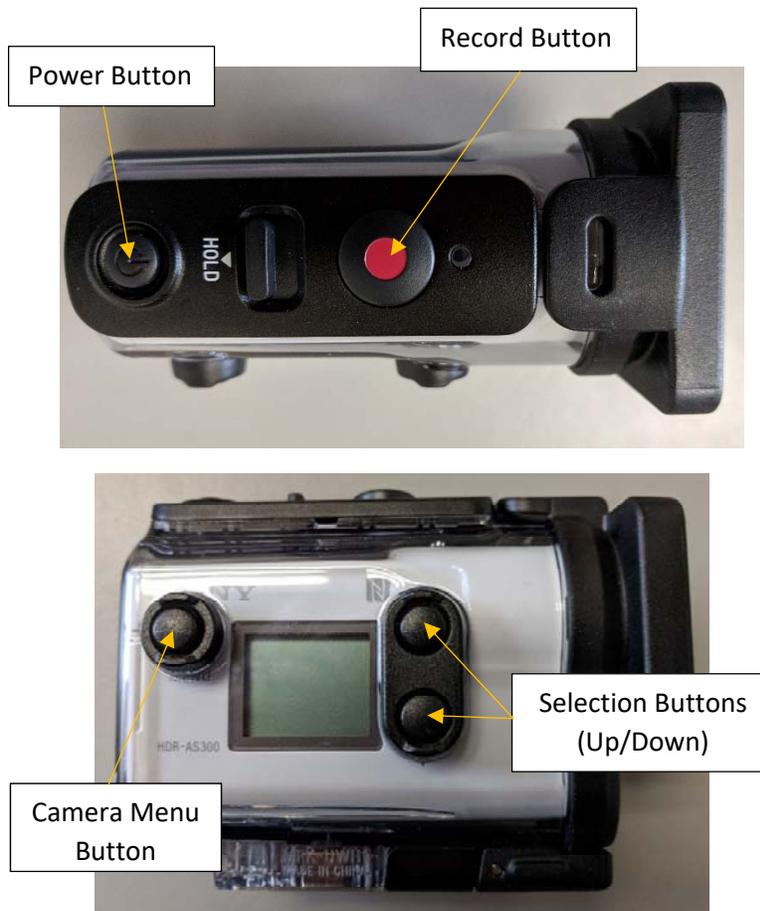
HIVE Controller



Transmitter tips:

- Turn on before vehicle when using.
- Do **not** flip servo reverse switches. Doing so will invert the controls, making controlling vehicle difficult.
- If camera servos are not straight, the servo calibration dials can be used to align camera.
- If vehicle has issues moving, check servo calibration dials and ensure they are equalized out

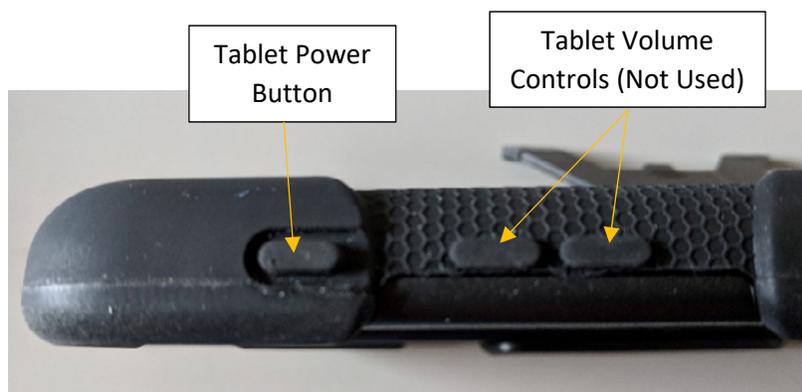
Camera



Camera tips:

- Camera battery is independent of vehicle, ensure it is charged before using
- Ensure waterproof case is closed and sealed before using
- Ensure the camera is properly mounted with bolt fully engaged
- Camera storage card is located on bottom of camera
 - o Please remove all footage from camera before returning, administrator will delete all footage before loaning vehicle out
- To access storage card or charging port, camera must be taken out of waterproof case

Tablet



Tablet tips:

- Tablet power is independent of vehicle, ensure it is charged before using
- Tablet does not have any password protection, please ensure that it is used properly
- Administrator will update the tablet when system is returned
- Tablet is not waterproof, please handle with care

Tablet to Camera Connection

- Make sure camera is charged and turned on
- Use PlayMemories Mobile tablet to connect or turn on the camera
- Wi-Fi connections are best, but Bluetooth connections can be used
- To find QR code to re-connect to camera, remove camera from waterproof case and open battery compartment on side of camera

Charging Equipment



Charging
ON/OFF Button

Charging equipment tips:

- Vehicles only use NIMH batteries, no LIPO settings are used
- Do not leave batteries on charger overnight, please remove when fully charged
- Charge as slowly as possible to extend battery life
- Charger will alert user when the battery is fully charged (Green light will be fully illuminated and charger will chirp)

Resources:E/Revo 16 Documents

<https://traxxas.com/products/models/electric/71054-1erevo116?t=support>

HDR-AS300 Information

https://esupport.sony.com/US/p/model-home.pl?mdl=HDRAS300R&template_id=1®ion_id=1&tab=howto#/howtoTab

Galaxy Tab Manuals

<https://www.samsung.com/us/support/owners/product/galaxy-tab-a-8-0-wi-fi>

HIVE Coordinator

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Special Thanks to Robert Coughlin at MNDOT for his guidance through the construction of the HIVE Vehicle. Their information on HIVE Vehicle or how to create your own is at:

<http://www.dot.state.mn.us/research/projects/hive/hive.html>