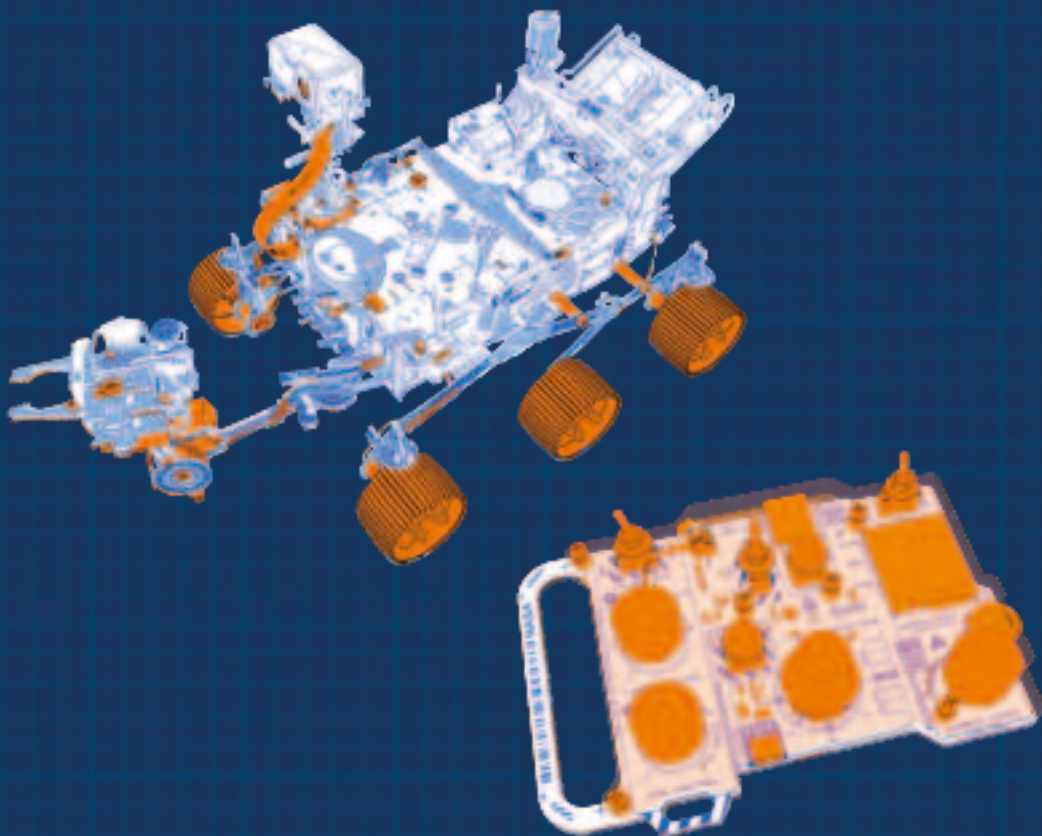




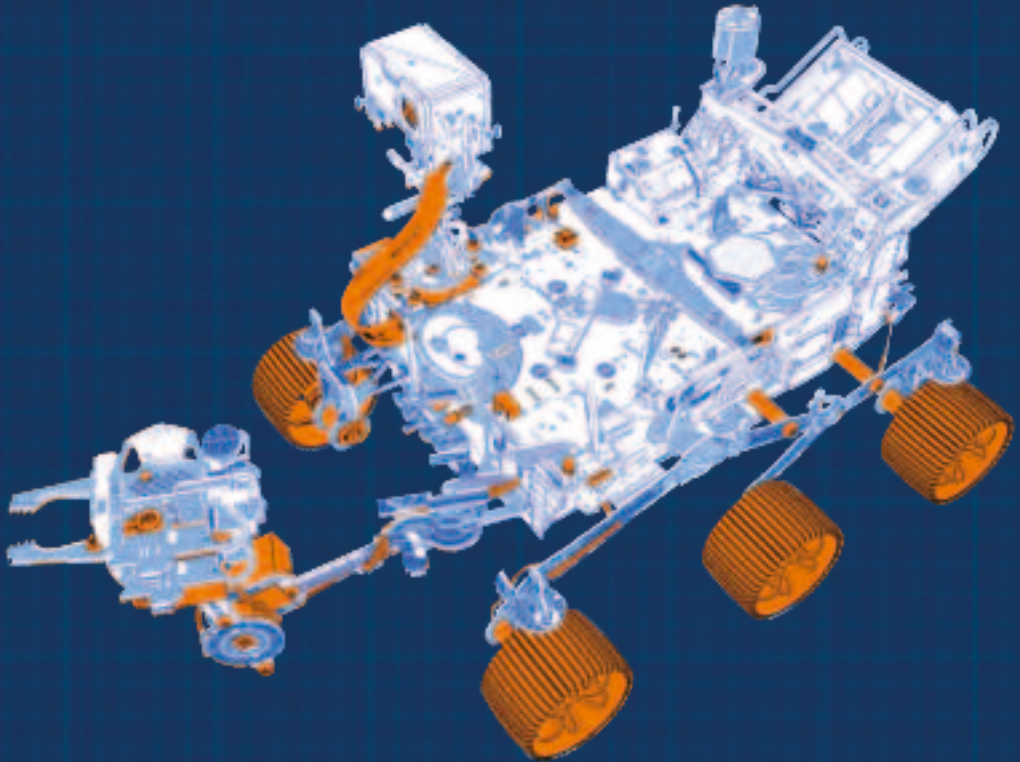
CircuitMess

# NASA Perseverance rover NASA Perseverance rover controller

INSTRUCTION MANUAL



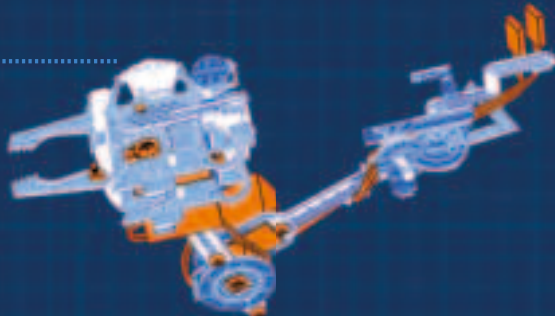
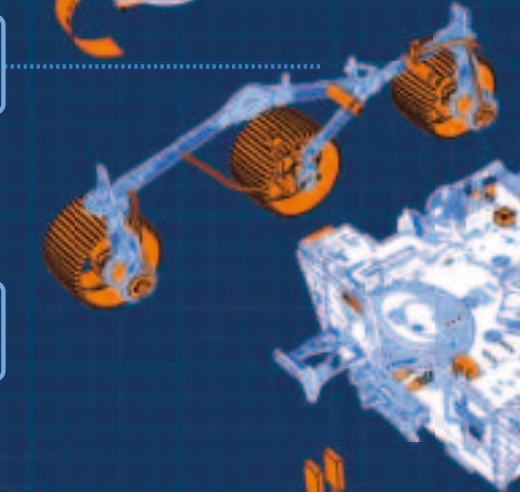
# NASA Perseverance rover

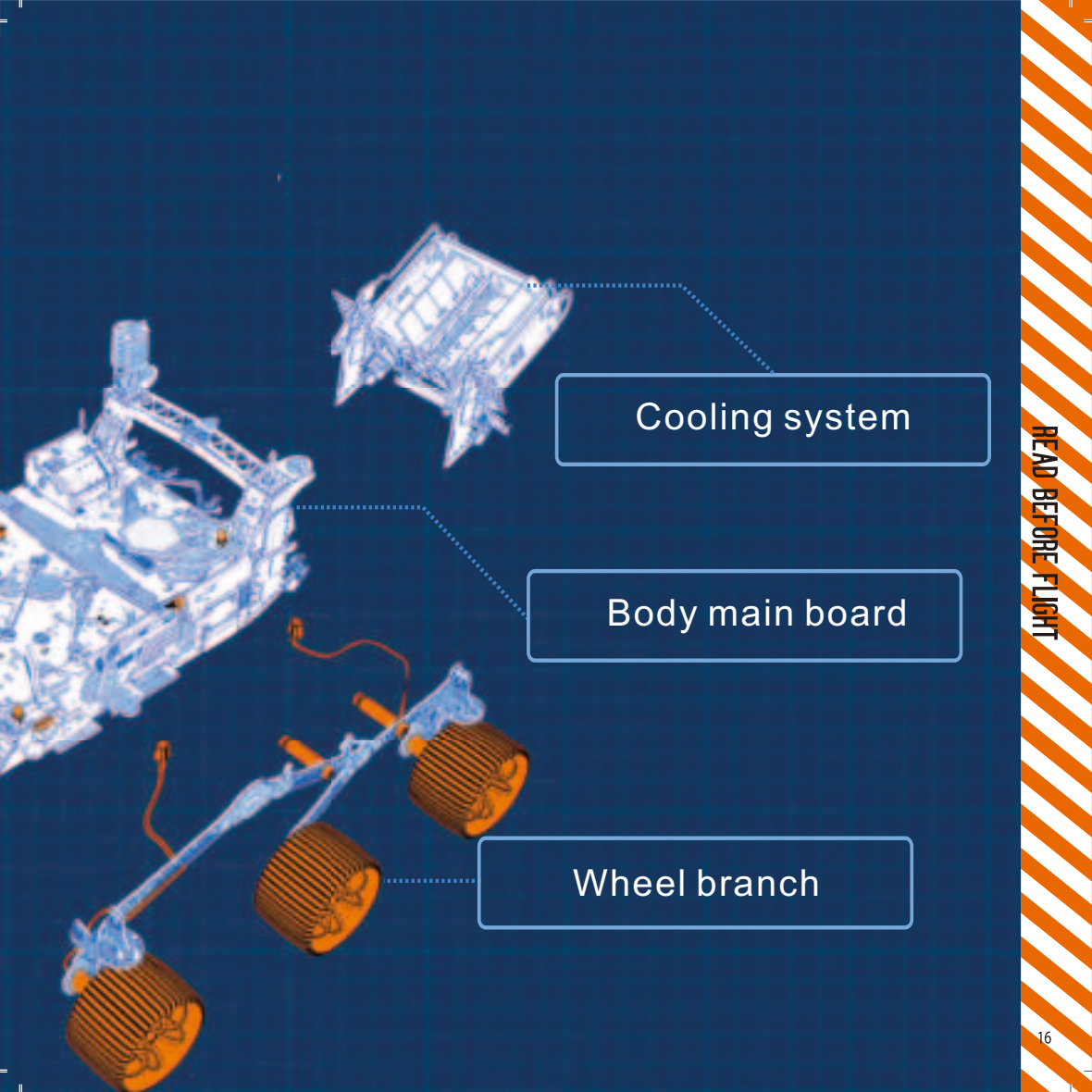


AI camera tower

Wheel branch

Arm pinch



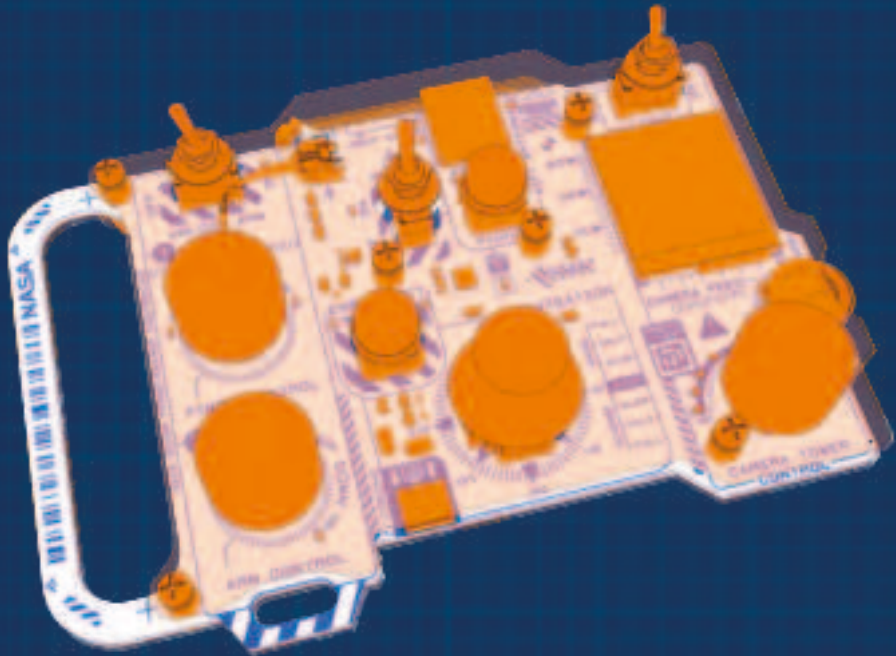


Cooling system

Body main board

Wheel branch

# NASA Perseverance rover controller





Unlock arm control  
LED on: arm control  
unlocked

CPU reset  
Button

LED on:  
power on

Pinch  
Left: close  
Right: open  
Push: neutral  
position

Emergency  
Procedure:  
press and hold  
to initiate

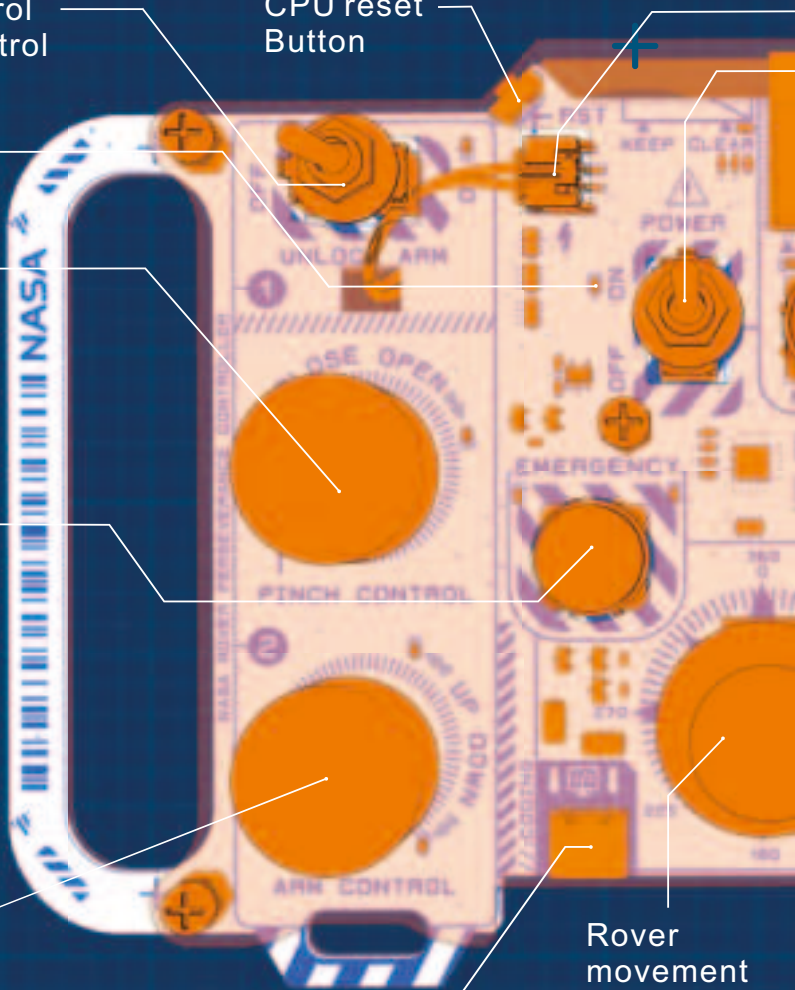
Press once while  
in emergency  
mode to exit  
emergency

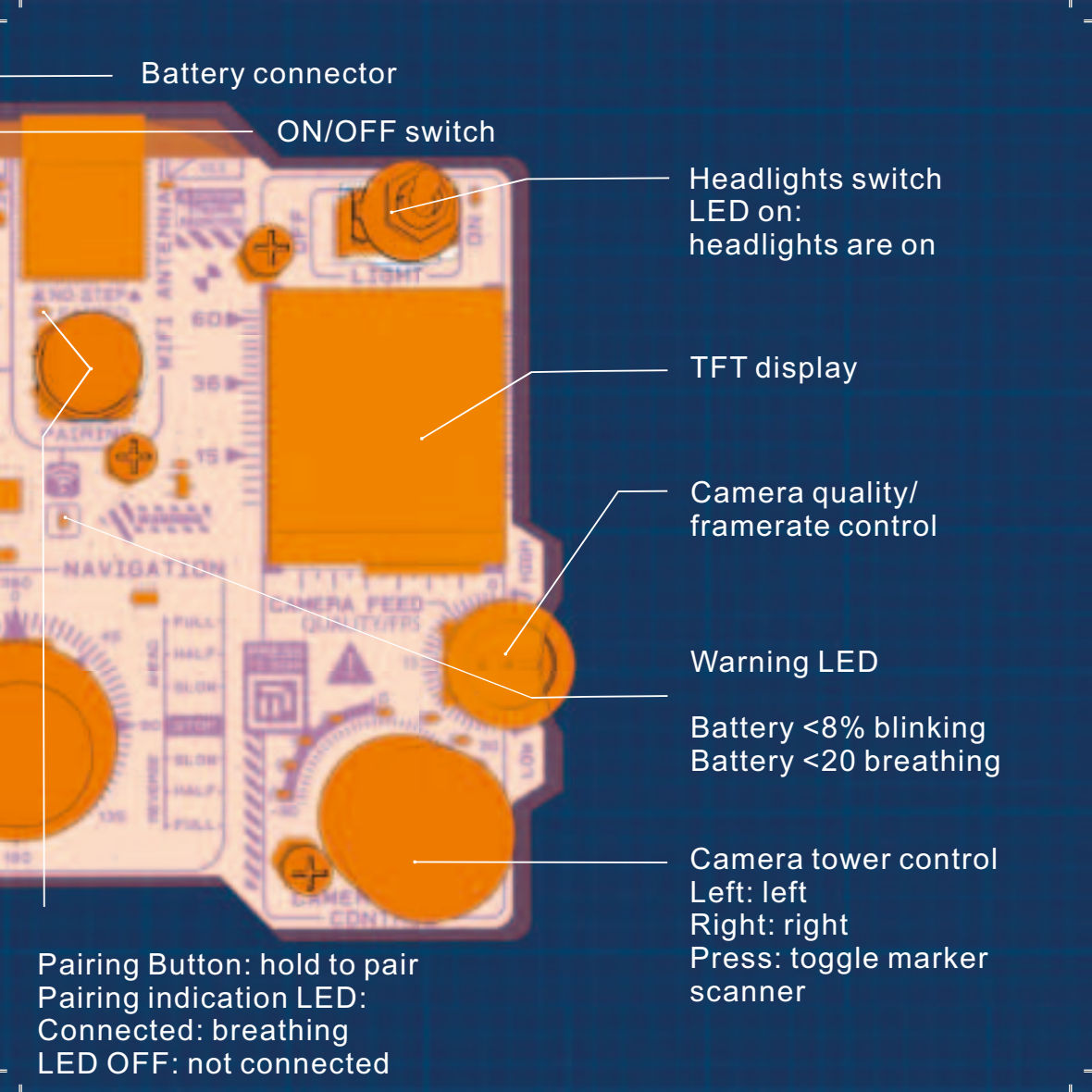
Emergency LED:  
blinking during  
enmergency

Arm control  
Left: up, Right: down  
Push: neutral position

USB connector:  
programming

Rover  
movement  
control:  
press to  
toggle mute





Battery connector

ON/OFF switch

Headlights switch  
LED on:  
headlights are on

TFT display

Camera quality/  
framerate control

Warning LED

Battery <8% blinking  
Battery <20 breathing

Camera tower control  
Left: left  
Right: right  
Press: toggle marker  
scanner

Pairing Button: hold to pair  
Pairing indication LED:  
Connected: breathing  
LED OFF: not connected

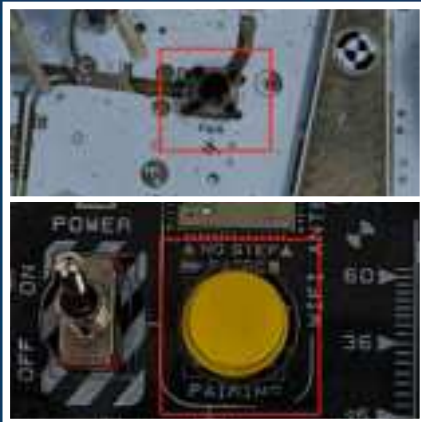
# How to connect the NASA Perseverance rover with controller



1. Turn on the controller



2. Turn on the NASA Perseverance rover



3. Press and hold the PAIR button on both the controller and the NASA Perseverance rover to pair them.

**After the connection is successful, you can start using the controller to control the NASA Perseverance rover.**



**FCC Caution :**

This device complies with part 15 of the FCC Rules. Operation is subject to the following two 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.

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note: 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:

- Reorient 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 dealer or an experienced radio/TV technician for help.

**NASA Perseverance rover controller:**

The device has been evaluated to meet general RF exposure requirement. The device can be used in portable exposure condition without restriction.

**NASA Perseverance rover:**

To maintain compliance with FCC's RF Exposure guidelines, This equipment should be installed and operated with minimum distance between 20cm the radiator your body: Use only the supplied antenna.