

COMMAND

FOR DOZING



CAT[®] COMMAND REMOTE CONTROL

SAFE. EFFICIENT. PRODUCTIVE.

Operating near high walls. Working on unstable surfaces or steep slopes. Moving hazardous materials. Any of these situations can put dozer operators at risk. Even traveling to a remote jobsite poses its own safety issues. Cat[®] Command for Dozing helps address all of these challenges by enabling the operator to work outside the machine.



IN THE FIELD OR OFF SITE

COMMAND HELPS OPERATORS WORK SAFELY

It's a sophisticated remote control system that takes operators off the machine and away from potential dangers when working with hazardous materials or in unsafe conditions. Plus, it maintains the option to utilize other advanced control technologies like Grade and Assist features for dozers.

Once operators become familiar with the feel of the remote control system, they can operate as efficiently, accurately, and confidently as in the cab. In fact, because they experience dramatically less noise and no vibration, operators can work efficiently for longer periods of time with less fatigue.

A SYSTEM TO MATCH JOB NEEDS

CAT COMMAND STATION

Enables the operator to work remotely in a seated indoor “virtual cab” located on site or many miles away.

- + Helps reduce operator fatigue with a comfortable working environment.
- + High quality video delivers a clear view of the work area.



SAFETY COMES FIRST

Allows operators to work away from hazardous conditions, dust, noise, and vibration. Eliminates risk of an operator being injured climbing on or off the machine.

OPERATION IS SIMPLE AND FAMILIAR

Easy to learn and use. Common jobs like dozing and grading materials in hazardous areas become safer for operators – without sacrificing control or accuracy.

FLEET INTEGRATION IS EASY

Your Cat dealer can install Command on a wide range of new Cat dozers, wheel loaders, and excavators.

REMOTE OPERATING STATION

NON-LINE-OF-SIGHT OPERATION



- + Provides a comfortable, indoor environment with familiar controls.
- + Operators can switch between machines, changing jobsites with no downtime.
- + Controls deliver virtually the same response time as in the cab, maintaining precise control for all dozer applications.
- + Enables trainers to stand beside an operator without noise or movement.

CAT COMMAND STATION includes universal controls and an ergonomic design for long-term operation.

DISPLAY OPTIONS



STANDARD

- + Television Size: 43-50" (110 cm-130 cm)
 - Not Included
- + Television Interface: TV Wall Mount
 - Not Included
- + Touch Screen Size: 22" (56 cm)
 - Not Included
- + Touch Screen Mount: Dynamic Arm
 - Included



OPTIONAL

- + Secondary Site Television Size: 43-50" (110 cm-130 cm)
 - Not Included
 - Optional Dual Interface Bracket
- + Secondary Touch Screen Size 22" (56 cm)
 - Not Included
- + Touch Screen Size: 22" (56 cm)
 - Not Included
 - Optional Dynamic Arm



CONFIGURABLE

- + Remove Mounting Mast
- + Wall Mount Any Size TV

STATION CONTROLS



PEDALS

- + Adjustment Range: 3" (7.5 cm)

JOYSTICKS

- + Adjustment Range: 7" (17.5 cm)
- + ISO/SAE Pattern Configurable

SEAT

- + Adjustment Range: 9" (23 cm)
- + Recline Adjustment Range: 35°
- + Lumbar Adjustments: Five Positions
- + Headrest: Adjustable
- + Seat Material: Cloth
- + Operator Presence Switch

SWITCHES

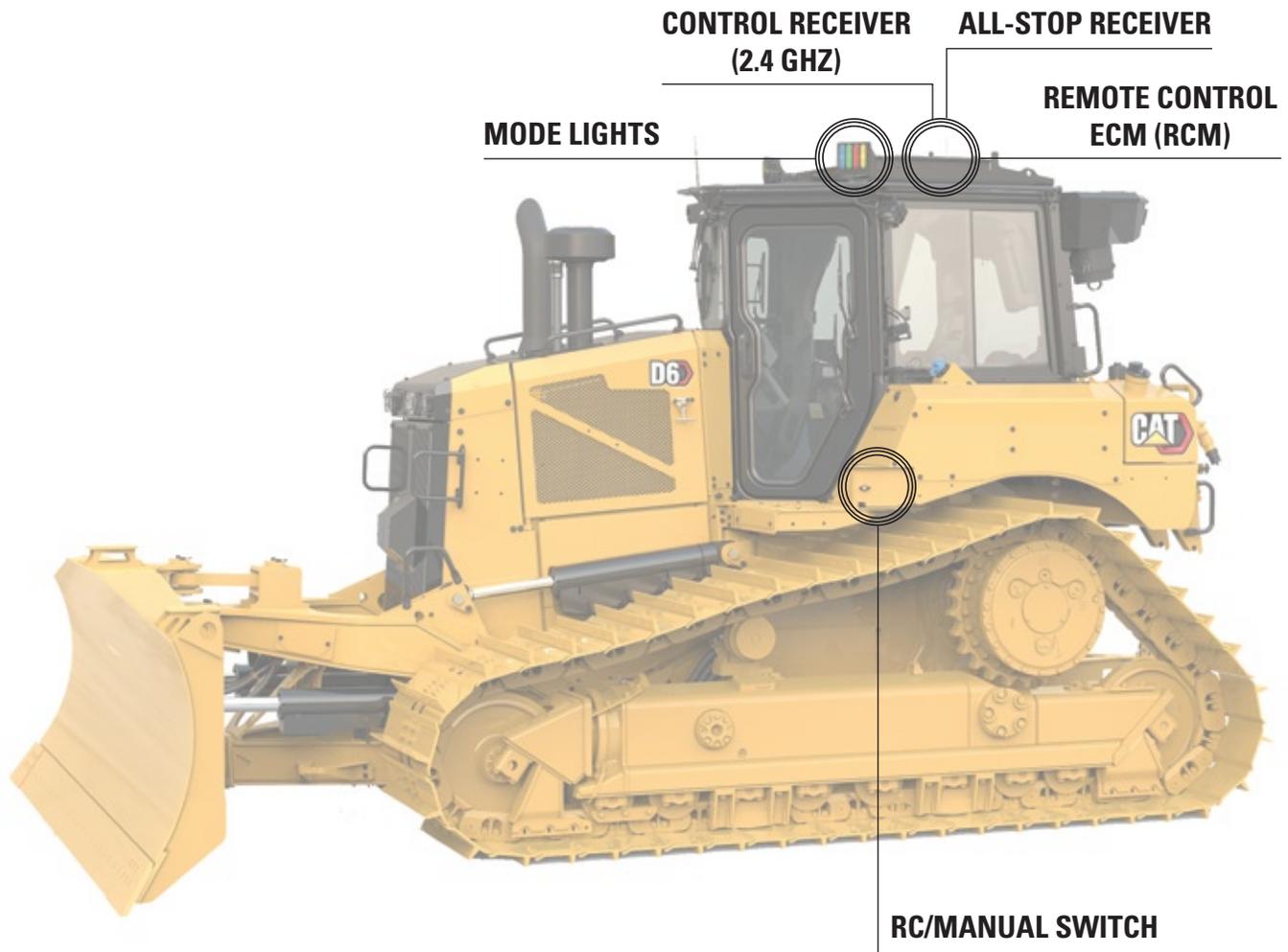
- + Station Power
- + Park Lock
- + Implement Lock
- + Remote Shutdown Switch

STORAGE

- + Mouse Pad Area
- + Keyboard Shelf
- + Two Cup Holders
- + Storage Tray
- + Cell Phone/Tablet Holder

ONBOARD DOZER COMPONENTS

Most components that make Command for Dozing possible are already integrated into next generation machines. Getting the operator started is fast and easy with only a few additional parts needed.



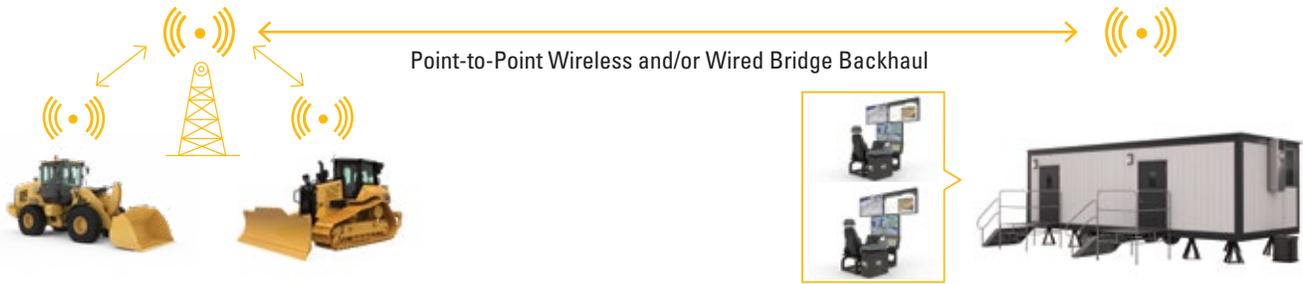
COMMAND FOR DOZING

HOW IT WORKS

POINT-TO-POINT COMMUNICATION



SINGLE ACCESS POINT



MULTIPLE ACCESS POINT/MACHINE ROAMING



COMMAND STATION OPERATION IS INTUITIVE AND PRECISE

Operating from the Command Station is remarkably similar to running a dozer from the cab. Multiple monitor views show everything the operator needs to see, including additional views that they can't get from the cab.

SMOOTH STEERING AND LIFT/TILT CONTROL

The control layout of the Command Station mirrors what operators will find in most Cat dozers. Controls are familiar and precise, reflecting what is happening on the machine in the field.



REAL-TIME MACHINE STATUS INFORMATION

Along with the exterior camera views, the Command Station monitors provide essential machine status information in real time such as fuel usage, engine speed, travel mode and more, plus information from other Cat dozer technologies such as Cat Grade.

COMMAND FOR DOZING

EASY-TO-LEARN CONTROLS

COMMAND STATION OVERVIEW

- 1 SITE CAMERA DISPLAY (DEALER/CUSTOMER SUPPLIED)
- 2 REMOTE VISION DISPLAY (DEALER/CUSTOMER SUPPLIED)
- 3 REMOTE OPERATOR INTERFACE DISPLAY AND GRADE CONTROL OPTIONAL DISPLAY (DEALER/CUSTOMER SUPPLIED)
- 4 RIGHT-HAND SIDE CONSOLE
- 5 PARK BRAKE SWITCH
- 6 IMPLEMENT LOCKOUT SWITCH
- 7 FIRE SUPPRESSION SWITCH (OPTIONAL)
- 8 COMMAND STATION REMOTE SHUTDOWN
- 9 RIGHT CONTROL
- 10 OPERATOR NOT PRESENT SENSOR (WITHIN SEAT BOTTOM CUSHION)
- 11 LEFT CONTROL





SUPPORTED OPERATOR FEATURES

The operator can select a wide range of dozer and technology features using the menus on the Command Station. Some features are not available on all excavator models or configurations. Consult your Cat dealer for details.

- +** **Grade** - Helps operators of varied skill levels hit target grade faster and more accurately.
- +** **Slope Assist** - Automatically maintains pre-established blade position without a GPS signal – no additional hardware or software needed.
- +** **Steer Assist** - Helps reduce operator fatigue by automatically maintaining straight travel with light loads on flat ground and side slopes.
- +** **Steer Assist 3D** - Automatically follow guidance lines from site design plan or infield design under light or heavy loads - requires Grade with 3D.
- +** **Stable Blade** - Seamlessly works with operator inputs to help reduce imperfections and produce a smoother surface.
- +** **Slope Indicate** - Shows side slope and uphill/downhill grades to help operators with slope work.
- +** **AutoCarry™** - Automates blade lift to help get more consistent blade loads with each pass and reduce track slip.
- +** **Blade Load Monitor** - Actively monitors machine load and track slip to help reach optimal pushing capacity.
- +** **Traction Control** - Automatically reduces track slippage with no operator interaction, resulting in less ground disturbance and fewer passes.
- +** **Power Pitch** - Provides operators with the ability to quickly adjust the blade pitch on the go for applications that require multiple adjustments.
- +** **Power Turn** - Provides power to each track to allow the dozer to carry heavy loads around turns.
- +** **Eco Modes** - Optimizes engine speed while maintaining ground speed and power to save fuel in lighter blade load applications like finish grading.

“CAT COMMAND HAS TAKEN THE OPERATOR OUT OF THE DANGER ZONE.”

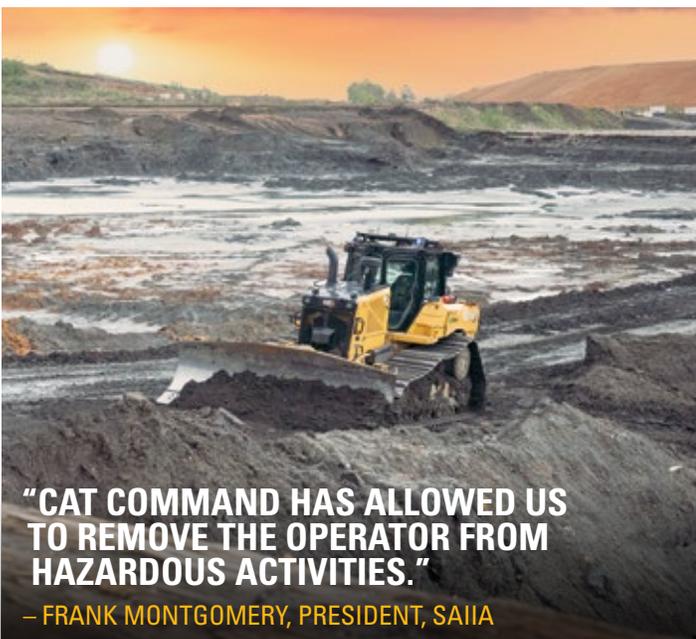
– STEVE SHULTZ, SUPERINTENDENT, PRESTON CONTRACTORS



REMOTE CONTROL IN ACTION

Preston Contractors, a full-service construction contractor based in West Virginia (USA), is using Cat Command for dozer push outs at fine coal slurry impoundments.

Eliminating the need for people to work in potentially hazardous situations – such as working close to the water’s edge – operators now work away from the unforgiving quicksand like composition of slurry. The ability to work outside the cab and control the dozer remotely keeps operators out of the danger zone.



“CAT COMMAND HAS ALLOWED US TO REMOVE THE OPERATOR FROM HAZARDOUS ACTIVITIES.”

– FRANK MONTGOMERY, PRESIDENT, SAIIA

SAIIA, an industrial/heavy civil contractor in northern Alabama (USA), is using three Cat Command Stations around an ash pond site. The materials around these ponds can be unpredictable, especially during rainy conditions.

Operators control Cat dozers and excavators from inside a heated office trailer. Along with the comfortable work space, they appreciate not having to walk through muddy conditions or risk getting their vehicles stuck on the way to their machines.

STANDARD & OPTIONAL EQUIPMENT

Standard and optional equipment may vary. Consult your Cat dealer for details.

COMMAND STATION (NON-LINE OF SIGHT)

MACHINE BASE KIT	STANDARD	OPTIONAL
Mode Indicator Lights	●	
RC/Manual Mode Switch	●	
Electronic Control Modules, Harnesses, Brackets, Fuses, Relays	●	

MACHINE VISION AND COMMUNICATIONS	STANDARD	OPTIONAL
HD Cameras	●	
Microphone	●	
ECMs, Harnesses, Brackets	●	
Machine Radio Installation Kit	●	
Machine Radio, Antennas	○	

STATION DISPLAY SETUP	STANDARD	OPTIONAL
Machine Vision Television	○	
– Tilt Mount and Cables	○	
Operation Info Touch Screen	○	
– Dynamic Mount Arm	●	
– Cables	○	
Site Camera Television	○	
– Tilt Mount and Cables	○	
Secondary Touch Screen (Ex. Cat Payload)		○
– Dynamic Mount Arm		●
– Cables		○
Configurable 3rd Television		○
– 3rd Television Bracket		●
– Television Tilt Mount and Cables		○
Configurable		
– Remove Mounting Mast	●	
– Wall Mount Any Size TV		

STATION MODULAR STRUCTURE	STANDARD	OPTIONAL
Detachable Display Mounting Mast	●	
Two-Piece Rigid Frame	●	
Detachable Cat Electronics Enclosure	●	

SITE COMMUNICATIONS	STANDARD	OPTIONAL
Site Access Point		
– Manages wireless communication with the machine	○	
Site Backhaul		
– Manages communication between the Station and Access Point		○
Site Camera		
– Operator can monitor site-level hazards	○	

STATION CONTROLS AND ERGONOMICS	STANDARD	OPTIONAL
Pedals	●	
– Adjustment Range: 3" (7.5 cm)	●	
Joysticks	●	
– Adjustment Range: 7" (17.5 cm)	●	
Seat	●	
– Adjustment Range: 9" (23 cm)	●	
– Recline Adjustment Range: 35°	●	
– 5 Lumbar Positions	●	
– Adjustable Headrest	●	
– Cloth Seat	●	
– Operator Presence Sensor	●	
Switches	●	
– Station Power Switch (Lockable)	●	
– Park Brake Switch	●	
– Implement Lock Switch	●	
– Fire Suppression Enable Switch	●	
– Remote Shutdown Switch	●	
Storage	●	
– Mouse Pad Area	●	
– Keyboard Shelf	●	
– Two Cup Holders	●	
– Storage Tray	●	
– Phone/Tablet Holder	●	

STATION POWER AND CONNECTIVITY	STANDARD	OPTIONAL
Personal Computers	○	
– Personal Computer for Machine Vision and Interface	○	
– Personal Computer for Site Camera and Cat Productivity	○	
– Wireless Keyboard/Mouse	○	
AC-to-DC Power Supply (24VDC, 10A)	○	
AC Power Strip Extension	○	
Caterpillar Validated Ethernet Switch	○	
4 × Ethernet Cables	○	
2 × Power Cables	○	

● – Caterpillar supplied equipment
○ – Cat dealer or customer supplied equipment

Cat Command availability may vary by region and model. Consult your Cat dealer for details.

For more complete information on Cat products, dealer services and industry solutions, visit us on the web at www.cat.com

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Materials and specifications are subject to change without notice. Featured machines in photos may include additional equipment. See your Cat dealer for available options.

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