

ESC

Forward view
640 x 480
resolution
Toggle cockpit
graphics

Instrument
view
Toggle cockpit
displays

Left MFD
(Apache)
TV
-Resolution

Right MFD
(Apache)
Large HUD
(Havoc)
+Resolution

F1

F2

F3

F4

Player's
gunship
Toggle external
HUD

> Force
< Force
(air/ground/sea)
Toggle side

> Object
< Object
Nearest object
Toggle object
text

F5

F6

F7

F8

Chase camera
Reset position
Lock/unlock

Fly-by camera
Drop camera

Auto-action
camera
Cinematic
camera

F9

F10

F11

F12

Main Cockpit Views

Select Apache MFD Page

Select Object To View

Select Camera

~

Ground radar
Left MFD
Right MFD
(Apache)

1

Air radar
Left MFD
Right MFD
(Apache)

2

TADS
Left MFD
Right MFD
(Apache)

3

TSD
Left MFD
Right MFD
(Apache)

4

ASE
Left MFD
Right MFD
(Apache)

5

Weapon
Left MFD
Right MFD
(Apache)

6

System
Left MFD
Right MFD
(Apache)

7

Engine
Left MFD
Right MFD
(Apache)

8

9

0

- Collective
- Time accel.
(single player)

+ Collective
+ Time accel.
(single player)

> Weapon
< Weapon
Weapons safe
Turret gun

Display radio message menu
Repeat radio message
Move inset map (map screen)

+ Collective
Quit mission/
campaign

> Waypoint
< Waypoint

> TSD/ASE
range
< TSD/ASE
range
(Apache)

Rotor brake

Trim
Clear trim

Wiper
Toggle
intermittent
wipe

IR jammer

Engage
bob-up
Disengage
bob-up

Pause
(single player)

> Left MFD
< Left MFD
Switch on/off
(Apache)

> Right MFD
< Right MFD
Switch on/off
(Apache)

Toggle Cockpit/
Menus

Tab

Q

W

E

R

T

Y

U

I

O

P

[

]

Caps Lock

- Collective
ASE Auto-page
Attack my
target

+ Salvo size
- Salvo size

> TSD
dedutter
< TSD
dedutter
(Apache)

Flare
Fire
extinguisher

Autopilot

Hover hold

Radar jammer

> HUD colour
< HUD colour
Toggle HUD
size (Havoc)

Hellfire
LOBL/LOAL
(Apache)

;

"

Enter

A

S

D

F

G

H

J

K

L

,

"

Shift

Tail rotor left

Tail rotor right
Exit game

Chaff
Auto-counter-
measures

Toggle
navigation
lights

Wheel Brakes

PNVS (Apache)
NVG (Havoc)

Acknowledge
master
caution

Zoom out
external view
Zoom out map

Zoom in
external view
Zoom in Map

?

/

Shift

Z

X

C

V

B

N

M

<

>

/

Ctrl

Alt

Fire Weapon

Alt

Ctrl

Print Screen

Scroll

Pause

+ = Increase

- = Decrease

> = Select Next

< = Select Previous

Select Target Acquisition System

Radar

Ground radar

Air radar

IHADSS
(Apache)
HMS
(Havoc)

Insert

Home

Page Up

FLIR

DTV
(Apache)
LLTV
(Havoc)

DVO
(Apache)

Delete

End

Page Down

TADS (Apache) / EOS (Havoc)

Cyclic
pan up

Cyclic
pan left

Cyclic
pan right

Cyclic
pan down

Cyclic/
View Panning/Scroll Map

■ Ctrl + key to pan fixed cockpit single view

■ Shift + key to pan fixed cockpit full extent

■ Alt + key to pan virtual cockpit/external view

Target Acquisition System Controls

Num Lock

Activate
single radar
sweep

Single/
continuous
radar sweep

+ Range
- Zoom

7

+ Scan size
Pan up

+ Target
priority
(ground radar)

+ Range
+ Zoom

8

9

Scan left
Pan left

Scan centre
Pan centre

Scan right
Pan right

4

5

6

Auto-target

- Scan size
Pan down

- Target
priority
(ground radar)

1

2

3

> Target
< Target

Switch off

0

Del

Enter

Lock/unlock
target
Padlock
target

● Radar

▲ TADS (Apache)/EOS (Havoc)

■ IHADSS (Apache)/HMS (Havoc)

■ Shift + key for maximum effect

■ Alt + key for minimum effect

ACRONYMS

AAA	Anti-Aircraft Artillery ("Triple A")	IHADSS	Integrated Helmet And Display Sighting System
AGM	Air to Ground Missile	IR	Infra-Red
AP	Armour Piercing	LLTV	Low Light Level TV
APC	Armoured Personnel Carrier	LOAL	Lock On After Launch
APU	Auxiliary Power Unit	LOBL	Lock On Before Launch
ASE	Air Survivability Equipment	LOS	Line Of Sight
ATGM	Anti-Tank Guided Missile	LZ	Landing Zone
CAP	Combat Air Patrol	MBT	Main Battle Tank
CAS	Close Air Support	MFD	Multi-Function Display
CP/G	Co-Pilot/Gunner	MPSM	Multi-Purpose Sub-Munitions
DTV	Daylight TV	MRLS	Multiple Rocket Launch System
DVO	Direct View Optics	NOE	Nap Of the Earth
ECM	Electronic Countermeasures	NOV	Night Vision Goggles
EO	Electro-Optical	PNVS	Pilot Night Vision Sensor
FAC	Forward Air Controller	RWR	Radar Warning Receiver
FARP	Forward Arming And Refueling Point	SAM	Surface to Air Missile
FFAR	Folding Fin Aerial Rocket	SEAD	Suppression of Enemy Air Defences
FLIR	Forward Looking Infra-Red	TADS	Target Acquisition and Designation System
HE	High Explosive	TOW	Tube-Launched, Optically-tracked, Wire-guided
HEAT	High Explosive Anti-Tank	TSI	Tactical Situation Display
HEDP	High Explosive Dual Purpose	TWD	Threat Warning Display
HMS	Helmet Mounted Sight	VSI	Vertical Speed Indicator
HUD	Head Up Display		
IFV	Infantry Fighting Vehicle		

RADAR SYMBOLS

Target Categories	LOS	No LOS
Wheeled vehicle	●	○
Tracked vehicle	■	■
Air defence unit	▲	△
Aircraft	◆	◇
Helicopter	✕	✕
Ship	⚓	⚓
Structure	■	□

GAME KEYS

Ctrl Q Quit mission/campaign	Ctrl = Increase time acceleration (single player)
Ctrl X Exit game	Ctrl - Decrease time acceleration (single player)
P Pause (single player)	

MAP SCREEN KEYS

Enter Toggle cockpits/menus	< Zoom out
← → ↑ ↓ Scroll map	> Zoom in
Shift ← → ↑ ↓ Scroll map (coarse)	→ Move inset map
Alt ← → ↑ ↓ Scroll map (fine)	

FLIGHT CONTROL KEYS

R Rotor brake engage/disengage	Z Tail rotor left
B Wheel brakes	X Tail rotor right
Q or = Increase collective	T Trim
A or - Decrease collective	Shift T Clear trim
← → ↑ ↓ Cyclic	G Autopilot
	H Hover-hold

WEAPONS AND COUNTERMEASURES KEYS

← Select next weapon	L Hellfire LOBL/LOAL toggle (Apache)
Shift ← Select previous	C Release chaff
Ctrl ← Weapons safe	F Release flare
Alt ← Select turret gun	J Radar jammer
Spacebar Fire weapon	I IR jammer
S Increase rocket salvo size	Ctrl C Auto-counter measures
Shift S Decrease rocket salvo size	

TARGETING KEYS

Select Target Acquisition System

Insert Ground radar	Delete FLIR
Home Air radar	End DTV (Apache) / LLLTV (Havoc)
Tab IHADSS (Apache) / HMS (Havoc)	Num DVO (Apache)

Radar Controls (use numeric keypad)

4 Scan left	1 Engage auto-target
5 Scan centre	7 Toggle allied aircraft (air radar)
6 Scan right	* Toggle single/continuous sweep
8 Increase scan size	7 Activate single radar sweep
2 Decrease scan size	Enter Lock/unlock target
+ Increase range	Ctrl Enter Padlock target
- Decrease range	0 Select next target
9 Increase target priority (ground radar)	Shift 0 Select previous target
3 Decrease target priority (ground radar)	Ctrl Delete Switch off

TADS (Apache) / EOS (Havoc) Controls (use numeric keypad)

4 Pan left	+ Increase zoom	Enter Lock/unlock target
5 Pan centre	- Decrease zoom	Ctrl Enter Padlock target
6 Pan right	0 Select next target	Shift 0 Select previous target
8 Pan up	Ctrl Delete Switch off	
2 Pan down		

IHADSS (Apache) / HMS (Havoc) Controls (use numeric keypad)

Ctrl 4 6 8 2 Pan fixed cockpit single view	Ctrl Enter Padlock target
Shift 4 6 8 2 Pan fixed cockpit full extent	0 Select next target
Alt 4 6 8 2 Pan virtual cockpit	Shift 0 Select previous target
Enter Lock/unlock target	Ctrl Delete Switch off

COCKPIT KEYS

M Acknowledge master caution	K Select next IHADSS (Apache) / HUD (Havoc) colour
W Select next waypoint	Shift K Select previous IHADSS (Apache) / HUD (Havoc) colour
Shift W Select previous waypoint	Alt K Toggle HUD size (Havoc)
Y Wiper	N Toggle night vision - PNVIS (Apache) / NVG (Havoc)
Alt Y Toggle intermittent wipe	Ctrl F Activate fire extinguisher

MULTI-FUNCTION DISPLAY KEYS (Apache)

Cycle MFD Pages

T Select next left MFD page	J Select next right MFD page
Shift T Select previous left MFD page	Shift J Select previous right MFD page
Ctrl T Left MFD on/off	Ctrl J Right MFD on/off

MFD Page Shortcuts

Ctrl 1 to 8 Select page for left MFD	7 System
Alt 1 to 8 Select page for right MFD	8 Engine
1 Ground radar	E Increase TSD and ASE range
2 Air radar	Shift E Decrease TSD and ASE range
3 TADS	D Select next TSD declutter level
4 TSD	Shift D Select previous TSD declutter level
5 ASE	Ctrl A Toggle ASE auto-page
6 Weapon	

MESSAGE KEYS

→ Display radio message menu	1 to 0 Select message
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COCKPIT VIEW KEYS

Main Cockpit Views

F1 Forward view	F3 Left MFD (Apache), TV (Havoc)
Ctrl F1 Toggle cockpit graphics	F4 Right MFD (Apache), large HUD (Havoc)
F2 Instrument view	

View Panning

Ctrl ← → ↑ ↓ Pan fixed cockpit single view	Alt ← → ↑ ↓ Pan virtual cockpit
Shift ← → ↑ ↓ Pan fixed cockpit full extent	

EXTERNAL VIEW KEYS

Select Object To View

F3 View player's gunship	F7 View next object in force
Shift F3 View player's target	Shift F7 View previous object in force
F6 View next force (air/ground/sea)	Ctrl F7 View nearest object in force
Shift F6 View previous force	Alt F7 Toggle object text
Ctrl F6 Toggle force side	

Select Camera

F9 Chase camera	Shift F10 Drop camera
Shift F9 Reset chase camera position	F11 Auto-action camera
Alt F9 Toggle chase camera lock	Shift F11 Cinematic camera
F10 Fly-by camera	

Camera Zoom And Panning

< Zoom out	> Zoom in	Alt ← → ↑ ↓ Pan
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