

RED STORM RISING Technical Supplement

Package Contents

Your *Red Storm Rising* should contain a manual, this technical supplement folder, two 5 1/4" disks or one 3 1/2" disk, keyboard overlays, a map of the Norwegian Sea Theater, a registration card, and an order card for backup disks.

Required Equipment

Computer: This simulation requires an IBM PC, XT, AT, PS/2, Compaq 386, Tandy 1000, or a computer 100% compatible with one of those models. The machine must have at least 384K of RAM and DOS 2.x or 3.x. When using higher versions of DOS, more RAM may be necessary.

Controls: The simulation can be run entirely from the keyboard, or with a joystick and keyboard.

Display: The simulation requires a color monitor with an IBM CGA, EGA, MCGA, VGA or Tandy 1000 graphics system. EGA systems must have 256K on the graphics card (standard on all but the earliest boards).

The simulation will run on a system with a monochrome monitor if you have a Hercules Monochrome Graphics card. If you are using a compatible graphics card/monitor, it must be 100% hardware compatible to one of the above.

DOS: You must have IBM or MicroSoft DOS, version 2.0 or higher. A version between 2.11 and 3.31 is recommended (3.1 or less on 384K machines).

Saving Games

Red Storm Rising can save games only if you follow the installation procedure and "run" the game from copies on either floppy disks or a hard disk. If you run the game using the disk(s) in the box, no games can be saved. The original MicroProse disks are write-protected to avoid inadvertant damage.

Accelerated Time

This is a new feature for the IBM version of *Red Storm Rising*.

If you find the pace of action too slow, or are pursuing a slowly-developing strategy, press ALT and the T key to accelerate time. Press it again to restore normal time rate. This option only functions during a battle.

Tandy 1000 Keyboards

On Tandy 1000 computers, do not attempt to use the numeric keypad for cursor key movements. Instead use the marked cursor keys. For diagonal movements, use two keys in combination.

Installation Concepts

Red Storm Rising is copy-protected using a "key disk" technique. This means you can copy the game files from the original disks however you prefer — to other floppy disks, and/or to a hard disk. These files are normal in all respects. They can be backed up, restored and optimized on a hard disk.

However, the original disks have special "invisible" markings that cannot be copied or removed. The program will ask you to insert temporarily the original Disk A into your floppy drive. MicroProse regrets that continuing casual and organized software piracy within the USA and around the world requires that we copy-protect this product.

Remember, you cannot save games or final scores unless you install *Red Storm Rising* on floppy disk or hard disk.

Installation on Floppy Disks

This simulation is designed to run using copies of the original (distribution) disks supplied in the box. You can run the game using the distribution disks, but no information will be saved. We suggest you format new disks and then copy the game onto them.

If you're using 5.25" 360K drives (standard for PCs and XT's) format two disks. If you're using any other type of drive (5.25" 1.2 MB, or any 3.5" size) format just one disk.

Format a Floppy Disk: Formatting a disk requires that you boot your computer with DOS, then at the ">" prompt type the appropriate format command. For example, on most machines type `FORMAT A:` to format a floppy disk in the A: drive. For details, consult the description of "FORMAT" in your DOS manual.

Copy to Newly Formatted Disks: After formatting the disk(s), use the DOS "COPY" command to copy the disks with *.* as the file designators. Typically this command is entered as `COPY A:*.* B:*.*`, even if you just have one floppy drive. For details, consult the description of "COPY" in your DOS manual.

Avoid Diskcopy: Do not use the "DISKCOPY" command to copy disks. You must use the "COPY" command.

Installation on a Hard Disk

You can copy the original (distribution) disks onto a hard disk. The files copied are standard DOS files. They can be copied, erased, and optimized as desired.

Install Program: For your convenience, a batch file called "INSTALL" is included on disk B. It automatically installs the program onto your hard disk. To use the program, insert your disk (if using 5.25" disks, insert disk B) into a drive.

Type `A:INSTALL` and press Return if you put the original disk into drive A. Type `B:INSTALL` and press Return if you put the original disk into drive B. The install program will then ask which disk you wish to install onto. Most hard disks are set up as drive C. Type the appropriate letter and follow any instructions that appear.

Technical Notes: If you have problems with the install program, use DOS commands to make a subdirectory titled RSR and then copy all the files from all original disks into that subdirectory. Finally, copy the RSRLOADR file into the root directory and then rename it REDSTORM.BAT. The install program simply automates this process.

If you're an experienced IBM user, feel free to modify or move "REDSTORM.BAT". Note that *Red Storm Rising* requires all its files to be in the same subdirectory, and that subdirectory must be the default while the program is running.

Loading from Floppy Disks

(1) **Boot** your machine using a DOS disk (version 2.11 to 3.31 recommended).

(2) **Insert Disks:** When the "A:>" prompt appears, remove the DOS disk and insert *Red Storm Rising* disk A. If you have two floppy drives, put disk B in the second drive. Use the copies made in the install instructions above.

(3) **Set Speed:** If you have a "turbo" or multi-speed computer, use your normal speed setting. Actually, you can use any speed, but do NOT change speeds during the game.

(4) **Load Program:** Type the following:

REDSTORM

and press return. The simulation will begin loading. It will ask you to insert your original disk A (the key disk) at some point, and then press a letter key indicating which drive contains this disk. When the screen after that appears, replace the original disk with your copy disk.

Loading from a Hard Disk

This assumes your machine runs under DOS when it boots, which is true of 99+% of all IBM and compatible machines with hard disks.

(1) **Turn on your machine.** If it is already on, exit all programs and return to the root directory with the "cd" DOS command. For example, if your hard disk is C: then "cd C:\" does this.

(2) **Set Speed:** If you have a "turbo" or multi-speed computer, use your normal speed setting. Actually, you can use any speed, but do NOT change speeds during the game.

(3) **Load Program:** Type the following:
REDSTORM

and press return. The simulation will begin loading.

Graphics Options

When *Red Storm Rising* loads it asks you to select a graphics option. The current options include the following:

EGA: Select this option if your machine has an EGA graphics board. This option provides 16 colors. Any RGB monitor can be used (a special high-resolution EGA monitor is not required).

CGA: Select this if you have a CGA graphics board. This option provides 4 colors.

Tandy 1000: Select this option if you have a Tandy 1000. This option also provides 16 colors.

VGA/MCGA: Select this if you have a PS/2, or any other machine with a VGA graphics board and monitor.

Hercules Monochrome: Select this if you have a Hercules Monochrome Graphics board, or a compatible monochrome graphics board, sometimes termed "MGA". Note that the original IBM graphics board and IBM MGA compatibles won't work, since that design only supports text.

A Suggestion to CGA Users: We suggest that you purchase an EGA graphics board (which are now quite inexpensive) and attach your CGA RGB monitor to that. *Red Storm Rising*, other MicroProse products, and most other IBM EGA games run in this fashion. A new, expensive EGA monitor is not required if the board has a standard output. Of course, it's true that certain high-resolution and special-color-palette modes are not available without a new, expensive monitor. However, in that case we'd recommend a VGA board and monitor instead.

Sound Driver Options

When *Red Storm Rising* loads it asks you to select a sound option. The current options include the following:

IBM Sound: This default sound is appropriate to all IBM PC, XT, AT and PS/2 and compatible machines with no special sound hardware.

Tandy 1000 Sound: Only use this option on Tandy 1000 computers, which include a special music chip.

Innovation Sound Board: Only use this option if your computer contains the Innovation music/joystick board.

Ad Lib Sound Board: Only use this option if your computer contains the Ad Lib music board.

No Sound: This makes the entire simulation silent.

Automated Loading

When the program loads, it asks a variety of questions about your computer system. You can automate this process by adding additional characters after the "REDSTORM" loading command. Separate "REDSTORM" and each of these commands with a space.

Automated loading options include:

- /J if you use a joystick
- /NJ if you use a keyboard without a joystick
- /GE if you use EGA with 16-color graphics capability
- /GC if you use CGA with 4-color graphics capability
- /GT if you use Tandy 1000 with 16-color graphics capability
- /GM if you use MCGA or VGA with 256-color graphics capability
- /GH if you use Hercules monochrome graphics
- /AI if you always use IBM sounds
- /AT if you always use Tandy 1000 sounds
- /AB if you always use Innovation sounds
- /AA if you always use Ad Lib sounds
- /AX if you always use no sounds

Examples: If you use a standard PC or XT without joystick, CGA graphics, and standard PC sounds you would load the game with "REDSTORM /NJ /GC /AI". If you have a Tandy 1000 with joystick, you would load the game with "REDSTORM /J /GT /AT". If you have an AT with EGA graphics, but wish to select joystick and sound options normally (at the start of each game), you would load with "REDSTORM /GE".

Loading Problems?

The latest notes regarding this program and problems with "compatibles" can be found on disk B, in an ASCII file named "READ.ME". You can read this file using standard DOS commands, such as "TYPE READ.ME".

If the program does not load or run correctly, turn off your entire machine and restart it. Make sure DOS and *Red Storm Rising* are the only programs loading into memory. Certain RAM-resident programs or tools can conflict with *Red Storm Rising*.

If you continue to have trouble, try the original *Red Storm Rising* disks. Your copies may be bad. If the original doesn't work, try the original *Red Storm Rising* disks in another PC. If the disks *do* work in another machine, then your machine has compatibility problems (i.e., some aspect is not entirely IBM compatible). Try a different machine speed, or a different keyboard/joystick, graphics, or sound option. Sometimes an alternate setting will work.

If you have trouble loading on other machines as well as your own, you may be one of the tiny percentage with a defective disk. In such a case contact MicroProse Customer Service at (301) 771-1151, Monday through Friday, 9am-5pm Eastern time. Please have a pencil and paper handy when you call.

IBM Version Credits

IBM Programming

Richard Orban,
Darrell Dennies and Joe Hellesen,
with Animation Programming by Bill Becker

IBM Computer Graphics

Barbara Bents

Music & Sound Effects

Ken Lagace
AD LIB sound drivers by Jim McConkey

Manual

Written by Arnold Hendrick
Design by Iris Idokogi and Murray Taylor
Graphics by Barbara Bents and Murray Taylor
Layout by Jackie Ross

Technical Advice & Research

Larry Bond and Tom Clancy

IBM Version Quality Assurance

Chris Taormino and Al Roireau

IBM Version Playtesting

Chris Taormino, Al Roireau, Steve Meyer, Arnold Hendrick, Ken Veale

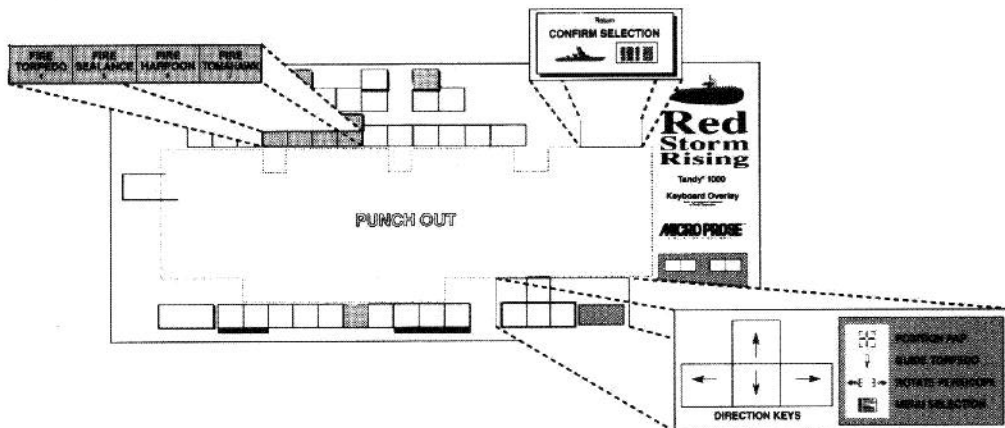
Technical Supplement Version 1.0

Copyright © 1989, MicroProse Software, Inc.

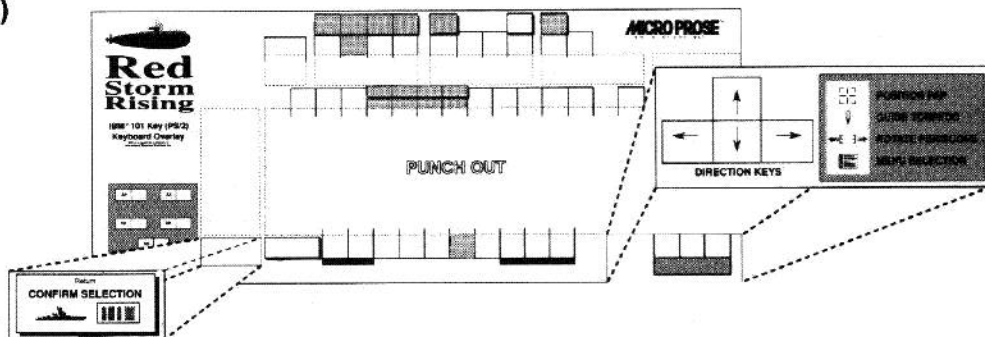
IBM is a registered trademark of International Business Machines Inc. Apple and Macintosh are registered trademarks of Apple Computer, Inc. Commodore 64 and Amiga are registered trademarks of Commodore Business Machines, Inc. Hercules is a registered trademark of Hercules Computer Technology, Inc. Tandy is a registered trademark of Tandy Corporation. Atari is a registered trademark of Atari Corp.

Keyboard Overlay Stickers

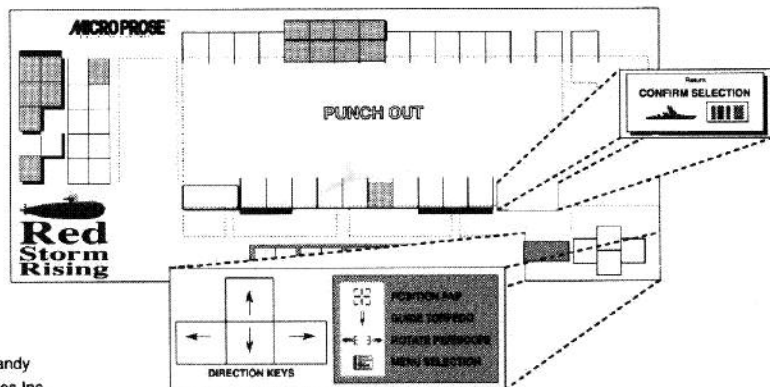
Tandy 1000



IBM 101 Key (PS/2)



IBM PC/XT/AT



Starting Options

<i>Activity</i>	<i>with keyboard</i>	<i>with joystick</i>
Move Arrow or Highlight	cursor keys	push joystick
Select Option	return key	either trigger button
Quit Game	alt Q (exits to DOS)	alt Q (exits to DOS)

Strategic Transit

Only available in the RED STORM RISING Scenario

Strategic Map Color Key

<i>EGA/Tandy</i>	<i>CGA</i>	<i>Meaning</i>
dark blue	black	Deep water
light blue	cyan-black mix	Shallow water
green	cyan	NATO-controlled land areas
red	purple	Warsaw Pact-controlled land areas
white	white	Mountains and polar ice pack
white dots	white dots	Drifting ice
red-brown dot	purple-black dot	US Submarine base at Holy Loch

Strategic Map Symbols



<i>Feature</i>	<i>EGA/Tandy</i>	<i>CGA</i>	<i>Meaning</i>
SOSUS Seabed Sensors	flashing white	flashing cyan	Enemy ships and subs passing over a "SOSUS line" are detected



Your Submarine	yellow	cyan	The current location of your boat
----------------	--------	------	-----------------------------------



Enemy Surface Force	flashing red-purple	flashing white-purple	Contact accurate to this instant
	light red	purple	Contact not accurate, but very recent
	cyan	purple	Contact old
	light gray	purple	Contact very old



Enemy Subs-only Force	flashing red-purple	flashing white-purple	Contact accurate to this instant
	red	purple	Contact not accurate, but very recent
	cyan	purple	Contact old
	light gray	purple	Contact very old



NATO P-3C "Orion"	flickering yellow	flickering cyan	Friendly aircraft that can spot enemy forces which it flies near.
-------------------	-------------------	-----------------	---



USSR Tu-142 "Bear-F"	flickering red	flickering purple	Enemy aircraft that can spot you if it flies close enough to your position
----------------------	----------------	-------------------	--













NATO Satellite	flickering yellow	flickering cyan	Satellite will spot enemy forces beneath its orbital path
----------------	-------------------	-----------------	---






USSR Satellite	flickering red	flickering purple	This satellite will spot you if you're under its orbital path
----------------	----------------	-------------------	---

Map Movement	<i>Movement Command</i>	<i>with keyboard</i>	<i>with joystick</i>
	Drifting (0-5 kts)	no keys down (hands off keyboard)	joystick centered
	Cruising (12-18 kts)	cursor keys	push joystick
	Flank Speed (25-36 kts)	hold down shift and cursor keys	trigger down and push joystick
	Pause	return, space bar, or alt and p key	return, space bar, or alt and p key
Menu Options	<i>Activity</i>	<i>with keyboard</i>	<i>with joystick</i>
	Move Arrow or Highlight	cursor keys	push joystick
	Select Option	return key	either trigger button
	Quit Game	alt Q (exits to DOS)	alt Q (exits to DOS)

Battle

Tactical Map Symbols

	<i>Symbol</i>	<i>EGA/Tandy</i>	<i>CGA</i>	<i>Meaning</i>
	Open rectangle	light blue	cyan	Your submarine (open side is your stern)
	Box	dark purple	purple	Enemy, course unknown
	Open Rectangle	bright red dark red yellow	purple purple flashes white	Enemy, course known Enemy, last known position Enemy, using active sonar
	Box	purple	purple	Enemy helicopter when your periscope is above water
	(Invisible)	(none)	(none)	Enemy helicopter when your periscope is below water
	Dotted line	light blue	cyan	Track of your weapon
	Dark dot	light blue	cyan	Your weapon not activated
	Bright dot	flashing white	white	Your weapon after activation
	Dotted line	green	purple	Track of enemy weapon
	Dark dot	green	purple	Enemy weapon not activated
	Bright dot	yellow	white	Enemy weapon, activated
	Dotted hexagon	light blue	cyan	Enemy sonobuoy (dropped from helicopter)
	Small sub	dark blue	cyan	Decoy appears as long as it's active
	Starburst	dark blue	cyan	Noisemaker appears as long as it's active
	"S" Symbol	dark blue	cyan	Knuckle in water appears as long as it's active

	No Drop bar	medium blue	white	Underwater pack ice to 50' depth
	1 Drop bar	medium blue	white	Underwater pack ice to 100' depth
	2 Drop bars	medium blue	white	Underwater pack ice to 150' depth
	3 Drop bars	medium blue	white	Underwater pack ice to 200' depth
	4 Drop bars	medium blue	white	Underwater pack ice to 250' depth
3	Number	dark blue	white	Shallow bottom; number indicates depth of the the bottom in hundreds of feet

Attack Center Controls

The Primary Displays

<i>Activity</i>	<i>with keyboard</i>	<i>with joystick</i>
Tactical Display	F1 key	F1 key
Map Overlay (toggles on/off)	shift & F8 key	shift & F8 key
Zoom Map	z key	z key
Unzoom Map	x key	x key
Sea Conditions	F8 key	F8 key
Compare Sonar	F6 key	F6 key
Change enemies on display	c key	c key
Weapon Control	F2 key	F2 key
Map Overlay (toggles on/off)	shift & F8 key	shift & F8 key
Zoom Map	z key	z key
Unzoom Map	x key	x key
Change to another weapon	n key	n key
Defense Display	F3 key	F3 key
Map Overlay (toggles on/off)	shift & F8 key	shift & F8 key
Zoom Map	z key	z key
Unzoom Map	x key	x key
Perscope	F4 key	F4 key
Manually rotate scope	left/right cursor keys	left/right joystick
Snap scope to contact	c key	c key
Identify periscope image	backspace key	backspace key
Acoustic Signature	F5 key	F5 key
Compare vessel signature	shift & letter key	shift & letter key
Make identification positive	return key	return key
Ship Data Base	F7 key	F7 key
Select ship	shift & letter key	shift & letter key

The Secondary Displays

View Contacts	c key	c key
press again for another contact		
Weapons Loadout	v key	v key
press again for stores list		
Damage Report	b key	b key
Torpedo Control	n key	n key
press again for next active torpedo		
Threat Weapons	m key	m key

	<i>Activity</i>	<i>with keyboard</i>	<i>with joystick</i>
Navigation Controls	Increase speed level	=+ key	=+ key
	Decrease speed level	-_ key	-_ key
	Set Depth	F9 key, then three digits, or finish with return key	F9 key, then three digits, or finish with return key
	Set Course	F10 key, then number keys, finish with return key	F10 key, then number keys, finish with return key
	Silent Running (min speed)	0 key	0 key
	Left Rudder (5°, 10° or 15°)	,< key	joystick left
	Right Rudder (5°, 10° or 15°)	,> key	joystick right
	Straight and Level	?/ key	?/ key
Active Sensor Controls	Active Sonar (on/off toggle)	8 key	8 key
	Active Radar (on/off toggle)	9 key	9 key
Weapon Loading & Firing	Load Torpedo into tube	shift & 4 key	shift & 4 key
	Load Sealance into tube	shift & 5 key	shift & 5 key
	Load Harpoon into tube	shift & 6 key	shift & 6 key
	Load Tomahawk into tube	shift & 7 key	shift & 7 key
	Fire Stinger SAM	3 key	3 key
	Fire Torpedo	4 key	4 key
	Fire Sealance	5 key	5 key
	Fire Harpoon	6 key	6 key
	Fire Tomahawk	7 key	7 key
Torpedo Controls	Move PAP point (if inactive)	cursor keys	joystick
	Run Shallow	shift & F1 key	shift & F1 key
	Run Deep	shift & F2 key	shift & F2 key
	L/ (Left) Search Pattern	shift & F3 key	shift & F3 key
	R/ (Right) Search Pattern	shift & F4 key	shift & F4 key
	Activate Torpedo	shift & F5 key	shift & F5 key
	Steer torpedo (if active)	cursor keys	joystick
	Drop Torpedo	shift & F9 key	shift & F9 key
Countermeasures	Drop Noisemaker	1 key	1 key
	Drop Decoy	2 key	2 key
Other Controls	Cancel an order in progress	escape (ESC) key	escape (ESC) key
	Normal/Accelerated Time)	alt & t key	alt & t key
	Pause (on/off toggle)	alt & p key	alt & p key
	Help from tactical computer	alt & h key	alt & h key
	Action Track (on/off toggle)	alt & a key	alt & a key
	Sound (on/off toggle)	alt & v key	alt & v key
	Replay battle (at end only)	alt & r key	alt & r key
	Quit (exit to DOS)	alt & q key	alt & q key