

M1 TANK PLATOON

TECHNICAL SUPPLEMENT

IBM® PC, XT, AT, PS/2 and compatible computers

Contents

Your M1 Tank Platoon should contain a manual, this technical supplement folder, three 5.25" disks or two 3.5" disks, keyboard overlays, a registration card, and an order card for backup disks.

Required Equipment

Computer: This simulation requires an IBM PC, XT, AT, PS/2, Tandy 1000, Compaq 386, or a computer 100% compatible with one of those. The machine must have at least 512K of RAM and DOS 2.x, 3.x, or 4.x. It may run on some 384K machines with DOS 2.x and/or CGA graphics. If your machine has 640K, *M1 Tank Platoon* takes advantage of the extra memory.

Controls: MicroProse recommends you use both a keyboard and joystick with this simulation. However, it can be run entirely from the keyboard.

Display: The simulation requires VGA (256-color), MCGA (PS/2 model 25 and 30), EGA 16-color, CGA 4-color, Tandy 1000 16-color, or Hercules Monochrome Graphics ("MGA") 2-color card (or 100% compatible). A color monitor is required for all but MGA, which requires a monochrome monitor.

DOS: You must have IBM or MicroSoft DOS, version 2.1 or higher. A version between 2.11 and 3.31 is recommended.

Saving Games

You can only save games if you run the simulation from copies on either floppy disks or a hard disk. If you run from the disk(s) in the box you cannot save anything. The original MicroProse disks are write-protected to avoid any inadvertent damage.

Installation Concepts

M1 Tank Platoon 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, 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. At various points the program asks you to insert an original disk into a floppy drive, so keep the original disks handy. MicroProse regrets that continuing casual and organized software piracy, within the USA and around the world, requires that we copy-protect this product.

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RUNNING WITH FLOPPY DISKS

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 is saved.

We suggest formatting disks before installation. This insures that the disk is “clean” and in good operating condition.

Format a Floppy Disk: You must format disks before you install the simulation on them. Depending on the disk drives in your computer, you need either:

- three 5.25" 360K disks (PC or XT style disks), or
- one 5.25" 1.2 MB disk (AT or 386 style disks), or
- two 3.5" 720K disks (Tandy and PS/2 models 25-30), or
- one 3.5" 1.44 MB disk (PS/2 models 50-90).

Formatting a disk requires that you boot your computer with DOS. At the “>” prompt type the appropriate format command. On most machines this is “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 disk(s), now use the DOS “COPY” command to copy the original 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.

Warning: Do not use the “DISKCOPY” command to copy disks. You must use the COPY command.

Loading from Floppy Disks

(1) **Boot your machine** using the DOS disk.

(2) **Insert Disks:** When the “A:>” prompt appears, remove the DOS disk and insert the *M1 Tank Platoon* “A” disk. If you have two floppy drives, put the “B” disk 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, set the computer to its highest speed (frequently “Ctrl” and “Alt” and “+” together do this).

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

TANK

and press return. The simulation starts loading.

(5) **Insert Key Disk:** When requested, insert the original “A” disk in a disk drive. Then type the letter of the drive (“A”, “B”, etc.) where you inserted the disk.

(6) **Replace Key with Installation Disk:** When requested, remove the key disk and reinsert your copy of disk “A”.

Installation on a Hard Disk

RUNNING 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 program called “INSTALL” is included on disk A. It automatically installs *M1 Tank Platoon* onto your hard disk. To use this program, insert disk A into your “A” drive and type:

A:INSTALL

If you insert the disk into drive “B” instead, type B:INSTALL, etc. The install program asks for the letter of your hard drive. Traditionally the first hard disk of an IBM compatible system is drive “C”. After you enter this letter, the install program will copy files and prompt you for the other disks as necessary. Installation takes about 3 to 6 minutes, depending on disk drive speeds.

Technical Notes: This program creates a subdirectory titled “TANK” and copies all necessary files into it. It also places a file titled “TANK.BAT” in your root directory to automate loading.

If the installation fails or you prefer to organize your own subdirectories and batch loaders, you can use DOS commands to create an appropriate subdirectory and copy all files into it. Be sure to copy *all* files from all disks. The file “TNKLOADR” is a batch file which you can copy to any appropriate location (typically the root directory) and should then rename “TANK.BAT”.

Loading from a Hard Disk

The following 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’s 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, set the computer to its highest speed (frequently “Ctrl” and “Alt” and “+” together do this).

(3) Start Program: Type the following:

TANK

and press return. The simulation starts loading.

(4) Insert Key Disk: When requested, insert the original “A” disk in a disk drive. Then type the letter of the drive (“A”, “B”, etc.) where you inserted the disk. The simulation checks the disk, then returns to your hard disk and continues loading. You can remove the key disk once you see the floppy’s “drive running” light turn off. Instead you can leave the key disk in the drive.

OPTIONS

Graphics Options

This determines the graphics “driver” used by the simulation.

EGA: Select this option if your machine has an “Enhanced Graphics Adapter” board with 256K RAM. This option provides 16 colors on any RGB monitor (a high-resolution EGA monitor is *not* required).

CGA: Select this if you have a “Color Graphics Adapter” graphics board. This option provides 4 colors.

Tandy 1000: Select this option if you have a Tandy 1000. This option also provides 16 colors. Some Tandy computers also support CGA and/or EGA.

Hercules Monochrome: Select this if you have a Hercules Monochrome Graphics (“MGA”) or compatible board. The original IBM monochrome board and compatibles don’t work because they only support text.

VGA/MCGA: Select this if you have a PS/2, or any other machine with a “Video Graphics Array” board. This option provides a full 256 colors. If you have a PS/2 model 25 or 30 you will find CGA faster and easier to play.

Sound Options

This determines the sound “driver” used by the simulation.

IBM Sound: This default sound is appropriate to all IBM PC, XT, AT and PS/2 machines with no special sound hardware. These machines have a simple “beeper speaker”. Don’t expect too much from the sound effects.

Tandy 1000 Sound: Use this option only on Tandy 1000 computers, which include a special music chip that produces very nice sound effects.

AdLib Sound: If you have added the “Music Synthesizer Card” by AdLib, select this option. Unlike most software, which only plays music through this board, *M1 Tank Platoon* uses this board for superlative speech and realistic sound effects, as well as music.

No Sound: This turns off all sound. To get sound again you must exit from the simulation to DOS and start over, selecting a different option.

Detail Options

This control adjusts the overall number of vehicles in the battle.

Less Detail: Select this option if you have a PC/XT or compatible, a Tandy 1000/HX/EX/SX/SL, or a PS/2 model 25 or 30. These machines have an 8086 or 8088 processor. Even a 7 MHz to 10 MHz “turbo” machine, is slow compared to a 80286 or 80386.

More Detail: If you have an 80286 (AT) or compatible, or any 80386 computer, feel free to use this level for slightly larger battles. Of course, if you prefer a few less things to worry about, select “Less Detail” instead.

Automated Loading

You can automatically select your options when you first load *M1 Tank Platoon* using “options parameters”. After you type “TANK”, but before you press Enter, you can type additional characters to pre-select options. Separate each option with a space.

The parameters for *M1 Tank Platoon* are:

/J Joystick will be used
/NJ No Joystick is used
/GE Graphics are EGA 16-color

/GM Graphics are MCGA or VGA 256-color
 /GC Graphics are CGA 4-color
 /GT Graphics are Tandy 1000 16-color
 /GH Graphics are Hercules monochrome
 /AI Audio (sound) is IBM
 /AT Audio (sound) is Tandy 1000
 /AA Audio (sound) is AdLib
 /AN Audio (sound) is off (No sounds)
 /D0 Detail level is low
 /D1 Detail level is high
 /O Options are the same as last game (see below)
 /T Title screens are disabled (see below)

Examples: If you use a standard PC or XT without joystick, CGA graphics, standard PC sounds, and low detail you would load the game with “TANK /NJ /GC /AI /D0”. A space must be placed between each parameter.

Options Repeat (/O): Every time you start the simulation saves a file titled “OPTS” that records your parameters (including joystick information). The /o parameter reads those saved parameters from the OPTS file. The option doesn’t work the first time, or when loading from an original disk.

Title Screens (/T): This option parameter disables the title sequence and music. Initially you must use it with /O; that is, “TANK /O /T”. Thereafter it becomes part of the options repeat (/O) parameter.

Horsepower Choices

M1 Tank Platoon demands a lot from a microcomputer. It has a wide variety of options, especially in graphic presentation. Typically, the more attractive the graphics, the more computer horsepower is needed.

Computers with an 80286 (“AT”) or 80386 (“386”) microprocessor are “high horsepower” machines that can handle *M1 Tank Platoon* in any mode, although with all high horsepower options a 6 MHz or 8 MHz 80286 may be a bit slow.

Computers with an 8088 or 8086 (the original PC, XT, Tandy 1000, and PS/2 models 25 and 30) are “low horsepower” machines with 1/5th to 1/8th the speed of their big brothers. “Turbo” machines with 7-10 MHz speeds are about 1/5th as fast as ATs, while regular 4.77 MHz machines are about 1/8th as fast. With these machines MicroProse recommends you avoid choices that demand high horsepower, unless you’re simply sight-seeing.

Graphics Display: The initial choice of graphics display has the largest effect on horsepower demands. MCGA/VGA demands vastly more horsepower than any other mode. Except for sightseeing, it is *not* recommend on any 8086 or 8088 machine, including PS/2 models 25 and 30.

The next most demanding is 16-color EGA, which is too demanding for a “normal speed” 4.77 MHz 8088 and borderline for “turbo” 7-10 MHz 8086/8088 machines. The Tandy 1000 16-color mode is less demanding than EGA, and a reasonable choice for 7-10 MHz machines, although CGA runs faster.

The least demanding environment is 4-color CGA. Even if you have more powerful graphics available, MicroProse recommends CGA on all 4.77 MHz 8086 and 8088 machines.

Monochrome graphics are a bit more demanding than 4-color CGA, but not

as demanding as a 16-color mode.

Battle Detail: During a battle you have a choice of how 3D objects are represented. The default is Level 1 detail where vehicles are detailed. In battle press "Alt" and "d" for Level 0 detail. This eliminates fine details on the vehicles and reduces the horsepower requirements.

If you're using any 8086 or 8088 machine, especially a 4.77 MHz machine, switch to Level 0 detail at the start of every battle.

Initial Detail Level: This is selected at the start. It can be controlled by the /D0 and /D1 parameter options (see above). Less detail means that both the US and Pact forces are slightly less numerous. Slightly fewer vehicles requires less horsepower. Again, if you have an 8086 or 8088 machine you should select the lower detail (/D0) option.

Note: Don't confuse "Alt d" *battle details* with /D0-/D1 *initial detail*. They are entirely separate concepts. The former controls vehicle appearance, the latter the overall number of vehicles involved in the battle.

Battle Speed

M1 Tank Platoon has five internal speeds, from Level 0 to Level 4. From your standpoint as a player, lower levels accelerate the game, while higher levels slow things down.

When you toggle in and out of accelerated time ("Alt a") the speed level is displayed. Accelerated time goes to the next lower Level than normal time. However, on 8086 and 8088 machines where Level 0 is "normal" time, accelerated time has no effect (because there's no Level -1).

You can manually adjust the speed Level using the Insert key. On some machines you may find the simulation runs too fast. If so, use this key to change the speed to the next higher Level, which slows things down.

You can return to the standard Levels by toggling Alt a between normal and accelerated speed, ending up with the normal speed setting once more.

Loading Problems

The latest notes regarding this program can be found on disk, 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 *M1 Tank Platoon* are the *only* programs loading into memory. Other RAM-resident programs or tools may conflict with *M1 Tank Platoon*. Also make sure your computer and your graphics card have sufficient memory. The computer needs 512K RAM, while EGA or VGA cards require 256K of Video RAM.

If you continue to have trouble, try the original *M1 Tank Platoon* disks. Your copies may be bad. If the originals don't work, try the original *M1 Tank Platoon* disks in another PC, preferably an IBM or Compaq machine. If the disks work in that, then your machine has compatibility problems (i.e., some aspect is not entirely IBM compatible).

If you have trouble loading on other IBM/Compaq machines as well as your own, you may be one of the tiny percentage with a defective disk. In such cases 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.

BRIEFING & BIVOUAC

<i>Activity</i>	<i>with keyboard</i>	<i>with joystick</i>
Controller	Cursor keys	Joystick
Selector #1	Return key	Joystick button #1 (top)
Selector #2	Space bar	Joystick button #2 (side)
Quit Game (exit to DOS)	Alt q	Alt q

CONTROLS

Viewpoint Controls

<i>Control</i>	<i>Key</i>	<i>Manual</i>	<i>Notes</i>
TC Unbuttoned	F1	pg 39-41	works from any viewpoint
TC Buttoned	F2	pg 41-43	works from any viewpoint
Gunner	F3	pg 43-47	works from any viewpoint
Driver	F4	pg 47-50	works from any viewpoint
Outside Tank	F9	pg 68	view from OP tank
Outside Any	F10	pg 68	must be on mapboard

OP & Platoon Leader Controls

<i>Control</i>	<i>Key</i>	<i>Manual</i>	<i>Notes</i>
OP to Next Tank	Shift F9	pg 66	works from any viewpoint
LDR to OP Tank	Shift F10	pg 66	works from any viewpoint

Standard Vehicle Controls

<i>Control</i>	<i>Key</i>	<i>Manual</i>	<i>Switch Visible at these Positions</i>
Sabot (AP) Ammo	1	pg 46	Gunner (tiny on TC Buttoned)
HEAT Ammo	2	pg 46	Gunner (tiny on TC Buttoned)
Main/Coax	3	pg 46	Gunner (tiny on TC Buttoned)
Computer(Normal)/ Battlesight	4	pg 45	Gunner (tiny on TC Buttoned)
Input Battlesight Range	5	pg 45	Gunner (tiny on TC Buttoned)
Manual Range Input	Shift 0-9	pg 45	Gunner (tiny on TC Buttoned)
Magnify Vision	7	pg 39,41,44	none (but view changes)
Night Vision	8	pg 39,41,44,47	Gunner, Driver
Turn to This Facing	9	pg 40,42,47	TC (both), Gunner
Smoke Generator On	=	pg 39	Driver
Smoke Generator Off	-	pg 39	Driver
Smoke Grenade Salvo	Backspace	pg 39	TC (both), Gunner

TC Controls

These controls are unique to the two TC positions

<i>Control</i>	<i>Key</i>	<i>Joystick</i>	<i>Manual</i>
View / Aim Up	Down Cursor	pull back	pg 39-40, 41-42
View / Aim Down	Up Cursor	push forward	pg 39-40, 41-42
View / Aim Left	Left Cursor	move left	pg 39-40, 41-42
View / Aim Right	Right Cursor	move right	pg 39-40, 41-42
Fire Machine-gun	Return	button #1	pg 40, 42

Gunner Controls

These controls are unique to the Gunner position

<i>Control</i>	<i>Key</i>	<i>Joystick</i>	<i>Manual</i>
Elevate Gun and Coax	Down Cursor	pull back	pg 43
Depress Gun and Coax	Up Cursor	push forward	pg 43
Rotate Turret Left	Left Cursor	move left	pg 43
Rotate Turret Right	Right Cursor	move right	pg 43
Fire Laser Rangefinder	Space bar	button #2	pg 44-45
Fire Gun or Coax	Return	button #1	pg 46

Driver Controls

These controls are unique to the Driver position

Control

Decelerate: Move Back
Accelerate: Move Ahead
Turn Left
Turn Right
Brake (Stop Quickly)

Key

Down Cursor
Up Cursor
Left Cursor
Right Cursor
Return

Joystick

pull back
push forward
move left
move right
button #1

Manual

pg 48
pg 48
pg 48
pg 48
pg 48

COMMANDS

Vehicle Orders

Command

Advance Fast
Advance Slow
Halt
Backup
Left Turn
Right Turn
Move to...
Turn to...
Fire at Will
Cease Fire
Engage to Front
Engage to Rear
Engage to Left
Engage to Right
Smoke Generator On
Smoke Generator Off

Key

a
s
h
b
l
r
*
**
f
c
e
d
<
>
+=
-

Manual

pg 57
pg 57
pg 57
pg 57
pg 56
pg 57
pg 57
pg 57
pg 57
pg 58
pg 58
pg 58
pg 58
pg 58
pg 58
pg 58

Notes

(do not hold down the shift key)
(do not hold down the shift key)
(do not hold down the shift key)
(do not hold down the shift key)

Platoon Orders

Command

Advance Fast
Advance Slow
Halt
Backup
Left Turn
Right Turn
Move to...
Turn to...
Fire at Will
Cease Fire
Form Wedge
Form Vee
Form In-Line
Form Column
Form Echelon Left
Form Echelon Right
Smoke Generator On
Smoke Generator Off

Key

a
s
h
b
l
r
*
**
f
c
Shift W
Shift V
Shift I
Shift C
Shift L
Shift R
+=
-

Manual

pg 62
pg 62
pg 62
pg 62
pg 59
pg 59
pg 62
pg 59
pg 62
pg 62
pg 59
pg 59
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pg 59
pg 59
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pg 62

Notes

illustrated on pg 60
illustrated on pg 60
illustrated on pg 60
illustrated on pg 61
illustrated on pg 61
illustrated on pg 61
do not hold down the shift key
do not hold down the shift key

* if using joystick: move crosshair with joystick, then press fire button #1
without joystick: move crosshair with cursor keys, then press Return
* if using joystick: move crosshair with joystick, then press fire button #2
without joystick: move crosshair with cursor keys, then press Space Bar

HQ Radio Net
only if the appropriate support
is available

<i>Command</i>	<i>Key</i>	<i>Manual</i>	<i>Notes</i>
A-10A Jet	j	pg 64,65	has Mavericks and 30mm GAU
AH-64A Helicopter	a	pg 64,65	has Hellfires and 30mm Chain
OH-58D Helicopter	o	pg 64,65	has Machine-gun
107mm Mortar Bombs	b	pg 63,64	high explosive barrage
107mm Smoke Bombs	s	pg 63,64	smoke screen barrage
155mm HE Shells	h	pg 63,64	high explosive barrage
155mm WP Shells	w	pg 63,64	smoke screen barrage
MRLS 227mm Rockets	r	pg 63,64	large high explosive barrage

SIMULATION CONTROLS

<i>Control</i>	<i>Key</i>	<i>Manual</i>	<i>Notes</i>
Outside Tank	F9	pg 68	view from OP tank
Outside Any	F10	pg 68	must be on mapboard
Map Objectives On/Off	Alt m	pg 55	toggles map objective on and off
Pause	Alt p	pg 68	hardware pause may also work
Accelerated Time	Alt a	pg 69	has no effect if low horsepower
Boss (Hide Game)	Alt b	pg 69	must press Alt b to resume
Quit	Alt q	pg 69	exit to DOS
Adjust Detail	Alt d	pg 69	adjusts vehicle graphics
Adjust Volume	Alt v	pg 69	switches between three states
Reset Joystick	Alt j	pg 69	“stir” stick after pressing keys
Adjust Battle Speed	Insert	in Tech.Sup.	see “horsepower considerations”

MAPBOARD













Controls

<i>Control</i>	<i>Key</i>	<i>Manual</i>	<i>Notes</i>
Mapboard	F5	pg 54	necessary before other map controls
Your Tank	F6	pg 54,56	displays OP tank position and data
Next Platoon	F7	pg 55,58-63	cycles platoon data windows
Next Vehicle	F8	pg 55,56-58	cycles vehicle data windows

Terrain Key

<i>Feature</i>	<i>256 color MCGA/VGA</i>	<i>16 color EGA, Tandy</i>	<i>4 color CGA</i>	<i>2 color Monochrome</i>
Open Ground	Dark green	Light green	Light blue	Medium color
Road	Black line	Black line	Black line	Dark line
Building	Gray/black box	Black box	Purpl-Black box	Dark-Med box
Stream	Blue line	Blue line	Blue-Purp line	Med-Dark line
Tree	Black-Grn dot	Dk Green dot	Blue-Black dot	Dark dot
Bog or Field	Olive Grn area	Brown area	Purp-Blue area	Dark-Med area
Hill	Lt Green area, Bbrown crests	Med Grn area, Brown crests	Purple	Dark area

Vehicle Key

<i>Map Symbol</i>	<i>16 or 256 color VGA/MCGA, EGA, Tandy</i>	<i>2 or 4 color CGA, Monochrome</i>
Main Battle Tanks: M1, M60, T-80, T-72 T-64, T-62, T-55		
Other AFVs: IFVs, APCs, Armored Cars, etc.		
Unarmored Vehicles: Jeeps and Trucks		
Dismounted Infantry		
Helicopters: AH-64A, OH-58D, or Mi-24 HIND		
American A-10A "Thunderbolt II" Attack Jet		
Pact Su-25 "Frogfoot" Attack Jet	