



Panzer Commander Demo v. 1.1

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This Demo is a pre-release version of Panzer Commander.

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SECTION 1: Panzer Commander Demo System Requirements

Required

- P133
- 16 MB of RAM (Note: users with 16MB of RAM should use the "low" detail setting)
- 4x CD-ROM
- Video Display (2MB SVGA card required)
- For Accelerated Play, a 3-D accelerated card with 4MB of RAM

Recommended

- P166
- 32 MB of RAM
- 8x CD-ROM
- For Accelerated Play, a 3-D accelerated card with 4MB of RAM

SECTION 2: Demo Hardware Configuration Notes

Panzer Commander requires DirectX 5.0 or later, and supports 3D hardware acceleration using Direct3D. If you have a hardware accelerator, be sure that it supports Direct3D and that you have the latest drivers.

While we have tried to ensure that Panzer Commander supports the widest possible range of 3D accelerators, no one can anticipate every possible hardware configuration. If you should experience problems, contact the manufacturer

of your 3D accelerator for troubleshooting information. Again, make sure that you have the latest drivers before proceeding.

For best results, we recommend an accelerator based on one of the following chip sets:

- 3DFX Voodoo or Voodoo RUSH
- nVIDIA RIVA 128
- ATI Rage Pro
- 3D Labs Permedia 2
- Rendition Verite V2100 or V2200

If you have an accelerator based on a different chip set, we can't guarantee compatibility or good performance with Panzer Commander. However, the program will attempt to use any Direct3D-compatible hardware that you have. If you have problems launching the program, you can disable hardware acceleration by using the Notepad program to edit the file PANZER.INI, located in the folder where Panzer Commander was installed. Change the line which reads:

Accel = TRUE

to read:

Accel = FALSE

Panzer Commander will then use its built-in software renderer.

SECTION 3: 3-D Drivers

We have included with this demo the latest 3-D drivers for the following Video Cards: Orchid Rightous 3D and Diamond Monster. These drivers can be found in the "3d_drivers" folder within the Demo folder. For other cards, please see their respective web sites for more recent drivers.

SECTION 4: Full Game Features

The final version of Panzer Commander will include:

- Three German and three Russian campaigns (24+ scenarios each)
- 40 Single Scenarios (for German, Russian, American, and British tanks)
- 10 Multiplayer Scenarios
- Scenario Editor
- Over 24 Drivable Vehicles
- Over 24 other Armored Fighting Vehicles
- Airstrikes and Artillery Bombardment

SECTION 5: Hot Keys

Note: Hot Keys in the full release of the game will allow all keys to be designated by the player, as well as support joystick play. To change hot keys, open the Controller.ini file and adjust the key assignments.

Esc = **Quit Game**

View Control

C Center view
V Change view to next platoon vehicle
R Return view to player's tank

F1 ¼ View **F2** Cupola View **F3** Binocular Zoom **F4** Buttoned Cupola

F5	F6	F7	F8
Driver's View	Gunner's View	Gun Sight/Range Finder	Machine Gunner's View

Keypad:

7 Camera Swing Up	8 Traverse Gun Down	9 Camera Swing Down	- Camera Zoom Out
4 Traverse Turret Left	5 Center Main Gun	6 Traverse Turret Right	+ Camera Zoom In
1 Camera Swing Left	2 Traverse Gun Up	3 Camera Swing Right	

Delete	Apply brakes
End	Reverse direction
~	Throttle idle setting
1,2 ... 9,0	Throttle presets, 1 = minimum, 0 = maximum

Arrow Keys:

	up arrow	Forward	
left arrow	Steer Left	down arrow	Reverse
		right arrow	Steer Right

Targeting and Fire Control

Keypad 4, 6	Traverse current weapon
Keypad 8, 2	Elevate current weapon
Keypad 5	Center turret and release tracking
Tab	Select next target
Caps Lock	Select previous target
N	Select nearest target
S	Select target centered in the gun sight
PgUp (not keypad)	Increase range finder setting
PgDn (not keypad)	Decrease range finder setting
Space	Fire main gun, or machine gun if in machine gunner view
Ctrl	Fire coaxial machine gun (if present)

Platoon Orders (Not available in Demo)

Crew Orders

T	Order gunner to track target with turret
D	Order driver to steer to current view direction
G	Order loader to change between AP and HE rounds

Miscellaneous

Esc	Exit the sim
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Joystick Commands

Button 1	Fire main gun
Button 2	Toggle main gun ordnance
Button 3	Select next target
Button 4	Track the selected target
Button 5	Reverse direction (if present)
Button 6	Switch between gunner and previous view
Hat	Rotate/elevate view (except gun sight view)
	Increase/decrease range finder setting (gun sight view)

Joystick Axes

Configuration 1: 2-axis joystick with no throttle:

X-axis Steer tank left/right

Y-axis Throttle setting

Configuration 2: 2-axis joystick with throttle:

X-axis Steer tank left/right

Y-axis Not used

Throttle Fixed throttle setting

Configuration 3: 2-axis joystick with throttle and rudder pedals:

X-axis Traverse turret left/right

Y-axis Set main gun elevation

Throttle Fixed throttle setting

Rudder Steer tank left/right

SECTION 6: Driving and Basic Navigation

(Please note that the section dealing with Platoon Orders is included for reference to the final version of Panzer Commander)

The tank can be driven from any position using the arrow keys. The left and right arrow keys steer the tank and the up and down arrow keys increase and decrease the throttle respectively. The down arrow will also put the tank into reverse. A bar graph indicator in the center of the status bar at the bottom of the screen shows the current throttle position. Use the Delete key to engage the brakes. This will also reduce the throttle setting and place the transmission in neutral. To bring the tank to a complete stop, you may have to hold the Delete key down for a time.

Hitting the F5 key will bring up the driver information display, which incorporates a number of useful gauges grouped around the driver's vision slit, which provides you with a view from the "driver's seat" of your tank. Among the gauges are:

- Speedometer. This tells you how fast the tank is currently moving.
- Fuel gauge. This tells you how much fuel you have left. If you run out the scenario ends. In general, the faster you are driving the less efficiently the tank is using fuel. Depending on how far you must travel and how much fuel you have you may have to drive more slowly to complete an operation.
- Temperature gauge. This tells you how hot the engine is running. Most WWII tanks were not designed to be run flat out for long periods of time. If you do so, your engine may overheat – especially in desert scenarios. If this happens your engine will shutdown and the scenario will end.
- Oil pressure gauge. This tells you the engine's current oil pressure. This can be used to gauge the general condition of your engine. When an engine is running too hot or if it's suffered damage, the oil pressure will be low. If you run the engine too long under low oil pressure conditions, it will fail and the scenario will end when you press the Esc key.

Navigation and Way Points

Most of the single player and campaign missions in Panzer Commander include a set of way points for your units to follow. At the beginning of the demo scenarios, the Driver automatically begins to follow these waypoints unless you take over. Generally these will be designed to take you to your mission objectives. However, you're perfectly free to deviate from this suggested course and many times you will have to in order to gain some tactical advantage.

The status bar shown at the bottom of the screen will show you which way to turn to reach the next way point. A < symbol to the left of the compass heading is telling you to turn left, while a > symbol to the right of the compass heading is telling you to turn right. When the compass heading is bracketed by >< symbols, like this: ">122<" it means that you are exactly on course for the next way point.

You can switch to subsequent way points using the W key. Each time you hit the W key will change the active way point to the next one in the list. If you reach the end of the way point list, hitting W again will take you to the beginning of the list. Each time you hit the W key, the way point data indicator will change to show you the way point you selected and the distance to that way point.

Tips for Successfully Driving Your Tank

WWII tanks varied widely in their performance capabilities. British infantry tanks like the Matilda II could achieve a mere 24 kph while the American M18 tank destroyer could reach 80 kph. Many of the mission scenarios in Panzer Commander will require you to achieve your objectives within a certain amount of time. You will have to balance the tank's performance capabilities, fuel usage and the likelihood of an engine failure against this.

You can generally climb an incline of 45 degrees or less – albeit, very slowly. In addition, if the tank is rolled too far to the left or right due to its position on an incline, it will topple, leaving you stranded and ending the scenario.

While tanks are designed to traverse all sorts of rough terrain, your tank will be able to move faster over a road with less wear and tear. However, roads are obvious places for ambushes and the enemy will take advantage of this fact. Your tanks will also frequently have to go off road in order to outflank an enemy holding a defensive position. Off road travel increases the risk that your tank will take damage to its wheels or treads. You will need to reduce your speed under such conditions or risk a catastrophic failure of one of your tanks.

Finally, a note about evasion. A tank moving over open ground or at the top of a ridge line is a highly visible target. If you have to move over such terrain, do it as quickly as possible and try to dodge frequently. You may not know that an enemy has you in his sights until he fires, which by then will be too late for you to do anything about it.

It is much better to find routes down gullies, behind hills and well back from exposed ridge lines. The less chance the enemy has of spotting you, the more chance you have of spotting him first and destroying him.

Operating the Main Gun

The tank's main gun is its most important and formidable weapon. All WWII tanks depicted in Panzer Commander have main guns capable of firing armor-piercing rounds at their enemies. However, the relative power of their main guns vary greatly from model to model, especially between early war and late war models. The German Tiger tanks, for example, gained their notoriety from the famed 88mm gun, which was more than capable of penetrating most armor of the day.

As the war progressed, armor thickness and quality improved, necessitating an increase in the bore sizes of tank main guns. Tank battles tended to be short and intense – especially when one side had a decisive advantage in armor thickness and main gun power. Early in the Russian campaign, the Germans were frequently thwarted by the superior armor and larger guns of the Russian T-34 and KV-1 tanks. Later in the war, British and American tank forces took fearsome losses going up against the superior Panther and Tiger tanks fielded by the Germans.

While you can control the traversal and elevation of the main gun from anywhere in the tank, the gunner's position and the gun sight view provide targeting reticles which allow you to aim the gun much more precisely. Change to one of these views by using the F6 and F7 keys, respectively.

The gun sight view (F7) also provides a range finder which allows you to accurately determine the distance to a particular target. Distant targets may require you to raise the elevation of the gun in order to compensate for the distance the shell will drop over time, otherwise, your shots will fall short of the target. With the range finder, you can determine how much to compensate for the distance, allowing you to accurately lay the gun on the target. For this reason the targeting reticles are provided with graduated cross hairs which can help you adjust your aim. In general, the further the target the higher the required elevation. Getting it right the first time takes practice, but can make the difference between surviving a battle and getting shredded by enemy fire.

Using the Range Finder

Using the range finder is fairly straightforward, but may require some practice. If you have used an old style "range finder" camera this procedure will be pretty familiar to you. There are two parts to the range finder gauge. The first and most obvious is a numeric scale in the lower right or upper right quadrant of the gun sight which includes a red needle that moves up and down when you change the range setting. This will show you the range to the target when set properly. It is marked off in hundred meter increments between zero and two thousand meters.

The other part of the range finder is a little trickier. When you look through the gunsight you will see that targets which have been identified bear two of the distinctive green or red targeting crosses rather than the single cross you would see in any other view. The second cross is a darker shade and will appear to the left or right of the main targeting cross, depending on the range finder setting.

Range Finder view



To determine the range to a target, use the page up and page down keys (possibly labeled PgUp and PgDn on your keyboard) to increase or decrease the range finder setting. Note that these are not the page up and page down keys located on the numeric keypad, but those located to the left of the keypad on extended keyboards. If your joystick is equipped with a "hat" switch, you can also use this to adjust the range finder setting. When you do this, the second cross will move to the left or right. When the darker cross lines up behind its mate, the range finder will have been dialed in for that target. All you have to do now is note the position of the red needle in the distance scale and you will have the range to your target. If you have more than one target in your sight, you can quickly determine the range to each by lining up its two targeting crosses.

Now what do you do with this information? This will depend on your gun sight layout, which varies depending on which country's tanks you are driving.

For German and Russian tanks, the targeting reticle located at the center of the gunsight moves up and down with the range finder setting to show the optimal aim for a target at that range. To hit the target, all you need to do is dial in the proper range setting and line up the upper tip of the center triangle with your target and fire. The smaller triangles to the left and right are provided as reference marks to help you lead a moving target. The targeting reticle is calibrated to your current ammunition selection. Note that since high-explosive rounds have a lower muzzle velocity they will require more elevation correction than armor piercing rounds.

Armor-Piercing and High Explosive Rounds

Although AP rounds were effective against tanks and reinforced bunkers, high-explosive rounds were much more useful against buildings, bridges and infantry fortifications. These rounds were similar to the high-explosive rounds fired by artillery pieces, though generally not as powerful. Some vehicles – most notably early war British tanks equipped with the "2-pounder" and "6-pounder" guns – were incapable of firing HE rounds, which put them at a disadvantage for certain missions. Others, like the Iosef Stalin series of Russian tanks with their huge 122mm main guns were capable of devastating attacks with massive high-explosive shells.

Panzer Commander attempts to accurately present the availability of HE and AP rounds for each tank. In addition, the load outs will vary from mission to mission depending on the scenario objectives. Supply problems may make it difficult to achieve certain mission objectives. Make every shot count.

The main gun is rotated along two axes for the purposes of aiming. *Elevation* is the vertical movement of the gun barrel and directly affects the distance the shell will travel. *Traversal* is the horizontal rotation of the tank's turret and affects the direction in which the shell will travel. You aim the tank's main gun by traversing the turret and elevating the gun to lay the gun on its target. The following keys operate the traversal and elevation functions:

Keypad 4	Traverse left
Keypad 6	Traverse right

Keypad 2	Increase elevation
Keypad 8	Decrease elevation

In addition, you can hold down the shift key to slow the traversal or elevation, allowing fine adjustment of the aim.

While you can control the traversal and elevation of the main gun from anywhere in the tank, the gunner's position and the gun sight view provide targeting reticles which allow you to aim the gun much more precisely. If you change to one of these views (using the F6 and F7 keys respectively) you also have the option of aiming the gun with your joystick.

Once you have the target centered, hitting the space bar or joystick button 1 fires the main gun. Several things can happen depending on the target and the type of round fired at it. If the target is an armored vehicle, a high explosive round will probably not destroy it, but may cause some damage depending on where it lands. A thrown tread or damaged road wheels will partially disable a tank, but it will still shoot back at you if it can.

An armor piercing round will probably destroy a tank – if it penetrates the armor. This can be a big ****if**** depending on what type of vehicle you are driving and what kind of target you are shooting at and on the range and position at which you are shooting. Most tanks are more vulnerable in the sides and back than in the front. If you are in an M4A3 Sherman and your target is a Tiger, you will want to try and flank him to get off a side shot or ambush him to get off a rear shot. Dueling toe-to-toe in this situation is not advised as your AP rounds will likely just bounce off his formidable front armor. Of course, at point blank range you probably have a chance, but you probably won't be able to get that close.

Armor damage is not cumulative: a shell either penetrates or it does not. If it does not, the armor's effectiveness isn't reduced in any way. If the shell penetrates, the target will probably be destroyed, but if it isn't, the armor effectiveness on the side that is hit *is* greatly reduced. A second shot in the same place will certainly destroy the target.

While AP rounds will destroy most soft-shelled vehicles, you're probably better off using your coaxial machine gun for such targets and reserving your AP rounds for more deadly foes.

AP rounds will also damage buildings and bridges, but often they will simply poke holes in them. Use your high-explosive rounds on these targets or your coaxial machine gun, which will accumulate damage to the target until it collapses.

If your first round misses it will often be because it falls short of the target. For this reason the targeting reticles are provided with graduated cross hairs which can help you adjust your aim. In general, the further the target the higher the required elevation. Getting it right the first time takes practice, but can make the difference between surviving a battle and getting shredded by enemy fire.

Once a round is fired, your loader will automatically feed a new round of the same type into the main gun.

Changing Ammunition Types

If you want to change what type of round is being loaded into your main gun, use the G key on the keyboard to toggle between AP and HE rounds. The best time to change loads is immediately after firing the main gun. This allows the loader to avoid wasting time loading a round that isn't desired. If you ask the loader to change loads *after* a new round is ready to fire, it may take him up to twice as long to unload the old round and reload a new one. While you may want to do this if you are low on ammunition or if there is no particular danger, it might make more sense to fire the round that's already loaded at a target of opportunity and *then* order a different load.

Occasionally you will be unable to lay your gun on a target. Usually this will be because the gun has a limited range of elevation and cannot be elevated or depressed enough to sight the target. The only things you can do in a case like this is to move your tank to a more favorable vantage point or wait for the target to move into range of your sights. This can be very frustrating if you have found a good "hull down" position and can't take advantage of it. Experience will teach you the best positions to assume for certain target angles.

Main gun elevation and traversal speed can vary widely from model to model. Though the Germans had some of the

most powerful guns in their late war tanks, speed of elevation and traversal on these vehicles was only mediocre, while the American tanks, though under gunned, could lay their main guns on the target more quickly. The best strategy is to learn the vehicle's strengths and weaknesses and make the most of them.

A note about moving and shooting

Unlike their modern counterparts, World War II tanks had no functional gun stabilizing systems, though some efforts were made in this direction. Without such a system, traveling down rough terrain and accurately aiming the main gun is pretty impractical. You may waste a lot of ammo proving this to yourself, but your enemies won't. Most successful commanders will adopt a strategy involving quick dashes between cover punctuated by some moments completely stopped to allow the gunner to track the target.

The status bar displays information about ammunition to the far left. There are two icons here representing the different types of shells; the one with the white tip represents high-explosive rounds while the other represents armor-piercing rounds. (Historical note: this scheme was actually used by German tankers in World War II. Shells painted with a white tip were used to distinguish high-explosive rounds.) Next to each icon is the number of rounds of that type remaining. If the number of rounds goes to five or less, the number will turn yellow, warning you that you are low on ammo. At zero, the number goes red, indicating that you are out of that type of ammo. When this happens, your loader will start loading from the remaining ammunition type.

Commanding the Gunner

While it can be very satisfying to lay the gun on enemy targets and blow them away, the commander must assume overall responsibility for the tactical situation. An evolving situation may not leave you with enough time to aim the gun *and* issue orders to other crew and platoon members.

Your crew includes a gunner who is quite capable of aiming the main gun with a fair amount of accuracy, which will improve over time the longer he survives. It is your responsibility to pick targets for him, order the gun load (AP or HE) and issue the fire order. It is his responsibility to keep the gun tracking the target until ordered to fire. He will do so until you order otherwise or until the target passes out of view, even when the tank is moving.

When enemy units are sighted they will be marked by cross-hairs. The cross-hairs will be red for the target that is considered "selected" and will be green for the targets that are not. You can change which target is selected pressing the Tab key. If you continue pressing the Tab key, the selection cycles back to the original. To order your gunner to track the selected target, press the T key. When he has the traversal and elevation set properly you will be notified.

The status bar located at the bottom of the screen contains some valuable targeting information. First, the gun sight icon tells you the status of the main gun. When it is green, the gunner has no target and isn't tracking anything. When it is yellow, the gunner is traversing or elevating the main gun. When it is red, the gunner has the target in his sights and is ready to fire.

Next to the gun sight icon is the target indicator, which is a text description of the selected target. This can be very useful when prioritizing your fire for the most dangerous targets. Note that this space is shared by the way point indicator, which can momentarily replace the targeting indicator when you switch way points. If this happens, you can restore the target indicator again by hitting the Tab key.

When the gunner reports that he is ready to fire, you should hit the space bar or joystick button 1 to fire the main gun. If the target is destroyed, the gunner will center the gun and await new firing orders. If not, he will continue tracking the target until it is destroyed or until you order otherwise. You can manually order the gunner to center the main gun (the normal position for travel) by pressing the 5 key.

You can issue orders to the gunner from any position in the tank – provided you can see the targets to select them and assign them. If you override the gun traversal or elevation manually, the gunner will relinquish control of the main gun to you until ordered to do otherwise and any targeting order you issued before will be canceled.

Operating the Coaxial Machine Gun

Most tanks come with a machine gun mounted coaxially with the main gun – that is, they share the same mount and can be traversed and elevated simultaneously. This gives the tank commander an additional weapons option that

allows him to save valuable AP and HE main gun rounds for more appropriate targets. The coaxial machine gun is most effective against soft-skinned vehicles like trucks or personnel carriers and against unfortified structures like houses and other buildings. It can also be effective against machine gun nests and other light infantry strongpoints.

You aim the coaxial machine gun using the same key commands and joystick movements as the main gun. The only difference is that you use the Control key to fire the coaxial machine gun instead of the space bar. The machine gun will fire continuously as long as you hold the control key down. You may have to do this for a while for stubborn targets.

In the status bar, next to the section denoting main gun ammunition, there is a machine gun belt icon with two numbers next to it. The upper number is the number of rounds left for the coaxial machine gun while the lower number provides the same information for the hull-mounted bow machine gun. The machine gun can rapidly deplete its store of ammunition, so we recommend short, controlled bursts. You may also order the gunner to track a target on which you want to use the coaxial machine gun. Use the same technique as described above for the main gun, just use the Control key to fire the machine gun instead of the space bar.

Issuing Platoon Orders

In the full release of the game, when you are promoted to platoon leader your responsibilities increase to encompass operations involving one or more additional tanks whose efforts you will have to coordinate. Don't panic, though – Panzer Commander makes this simpler than you might think.

Your platoon members are more than just extra guns – they are also extra eyes and ears and will help you spot the enemy more quickly. Like the members of your tank crew, they will gain experience and improve in performance over time. You will therefore want to make sure that they stay alive too.

By default, your platoon members will follow you around in column formation and will independently engage enemy targets as they are spotted. Normally, all you have to do is keep them out of trouble. Fortunately, there are some commands to help you accomplish this.

Assigning Specific Targets

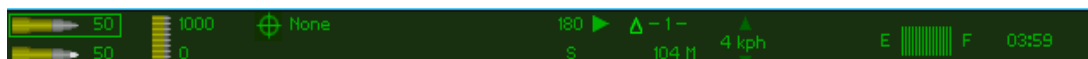
By default your platoon members will engage enemy targets of opportunity. This may not always be a tactically good situation. You may wish to concentrate one or more of your platoon members to specific high-priority targets. To do this, select the target using the Tab key, as you would if you wished to assign a target to your own gunner. Then hit Shift and one of the number keys from 1 to 4 (not from the numeric keypad) to assign a platoon member to the selected target. That tank's commander will attack the target until it is either destroyed or until the commander is issued different orders. If the target is destroyed, the tank commander assigned to the target will return to engaging targets of opportunity.

Engaging the Enemy and Holding Fire

Although most of the time you will want your platoon members to engage any targets of opportunity, occasionally you will wish to sneak up on a target to gain the advantage of surprise. Pressing H will order all of your platoon members to hold fire. However, if fired upon your tank commanders may not maintain fire discipline and may proceed to return fire. You can cancel the hold fire order using the E key to issue the Engage command. All units in your platoon will then engage targets of opportunity. Note that issuing the Engage order will cancel any specific target assignments.

SECTION 7: Using the Status Bar

At the bottom of each simulation view screen there is a status bar which gives you valuable information about your tank, your platoon and any targets you may have in view. Learning to read the status bar is crucial to successfully operating your tank and commanding your platoon.



The status bar is broken down into a number of separate regions, each of which is discussed below.

Main Gun Ammunition Indicator

This shows the current load settings for the main gun and the machine gun. The two shell images to the left indicate your main gun load. The white-tipped shell represents high-explosive rounds while the other represents armor-piercing rounds. To the right of each shell is the number of rounds of that type left in your ammo store. This number turns yellow when ammunition gets low and turns red when ammunition is out.

The type of round currently loaded in your main gun is indicated by a rectangle surrounding one or the other ammunition indicator. When a round is fired or you order a change of load, this rectangle turns yellow to indicate that your loader is currently reloading the gun. When it turns green again, you can fire the main gun.

Machine Gun Ammunition Indicator

The machine gun belt icon indicates the ammunition status for your tank's machine guns. The top number is the ammunition count for the coaxial machine gun while the bottom number is the ammunition count for the bow machine gun.

Main Gun Status Indicator

The cross hairs icon next to the machine gun ammo indicator changes color to indicate the current status of your main gun in relation to the target currently assigned to your gunner. If the cross hairs are green, no target is selected, if yellow, the gunner is in the process of laying the main gun onto the target and if red, the gun is on target and ready to fire.

Target Description

Next to the target cross hairs is a text description of the currently selected target. Use the Tab key to change the target selection. This procedure is described in detail in the section titled, *Commanding the Gunner*.

Crew Message Indicator

From time to time your crew or one of the other members of your platoon will inform you of events related to the operation of your tank or the command of your platoon. For example, the loader will inform you when the gun is ready to fire and your driver will inform you when you have reached a navigation way point. While these messages are presented as spoken audio, they also appear here as text.

Compass

The compass indicates the heading in which your tank is facing. The upper part of the compass shows the heading in degrees (0 to 360) while the lower part shows an abbreviation of the nearest cardinal direction (N, NE, E, SE, S, SW, W, NW.)

Directional Indicator

The directional indicator consists of two arrows which bracket the compass. These provide a relative direction to the next selected way point. To reach the way point, steer your tank until the arrows indicate that you are on course. When this happens, both arrows will appear inverted. For example, if the course to the way point were 48 degrees, your compass would look something like this: > 48 <. Some missions don't have way points; in this case no arrows will appear.

Way Point Data

The Δ symbol indicates the location of the way point data indicator. This is split into two parts, the upper part of which indicates the number of the currently selected way point and the lower number of which indicates the distance in meters to that way point. If the mission has no way points this area will be blank.

Throttle Indicator

The throttle indicator shows you the current throttle setting for your tank. The indicator is essentially a bar graph which increases from the bottom up if you are driving the tank forward and increases from the top down if you are driving the tank in reverse. Normally the bar graph is displayed in green. However, if part of the graph is yellow or red then you are pushing your engine beyond its normal capabilities. If you run your engine like this for too long, you risk an engine failure.

Speedometer

The speedometer is just to the left of the throttle indicator and shows your tank's speed in kilometers per hour. In addition, above and below the speedometer are arrows which show you the current direction of movement, either forward or reverse.

Formation Indicator

This area show a graphical representation of the current tank formation used by your platoon. It also shows you the current status of your tanks. If one of the indicators is yellow then the corresponding tank is disabled, but repairable. If red, then that tank is destroyed.

Fuel Gauge

This is a bar graph which shows you your current fuel status.

Elapsed Time Display

A chronometer is provided which shows you the remaining mission time, in minutes. If you fail to meet your mission objective in the time required, the scenario ends.

SECTION 8: Beating the Demo Scenarios

German - The Gauntlet

To accomplish your goals for this scenario, you must: destroy six enemy tanks, or destroy five enemy tanks and get to the victory objective.

Advance down the road to the north. When you first sight the Chaffees(M24), come to a complete stop. Target and destroy the two oncoming Chaffees. You do not want to spend too much time stopped. There are American Thunderbolts (P-47) in the area that will hit you hard if you hang around.

If you continue down the road to your next waypoint, there are American Shermans (M4A3E2) waiting in ambush. To surprise them, continue northwards after reaching the first waypoint. You want to come around the trees to your northwest. Continue until you spot one of the waiting tanks. Shoot at range and destroy the target. Use your range finder in the Gunners televue (F7) to correctly determine the tanks range, and then line up the target by placing the tip of the triangle in the center of the target. Once you destroy the tanks, slowly move towards the destroyed tank. There are two more tanks waiting for you nearby. Engage and destroy these targets. Once all three Shermans are destroyed, continue towards the village to the northwest.

There are two Pershings (M26) waiting for you at the village. You should be able to shoot one of the Pershings at range to achieve a victory. If you feel daring, you can race for the village, hoping to slide under the barrels of the Pershings, and victory. (When notified that your objectives have been met, you can press the escape key to end the scenario). Please note that you can play on past the 0:00 point in a scenario, win or lose. (Be aware that playing on after objectives have been met can end in your demise!).

MH

Russian - Factory Assault

You will come under fire from two Tiger I's very quickly. Move just over the bridge and use the F7 (magnified gunsight) view to target them at range. After knocking out the Tiger I's, use the F4 (buttoned cupola) view and look at the map. A platoon of Panzer IV's are advancing westward on your right flank. You have a couple of options. If

you have a high opinion of your own marksmanship, just wait for the Pz IV's to crest the rise to the east of the road. If you are a more careful sort, find a good cover position to the west of the road. (Hull down or behind the corner of a structure). In either case make sure to use the F6 (gunsight) view to sight in on the hill crest. (At close range the F6 gunsight is recommended).

Once you have taken care of the Pz IV's, head for the factory complex to the north. You can follow the waypoints to the complex, or try your own path, but beware of the Tiger II's in reserve on the road north of the complex. By the time you have cleared a path to the complex they may already have been released from their reserve position. (If you have to deal with them, try to find high ground that allows you to achieve an angle of attack into their top armor).

Upon entering the into the complex, if you have knocked out at least five tanks, you will be notified that your objectives have been met. Press the escape key to end the scenario. Please note that you can play on past the 0:00 point in a scenario, win or lose. (Be aware that playing on after objectives have been met can end in your demise!).

This is a difficult scenario, and it may take you some time to achieve success.

DP

JK/RM 3/16/98