
System Requirements

Before installation, verify that your computer meets the minimal system requirements. Close all other programs prior to installing. You must have DirectX 9.0c installed. After installation you can start the game from the windows “Start” menu.

WARNING: Game stability or performance on notebooks and laptops has not been tested.

### Minimal:
- OS: Windows XP SP2 / Vista / 7, DirectX 9.0C
- The processor: Pentium 4 / Athlon 1.1 GHz or better
- RAM: 1024 MB
- Videocard: 128 MB GeForce 6600 / RADEON 9600 or better
- Sound card: compatible with DirectX 16-bit sound PCI a card

### Recommended:
- OS: Windows XP SP2 / Vista / 7, DirectX 9.0C
- The processor: Pentium 4 / Athlon 2,4 GHz or better
- RAM: 2048 MB or above
- Videocard: 256 MB GeForce 7600 / RADEON x1600 or better
- Sound card: compatible with DirectX 16-bit sound PCI a card

Camera Management

**Camera rotation:** Move the mouse left or right while holding the right mouse button. This can also be accomplished using the “Home” and “End” keys on the keyboard.

**Camera height:** move the mouse up or down while holding the right mouse button. This can also be accomplished using the "PgUp" and "PgDn" keys on the keyboard.

**Camera zoom:** scroll the mouse wheel up or down or use the “+” and “-” keys on the keyboard.

Hotkeys

- Click to real time mode. (Key - Z)
- Click to time acceleration. (Key - X)
- Click to pause. (Key - C)
- The units group number - I (Key - 1)
- The units group number - II (Key - 2)
- Menu: save, load, exit game (Key - Esc)
- Screenshot (Key - F5)
- Hide game user interface (Key - F4)

Support Service

For technical support relating to installation, start up, or game crash issues contact us: support@totemgames.ru

Before contacting us, please ensure that your computer meets the minimal system requirements. Additionally, check to make sure you have the latest version of your computer's video drivers and that DirectX 9.0c is installed.

When sending an email requesting technical support, attach your computers diagnostic file and game log file. To get the files, follow the instructions below:

1. Find and start a file "Info.exe" in a game folder (example C:\Program Files\Ironclads2\Info.exe).
2. Follow program instructions.
3. Send both files (Totem3Log.log and DxDiag.txt) to the support@totemgames.ru
This game is about naval actions during of historical conflict between two hostile sides. In *Ironclads 2 American Civil War* Union fleets fight against Confederate fleets to dominate the Gulf of Mexico. The game takes place during the American Civil War. Players can take control of either the Union or the Confederacy. The game begins in January 1862 and continues to December 1865.

**How to Play in Strategic Mode**

**Harbors**

Harbors are the keys to victory. Any harbor in game represents Victory Points. By the end of the game, you need to control as many harbors as possible. Each harbor gives you Victory Points and increases your Success Rate. Complete victory is 100% Success Rate. In the game, you play on strategic and tactical maps. Gameplay on the strategic map is in turned-based mode while gameplay on the tactical map is in real time. One turn on strategic map lasts one month. You can see all turns and current one in the right side of info panel in top of a screen. Game time on tactical map may last up to 3 hours.

The strategic map is based on a geographical map. The map contains groups of slots: harbors, blockade stations and trade routes. Slots can hold ships or structures. You can move your warships from one slot to another but can't move structures.

**Income and Expenses.**

Every turn, harbors and trade ships (completed structures in trade slots) earn money. You can see this income and all money in the left side of info panel in top of a screen. You can spend money for ships repair, construction of new ships or structures. At the end of the turn, a screen shows all finance events. You can read a description of event in the bottom of info panel.

**Slots for Warships.**

There are two pairs of slots in harbors, blockade stations and trade routes for each side. For example, there are two slots at some point of a trade route: one for Union (USA flag symbol) and one for Confederates (CSA flag symbol).

To move a warship from one slot (make sure it is a warship slot) to another you need to:
1. Place the mouse cursor above the warship.
2. Click the left mouse button.
3. Make sure you see the selection symbol above the ship.
4. Place the mouse cursor above the slot where you want to move the ship.
5. Click the left mouse button to move the warship.
Consider the seaworthiness when you are moving your warship. Some warships can’t move in high seas. To get information about seaworthiness of a warship or slot, you need to place the mouse cursor above it and wait for a pop-up info dialog.

Harbor (Anchorage) - all slots within harbors, for all types of ships.

High Seas (Cruise) - all slots on the high seas, for seagoing ships only.
US screw sloop-of-war
US armed steamer
US screw steam frigate
CS commerce raider
CS cruiser corvette

Coastal (Blockade) - all slots near the coast.
CS screw gun vessel
US screw gunboat
US single-turret monitor
US double turret monitor
CS 1100t armored gunboat
CS 1600t casemate ironclad

When the turn ends, the player’s opponent (computer) makes his own moves. As a result, warships of each side can be in one area what lead to battle. The player can control his warships in the battle manually on the tactical map in real time mode or can choose auto battle mode on the strategic map. In the last case, battle consists of rounds; each round is equal to 5 minutes of real time. Warships fire in column-ahead formations. If one warship in line is destroyed or runs (turned away from line), the next warship takes its place in the formation but not in the slot. In tactical real time mode, warships in columns stay in the same order as on strategic map.

Slots for Infantry and Artillery Units.

There are two pairs of infantry slots in harbors and siege areas for each side of a conflict: one group for Union (USA flag symbol) and one group for Confederates (CSA flag symbol).

Before moving infantry between ports make sure that in the harbor of departure and in the harbor of destination is not placed the enemy ship. At the same time, ensure that the port of departure and the port of destination are not blocked by enemy ships.

Infantry unit and siege artillery can landing only in the siege area. Amphibian unit as the Marines could land in enemy harbor area. More information about infantry and artillery you can get from pop-up dialog if you place mouse above unit.

Heavy siege artillery used to bombard infantry in the besieged city or external siege lines and not used in the battle between the infantry. Siege artillery shells each enemy infantry unit once per turn. The shelling is only possible from the harbor area to the siege area, and vice versa. Artillery moves on to the same rules as the infantry.

To move infantry unit from one slot (make sure it is infantry slot) to another you need to do next:
1. place mouse cursor above infantry unite (for example US Regular Infantry Brigade).
2. click left mouse button.
3. make sure you see selection symbol above unit.
4. place mouse cursor above slot you want to move unit.
5. click left mouse button to move unit.

When the turn ends player’s opponent (computer) makes his own moves. In results of it infantry units of each side can be in one area what lead to battle. The player can not control his infantry units in the battle manually (auto battle mode on strategic map only). Battle consist of rounds, each round is equal to 2 minutes of real time. Infantry units are shooting each other in simulation of battle line fight. If one unit in line is defeat or retreat (turned away from battle line) next infantry unit takes his place in fight but not in slot. The effectiveness of the infantry unit in combat is determined by the number of soldiers (Strength) and the Experience of the unit (the bigger the better.)
Scheme of Infantry and Artillery movement

Scheme of Marines movement
1 Confederate Harbor
2 Blockade Station
3 Trade Route

4 Union Harbor
5 Union Naval Base (unavailable to capture)
6 Neutral Port (CSA Shipbuilding and Trade with Europe)

Heavy Siege Artillery
US and CS Infantry Slots
US Siege Fortification
Warship Project Slot
Shipbuilding Slot
Training Camp Slot

CS Slots for Warships
Merchantman Slot
Torpedo Boat Station
Harbor Minefield
Coastal Battery
US Slots for Warships
Harbors and Structures.

Harbors are the most important elements of the strategic map. The main purpose of the game is to control all harbors. In harbors, you can see slots for structures and slots where you can begin construction of a new warship or repair damaged ones. There are slots for traders or coastal batteries. Harbors can defend warships inside from attack with coastal batteries or mines fields.

Harbors are named the same as their cities. For example, New York harbor belongs territorially to New York City.

Harbors belong to only one side of conflict but each side can take control of a harbor. This is mean that Union can take control of New Orleans but this harbor still belongs to the Confederates. The color of a harbor's name shows which side controls the harbor. More information about harbor you can get from pop-up dialog if you place mouse above harbor symbol on strategic map.

If a harbor belongs to a player and the player controls it, then the harbor earns money for the player every turn. Each harbor earns different amounts of money depending on city population. Captured harbors don’t earn money. You can see harbor income in the pop-up dialog of fort.

Some harbors in the game can’t be controlled by the hostile side. Only harbors with a pair of slots for both sides can be taken under control.

The player must destroy all enemy infantry units inside the harbor to control it. At least two turns are required for this. To control a harbor, it is not necessary to keep infantry units inside, just don’t let hostile infantry stay more than two turns inside the harbor.

As was said, the color of harbor name shows who controls a harbor. Gray is used for Confederates cities and blue for Union cities. Colors change when control changes. When this happens, all structures and warships in docks have to be destroyed. The controlling side can’t construct any structures or ships in this harbor. For example, Union can’t construct coastal batteries or repair ships in New Orleans.

If a harbor belongs to one side but it is under control of another, the original owner can’t construct any structures or ships inside this harbor. For example, Confederates can’t begin construction of coastal batteries in Galveston if Union controls it.

To build a structure in a harbor, you need to:

1. Find an empty slot for the structure you want to build.
2. Wait for an information pop-up and make sure you have enough money.
3. Click on a slot with the left mouse button.

Harbor Defense Structures:

Coastal batteries damage the most dangerous enemy warship in the harbor every turn.

Harbor minefields have a chance to destroy any entering warship in the harbor but can’t destroy a warship which stays in harbor more than one turn.

Torpedo boat stations have a chance to destroy one blockading warship.

Siege works and fortifications protect soldiers in the bombardment and defense. The infantry under protection of a fort loses much less soldier in battle with enemy infantry.

Shipbuilding Structures:

To build a new warship, you need to:

1. Find a warship project in the harbor.
2. When you place the mouse cursor on a project, you can get information about the warship. To get the cost of construction, you need to click on a project then place the mouse above the shipbuilding slot to see the pop-up info dialog.
3. You need only to click on the shipbuilding slot to begin construction of new ship. A warship project can be built only in a shipbuilding slot of the same harbor as the project.

Repairing Warships

To repair a warship, you need to place it in the shipbuilding slot of a harbor:

1. Select a warship and choose a shipbuilding slot in a harbor under your control.
2. Wait for the pop-up info dialog to make sure you have enough money.
3. Click the left mouse button to move the warship to a slot. The ship may not move to the slot in some cases. For example, blockade may prevent it.
4. When a warship is in the shipbuilding slot, you can’t move it until completion.

Merchantman.
In the merchantman slot, you can build a ship. Each turn, this ship earns you money. As always, you can see income in the pop-up info dialog of the slot. Each turn, merchantmen can be captured by hostile warships in blockade or raid areas.

**Training Camp (Barrack):**

To recruit a new unit (infantry and artillery) you need to do next:

1. Find unit project in harbor.
2. When you place mouse cursor on project you can get information about unit to recruit. To get cost of recruitment you need to click on project to select it, then place mouse above training camp slot to see pop-up info dialog.
3. You need only click on training slot to begin recruitment of new unit. Unit project can be only trained in training slot of the same harbor as project.

To reinforce unit you need to place it in training camp slot of a harbor:

1. Select unit and choose training slot in harbor under your control.
2. Wait for pop-up info dialog to make sure you have enough money.
3. Click left mouse button to move unit in slot. Unit may not move to slot in some cases, blockade may prevent it for example.
4. When unit is in training slot you can’t move it until the end of reinforcement.

**Blockade Stations.**

You can place your warships in blockade stations in front of hostile harbors to prevent movement of hostile warships or to destroy merchantmen. In the same way, you can defend your harbor from hostile blockades by placing your warships in the blockade station of your harbor; hostile warships can’t move in the harbor in this case.

Warship can’t move out of a harbor if hostile warships are present in the blockade stations. First, warships must move to the blockade stations for battle. After battle, warships can leave the harbor or return to it.

**Trade Routes.**

Merchantmen use trade routes to operate. In a turn, a merchantman leaves a harbor with cargo, makes his way to a destination point on the trade route, and goes back with money. To destroy hostile merchantmen, you need to place a warship on trade route. It can be in blockade stations or the high seas.

The probability of intercept depends on the number of warships placed on a trade route. You can see this number in the pop-up info dialog of the merchantman. Interception of merchantmen yields money so you need to protect your trade routes and blockade stations from hostile warships.
How to Play in Tactical Mode

At the beginning of battle, you will see a battle area which is defined by red anchor buoys. Squadrons can fight only in this battle area. Along with the limited battle area, there is a time limitation for the battle. The timer is located in the top left corner under the compass. This timer shows the time remaining in the battle. After battle, all remaining ships come back to the harbor.

The player can control movement of only the first ship in a column. The ships of each group in battle will follow the first ship in a column. The speed of all groups is defined by the slowest ship. During battle, it will be impossible to separate the column and it will be impossible to create a new column. After each battle, your squadron will come back to the harbor and repair the damaged ships. During turn maneuvers, it is not recommended to change a movement direction sharply. This can lead to a loss of formation or collisions. After a collision, the player cannot control the ship.

If, during battle, a ship receives severe damage from gunfire, flooding, or a fire, it independently leaves battle. If the battle takes place in the harbor, the ships cannot retreat and will fight until victory or until the end of the battle. When the ship leaves the area defined by anchor buoys, it comes back to the game strategic map and can be used by the player or the computer in the next battle. The purpose of each battle is to destroy enemy ships. It is necessary to destroy as many enemy ships as possible.

Each ship will automatically select targets to fire at as they come into range of its armaments. Shooting begins at the 5% accuracy of hitting. If you wish to control the firing of individual ships, bring the ships into range and click on the “Begin Gun Fire” control. The ship will fire all available guns at the enemy target simultaneously. If you wish the ship to stop firing, click on the “Stop Gun Fire” control. To manually select or deselect a ship as a target, move your mouse over an enemy ship and click the right mouse button.

During a battle, shells fired at a target may hit above the water line or below the water line. A successful hit above the water line may cause a fire. A successful hit below the water line may cause flooding. As the ship takes fire from the enemy or is on fire, the percent damage will increase. Eventually, the damage will cause the ship to sink. A ship crew will automatically try to put out fires and pump out flooding during a battle. The more percent damage a ship sustains, the harder it is to repair flooding and put out fires. Damage also reduces a ship’s movement.
Solid Shot - solid smoothbore cannonball or hollow rifle projectile: low damage, average armor penetration, large supply.
Bomb Shell - smoothbore or rifle low explosive (black powder) projectile: high damage, low armor penetration, limited supply.
Armor-Piercing Shot - is a type of ammunition designed to penetrate armor: critical damage, high armor penetration, very limited.

Begin/Stop Gun Fire - shoot the nearest target. To shoot for the selected target - enables “begin gun fire” just near her.
## Warship Database

<table>
<thead>
<tr>
<th>Warship Name</th>
<th>Endurance</th>
<th>Firepower</th>
<th>Accuracy</th>
<th>Penetration</th>
<th>Propulsion</th>
<th>Battery</th>
</tr>
</thead>
<tbody>
<tr>
<td>CS 1100t armored gunboat</td>
<td>65% (3930)</td>
<td>13% (250)</td>
<td>100% (43)</td>
<td>80% (193)</td>
<td>80% (10kts)</td>
<td>MLR 6in</td>
</tr>
<tr>
<td>CS 1600t casemate ironclad</td>
<td>53% (3200)</td>
<td>13% (250)</td>
<td>100% (43)</td>
<td>80% (193)</td>
<td>41% (5kts)</td>
<td>MLR 6in</td>
</tr>
<tr>
<td>CS 2200t cruiser corvette</td>
<td>38% (2320)</td>
<td>45% (875)</td>
<td>100% (43)</td>
<td>80% (193)</td>
<td>100% (12kts)</td>
<td>MLR 6in</td>
</tr>
<tr>
<td>CS 1200t commerce raider</td>
<td>19% (1176)</td>
<td>14% (280)</td>
<td>30% (13)</td>
<td>20% (49)</td>
<td>80% (10kts)</td>
<td>SB 32pdr</td>
</tr>
<tr>
<td>CS 550t screw gunvessel</td>
<td>8,5% (415)</td>
<td>7% (140)</td>
<td>35% (14)</td>
<td>30% (67)</td>
<td>65% (8kts)</td>
<td>SB 64pdr</td>
</tr>
<tr>
<td>US 2100t single-turret monitor</td>
<td>100% (6000)</td>
<td>29% (560)</td>
<td>30% (14)</td>
<td>100% (231)</td>
<td>58% (7kts)</td>
<td>SB 440pdr</td>
</tr>
<tr>
<td>US 1100t double-turret monitor</td>
<td>60% (3600)</td>
<td>25% (480)</td>
<td>35% (14)</td>
<td>60% (133)</td>
<td>75% (9kts)</td>
<td>SB 166pdr</td>
</tr>
<tr>
<td>US 4500t steam screw frigate</td>
<td>65% (4000)</td>
<td>100% (1920)</td>
<td>35% (14)</td>
<td>60% (133)</td>
<td>65% (8kts)</td>
<td>SB 166pdr</td>
</tr>
<tr>
<td>US 2500t screw sloop-of-war</td>
<td>40% (2400)</td>
<td>63% (1220)</td>
<td>35% (14)</td>
<td>30% (67)</td>
<td>90% (11kts)</td>
<td>SB 64pdr</td>
</tr>
<tr>
<td>US 1200t armed steamer</td>
<td>20% (1200)</td>
<td>12% (240)</td>
<td>30% (13)</td>
<td>20% (49)</td>
<td>80% (10kts)</td>
<td>SB 32pdr</td>
</tr>
<tr>
<td>US 550t screw gunboat</td>
<td>10% (670)</td>
<td>11% (214)</td>
<td>60% (27)</td>
<td>25% (52)</td>
<td>80% (10kts)</td>
<td>MLR 4in</td>
</tr>
</tbody>
</table>

**Endurance** the number of damages to the complete destruction of the warship

**Firepower** “weight” of the broadside per minute in damage point

**Accuracy** external ballistic characteristics, excluding the experience of the crew

**Penetration** maximum thickness of iron armor that can pierce the shell

**Propulsion** maximum speed and acceleration characteristics

**Battery** type of main armament

To receive information about loaded type of ammo, reloading state or activity of individual gun, place a mouse cursor over gun of your ship:
Naval Artillery Database

<table>
<thead>
<tr>
<th>Type &amp; Caliber</th>
<th>SB Solid Shot / MLR Solid Bolt (SL)</th>
<th>SB Bomb Shell / MLR Common Shell (CP)</th>
<th>SB Steel Shot / MLR Steel Bolt (AP)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>reload</td>
<td>range</td>
<td>penetration</td>
</tr>
<tr>
<td>SB 32pdr</td>
<td>30 sec</td>
<td>1600 m</td>
<td>15 mm</td>
</tr>
<tr>
<td>SB 64pdr</td>
<td>45 sec</td>
<td>1600 m</td>
<td>30 mm</td>
</tr>
<tr>
<td>SB 166pdr</td>
<td>80 sec</td>
<td>1500 m</td>
<td>40 mm</td>
</tr>
<tr>
<td>SB 440pdr</td>
<td>200 sec</td>
<td>1500 m</td>
<td>65 mm</td>
</tr>
<tr>
<td>MLR 4in</td>
<td>35 sec</td>
<td>1900 m</td>
<td>25 mm</td>
</tr>
<tr>
<td>MLR 6in</td>
<td>60 sec</td>
<td>2000 m</td>
<td>45 mm</td>
</tr>
<tr>
<td>MLR 8in</td>
<td>120 sec</td>
<td>2000 m</td>
<td>50 mm</td>
</tr>
<tr>
<td>BL 5in</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BL 6in</td>
<td>45 sec</td>
<td>3700 m</td>
<td>60 mm</td>
</tr>
<tr>
<td>BL 8in</td>
<td>65 sec</td>
<td>3700 m</td>
<td>80 mm</td>
</tr>
<tr>
<td>QF 2in</td>
<td>8 sec</td>
<td>1850 m</td>
<td>56 mm</td>
</tr>
</tbody>
</table>

* All specs are shown for warships crews with the 100% experience level

How to understand data on artillery:
4 x MLR 8in = 4 (number of guns) x MLR (rifle) 8 (caliber in inches)

- **SB** smoothbore cannon
- **MLR** muzzle-loading rifle
- **BL** rifled breech loader
- **QF** quick-firing gun (rapid-firing)

**Reload**
The time required to reload the gun. Less is better.

**Range**
Maximum range of effective firing. The bigger the better.

**Penetration**
Maximum thickness of iron armor that can pierce the shell at a distance of zero meters (increase in distance = decreases in penetration). The bigger the better.

**Damage**
The value of the damage is necessary to put the ship for its total destruction. To destroy the ship with a displacement of 500 tons have to inflict 500 points of damage. Armor reduces or fully protects from the damage. The bigger the better.