



Emberward

The Kindled and the Hollow — player and developer manual

Version 1.0.0 · Tronsoft Wargame Engine 1.0.0 · Tronsoft Games Portal v6.12 or later · released 2026-08-04

Every table in this manual is generated from the data files this package ships, so no figure here can drift from the rules the engine actually runs.

The ward

The Emberward is 63 hexes, 9 files by 7 ranks, laid out as pointy-top hexes in axial coordinates. 5 of them are wardstones, ringed in gold. Each host begins on 8 home hexes along its own edge, and the whole ward is unchanged by a half turn — terrain, phase and home hexes all — so neither host has better ground.

You win by holding every wardstone at the start of one of your seasons, or by leaving nothing of the enemy standing. If neither happens within 72 seasons the ward runs cold and is settled on wardstones held, then pieces standing, then vigour remaining.

Terrain

Terrain does two jobs. On the ward it sets what a walker pays to enter. In the arena it sets how much clutter stands on the floor and how well the ground takes a foot.

Terrain	Move cost	Passable	Arena clutter	Footing	Note
Ashfield	1	yes	5%	1.05	Level grey ash, packed hard by the tide. Open ground for a duel.
Emberglass	1	yes	12%	1.18	Fused sand that rings underfoot. Quick going, with shards standing proud.
Cinderdrift	2	yes	9%	0.84	Loose drifts of spent cinder. Heavy to cross and heavier to fight in.
Bone Orchard	2	yes	26%	0.92	Stands of pale calcined timber. Thick cover that stops a bolt dead.
Stillwater	2	yes	4%	0.72	Shallow black water. Nothing moves quickly through it and nothing hides.
Riftmaw	4	no	30%	0.90	An open seam in the ward. Only fliers may cross and none may stand.

The tide

Every hex carries a phase. The whole ward advances one phase each season, rippling outward from the centre stone, so a hex passes through all five states of the tide every 8 seasons and back again. A Kindled piece fighting on a radiant hex carries a larger pool of vigour into the arena and strikes harder; on a shadowed hex it carries less and strikes softer. The Hollow are the exact mirror of it, so the tide never favours anyone on balance — only here, only now.

Phase	Kindled	Hollow
Radiant	+16%	-16%
Waxing	+8%	-8%
Even	+0%	+0%
Waning	-8%	+8%
Shadowed	-16%	+16%

The opening counterpoise. The tide is set at the start of a ward so that the opening light stands with the host that moves second. Without it the host with the move also had the light, and measurement over sixty wards put the first mover at about 62 per cent. With it the same measurement returns about 52.

The pieces

A unit has two lives. On the ward it has a gait and a span: walkers pay terrain and cannot pass through anyone, fliers ignore the ground and everything on it, chargers run in one of the six straight lines until something stops them, and leapers step over whatever lies between. In the arena it has a pace, a reach, a strike and a cadence, and some carry a bolt. Nothing may end its

move on the riftmaw, flier or not.

The Kindled

Unit	Role	Gait	Vigour	Pace	Reach	Strike	Dmg/s	Bolt
Lantern-Bearer	warden	walk 3	84	1.7	0.55	12/0.62s	16.1	10 dmg at 7.5/s, 1.5s
Sunhawk	flier	fly 4	86	2.9	0.5	10/0.42s	23.8	melee only
Cinder Wisp	flier	fly 5	42	3.4	0.4	6/0.3s	16.7	5 dmg at 9/s, 0.9s
Slagwarden	anchor	walk 2	156	1.15	0.95	34/1.35s	25.2	melee only
Ember Lancer	lancer	charge 4	104	2.1	1.35	20/0.85s	23.5	melee only
Ashen Stag	skirmisher	charge 5	86	3	0.7	13/0.5s	26	melee only
Dawn Herald	archer	walk 3	54	1.9	0.5	7/0.85s	14.1	12 dmg at 11/s, 1.6s
Mirrorkin	trickster	leap 3	80	2.3	0.8	15/0.6s	18.3	11 dmg at 6/s, 1.2s

The Hollow

Unit	Role	Gait	Vigour	Pace	Reach	Strike	Dmg/s	Bolt
Nightbinder	warden	walk 3	87	1.55	0.55	13/0.68s	16.2	11 dmg at 6.5/s, 1.7s
Gloomwing	flier	fly 4	84	3.1	0.45	9/0.38s	23.7	melee only
Gravemoth	flier	fly 5	46	3.2	0.42	7/0.34s	17.6	6 dmg at 8/s, 1s
Barrowhulk	anchor	walk 2	168	1.05	1.05	31/1.25s	24.8	melee only
Rift Lancer	lancer	charge 4	100	2.2	1.45	19/0.8s	23.8	melee only
Hollow Stalker	skirmisher	charge 5	82	3.15	0.65	12/0.46s	26.1	melee only
Thorn Caster	archer	walk 3	60	1.8	0.5	8/0.9s	13.3	12 dmg at 10/s, 1.5s
Shade-Eater	trickster	leap 3	77	2.4	0.75	15/0.55s	18.2	10 dmg at 7/s, 1.3s

The Conjured

Unit	Role	Gait	Vigour	Pace	Reach	Strike	Dmg/s	Bolt
Cinder Wraith	elemental	walk 3	74	2.4	0.6	14/0.5s	16	8 dmg at 8.5/s, 1.1s
Brine Wraith	elemental	walk 3	110	1.8	0.9	22/0.8s	27.5	melee only
Squall Wraith	elemental	fly 5	70	3.6	0.5	11/0.36s	30.6	melee only
Loam Wraith	elemental	walk 2	140	1.2	1	28/1.1s	25.5	melee only

Damage a second is the strike divided by the cadence, or the bolt damage divided by the cadence for a unit that throws one. It is a guide, not a promise: a bolt that misses does nothing at all, and a heavy striker that cannot close does less than nothing.

The arena

Move a piece onto an enemy and the ward gives way to a duel. The floor is 7 by 5 hexes of the contested hex's own terrain, lit by its own phase of the tide. The challenger enters from the near side, the holder from the far. Movement is continuous and the simulation steps at a fixed 60 steps a second, so the same seed always fights the same duel.

Each fighter carries a pool of vigour equal to what it had on the ward, scaled by the light. The holder gets a further 6% for standing its ground. Striking freezes you for your recovery, so a heavy weapon is a commitment. After 12.8 seconds the ward begins to close in at 0.34 hexes a second and burns anything outside it, so no duel can be run away from for ever; at 32 seconds the greater share of vigour remaining takes the hex.

The loser is destroyed outright. The winner keeps whatever vigour it has left and carries the damage back onto the ward, where resting on a wardstone mends 12 vigour at the start of your season. A piece never leaves a duel richer than it entered it.

Controls

Action	Keyboard	Pointer	Touch
Move	arrows or W A S D	—	the pad, lower left
Strike	space	click	the strike button
Aim a bolt	—	the pointer	the strike button
Pause	P or Escape	the Pause control	the Pause control

Measured across 4000 pairings at 16 seeds each, a duel runs 13.01 seconds on average.

The workings

Your warden carries 7 workings, one use each. Speaking one costs the whole season, so a working is always paid for with a move you did not make. Lose the warden and every working still unspent is lost with it — which is why the warden is the piece the machine hunts hardest.

Working	Target	Uses	What it does
Mend	friendly	1	One of your own is made whole again, whatever the duels have taken from it.
Displace	empty hex	1	One of your own steps out of the ward and back into any empty hex of it.
Barter	two pieces	1	Any two pieces on the ward change places, friend or foe, willing or not.
Recall	fallen	1	A fallen piece of yours is called back to an empty home hex at half vigour.
Conjure	empty hex	1	An elemental is raised within two hexes of your warden and holds for a season.
Fetter	enemy	1	An enemy piece is bound where it stands for three turns and may not move.
Wane	none	1	The tide is pulled two phases forward and the whole ward changes its colour.

The wards

First Light

Four against four, no workings, and five wardstones between you. Learn the two halves of the game: the ward is taken with the feet, but every hex that changes hands is settled in the arena.

Watch the tide before you commit a piece to a duel it will fight in the wrong light.

Host	Order of battle
Kindled	Lantern-Bearer, Slagwarden, Ember Lancer, Dawn Herald
Hollow	Nightbinder, Barrowhulk, Rift Lancer, Thorn Caster

The Kindled move first. Workings are set aside. Season limit 30. Par is 18 seasons.

The Warden's Gambit

Both lances are gone and both hosts are down to six, so the wardens must do more of the work themselves. The Hollow move first and will be on the near stones before the Kindled have crossed the ash, but the opening light stands radiant against them. Workings are the only way back into it.

Host	Order of battle
Kindled	Lantern-Bearer, Slagwarden, Dawn Herald, Ashen Stag, Mirrorkin, Cinder Wisp
Hollow	Nightbinder, Barrowhulk, Thorn Caster, Hollow Stalker, Shade-Eater, Gloomwing

The Hollow move first. Workings are allowed. Season limit 72. Par is 34 seasons.

The Long Ward

The full ward: eight pieces a side, seven workings a side, and the whole cycle of the tide to fight through. Hold all five wardstones at once, or leave nothing of the enemy standing. Neither is easy, and the second is usually the shorter road.

Host	Order of battle
Kindled	Lantern-Bearer, Slagwarden, Ember Lancer, Dawn Herald, Mirrorkin, Sunhawk, Ashen Stag, Cinder Wisp
Hollow	Nightbinder, Barrowhulk, Rift Lancer, Thorn Caster, Shade-Eater, Gloomwing, Hollow Stalker, Gravemoth

The Kindled move first. Workings are allowed. Season limit 72. Par is 42 seasons.

The campaign: The Tide of Embers

Three seasons of the ward, fought from the first quiet cycle to the one that decides it.

1. First Light

The tide has just turned radiant and the Kindled have the light for a few phases only. Take what can be taken before it goes.

2. The Warden's Gambit

Both lances were spent in the first season. What is left must be spent more carefully, and the Hollow have the opening.

3. The Long Ward

Every piece that either side can still field is on the ash, and there is no season after this one.

The machine

The machine chooses in two places and they are separate skills. On the ward a commander scores every legal move; in the arena a pilot flies the fighter. A commander does not guess at a duel: it reads the odds out of a table measured by playing 4000 pairings at 16 seeds apiece, indexed by both units, the phase of the tide and which host is attacking, then tilts the reading by how hurt each piece already is.

Tempers

Temper	Stones	Trades	Advance	Caution	Workings	Note
Warden	1.9	1.1	0.5	0.75	1.1	Plays for the stones and refuses duels it does not expect to win.
Reaper	0.7	1.9	1.2	0.5	0.95	Hunts pieces. Will take an even duel for the chance at a warden.
Tidewatcher	1.3	1.2	0.8	0.9	1.2	Fights the calendar as much as the enemy and spends its workings early.
Harrier	1	1.3	1.6	0.4	0.9	Comes straight down the ward at the enemy warden and does not look behind.

Skills

Skill	Pilot	Blunders	Note
Novice	32%	30%	Reads the board one move at a time and pilots badly in the arena.
Adept	62%	12%	Checks the reply before committing and holds its ground in a duel.
Warden of the Ash	92%	2%	Leads its shots, dodges bolts and rarely walks into a duel it loses.

Both knobs were checked separately rather than assumed: holding the blunder rate fixed and moving only the pilot skill separates the two by about 58 to 42, and holding the pilot fixed and moving only the blunder rate separates them completely. On the ward, in other words, choosing the right duel matters more than fighting it well — which is the opposite of the position you are in, since you fight every duel yourself.

For developers

Emberward is a Tronsoft Wargame Engine title. The engine and the content are separate: engine/ holds ten modules that know nothing about this game, and every rule, unit, map, scenario, campaign, temper and string lives in a JSON data file that the engine validates against a schema before it will run.

Folder	What is in it
engine/	hex, rng, schema, schemas, core, field, duel, ai, content, game, persist, bundle
maps/	the ward: hexes, terrain ids, phases, wardstones, home hexes
terrain/	the terrain table
units/	the three rosters
rules/	the rulesets: the tide, the arena, the workings, victory
scenarios/	orders of battle, who moves first, briefings, par
campaigns/	the campaign index and the campaign itself
ai/	temper and skills, and the measured duel-odds table
localization/	the interface strings
js/	render, save, sound, ai adapter, interface, boot

Loading

The resource manager fetches JSON over HTTP as the portal serves it. A file:// origin refuses fetch, so it falls back to engine/bundle.js, which is generated from the same JSON at build time with a digest per file that the loader recomputes on the way in. The offline copy therefore cannot silently drift from the data files beside it.

Determinism

Everything that draws on chance draws from a named stream seeded by hashing the seed with the name, so nearby seeds are uncorrelated and each commander, each pilot and each duel has its own. Duels advance on a fixed step. Pin the seed from the address bar with index.html#seed=1883 and the ward, the deployment and every duel repeat exactly.

Saving

One key, tronsoft_emberward_save, derived from the manifest slug, plus a second for the sound setting. A save carries a fingerprint of the position; an altered save is refused rather than loaded, and a truncated one is refused rather than half read. A refused store degrades to playing without a save.

Validation

The package ships validate.js, which runs from the extracted archive with no dependencies and checks the Package Specification section by section, Appendix B rule by rule, the content against the engine schemas, and the bundle digests against the data. The engine schemas are normative: a data file that fails one will not load, and the error names the exact path that failed.