

Watchlist & Entry-Gate Parameters

Every configurable parameter driving (1) top-30 watchlist selection and (2) the live entry gate · /var/www/screener/premarket · as of 2026-09-09

1. Top-30 Watchlist Selection

Pipeline: full tradable universe → symbol filters → price/volume prefilter → scorer.py scoring → top `candidates.premarket_candidate_count = 30` by `total_score`. Source: `premarket_scanner.py`, `scorer.py`, `symbol_filters.py`, `indicators.py`. Config section: `universe`, `candidates`, `premarket_scoring`.

1a. Universe filters (applied before any scoring)

PARAMETER	VALUE	WHAT IT DOES
price_min / price_max	\$5.00 – \$15.00	Only symbols trading in this band are considered at all
min_avg_daily_volume	500,000	Historical-volume floor for eligibility (also the fallback RVOL baseline where a real per-symbol baseline isn't available)
exclude_otc	true	OTC-listed symbols excluded
exclude_etfs_and_funds	true	Name-keyword match against ETF/ETN/trust/fund vocabulary (etf, trust, ishares, spdr, vanguard, etc.)
exclude_leveraged_inverse	true	Name-keyword match against leveraged/inverse products (2x, 3x, ultra, bull/bear, inverse, etc.)
max_name_syllables	5	Company names syllable-counted (legal suffixes like Inc/Corp stripped first); names over the limit are excluded as too complex/illiquid-sounding
exclude_symbols / include_only_symbols	[] / []	Manual override lists — both empty, no manual overrides active

1b. Scoring inputs & thresholds (scorer.py, per-symbol)

PARAMETER	VALUE	WHAT IT DOES
min_premarket_volume	20,000	Below this, volume_quality subscore is scaled down sharply (×0.3) instead of zeroed
min_rvol	1.5×	Relative-volume floor; below it the rvol subscore is scaled down (×0.3)
acceleration_min_ratio	1.15×	Volume-acceleration floor rewarding developing (not just one-time-spike) volume
max_spread_pct	1.5%	Spread/liquidity subscore threshold
max_distance_from_pm_high_pct	8.0%	How far below the premarket high a symbol can sit before the distance subscore hits zero
extension_risk_pct_threshold	25.0%	Extension-from-VWAP level above which a penalty subscore kicks in (only penalty component, subtracted from total)
vwap_lookback_bars	12	Bars used for the VWAP-slope calc
momentum_lookback_snapshots	5	Snapshots used for the price-momentum calc

1c. Scoring weights (sum to 100 minus the penalty component; extension_risk_penalty is subtracted, not summed)

COMPONENT	WEIGHT	REWARDS
volume_momentum family (rvol + volume_quality + volume_acceleration)	12 + 12 + 10 = 34	Largest combined weight — real, developing volume participation
price_momentum	12	Recent price acceleration
price_structure	12	Higher-highs/higher-lows pattern present
vwap_structure	8	Price trading above VWAP
vwap_slope	8	VWAP itself rising
momentum_consistency	8	Closes moving the same direction bar-to-bar (penalizes chop)
consolidation_quality	8	Tight recent range (≤3% full credit, ≥15% zero)
distance_from_pm_high	6	Sitting near the premarket high, not far below it
price_quality	5	Price near the middle of the \$5–\$15 tradable band
spread_liquidity	5	Tight bid/ask spread
extension_risk_penalty	-10 (penalty only)	Subtracted once extension_risk_pct_threshold (25%) is exceeded

Final `total_score` is this weighted sum normalized to 0–100. Top 30 by score become the watchlist; `candidates.final_candidate_count = 15` of those are additionally tagged as `final_10` (informational/dashboard ranking only — all 30 stay live-monitored either way).

2. Entry Gate

Two decision engines exist in config; only one is active at a time via `entry.decision_engine`.

Active engine: `prediction_pipeline / entry_score.py` ACTIVE

Produces five independent 0-100 scores (trend, structure, prediction, entry, risk) — deliberately not one blended number. A symbol only reaches READY when ALL FIVE clear their minimums simultaneously, held for a confirmation window.

PARAMETER	VALUE	WHAT IT GATES
<code>min_trend_score</code>	60	Trend-structure component floor
<code>min_structure_score</code>	50	Swing-pivot/structure component floor
<code>min_prediction_score</code>	40	Prediction-engine composite floor (lowered from 60 on 2026-09-08)
<code>min_entry_score</code>	65	Setup-confidence/regime/momentum blend floor
<code>min_risk_score</code>	45	Reward:risk / liquidity / spread blend floor (lowered from 60 on 2026-09-08)
<code>min_reward_risk_ratio</code>	1.5	Expected move vs. distance-to-stop; one of three inputs into <code>risk_score</code> , not a hard disqualifier on its own
<code>max_spread_pct</code>	1.0%	Spread component of <code>risk_score</code>
<code>min_relative_volume</code>	0.5×	Liquidity component of <code>risk_score</code>
<code>confirmation_seconds</code>	8	Minimum time all five scores must hold above minimum before READY fires (the "never enter from one tick" rule)
<code>confirmation_min_readings</code>	2	Minimum number of separate readings within that window
<code>require_full_confirmation_when_extended_from_open</code>	true	Anti-chase hard tier (added 2026-09-09)
<code>max_extension_from_open_pct</code>	0.3%	Extension-from-session-open threshold that triggers the hard tier above
<code>full_confirmation_min_score</code>	100	When the hard tier is triggered, ALL FIVE scores must hit this (not their normal minimums) before READY
<code>entry_weights</code>	setup_confidence .5 / regime_allows .3 / prediction_momentum .2	How <code>entry_score</code> itself is composed
<code>risk_weights</code>	stop_quality .4 / liquidity .3 / spread .3	How <code>risk_score</code> itself is composed

Known gap (flagged 2026-09-09, not yet fixed): `min_reward_risk_ratio` is only a soft input (40% weight) into `risk_score`, not a hard disqualifier — a real trade (BGC) entered with a 0.03 ratio (required 1.5) because liquidity/spread carried the blended score anyway.

Legacy engine: `entry_engine.py` INACTIVE — not evaluated live

Config still present and fully wired, but dormant while `entry.decision_engine = "prediction_pipeline"`. Listed here for completeness / in case of a rollback.

PARAMETER	VALUE	WHAT IT GATES
<code>min_confirmation_score</code>	65	Overall confirmation threshold
<code>require_price_above_vwap / require_vwap_rising</code>	true / true	VWAP structure hard requirements (3-bar lookback)
<code>require_opening_volume_expansion</code>	true, ≥1.4×	Opening volume must expand vs. baseline
<code>require_breakout_of_pm_high_or_resistance</code>	true	0.1% buffer, held 2 bars
<code>require_higher_lows</code>	true	4-bar lookback
<code>max_spread_pct_entry</code>	1.2%	Spread hard cap
<code>min / max_extension_from_vwap_pct</code>	0.3% / 4.0%	Must be extended enough to matter, not so far it's a chase
<code>require_rsi_not_overbought</code>	true, max 70 (RSI-14)	Overextension guard — this is the check missing from the active engine
<code>require_no_recent_spike_extension</code>	false (disabled)	Recent-spike guard, currently off even in the legacy path
<code>require_no_extended_downtrend</code>	true	20-bar lookback, 1.5% decline / 1.5% recovery thresholds
<code>require_momentum_not_fading / require_volume_not_declining</code>	true / true	Hard disqualifiers on fading momentum or declining volume

min_health_score_by_state	HEALTHY 65 / WATCH 70	Health-score floor by current health state
reentry_min_confirmation_score	90	Stricter bar for re-entering a symbol already tried once
time_based_overrides	disabled	Would allow per-time-window threshold overrides (morning/midday/afternoon); built but not enabled