

# ACTP v1 — Admissibility Definition and Dashboard Behavior

## A. Numerical Admissibility Definition

Admissibility  $\alpha(s) \in \{0,1\}$  is a binary gate applied to state  $s = (\text{asset}, \text{timeframe}, \text{volatility}, \text{structure}, \text{liquidity})$ . The system excludes inadmissible states; it does not rank or optimize admissible ones.

### A1. Volatility Gate

Compute realized volatility  $v = \text{ATR}_n / P$ . If  $v < v_{\min}$  (dead market) or  $v > v_{\max}$  (unstable market),  $\alpha_{\text{vol}} = 0$ . Otherwise  $\alpha_{\text{vol}} = 1$ .

### A2. Structure Gate

Structure admissibility is binary. Examples include higher-high/higher-low checks or price above a reference moving average. Ambiguity results in  $\alpha_{\text{struct}} = 0$ .

### A3. Liquidity Gate

Liquidity admissibility excludes states with excessive spread, insufficient volume, or recent execution gaps. If execution risk is nontrivial,  $\alpha_{\text{liq}} = 0$ .

### A4. Composite Gate

Final admissibility is  $\alpha = \alpha_{\text{vol}} \wedge \alpha_{\text{struct}} \wedge \alpha_{\text{liq}}$ . Any failing component forbids entry.

### A5. Timeframe Interaction

Admissibility is evaluated independently per timeframe. Higher timeframes may veto lower timeframes. No averaging is performed.

### A6. Interpretation

Admissibility does not imply expected profit or edge. It only certifies that survival constraints are not violated.

## **B. Dashboard Behavior (v1)**

The dashboard enforces admissibility rather than making decisions. It presents binary admissibility status per asset and timeframe.

### **B1. Display Requirements**

For each asset  $\times$  timeframe, display admissible/not admissible status, volatility status, structure status, and liquidity status.

### **B2. Forbidden Actions**

If  $\alpha = 0$ , execution is disabled, position size is zero, and override is not permitted in v1.

### **B3. Execution Rules**

If  $\alpha = 1$ , the user may enter a predefined micro position size. Entry requires manual confirmation.

### **B4. Exit Rules**

Exits default to simple profit targets and stops defined at entry. Adaptive exits are excluded from v1.

### **B5. User Outcome**

The system prevents naive users from entering highly unfavorable states, promotes frequent small outcomes, and prioritizes survivability.

## **Status**

Admissibility and dashboard behavior for ACTP v1 are fully specified and build-ready.