PSEDYS | TECHNICAL REFERENCE MANUAL V3.0

# Delta 5M — Order Flow Delta Approximation

# Delta 5M — Order Flow Delta Approximation

## Technical Reference Manual v1.0

**PSEDYS | Volume / Order Flow Indicators**

## 1. What is Delta?

Delta represents the difference between aggressive buying volume (Ask-side) and aggressive selling volume (Bid-side). Positive delta = buyers dominated; negative delta = sellers dominated.

**Real issue:** True Delta requires footprint/tape data. Binance Futures does not provide this breakdown via the standard OHLCV API. PSEDYS uses an **approximation** calculated from available OHLCV data.

**OHLCV Delta is not true delta. Accuracy ~65-70% compared to true delta on tick data. Used exclusively as a confirmation filter, NOT as a primary signal.**

## 2. Calculation Formula

### Variant 1 — Simple (Binary Direction)

```
if candle["close"] > candle["open"]:
    delta = +candle["volume"]
elif candle["close"] < candle["open"]:
    delta = -candle["volume"]
else:
    delta = 0  # doji
```

Limitation: Does not account for the size of the body relative to the range.

Downloaded from PSEDYS Ecosystem | t.me/PSEDYS

### Variant 2 — Proportional (Standard PSEDYS)

```
if candle["high"] != candle["low"]:
    body_ratio = (candle["close"] - candle["open"]) / (candle["high"] - candle["low"])
    delta = candle["volume"] * body_ratio
else:
    delta = 0  # candle without range
```

**Logic:** A candle with a larger body relative to the range has more volume attributed to the body's direction.

**Complete example:**

```
Candle: O=100, H=107, L=98, C=105, V=2000
body_ratio = (105 - 100) / (107 - 98) = 5/9 = 0.556
delta = 2000 x 0.556 = +1111
1111 units attributed to buyers
Positive delta predominantly bullish pressure
```

**Special cases:**

```
Doji: O=100, H=105, L=95, C=100.1
body_ratio = 0.1/10 = 0.01  delta ~ 0  correct

Bullish Marubozu: O=100, H=105, L=100, C=105
body_ratio = 5/5 = 1.0  delta = +volume  correct

Spike with long upper wick, small body: O=100, H=110, L=99, C=101
body_ratio = 1/11 = 0.09  delta ~ 0  correct, wick = rejection
```

### Cumulative CVD (over 20 bars)

```
CVD_LOOKBACK = 20   # last 20 bars of 5M (~1.67 hours)
cvd = sum(delta_values[-20:])

# CVD Interpretation:
# Rising CVD + rising price   confirmed bullish trend
# Falling CVD + rising price  bearish divergence (exhaustion)
# Rising CVD + falling price  bullish divergence (absorption)
# Falling CVD + falling price confirmed bearish trend
```

Downloaded from PSEDYS Ecosystem | t.me/PSEDYS

## 3. Edge Cases and Limitations

**Zero range (H=L):**

```
if candle["high"] == candle["low"]:
    delta = 0
```

**Extreme volume spike:**

```
avg_vol = mean(volumes[-20:])
capped_vol = min(candle["volume"], avg_vol * 3)
delta = capped_vol * body_ratio  # cap at 3x average
```

**Thin candles (crypto weekend):**

```
if candle["volume"] < avg_volume * 0.2:
    delta = 0  # ignored in CVD
```

---

## 4. Usage as PSEDYS Filter

```
LONG entry valid if:
  All main conditions met
  delta_5m[-1] > 0       (last bar bullish as delta)
  CVD rising over the last 3+ bars

SHORT entry valid if:
  All main conditions met
  delta_5m[-1] < 0       (last bar bearish as delta)
  CVD falling over the last 3+ bars

SKIP if:
  delta_5m[-1] contradicts the main signal direction
```

---

Downloaded from PSEDYS Ecosystem | t.me/PSEDYS

## 5. Delta Interpretation per Bar

| Delta | Signal |
|---|---|
| delta > 0 and close > open | Bullish confirmation aggressive buying |
| delta > 0 and close < open | Absorption buying present but sellers dominate |
| delta < 0 and close < open | Bearish confirmation aggressive selling |
| delta < 0 and close > open | Reverse absorption |
| delta ~ 0 | Doji / indecision / extreme wick |

**Delta-Price Divergences:**

```
BEARISH DIVERGENCE: Price HigherHigh + CVD LowerHigh
  Momentum deteriorates, reversal probability

BULLISH DIVERGENCE: Price LowerLow + CVD HigherLow
  Selling pressure reduces, bounce probability
```

Downloaded from PSEDYS Ecosystem | t.me/PSEDYS

## 6. Delta 5M Cheat Sheet

| Concept | Value / Rule |
|---|---|
| Standard formula | delta = volume x (close - open) / (high - low) |
| Simple variant | +volume if C>O, -volume if C<O |
| CVD lookback | 20 bars (5M) |
| Delta > 0 | Estimated buying pressure |
| Delta < 0 | Estimated selling pressure |
| Delta ~ 0 | Doji / indecision / extreme wick |
| Role in strategy | Confirmation filter, NOT primary signal |
| Accuracy compared to real data | ~65-70% |
| SKIP if | Delta contradicts the main signal |
| Bullish CVD divergence | Price LowerLow + CVD HigherLow |
| Bearish CVD divergence | Price HigherHigh + CVD LowerHigh |
| Spike filter | Cap volume at 3x average |
| Zero range | delta = 0 not calculated |

PSEDYS Technical Indicators Manual v1.0 — June 2026

Downloaded from PSEDYS Ecosystem | t.me/PSEDYS

Downloaded from PSEDYS Ecosystem | t.me/PSEDYS