

# BARON OPS BOT

Strategy Reference — Range Rush Reversal

## Overview

The Baron Ops Bot trades SPY 0DTE (same-day expiry) options using a rules-based Opening Range Breakout system called the Range Rush Reversal strategy. Every entry signal, position size, stop loss, and take-profit exit is fully defined by code — no discretion, no emotion, no second-guessing. The bot runs unattended from 9:30 AM to 3:45 PM ET and handles everything automatically.

## Why 0DTE Options on SPY

SPY 0DTE options expire on the same day they are traded. Options are priced cheaply in the morning because they have minimal time value — a \$500 account can control thousands of dollars of notional exposure. On breakout days these options move explosively — a 0.5% SPY move can produce a 50–100% gain on an ATM 0DTE option. Because they expire at market close, there is no overnight risk and no assignment risk. The bot is always flat by 3:45 PM.

## Opening Range Construction

The bot records SPY's high and low during the 9:30–10:00 AM opening period. This forms the Opening Range — the reference zone for the day. The range must be between 0.25% and 1.25% of SPY's price to be valid. Ranges tighter than 0.25% indicate low-conviction markets. Ranges wider than 1.25% indicate excessive volatility where premiums are too expensive to trade efficiently.

On days where the opening range is too tight, the bot automatically expands the lookback window in 30-minute steps up to 12:00 PM until a valid range is established. This handles slow-starting days where the real directional move begins later in the session.

## The Four Entry Setups

Setup	Logic	Best Market Condition
SIMPLE_ORB	SPY closes beyond the range on 2 consecutive 5-min bars.	Clear VWP filing days with a clear directional bias from the open.
RETEST	SPY breaks the range, pulls back to retest the breakout level.	Days when a limited breakout followed by consolidation before the real move.
MOMO	SPY breaks the range on a single large-body, high-volume bar.	News-driven days (CPI, FOMC, jobs report, or major market events).
REVERSAL	SPY initially breaks in one direction (false breakout), then reverses.	Days with multiple range breaks and traps on the wrong side.

## Signal Window and Filters

The bot only accepts entries between 9:45 AM and 2:00 PM ET. The 9:30–9:45 AM period is excluded to let the opening range establish and avoid the chaotic first bars. After 2:00 PM there is insufficient time before the 3:45 PM force exit to capture a meaningful move.

**VWAP Filter:** Every entry requires SPY to be trading above VWAP for CALLs and below VWAP for PUTs at the moment of entry. This filters out counter-trend breakouts that tend to fail.

**Confirmation Filter:** SIMPLE\_ORB requires two consecutive 5-minute closes beyond the breakout level before entering. This reduces false breakout signals on choppy days.

### Option Selection

Phase	Account	Strike Target	Logic
Phase 1	Under \$5k	ATM, slides OTM	Small accounts need cheap contracts. Starts ATM, slides OTM until the contract fits the 90
Phase 2	\$5k–\$30k	ATM	Standard delta, best cost/move balance. Account can afford ATM without sliding.
Phase 3	\$30k–\$100k	1 strike ITM	Higher delta (0.6+), slower theta decay. More reliable on moderate moves.
Phase 4	\$100k+	2 strikes ITM	Deep ITM delta 0.7–0.8, behaves like stock. Maximum reliability, minimal theta bleed.

### Position Sizing

Account Phase	Allocation	Max Contracts T1	Max Contracts T2/3
Under \$500 — P1	90%	2	1
\$500–\$1,500 — P1	90%	3	2
\$1,500–\$3,000 — P1	90%	5	3
\$3,000–\$5,000 — P1	90%	7	5
\$5,000–\$30,000 — P2	50%	10	7
\$30,000–\$100,000 — P3	50%	15	11
\$100,000+ — P4	50%	25	18

Trade 2 and Trade 3 within the same day are sized at 75% of Trade 1 to protect capital as the session progresses. The bot uses AvailableFunds (settled cash) for sizing decisions to prevent order rejections due to unsettled trades.

### Smart Stop Loss System

Trade Condition	Base Stop	Time Tightening
Trade 1 — Always	-25% of premium	After 45 min below entry → -20%
Trade 2 — Prior trade was a WIN	-25% of premium	After 45 min below entry → -20%
Trade 2 — Prior trade was a LOSS	-20% of premium	Already at floor
Trade 3 — Always	-20% of premium	Already at floor

The time tightening rule exists because a trade that has been below the entry price for 45 minutes is showing weakness — tightening the stop prevents turning a small loss into a large one on stalled positions.

### Take-Profit Cascade and Stop Lock-In

Event	Action	Stop After Event
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TP1 hits (+40%)	Sell first tranche	Stop moves to breakeven (+3% buffer). Trade now locked in profit.
TP2 hits (+100%)	Sell second tranche	Stop locks above TP1 price. Remaining contracts trail 25% from peak.
TP3 hits (+200%)	Sell third tranche (P3+)	Stop locks above TP2 price. Remaining trail 25% from peak.
TP4 hits (+300%)	Sell fourth tranche (P4 only)	Runner trails 25% from peak until structure break or force exit.
Force exit (3:45 PM)	Sell ALL remaining contracts	End of session — no exceptions.

## Daily Risk Limits

Limit	Value	What Happens
Max trades/day	3 (P1/P2), 5 (P3), 7 (P4)	Bot continues scanning and sends signal alerts but takes no new positions.
Max stop-outs/day	2	Bot stops trading entirely for the rest of the day.
Portfolio daily stop	-25% from opening balance	Any open position is closed immediately. Bot stops all trading.
Entry cutoff	2:00 PM ET	No new entries. Insufficient time before force exit.
Force exit	3:45 PM ET	All positions closed at market. ODTE options expire at 4 PM.

## Session Recovery

If the bot is restarted at any point during the trading day — due to a crash, power outage, or accidental close — it automatically recovers the full session state before resuming. Trade and loss counts are restored from IBKR execution history. Any open SPY option positions are detected, and the bot resumes monitoring them with reconstructed stop and TP levels. The smart stop state is also restored so the correct stop percentage is applied to the next trade.

## Compounding Roadmap

Phase	Account	Contracts	Strike	TPs	Trades/Day
Phase 1	Under \$5k	2–7	OTM slide	TP1+TP2	3
Phase 2	\$5k–\$30k	Up to 10	ATM	TP1+TP2	3
Phase 3	\$30k–\$100k	Up to 15	1 ITM	TP1+TP2+TP3	5
Phase 4	\$100k+	Up to 25	2 ITM	TP1+TP2+TP3+TP4+Runner	7

This bot does not predict the market. It reads the opening range, waits for confirmed breakouts, and executes rules-based exits. Every entry is defined. Every exit is planned. The strategy works because discipline is built into the code — the bot has no opinion, no fear, and no greed. It only has rules.