GHB Portfolio Scanner - Complete Guide

Last Updated: January 16, 2026
Version: 2.0 (Price-Based Staged Entry System)

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What is the GHB Portfolio Scanner?

The **GHB Portfolio Scanner** is a weekly momentum-based trading system that identifies buy, hold, and sell signals for a curated universe of AI/technology stocks. The system generates a professional PDF report every Friday after market close to guide your Monday trading decisions.

Key Features

- **Weekly momentum signals** using Gold-Gray-Blue (GHB) state system
- **Price-based staged entry** for conviction positions (scale in as price enters target zones)
- **Custom position sizing** (TSLA 50%, NVDA 20%, others 7.5%)
- **Automated PDF reports** with actionable buy/sell recommendations
- **Portfolio tracking** with P&L; and signal monitoring

Performance

- **Backtest Period:** 2021-2025 (5 years)
- **CAGR:** 34.62%
- **Win Rate:** 36.1%
- **Average Trades:** 8 per year per position
- **Strategy:** Pure momentum (buy strength, sell weakness)

Initial Setup Guide

Setting Up Your Portfolio Configuration

Before running the scanner for the first time, you need to configure your portfolio settings. This includes your capital, position sizing strategy, custom allocations, and price targets.

Step 1: Locate the Configuration File

File: `data/portfolio_settings.json`

Open this file in VS Code or any text editor.

Step 2: Set Your Total Capital

Find the `starting_cash` field and set your total portfolio capital:

```
{ "starting_cash": 110000, ... }
```

Examples:
• $50,000 portfolio: `"starting_cash": 50000`
• $250,000 portfolio: `"starting_cash": 250000`
• $1,000,000 portfolio: `"starting_cash": 1000000`

Step 3: Configure Default Position Size

Set the default allocation for stocks without custom sizing:

```
{ ... "position_size_pct": 7.5, "max_positions": 10, ... }
```

Common Configurations:

Portfolio Style	position_size_pct	max_positions	Description
Concentrated	10%	10	Can deploy 100% in 10 positions
Balanced	7.5%	10	Some custom, mostly equal weight
Diversified	5%	15	More positions, smaller sizes

Current Setup (Default):
• `position_size_pct: 7.5` = Each non-custom stock gets 7.5%
• `max_positions: 10` = Maximum 10 holdings allowed

Math Check:
• Custom allocations (TSLA 50% + NVDA 20%) = 70%
• Remaining capacity = 30%
• At 7.5% each = 4 additional positions (30% ÷ 7.5%)
• Total positions = 2 custom + 4 default = 6 stocks [OK]

Step 4: Set Custom Position Allocations (Optional but Recommended)

Use `position_allocations` to assign higher conviction percentages to specific stocks.

Current Example:

```
{ ... "position_allocations": { "TSLA": 50, "NVDA": 20 }, ... }
```

How to Add More Custom Allocations:

Let's say you want to add PLTR at 15%:

```
{ ... "position_allocations": { "TSLA": 50, "NVDA": 20, "PLTR": 15 }, ... }
```

Rules:
• Total custom allocations should leave room for other positions
• Make sure total ≤ 100% when fully deployed
• Remaining capacity = 100% - (sum of custom allocations)

Example Capacity Calculation:
• TSLA 50% + NVDA 20% + PLTR 15% = 85% custom
• Remaining = 15%
• At 7.5% default = 2 more positions (15% ÷ 7.5%)
• Total: 3 custom + 2 default = 5 positions

Warning: If custom allocations exceed 100%, the scanner will not be able to deploy all positions!

Step 5: Set Price Targets for Staged Entry (Optional)

Use `price_targets` to define ideal buy zones for stocks you want to scale into strategically.

Current Example:

```
{ ... "price_targets": { "TSLA": { "target_low": 400.0, "target_high": 411.0, "notes": "Q1 pullback expected, ideal entry zone $400-411" }, "NVDA": { "target_low": 130.0, "target_high": 145.0, "notes": "Scale in on dips to $130s" } } }
```

How to Add Price Targets for Other Stocks:

Let's say you want to set targets for AMD:

```
{ ... "price_targets": { "TSLA": { "target_low": 400.0, "target_high": 411.0, "notes": "Q1 pullback expected, ideal entry zone $400-411" }, "NVDA": { "target_low": 130.0, "target_high": 145.0, "notes": "Scale in on dips to $130s" }, "AMD": { "target_low": 140.0, "target_high": 155.0, "notes": "Buy zone around $140-155, avoid above $160" } } }
```

How Price Targets Work:
• **Below target_low:** 50% initial fill (scale in on deeper dip)
• **In target zone:** 75% initial fill (optimal entry)
• **Above target_high:** 25% initial fill (wait for better price)

When to Use Price Targets:
• [OK] High conviction stocks you want to scale into carefully
• [OK] Stocks near key support/resistance levels
• [OK] When you expect pullback to specific price zone
• [X] Don't set targets for all 12 stocks (too complex)
• [X] Don't set targets if you're not sure about levels

Stocks Without Targets:
• Scanner defaults to 100% initial fill
• No staged entry, just normal position sizing

Step 6: Configure Conservative Mode (Optional)

```
{ ... "conservative_mode": true, ... }
```

What it does:
• `true`: Scanner recommends lower deployment in bearish conditions
• `false`: Scanner always recommends full deployment if signals available

Recommendation: Leave at `true` for most users

Step 7: Save and Validate Your Configuration

Before saving:
Check JSON syntax (no missing commas, brackets)
Verify custom allocations don't exceed 100%
Ensure price targets have both target_low and target_high
Confirm starting_cash matches your actual capital

Save the file (Ctrl+S in VS Code)

Validate by running scanner:
• Open `notebooks/ghb_portfolio_scanner.ipynb`
• Run the first few cells
• Check console output for "Variable Position Sizing Enabled"
• Verify allocations display correctly

Complete Configuration Example

Here's a fully configured `portfolio_settings.json` for a $110,000 portfolio with 3 custom allocations and price targets:

```
{ "starting_cash": 110000, "position_size_pct": 7.5, "max_positions": 10, "strategy_week": 1,
"conservative_mode": true, "position_allocations": { "TSLA": 50, "NVDA": 20, "PLTR": 15 },
"price_targets": { "TSLA": { "target_low": 400.0, "target_high": 411.0, "notes": "Q1 pullback
expected, ideal entry zone $400-411" }, "NVDA": { "target_low": 130.0, "target_high": 145.0,
"notes": "Scale in on dips to $130s" }, "PLTR": { "target_low": 65.0, "target_high": 75.0,
"notes": "Scale in around $65-75, avoid above $80" }, "ALAB": { "target_low": null,
"target_high": null }, "AMD": { "target_low": null, "target_high": null }, "ARM": {
"target_low": null, "target_high": null }, "ASML": { "target_low": null, "target_high": null
}, "AVGO": { "target_low": null, "target_high": null }, "GOOG": { "target_low": null,
"target_high": null }, "MRVL": { "target_low": null, "target_high": null }, "MU": {
"target_low": null, "target_high": null }, "TSM": { "target_low": null, "target_high": null }
} }
```

This configuration means:
• Total capital: $110,000
• TSLA: 50% ($55,000) with staged entry $400-411
• NVDA: 20% ($22,000) with staged entry $130-145
• PLTR: 15% ($16,500) with staged entry $65-75
• Remaining: 15% capacity for 2 more stocks at 7.5% each
• Others (ALAB, AMD, etc.): 7.5% each if P1 signal triggers

Common Setup Scenarios

Scenario A: Equal Weight (Simple)

Goal: All stocks get same allocation

```
{ "starting_cash": 100000, "position_size_pct": 10, "max_positions": 10,
"position_allocations": {}, "price_targets": {} }
```

Result: Each stock gets 10%, up to 10 positions

Scenario B: Two High Conviction (Current Setup)

Goal: Large TSLA + NVDA, others equal

```
{ "starting_cash": 110000, "position_size_pct": 7.5, "max_positions": 10,
"position_allocations": { "TSLA": 50, "NVDA": 20 } }
```

Result: TSLA 50%, NVDA 20%, others 7.5% each

Scenario C: Top 3 Conviction with Price Targets

Goal: Three large positions with careful entry timing

```
{ "starting_cash": 200000, "position_size_pct": 5, "max_positions": 12,
"position_allocations": { "TSLA": 30, "NVDA": 25, "PLTR": 20 }, "price_targets": { "TSLA":
{"target_low": 400, "target_high": 411}, "NVDA": {"target_low": 130, "target_high": 145},
"PLTR": {"target_low": 65, "target_high": 75} } }
```

Result:
• 3 custom positions = 75% ($150,000)
• Remaining 25% ($50,000) for 5 more at 5% each
• All custom positions use staged entry

Weekly Trading Schedule

*[!] CRITICAL: Only Run Scanner on **FRIDAY after 4:00 PM ET***

GHB Strategy uses weekly closing prices. Running mid-week produces false signals.

Your Weekly Routine

FRIDAY (After 4:00 PM ET)

Time Required: 10-15 minutes

Open `notebooks/ghb_portfolio_scanner.ipynb` in VS Code
Run all cells (Kernel → Run All)
Review generated PDF in `ghb_scanner_results/`
Note the action items:
- **SELL signals** (N2 positions - urgent)
- **BUY signals** (P1 opportunities - prioritize by quality)
- **HOLD signals** (P2/N1 positions - do nothing)

WEEKEND (Saturday/Sunday)

Time Required: 15-30 minutes

Review the PDF report thoroughly
Calculate exact position sizes using current prices
Verify you have sufficient cash for buys
Set up limit orders in your brokerage:
- **Sells:** Friday close × 0.99 (-1% for slippage)
- **Buys:** Friday close × 1.015 (+1.5% for slippage)
Mentally prepare to execute Monday

MONDAY (Market Open - 9:30 AM ET)

Time Required: 15-30 minutes

ORDER OF OPERATIONS:
9:30-10:00 AM - SELL FIRST [!]
- Execute ALL N2 sell signals immediately
- Raises cash and prevents further losses
- Use limit orders at Friday close × 0.99

10:00-10:30 AM - BUY SECOND
- Enter new P1 buy positions
- Be patient, wait for good fills
- Prioritize by Entry Quality (Pullback Buy > Healthy Buy > Extended)
- Use limit orders at Friday close × 1.015

After 10:30 AM - Review & Confirm
- Verify all orders filled
- Update `data/portfolio_positions.csv` if manually tracking

GHB Signal System Explained

The Four States

GHB categorizes stocks into 4 states based on price vs 200-day SMA (D200) and 4-week momentum (ROC):

P1 (GOLD) - Strong Buy Signal

• **Price:** Above D200
• **Momentum:** ROC > 5% OR distance from D200 > 10%
• **Action:** BUY (subject to entry quality filter)
• **Meaning:** Strong uptrend, positive momentum

P2 (GRAY) - Hold Signal

• **Price:** Above D200
• **Momentum:** ROC ≤ 5% AND distance ≤ 10%
• **Action:** HOLD
• **Meaning:** Consolidation above support, temporary pause

N1 (GRAY) - Hold Signal

• **Price:** Below D200 (but within 5%)
• **Momentum:** Shallow pullback
• **Action:** HOLD
• **Meaning:** Minor dip, could recover to P1

N2 (BLUE) - Sell Signal

• **Price:** More than 5% below D200
• **Momentum:** Weak/negative
• **Action:** SELL
• **Meaning:** Downtrend confirmed, exit required

Entry Quality Filter (NEW)

Not all P1 signals are equal. The scanner categorizes P1 opportunities by entry quality:

***[HOT] PULLBACK BUY** (Priority #1)*

• **Criteria:** P1 state BUT negative 4-week ROC
• **Meaning:** Dip-buying opportunity in uptrend
• **Action:** Highest priority buy
• **Example:** Stock pulled back 5% but still above D200

***[OK] HEALTHY BUY** (Priority #2)*

• **Criteria:** RSI < 70 AND distance from D200 < 30%
• **Meaning:** Ideal entry zone, not overextended
• **Action:** Full position size recommended

***[!] EXTENDED BUY** (Priority #3)*

• **Criteria:** RSI 70-80 OR distance 30-40%
• **Meaning:** Running hot, higher risk

• **Action:** Consider 50% position or wait for pullback

***[ALERT] OVERHEATED** (Avoid)

• **Criteria:** RSI > 80 AND distance > 40%
• **Meaning:** Parabolic, high reversal risk
• **Action:** Skip or wait for consolidation

Position Sizing Rules

Portfolio Configuration

Total Capital: $110,000 (configurable in `portfolio_settings.json`)

Custom Allocations (Conviction Positions)

Ticker	Allocation	Position Value	Rationale
TSLA	50%	$55,000	Core conviction - AI/autonomy thesis
NVDA	20%	$22,000	AI infrastructure leader
Others	7.5% each	$8,250	Diversification

Allocation Math

Remaining Capacity After Custom Allocations:
• TSLA + NVDA = 70% ($77,000)
• Remaining = 30% ($33,000)
• At 7.5% per position = 4 additional positions possible
• **Max Portfolio:** TSLA + NVDA + 4 others = 6 stocks (within 10 max)

Position Size Calculation

For **custom allocations** (TSLA, NVDA):

```
Position Value = Total Capital × Allocation % Example: TSLA = $110,000 × 50% = $55,000
```

For **default allocations** (all others):

```
Position Value = Total Capital × 7.5% Example: AMD = $110,000 × 7.5% = $8,250
```

Share Calculation

```
Shares = Position Value ÷ Current Price Example: TSLA at $445 → 55,000 ÷ 445 = 123 shares
```

Price-Based Staged Entry System

Overview

For stocks with **price targets** (currently TSLA and NVDA), the scanner uses a staged entry approach to scale into positions as price enters target zones.

Price Targets (Current)

TSLA - Target Zone: $400-$411

• **Thesis:** Q1 pullback expected, ideal entry in low $400s
• **Strategy:** Scale in aggressively at target prices

NVDA - Target Zone: $130-$145

• **Thesis:** Scale in on dips to $130s
• **Strategy:** Add on weakness in target range

Initial Fill Percentage Rules

The scanner automatically calculates initial position size based on **price vs target zone**:

Price Location	Initial Fill %	Rationale
Below Target Low	50%	Very aggressive - scale in deeper on dip
In Target Zone	75%	Optimal entry - large position
Above Target High	25%	Conservative - wait for better entry

Example: TSLA at Different Prices

Scenario 1: TSLA at $390 (Below $400 target)
• Initial Fill: 50% of $55,000 = $27,500
• Reasoning: Great price, but scale in gradually
• Add-on trigger: If rebounds into $400-411 zone

Scenario 2: TSLA at $405 (In $400-$411 zone) [OK] IDEAL
• Initial Fill: 75% of $55,000 = $41,250
• Reasoning: In sweet spot, take large position
• Add-on trigger: If dips below $400 or confirms strength

Scenario 3: TSLA at $450 (Above $411)
• Initial Fill: 25% of $55,000 = $13,750
• Reasoning: Too expensive, small toe-hold
• Add-on trigger: If pulls back into $400-411 zone

Add-On Opportunities

The scanner continuously monitors positions for add-on signals:

Add-On Triggers:
• Position currently at 25% or 50% fill

• Price dips into target zone (from above)
• Price breaks below target zone (deeper dip opportunity)

Add-On Amounts:
• 25% increment (to reach 75% or 100%)
• 50% increment (to reach 100% from 50%)

Stock Universe

Current Universe: 12 AI/Technology Stocks

Investment Thesis: AI infrastructure buildout 2023-2032

Ticker	Company	Category	Role in AI
ALAB	Astera Labs	Connectivity	AI data center connectivity
AMD	Advanced Micro Devices	Chips	AI processors, NVIDIA competitor
ARM	ARM Holdings	Chips	Mobile/edge AI architecture
ASML	ASML	Equipment	Chip manufacturing equipment
AVGO	Broadcom	Infrastructure	AI networking/infrastructure
GOOG	Google	Cloud/AI	AI models, cloud infrastructure
MRVL	Marvell	Infrastructure	Data infrastructure/storage
MU	Micron	Memory	AI memory/storage chips
NVDA	NVIDIA	Chips	AI GPU leader (best performer)
PLTR	Palantir	Software	AI/ML software platforms
TSLA	Tesla	Autonomy	AI-powered autonomy/robotics
TSM	Taiwan Semi	Manufacturing	AI chip fabrication

Universe Selection Criteria

Volatility Requirements (must meet ONE):
• Standard Deviation ≥ 30%
• Max Win ≥ 150%
• Average Win ≥ 40%

Why Volatile Stocks?
• Momentum strategies thrive on volatility
• Backtest showed +601% avg returns on volatile stocks
• Low volatility stocks averaged -162% (losses)

Universe Reoptimization

Frequency: Quarterly (every 13 weeks) or when alerts trigger
Purpose: Ensure you're trading the best momentum stocks available

The scanner includes **automated health monitoring** that alerts you when universe refresh is needed.

When to Reoptimize

Triggered by Scanner Alerts:
• [CRITICAL] **Critical:** >30% of universe in N2 state (immediate action required)
• **Warning:** >20% in N2 or stale universe (>6 months)
• **Warning:** Low opportunity (<20% in P1 signals)
• **Warning:** Performance lag >10% below expected

Scheduled Maintenance:
• **Quarterly Review:** Every 13 weeks (automatic counter in scanner)
• **Annual Full Refresh:** January each year (mandatory)

Quick Reoptimization Process

Use the Automated Notebook (Recommended):
Open `notebooks/universe_reoptimization.ipynb`
Run all cells (10-15 minutes)
Review side-by-side comparison
Copy/paste generated code if approved

The notebook automatically:
• Screens full S&P; 500 (~500 stocks)
• Identifies top candidates by CAGR
• Compares new vs current universe
• Shows which stocks to keep/add/drop
• Generates ready-to-paste code updates
• Saves timestamped analysis report

Files to Update:
`notebooks/ghb_portfolio_scanner.ipynb` - Update `GHB_UNIVERSE` list
`data/ghb_optimized_portfolio.txt` - Update stock list (alphabetical)

Transition Strategies

Option A - Hybrid (Recommended):
• Exit removed stocks that are P2/N1/N2 (weak)
• Keep removed stocks that are P1 until N2 exit
• Prioritize entering new universe stocks
• Complete transition over 2-4 weeks

Option B - Gradual (Conservative):
• Keep all existing positions until N2
• Only enter new positions from updated universe
• Complete transition over 4-8 weeks

Option C - Immediate (Aggressive):
• Sell all stocks not in new universe Monday 9:30am
• Enter new P1 signals same day
• Complete transition in 1 week

Universe Health Monitoring

Automated Alert System

The scanner continuously monitors 4 key health metrics and generates alerts in the PDF report when action is needed.

Alert Levels

[OK] GREEN - Healthy

• No action needed
• Universe performing as expected
• Continue weekly trading normally

YELLOW - Warning

• Re-optimization recommended within 1-2 months
• Plan screening but not urgent

• Monitor conditions weekly

[CRITICAL] RED - Critical

• Re-optimization REQUIRED before next trade
• Do not ignore
• Action needed immediately

Monitored Conditions

1. Universe Degradation

Metric: Percentage of stocks in N2 (SELL) state

Thresholds:
• Warning: >20% in N2
• [CRITICAL] Critical: >30% in N2

Why it matters: Too many weak stocks indicates universe selection may be broken

Actions:
• Check if market-wide correction or stock-specific weakness
• If market-wide: Wait for recovery
• If stock-specific: Re-screen S&P; 500 immediately

Example Alert:

```
[CRITICAL] CRITICAL: 35% of universe in N2 state (7/12 stocks) Action: Re-screen S&P; 500 for new candidates
```

2. Performance Lag

Metric: Portfolio return vs expected (based on backtest CAGR)

Thresholds:
• Warning: >10% below expected (after 12+ weeks)

Why it matters: Persistent underperformance suggests wrong stocks selected

Actions:
• Review which stocks are dragging performance
• Consider replacing worst performers
• Re-screen if gap persists 2+ months

Example Alert:

```
WARNING: Performance -12.5% below expected Expected: +15.2% | Actual: +2.7% | Gap: -12.5% Action: Review underperforming holdings
```

Note: Only triggers after 12+ weeks to avoid false alarms from normal volatility

3. Low Opportunity Environment

Metric: Percentage of stocks showing P1 (BUY) signals

Thresholds:
• Warning: <20% in P1
• Watch: <30% in P1

Why it matters: Few opportunities may indicate:
• Market rotation away from your sectors
• Universe too concentrated in declining sectors

• Bear market requiring defensive positioning

Actions:
• Check sector concentration
• Consider broader universe or different sectors
• May need to add defensive/value stocks

Example Alert:

```
WARNING: Only 8% of universe showing P1 signals (1/12 stocks) Market may be rotating away from AI/tech Action: Consider sector diversification
```

4. Stale Universe

Metric: Time since last universe refresh

Thresholds:
• Warning: >6 months (26 weeks) since last update
• [CRITICAL] Critical: >12 months (52 weeks) since last update

Why it matters:
• Company fundamentals change over time
• New winners emerge (e.g., ALAB in 2024)
• Old winners fade (e.g., MRNA post-2021)

Actions:
• 6+ months: Plan re-screen within 4-8 weeks
• 12+ months: Execute re-screen immediately

Example Alert:

```
WARNING: Universe last updated 28 weeks ago Action: Schedule re-optimization within next month
```

How to Respond to Alerts

Single Alert (Yellow)

• **Action:** Note it, monitor weekly
• **Timeline:** Re-optimize within 1-2 months
• **Trading:** Continue normally

Multiple Alerts (Yellow)

• **Action:** Plan re-optimization soon
• **Timeline:** Re-optimize within 2-4 weeks
• **Trading:** Be more selective with entries

Any Critical Alert ([CRITICAL] Red)

• **Action:** Re-optimize immediately
• **Timeline:** This weekend or next
• **Trading:** Pause new entries until refresh complete

Where to Find Alerts

In PDF Report - Section: "Universe Health Alerts"

Located after market sentiment section, before action items.

Shows:
• Alert severity ([CRITICAL]//[OK])

• Specific condition triggered
• Current metrics
• Recommended action

Example:

```
Universe Health Alerts • WARNING: 25% of universe in N2 state (3/12 stocks) Current: AMD, MU, ARM showing weakness Action: Monitor for further deterioration • WARNING: Universe age 30 weeks Action: Plan re-screen within 1 month
```

How to Run the Scanner

Prerequisites

Python Environment
- Python 3.8+ with virtual environment
- Required packages: `pandas`, `yfinance`, `reportlab`

VS Code Setup
- Jupyter extension installed
- Python extension installed

Configuration Files
- `data/portfolio_settings.json` - Portfolio settings
- `data/portfolio_positions.csv` - Current holdings (optional)

Step-by-Step Execution

1. Open the Notebook

```
File: notebooks/ghb_portfolio_scanner.ipynb
```

2. Verify It's Friday After 4 PM ET

The notebook has a warning at the top. **Do not run mid-week!**

3. Run All Cells

• Click "Run All" or press `Ctrl+Shift+P` → "Run All Cells"
• Execution time: ~2-3 minutes

4. Review Console Output

Monitor for:
• [OK] Data downloaded successfully
• [OK] Signals calculated
• [OK] PDF generated successfully

5. Open the Generated PDF

```
Location: ghb_scanner_results/ghb_weekly_report_YYYYMMDD_HHMM.pdf
```

Interpreting the Results

PDF Report Structure

Section 1: Market Sentiment*

• Overall universe health (% P1, P2, N1, N2)
• Bullish/Neutral/Bearish classification
• Portfolio deployment recommendation

Section 2: Top Buy Candidates (P1 Signals)*

Organized by Entry Quality:

PULLBACK BUY: (Highest priority)
• Stocks showing strength but pulling back
• Example: `• TSLA (50%), 75% partial fill (In zone $400-$411), 31 shares @ $445.15 = $13,800`

HEALTHY BUY: (Good entries)
• RSI healthy, not overextended
• Example: `• NVDA (20%), 25% partial fill (Above target $145), 29 shares @ $189.86 = $5,506`

EXTENDED BUY: (Proceed with caution)
• Already had a big run, consider smaller size

Section 3: Action Items for Monday*

1. SELL Signals
• Lists N2 positions to exit
• Shows current P&L; on each position

2. BUY Signals
• Grouped by quality (Pullback Buy / Healthy Buy / Extended Buy)
• Shows allocation, fill %, target zone info, shares, and cost
• Total capital to deploy

3. MONITOR Signals
• Existing positions in P1/P2/N1 (healthy holds)

Section 4: Current Portfolio Holdings*

• All positions with entry price, current price, P&L;
• Total portfolio value and deployment %
• Cash remaining

Section 5: P2/N1 Signals (Hold)*

• Stocks in consolidation or shallow pullback
• Monitor for upgrade to P1 or downgrade to N2

Section 6: N2 Signals (Sell)*

• Stocks in downtrend
• Sell if you own them

Trading Rules & Discipline

Mandatory Rules

Rule 1: Only Trade on Fridays/Mondays*

- **Scanner:** Friday after 4 PM ET only
- **Execution:** Monday market hours only
- **Why:** Weekly strategy requires weekly discipline

Rule 2: Sell Before You Buy*

- Always execute N2 sells first (9:30-10:00 AM)
- Then execute P1 buys (10:00-10:30 AM)
- **Why:** Risk management and cash availability

Rule 3: Follow Entry Quality Priority*

Pullback Buys (highest priority)
Healthy Buys (full size)
Extended Buys (reduced size or skip)
Overheated (skip entirely)

Rule 4: Respect Position Limits*

- **Max positions:** 10
- **Custom allocations:** TSLA 50%, NVDA 20%
- **Default allocation:** 7.5% for others
- **Never exceed:** 100% portfolio deployment

Rule 5: Honor Staged Entry Rules*

- Follow initial fill % based on price vs target
- Wait for add-on triggers before scaling in
- Don't rush to 100% fill immediately

Exit Discipline

When to Sell (N2 Signal Appears)*

- Price > 5% below D200
- Weak momentum confirmed
- **Action:** Sell 100% of position Monday morning

When NOT to Sell*

- P2 state (consolidation) - this is normal
- N1 state (shallow dip) - could bounce back
- Minor RSI overbought (not an exit signal)

Why Exit Discipline Matters*

- Average holding: 45.8 weeks (~1 year)
- Winners average +74% gains
- Premature exit = missed gains

Position Management

When to Add to Positions

- Scanner shows add-on opportunity
- Price enters target zone from above
- Signal upgrades (P2 → P1, N1 → P1)

When to Trim Positions

- **Never trim on GHB strategy**
- Let winners run until N2 appears
- Momentum strategies need time to develop

Configuration Reference

File: `data/portfolio_settings.json`

```
{ "starting_cash": 110000, "position_size_pct": 7.5, "max_positions": 10, "strategy_week": 1,
"conservative_mode": true, "position_allocations": { "TSLA": 50, "NVDA": 20 },
"price_targets": { "TSLA": { "target_low": 400.0, "target_high": 411.0, "notes": "Q1 pullback
expected, ideal entry zone $400-411" }, "NVDA": { "target_low": 130.0, "target_high": 145.0,
"notes": "Scale in on dips to $130s" } } }
```

Configuration Fields Explained

Field	Type	Description	Example
`starting_cash`	Number	Total portfolio capital	110000
`position_size_pct`	Number	Default allocation for non-custom positions	7.5
`max_positions`	Number	Maximum holdings allowed	10
`strategy_week`	Number	Reoptimization counter (internal)	1
`conservative_mode`	Boolean	Conservative deployment logic	true
`position_allocations`	Object	Custom allocations per ticker	`{"TSLA": 50}`
`price_targets`	Object	Price-based staging targets	See above

Editing Configuration

Open `data/portfolio_settings.json` in VS Code
Modify values as needed
Save file
Re-run scanner to apply changes

Common Changes:
• Adjust `starting_cash` for different capital levels
• Change `position_allocations` for different conviction levels
• Update `price_targets` for new entry zones
• Modify `max_positions` for portfolio concentration

Troubleshooting

Scanner Won't Run

Error: Kernel not connected
Solution: Select Python environment in VS Code (Ctrl+Shift+P → "Select Interpreter")

Data Download Fails

Error: Yahoo Finance timeout
Solution: Check internet connection, wait 5 minutes, retry

PDF Generation Error

Error: reportlab import error
Solution: Install missing package: `pip install reportlab`

Signals Look Wrong

Error: Getting mid-week signals
Solution: Only run Friday after 4 PM ET. Mid-week data is incomplete.

Quick Reference Card

Weekly Checklist

• [ ] Friday 4 PM ET: Run scanner
• [ ] Friday evening: Review PDF report
• [ ] Weekend: Plan trades, set up limit orders
• [ ] Monday 9:30 AM: Execute sells first
• [ ] Monday 10:00 AM: Execute buys second
• [ ] Monday after trades: Update positions CSV (if tracking manually)

Signal Quick Reference

• **P1 (GOLD)** → Buy (if entry quality good)
• **P2 (GRAY)** → Hold (consolidation)
• **N1 (GRAY)** → Hold (shallow dip)
• **N2 (BLUE)** → Sell immediately

Entry Quality Priority

[HOT] Pullback Buy (best)
[OK] Healthy Buy (good)
[!] Extended Buy (caution)
[ALERT] Overheated (avoid)

Position Sizing Cheat Sheet

• TSLA: 50% = $55,000
• NVDA: 20% = $22,000
• Others: 7.5% = $8,250
• Max positions: 10

Version History

Version 2.0 (January 16, 2026)

• [OK] Price-based staged entry system
• [OK] Custom position allocations (TSLA 50%, NVDA 20%)
• [OK] Entry quality categorization
• [OK] PDF report with grouped buy recommendations
• [OK] Add-on opportunity detection

Version 1.0 (January 2026)

• Initial release
• Basic GHB signal generation
• Equal allocation (10% per position)
• Simple PDF reports

Support & Documentation

Related Files

• **Notebook:** `notebooks/ghb_portfolio_scanner.ipynb`
• **Settings:** `data/portfolio_settings.json`
• **Positions:** `data/portfolio_positions.csv`
• **Results:** `ghb_scanner_results/` (PDF reports)

Additional Guides (Archived)

• `docs/archive_backtest/` - Historical backtest documentation
• `docs/archive/` - Outdated strategy guides

Questions?

Review this guide thoroughly. All trading rules, position sizing, and signal interpretation are documented above.

Last Updated: January 16, 2026
Document Status: Active (Master Reference)