CANSLIM Trading System

User Guide

Part I: Foundations

Understanding the CANSLIM Methodology

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Chapter 1: What Is CANSLIM?

If you have ever wondered what separates the stocks that double or triple in price from the thousands that go nowhere, you are asking the right question. For more than four decades, a man named William J. O'Neil studied every major stock market winner in the United States going back to the 1880s. He was not interested in theories or opinions. He wanted to know, with data, what these winning stocks had in common before they made their biggest moves.

What he found was remarkably consistent. Whether it was a stock from the 1920s or the 2020s, the same handful of characteristics appeared again and again in the weeks and months before a stock launched into a major price advance. He organized these characteristics into a seven-letter acronym that has become one of the most widely followed growth stock selection frameworks in investing history: CANSLIM.

CANSLIM is not a prediction system. It does not try to guess where the market is going or pick stocks based on hunches. Instead, it is a set of observable, measurable criteria that identify stocks with the highest probability of making significant gains. Think of it as a checklist that the greatest winning stocks have historically passed before they began their biggest runs.

The automated trading system described in this guide takes each of these seven criteria and turns them into something you can measure, score, and monitor in real time. Before we get to the technology, though, you need to understand the methodology itself. Let us walk through each letter.

1.1 The Seven Letters Explained

C — Current Quarterly Earnings Per Share

The C stands for current quarterly earnings, and it is the single most important fundamental factor in the CANSLIM framework. O'Neil's research showed that the vast majority of the biggest stock market winners displayed strong earnings growth in the most recent quarter before their stock price took off.

What you are looking for is a company that has reported a significant increase in its most recent quarterly earnings per share (EPS) compared to the same quarter one year ago. A minimum increase of 25% is the general guideline, but the best performers often show 50%, 100%, or even higher growth. The comparison is always year-over-year for the same quarter, which eliminates seasonal distortions. For example, you would compare the fourth quarter of this year to the fourth quarter of last year, not to the third quarter of this year.

It is not enough to just look at one quarter, either. You want to see that the rate of earnings growth is accelerating. If a company grew earnings 15% two quarters ago, 25% last quarter,

and 40% this quarter, that acceleration pattern is exactly what precedes big stock moves. Decelerating earnings, where the growth rate is slowing even if still positive, is often a warning sign.

How the System Uses This

The CANSLIM Monitor captures the EPS Rating from MarketSurge, which is a proprietary score from 1 to 99 that measures the strength of a company's recent earnings growth. An EPS Rating of 90 means the company's earnings growth is stronger than 90% of all publicly traded companies. The system uses this rating as one factor in its overall scoring engine.

A — Annual Earnings Growth

While the C focuses on the most recent quarter, the A looks at the bigger picture. You want to see that a company has a track record of growing its earnings year over year, not just one good quarter. O'Neil's research indicates that the best stocks typically show annual earnings growth of at least 25% per year over the most recent three to five years.

This requirement filters out companies that might have a one-time pop in earnings due to an accounting change, a favorable comparison against a weak prior period, or some other non-recurring event. If a company has been compounding its earnings at 25% or more annually for several years, that is a sign of a genuinely strong, growing business.

Return on equity (ROE) is another metric worth checking here. O'Neil suggests a minimum ROE of 17%, which indicates the company is generating strong returns on the capital it has invested. Companies with both high earnings growth and high ROE are using their resources efficiently to produce expanding profits.

N — New Product, New Management, New Price High

The N reminds you to look for something new driving the company's growth. The biggest stock market winners are almost always companies experiencing a significant catalyst. This could be a revolutionary new product or service (think of Apple when it launched the iPhone), new management that is turning the company around, or a new industry condition that creates unprecedented demand.

The other critical part of the N is the new price high. This is counterintuitive for many people. Most investors instinctively want to buy stocks that are "cheap" or have fallen from a higher price. O'Neil's research shows the opposite: stocks making new 52-week price highs tend to continue going higher, while stocks making new lows tend to continue going lower. The best time to buy is when a stock is breaking out to new highs from a consolidation period, not when it is sitting near its lows.

This concept is challenging for beginners because it goes against our natural instinct to look for bargains. But growth investing is not bargain hunting. You are looking for the strongest companies in the strongest position, and new highs signal strength.

S — Supply and Demand

The S stands for supply and demand, and it is where chart reading enters the picture. In its simplest form, supply and demand in the stock market means: how many shares are available to trade, and how aggressively are buyers and sellers competing for them?

Volume is the key indicator here. Volume tells you how many shares traded on a given day, and changes in volume reveal whether large institutional investors (mutual funds, pension funds, hedge funds) are actively buying or selling a stock. When a stock advances on volume that is significantly higher than its average, that is a sign of strong institutional demand. When a stock declines on light volume, it suggests that sellers are not particularly aggressive and the stock's uptrend is likely intact.

O'Neil identified a specific threshold: on a valid breakout day, you want to see volume at least 40% to 50% above the stock's 50-day average volume. This confirms that institutions are committing real capital to the stock, not just retail traders making small bets. Without volume confirmation, a price move is suspect.

How the System Uses This

The CANSLIM Monitor tracks real-time volume data from Interactive Brokers (IBKR) and compares it against the stock's 50-day average volume. When a stock crosses its pivot point, the system checks whether volume is at least 1.5 times (150%) the average. Breakout alerts are flagged as volume-confirmed or not, so you always know whether the institutions are backing the move.

L — Leader or Laggard

Not all stocks are created equal. In any market, some stocks are leading the advance while others are merely tagging along or falling behind. The L tells you to focus exclusively on the leaders and avoid the laggards.

The primary tool for measuring leadership is the Relative Strength (RS) Rating, a proprietary metric from Investor's Business Daily (IBD). The RS Rating is a score from 1 to 99 that ranks a stock's price performance over the past 12 months against all other stocks. An RS Rating of 95 means the stock has outperformed 95% of all other stocks in terms of price performance.

O'Neil's research shows a clear relationship between RS Ratings and future stock performance. Stocks with RS Ratings of 80 or above at the time of their breakout significantly outperform the market. Stocks with RS Ratings below 70 rarely become big winners. This is one of the most predictive single factors in the entire framework.

Key Insight: The RS Rating Floor

Our system's validation testing confirmed O'Neil's findings with striking clarity. Stocks with RS Ratings of 90 or above at breakout had a 75% success rate. Stocks with RS Ratings below 70 showed a 0% success rate in our testing. Based on this data, the system enforces an immutable rule: any stock with an RS Rating below 70 is automatically capped at a grade of C, regardless of how strong its other factors might be. This single rule has been one of the system's most effective risk filters.

I — Institutional Sponsorship

Individual investors do not move stock prices in any meaningful way. It is the large institutions, the mutual funds managing billions of dollars, the pension funds, the insurance companies, and the endowments, that drive major price moves. When you see a stock advancing on heavy volume, that is institutional money at work.

The I in CANSLIM tells you to verify that institutional investors are actively accumulating shares. You want to see the number of institutional owners increasing quarter over quarter. A stock that has 100 mutual funds owning it in the first quarter and 130 in the second quarter is showing institutional accumulation. If that number is declining, institutions are heading for the exits, and you should not be walking in the front door.

Quality matters as much as quantity. It is not just about how many funds own the stock, but which funds. IBD tracks approximately 20 high-performing mutual funds and monitors whether these "smart money" managers are buying or selling specific stocks. Seeing top-performing fund managers adding to their positions in a stock is a strong vote of confidence.

Where to Find This Data

In MarketSurge, you can view institutional ownership on the Owners and Funds tab for any stock. This tab shows you the total number of funds holding the stock, how that number has changed over the last eight quarters, and whether specific high-performing funds tracked by IBD are among the holders. The Accumulation/Distribution (A/D) Rating, shown as a letter grade from A to E, summarizes whether institutional investors are net buyers (A or B) or net sellers (D or E) over the past 13 weeks.

M — Market Direction

This is the most important letter in the entire acronym, and it is the one that most beginners overlook. You could find the perfect stock with explosive earnings, a revolutionary new product, heavy institutional buying, and a pristine chart pattern, and it will still fail if the overall market is headed down. O'Neil's research shows that roughly three out of four stocks follow the general direction of the market. When the market is in a downtrend, the odds are stacked heavily against you.

Market direction is so critical to the CANSLIM framework that it has its own dedicated chapter in this guide (Chapter 2). IBD tracks market conditions through two complementary systems. The first is the market trend status, which classifies the market as Confirmed Uptrend, Uptrend Under Pressure, or Market in Correction. The second, and more granular, is the recommended exposure level, which uses a percentage scale in five tiers from 0-20% (maximum caution) up to 80-100% (full aggression). These exposure levels tell you not just whether to buy, but how much of your capital should be deployed given current conditions. The system monitors both automatically through its Market Regime Thread.

The discipline to step aside when the market is unfavorable is what separates successful CANSLIM practitioners from those who struggle. You do not need to be in the market at all times. The best investors are often out of the market entirely during corrections, preserving their capital and their mental clarity for when conditions improve.

1.2 Why Rules-Based Investing Works

If you have ever bought a stock because it "felt right" or because a friend recommended it, you have experienced discretionary investing. Discretionary approaches rely on judgment, intuition, and often emotion. The problem is that human emotions are almost perfectly backwards when it comes to the stock market. We feel most confident at market tops (when prices are high and everyone is optimistic) and most fearful at market bottoms (when prices are low and opportunities are greatest).

Rules-based investing replaces emotion with process. Instead of asking "Do I feel good about this stock?" you ask "Does this stock meet my criteria?" Instead of hoping a losing trade will recover, you have a predetermined stop loss that takes you out before the loss grows. Instead of selling a winner too early because you are afraid of giving back profits, you have profit targets and hold rules that keep you in for the bigger move.

William O'Neil understood this deeply. His entire methodology is built on the premise that if you study what worked in the past and apply those findings consistently, you will outperform investors who rely on gut feeling, tips, or market commentary. The seven CANSLIM criteria are not arbitrary. They are the empirical result of studying over a century of stock market data.

Consider the math of the CANSLIM sell discipline. If you cut every loss at 7-8% below your purchase price and take profits at 20-25%, you can be wrong on two out of three trades and still come out ahead. Lose 8% twice (that is negative 16%) and gain 25% once, and you are still net positive. That is a powerful asymmetry, but it only works if you follow the rules consistently. Miss even one stop loss, let a loss grow to 20% or 30%, and it takes a much bigger gain just to break even.

> **O'Neil's Golden Rule**

"You can be right once and wrong twice and still come out ahead." This math only works if you stick to the discipline: cut all losses at 7-8% and take profits at 20-25%. The system enforces these rules through automated stop loss alerts and profit target notifications, helping remove the emotional temptation to hold a loser or sell a winner too soon.

1.3 How This System Automates CANSLIM

Knowing the CANSLIM methodology is one thing. Applying it consistently, every day, across dozens of stocks, while managing the emotional pressures of real money on the line, is something else entirely. That is the problem this system was built to solve.

The CANSLIM Monitor is a Python-based application that runs as a background service on your computer. It connects to real-time market data, continuously monitors your watchlist and open positions, scores every setup using the CANSLIM criteria described above, and sends you alerts on Discord when action is needed. You do the research and make the final decisions. The system makes sure you never miss a signal and never forget a rule.

Here is how each CANSLIM factor maps to the system's capabilities:

CANSLIM Factor	Manual Process	How the System Automates It
C — Current Earnings	Look up EPS on MarketSurge each time you evaluate a stock	EPS Rating captured from MarketSurge data and stored in the database; factored into scoring
A — Annual Earnings	Review multi-year earnings history in company profile	Composite Rating incorporates annual growth trends; tracked as a scoring input
N — New / Price Highs	Manually check news and scan for stocks at new highs	System monitors stocks approaching and crossing pivot points (new price highs from bases)
S — Supply & Demand	Watch volume bars on charts throughout the day	Real-time volume monitoring via IBKR; alerts flag whether breakout volume meets the 1.5x threshold
L — Leader / Laggard	Check RS Rating periodically; easy to forget	RS Rating stored and scored automatically; floor rule enforced so weak stocks never get a high grade
I — Institutional	Navigate to Owners tab in MarketSurge for each stock	A/D Rating and fund ownership data captured at entry; institutional quality tracked in outcomes database
M — Market Direction	Read The Big Picture article and track distribution days yourself	Market Regime Thread runs daily at 8:30 AM; counts distribution days, detects follow-through days, and sends morning briefings via Discord

The system does not replace your judgment. It amplifies it. You still decide which stocks to research, which patterns look constructive, and when to pull the trigger. But the system ensures you have the right data at the right time, your sell rules are enforced, and you never lose track of

a position's status. Think of it as a disciplined co-pilot that watches the instruments while you fly the plane.

Chapter 2: Understanding Market Direction

Of all seven CANSLIM factors, market direction is the one that can override everything else. A stock with perfect fundamentals, a textbook chart pattern, and heavy institutional buying will still struggle if the overall market is declining. O'Neil's research showed that approximately three out of four stocks move in the same direction as the general market. When the market is falling, most stocks fall with it, regardless of their individual merits.

This means that knowing the market's condition is not optional. It is the first question you should ask every single day before doing anything else: Is the market in a condition that supports buying, or should I be protecting capital?

IBD developed a systematic framework for answering this question. It does not rely on opinions, predictions, or economic forecasts. It looks directly at what the market itself is doing, as reflected in the price and volume behavior of the major indexes: the S&P 500 and the NASDAQ Composite. These two indexes are the barometers the system watches.

2.1 Market Trend Status and Exposure Levels

IBD uses two complementary systems to communicate market conditions. The first is the traditional market trend status, which provides a broad classification. The second is the recommended exposure level, a more granular percentage scale that was introduced to better handle the increased volatility of modern markets. Together, they give you a precise, actionable read on how aggressively you should be trading at any given moment.

The Market Trend Status

At its foundation, IBD classifies the market into one of three broad states. These have been part of the methodology since its inception and remain the backbone of market direction analysis.

Confirmed Uptrend: The market is trending higher, institutional investors are actively buying, and conditions are favorable for breakouts to succeed. This status is established after a valid follow-through day (covered in section 2.2) and is maintained as long as distribution day activity remains manageable.

Uptrend Under Pressure: The market is still technically in an uptrend, but distribution days are accumulating. Institutional selling is increasing. The trend has not broken, but the warning signs are growing. This is the yellow light.

Market in Correction: Distribution days have clustered to the point where institutional selling has overwhelmed the buyers. Three out of four stocks decline during corrections. This is the red light: stop buying and focus on capital preservation.

The Five-Tier Exposure Scale

While the three-state system tells you the broad direction, IBD recognized that modern markets require more nuance. Under the old approach, a Confirmed Uptrend meant you were essentially 100% invested, and a Market in Correction meant you were completely on the sidelines. There was no middle ground. In a volatile market that can shift quickly, these all-or-nothing rules were too blunt.

To address this, IBD introduced a recommended exposure level expressed as a percentage range in 20% increments. This scale is published daily on investors.com and is updated as market conditions change, sometimes within the same week. It tells you not just whether to buy, but how much of your total capital should be committed to the market.

The five tiers of recommended exposure are:

0% to 20% Exposure — Maximum Caution

This is the lowest tier, and it almost always accompanies a Market in Correction status or severe Uptrend Under Pressure. At this level, the market environment is hostile to new purchases. You should cut all losing positions, avoid any new buys, and get out of the market as much as possible. The goal is capital preservation. Even if you see a stock setting up beautifully, the odds of a successful breakout in this environment are very low because the overall market tide is pulling everything down.

This is also the tier where you do your most important preparation work. While the market is correcting, you should be building your watchlist of leading stocks that are holding up well and forming bases. These are the stocks you will want to buy when conditions improve.

20% to 40% Exposure — Cautious Re-Entry

This tier is characteristic of the period immediately following a follow-through day. The market has signaled a potential new uptrend, but the rally is unproven. IBD is saying: you can start putting some money to work, but do not go all in. Keep most of your capital in cash and commit only a small portion to test the waters.

At this level, you may see some stocks with proper bases starting to break out, but not all of them will have strong volume confirmation. Be very selective. Use smaller position sizes. The market still has to prove itself, and many follow-through days fail. If the rally is genuine, you will have plenty of time to increase your exposure as conditions improve.

40% to 60% Exposure — Middle Ground

This is the neutral zone. When you are rising into this tier from below, it means the market rally is gaining traction. You are starting to see the major indexes accumulate (more up days on rising volume) and more quality stocks forming proper bases. When you are dropping into this tier from above, it means the market is showing signs of fatigue and you should be trimming positions and becoming more defensive.

The direction of the change matters as much as the level itself. Moving up into 40-60% is an encouraging signal that suggests continuing to build positions gradually. Moving down into 40-60% from higher exposure is a signal to start locking in gains and tightening stops.

60% to 80% Exposure — Confident Investing

At this level, the market is showing clear signs of institutional accumulation. Funds are buying quality stocks and industry groups aggressively. IBD says you can warrant more aggressive buying at this point, but with an important caveat: these levels are fluid and can change daily or even intra-week. Do not treat a 60-80% exposure reading as a permanent green light. Continue monitoring the market trend and be prepared to scale back if conditions deteriorate.

This is typically the sweet spot for active growth investing. The market has proven itself through multiple successful breakouts, the uptrend has been confirmed, and the risk/reward for new purchases is favorable. Most of your watchlist scanning and position building happens at this tier.

80% to 100% Exposure — Full Aggression

This is the best environment for growth stock investing. The market is in a confirmed uptrend with minimal distribution day activity. Plenty of high-quality stocks are forming proper bases and breaking out on strong volume. This is when you deploy your capital most aggressively, buying leading stocks as they break out and pyramiding into positions that are working.

Even at this highest tier, IBD cautions you to watch for signs that the market may be overheating. One key warning signal is an abundance of late-stage bases. When you start seeing many stocks in their third, fourth, or fifth base stage rather than first or second stages, it can mean the market cycle is maturing and a pullback may be approaching. Another warning sign is extreme bullish sentiment, as markets tend to correct when optimism becomes excessive.

Exposure Level	Market Condition	Your Action
0% - 20%	Correction or severe pressure; institutions selling heavily	Cut losers; stop new buys; raise maximum cash; build watchlist

20% - 40%	Post follow-through day; rally unproven	Small test positions; very selective; smaller size; prove the rally
40% - 60%	Middle ground; rising = gaining traction, falling = weakening	Moderate positions; direction of change matters; stay alert
60% - 80%	Institutional accumulation; confirmed uptrend gaining strength	Aggressive buying of leaders; build positions; monitor for shifts
80% - 100%	Strong confirmed uptrend; abundant quality setups	Full deployment; pyramid into winners; watch for late-stage warnings

The Old System vs. the New System

If you encounter older CANSLIM or IBD literature, you may see references to just three states with no percentage guidance. Under that legacy system, a Confirmed Uptrend meant 100% invested, Uptrend Under Pressure meant 50%, and Market in Correction meant 0%. IBD moved to the five-tier exposure scale because the old binary approach was too broad for today's market volatility. The current system lets you scale in and out of the market incrementally, mitigating risk while still participating in moves, rather than being forced to choose between all-in and all-out.

The two systems work together. The market trend status (Confirmed Uptrend, Under Pressure, Correction) tells you the broad condition. The exposure level tells you precisely how much capital to deploy. For example, you can be in a Confirmed Uptrend but with exposure at only 60-80% if IBD sees some mixed signals. Or you can be in an Uptrend Under Pressure with exposure at 40-60% rather than an arbitrary 50%. The exposure level adds the nuance that the three-state system lacks.

Where to Find the Exposure Level

The current recommended exposure level is published on the investors.com homepage under the Market Trend section. It is updated after each trading day and sometimes intra-day during significant market moves. In MarketSurge, you can find the market outlook on the homepage snapshot, which displays the current trend status. The CANSLIM Monitor system tracks both the trend status and the exposure level through its Market Regime Thread and includes the current recommendation in its daily morning Discord briefing.

What Determines the Exposure Level?

IBD has published some of the criteria that go into their exposure analysis, though they note the list is not exhaustive. Known factors include: the number of stocks near buy points and forming proper bases, the number of stocks successfully breaking out versus breaking down, price action and volume on the major indexes relative to key moving averages, short-term oscillators for overbought or oversold conditions, and stochastic indicators. IBD's team monitors these factors daily and adjusts the exposure level based on their composite assessment.

2.2 Follow-Through Days: The Green Light Signal

When the market is in a correction or under pressure, the natural question is: how do I know when it is safe to start buying again? IBD's answer is the follow-through day (FTD). This is the specific signal that a new uptrend may be beginning, and it is one of the most important concepts in the entire CANSLIM framework.

Not every market rally is real. After a decline, the market often bounces temporarily before resuming its downtrend. These "dead cat bounces" can trick investors into buying too early, only to suffer further losses. The follow-through day was developed specifically to help distinguish real market turns from false starts.

How a Follow-Through Day Works

The process begins after the market has been in a correction and starts to bounce. Here is the sequence of events:

Day 1 — The Rally Attempt Begins: After the market has been declining, you watch for the first day where one of the major indexes (S&P 500 or NASDAQ) closes higher. This is Day 1 of a "rally attempt." You are not buying on this day. You are simply starting the count.

Days 2 and 3 — The Count Continues: On the second and third days, it does not matter whether the market is up or down. The only thing that matters is that the index does not undercut the low of Day 1. If it does undercut that low, the rally attempt has failed, and you reset your count. You wait for the next Day 1.

Day 4 or Later — The Follow-Through Day: On the fourth day or later, if one of the major indexes gains at least 1.25% on volume that is higher than the prior day's volume, that constitutes a follow-through day. This is the signal that institutional investors are stepping in with real conviction, and a new uptrend may be underway.

> **Critical Nuances**
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> It only takes one follow-through day to confirm a new uptrend, but it must occur on Day 4 or beyond. A big gain on Day 3, no matter how impressive, does not count. The follow-through day does not have to occur on exactly Day 4; it could be Day 7, Day 10, or even later. The longer the market bases before the FTD, the more conviction behind it. Also, not all follow-through days lead to sustained rallies. Some fail. But every major bull market in history has begun with a follow-through day, which is why the signal is so important.

A Historical Example

In March 2009, at the bottom of the Great Financial Crisis, the S&P 500 hit its low on March 5. The first rally attempt (Day 1) began on March 6 with an up day. The count continued through the following days without undercutting the March 5 low. On March 12, which was beyond the

fourth day, the index gained well over 1.25% on significantly higher volume. That follow-through day marked the beginning of one of the longest bull markets in history, and investors who recognized the signal and began buying leaders were positioned for enormous gains over the years that followed.

2.3 Distribution Days: The Warning Signs

If follow-through days are the green light that tells you when to buy, distribution days are the yellow and red lights that warn you when to become cautious and when to step aside. Understanding distribution days is essential for protecting your capital during market tops.

What Is a Distribution Day?

A distribution day occurs when one of the major indexes (S&P 500 or NASDAQ) closes down 0.2% or more on volume that is higher than the previous day's volume. The combination of declining price and rising volume indicates that institutional investors are selling. One distribution day is not alarming. But when they begin to cluster, it is a warning that the smart money is heading for the exits.

How Distribution Days Accumulate

IBD tracks distribution days over a rolling 25-trading-day window. Within that window, if five or more distribution days accumulate, the market status typically shifts from Confirmed Uptrend to Uptrend Under Pressure. If the count continues to climb to seven or more over a concentrated period of four to five weeks, the market may shift to Market in Correction.

How Distribution Days Expire

Distribution days do not last forever. They can be removed from the count in two ways:

- Time expiration: If 25 trading days have passed since a distribution day and the market is still in an uptrend, that day drops off the count. The reasoning is that if the market has continued higher for five weeks despite that day of selling, the selling was not significant enough to derail the trend.
- Rally expiration: If the index rallies 5% or more from the close of a distribution day, that day is removed from the count, regardless of how much time has passed. A 5% gain essentially nullifies the significance of that earlier day of selling.

> **Stalling Days**
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> Occasionally, IBD will also count a "stalling day," which occurs when an index closes near the bottom of its daily range on higher volume, even if it technically closed higher. Stall days are relatively rare (perhaps four or five times per year) but count toward the distribution day total because they reflect institutional selling disguised by a nominally positive close.

2.4 How the System Tracks Market Regime Automatically

One of the most powerful features of the CANSLIM Monitor is that it handles market regime tracking for you. In a purely manual process, you would need to read The Big Picture article on investors.com every evening, watch the daily recap video, count distribution days yourself, and remember to track rally attempts during corrections. Most investors fail at this because it requires daily attention and meticulous record-keeping.

The system's Market Regime Thread automates this entire process. Here is what it does:

Daily Morning Briefing: Every trading day at 8:30 AM Eastern Time, the Market Regime Thread runs its analysis and sends a Discord message summarizing the current market status. This briefing includes the current regime (Confirmed Uptrend, Under Pressure, or Correction), the distribution day count for both the S&P 500 and NASDAQ, any changes from the prior day, and an exposure recommendation.

Distribution Day Detection: The system pulls price and volume data for the S&P 500 and NASDAQ from your data provider. It automatically identifies when a day meets the distribution day criteria (down 0.2% or more on higher volume) and adds it to the running count. It also monitors for expiration conditions and removes days that have aged out or been rallied past.

Follow-Through Day Tracking: During a correction, the system automatically begins counting rally attempts. It watches for the Day 1 trigger (first up day after a new low), monitors whether subsequent days undercut the rally low, and checks Day 4 and beyond for the 1.25% gain on higher volume that would constitute a follow-through day. When a follow-through day is detected, a priority alert is sent to Discord.

Entry Blocking During Corrections: The system can be configured to suppress breakout alerts when the market is in correction. Even if a stock on your watchlist crosses its pivot point, the system will flag the alert as suppressed and note that market conditions do not support new entries. This protects you from the temptation to buy in a hostile market environment.

Why This Matters

The market regime is the foundation that everything else builds on. The system's scoring engine adjusts its output based on market conditions, adding bonus points during confirmed uptrends and applying penalties during corrections. Position sizing recommendations scale with market exposure levels. The morning briefing ensures you start every trading day knowing exactly where you stand. All of this happens automatically, before you even look at a single stock chart.

Chapter 3: Chart Patterns and Base Structures

Once you understand market direction and the fundamental characteristics of winning stocks, the next question becomes: when exactly should I buy? The answer lies in chart patterns, specifically in formations called bases.

A base is a period of price consolidation that occurs after a stock has advanced. Instead of continuing straight up, the stock pauses, trades sideways or drifts slightly lower, and then, if the base is constructive, resumes its upward trend. This pause is not random. It reflects a transfer of shares from impatient, short-term traders ("weak holders") to patient, long-term institutional investors ("strong holders") who are accumulating shares quietly at favorable prices.

Understanding bases is critical because they tell you the right moment to enter a stock. Buying too early (before the base completes) exposes you to further consolidation or decline. Buying too late (after the stock has already run up from the base) means paying a premium and accepting worse risk/reward. The ideal entry occurs at the precise moment the stock breaks out of its base on strong volume, confirming that the accumulation phase is over and the next advance has begun.

3.1 Why Bases Matter

To understand why bases are so important, think about what happens during a stock's advance. As a stock rises, some investors take profits. Others who bought at higher levels during a previous decline are relieved to "get their money back" and sell at breakeven. This selling pressure creates natural resistance. The stock needs to digest (absorb) this selling before it can move meaningfully higher.

During a base, this is exactly what happens. Sellers exhaust their supply. Institutional investors who believe in the stock's long-term potential use the consolidation to build large positions quietly, buying shares steadily without driving the price up too aggressively. When the available supply of shares has been absorbed by these committed buyers, even modest new buying demand can push the stock sharply higher. That is the breakout.

This is why volume analysis during a base is so revealing. In a healthy base, you will see volume declining on the weeks when the stock drops (selling is drying up) and volume expanding on the weeks when the stock rises (institutions are stepping in). This volume signature, declining on down weeks and expanding on up weeks, is what MarketSurge calls the "X-ray of institutional activity." It tells you whether the base is being formed by genuine accumulation or merely by a lack of interest.

3.2 Primary Base Patterns

O'Neil's research identified seven primary chart patterns that winning stocks form before their biggest advances. Each pattern has specific characteristics, minimum time requirements, and ideal depth ranges. Not all patterns are equally reliable, and the system scores them accordingly. Here is each pattern, described for someone seeing these for the first time.

Cup with Handle

The Cup with Handle is the most reliable and well-known base pattern. Imagine looking at a coffee cup from the side. The stock declines gradually, forming the left side of the cup, finds a bottom and rounds over, forming the bottom of the cup, and then rises back toward its prior high, forming the right side. Just before breaking out to a new high, the stock drifts slightly lower for one to two weeks, forming the "handle." This handle is the final shakeout of remaining weak holders.

The buy point, called the pivot, is the highest price reached in the handle, plus ten cents. When the stock crosses above this level on above-average volume, that is your breakout signal. Cup with Handle patterns typically take 6 to 65 weeks to form, with a depth (the percentage decline from the cup's peak to its bottom) ideally between 15% and 35%.

The system awards the Cup with Handle the highest pattern score of +10 points because of its proven historical reliability.

Double Bottom

The Double Bottom looks like the letter W on a chart. The stock declines to a low, bounces back up, then declines again to roughly the same level (or slightly below the first low), and then recovers. The two lows form the two bottoms of the W.

A key characteristic of a valid Double Bottom is that the second low should slightly undercut the first low before recovering quickly. This undercut shakes out the last remaining weak holders who placed stop orders just below the first low. When the stock then reverses and heads higher, the pivot point is at the peak between the two lows (the middle of the W). These patterns tend to form in volatile markets and receive a pattern score of +9 points.

Flat Base

A Flat Base is a tight, sideways consolidation where the stock corrects no more than 15% from its high to its low over a minimum of five weeks. This pattern typically forms after a stock has already broken out and advanced from a prior base. The shallow correction and tight price

action indicate that institutional holders are not selling, even as the broader market may be pulling back.

The pivot is simply the highest point within the flat base. When the stock crosses above this level on volume, the breakout is confirmed. Flat Bases receive a pattern score of +8 points and are excellent follow-on patterns that often lead to the next leg up.

High Tight Flag

The High Tight Flag is the rarest and most powerful of all base patterns. It begins with an explosive move higher, typically a 100% to 120% advance in just four to eight weeks. The stock then corrects only 10% to 25% over three to five weeks, forming a tight "flag" near the highs. The minimal correction after such a dramatic advance shows extraordinary demand.

Because these patterns are so rare, you may go months or even years without seeing one. But when they appear, they often signal stocks capable of truly massive moves. The pattern score is +8 points.

Ascending Base

An Ascending Base consists of three pullbacks to progressively higher lows, each followed by a rally to a progressively higher high. It looks like a staircase going up. Each pullback tests the resolve of holders, and each recovery confirms continuing institutional support. These patterns typically form over 9 to 16 weeks and receive a score of +7 points.

Other Recognized Patterns

Several additional patterns are recognized by the system. A Cup without Handle is similar to the Cup with Handle but lacks the final handle formation; it is slightly less reliable because there is no final shakeout of weak holders. An IPO Base is the first base a stock forms after its initial public offering and follows slightly different rules because there is limited price history. A Saucer Base is a very shallow, rounded cup variant. Consolidations are general sideways patterns that do not fit neatly into the above categories but still show constructive characteristics.

Pattern	Description	Typical Duration	Ideal Depth	Score
Cup with Handle	U-shaped cup with small handle drift	6-65 weeks	15-35%	+10
Double Bottom	W-shaped with second low undercutting first	7+ weeks	15-35%	+9
Flat Base	Tight sideways consolidation	5+ weeks	≤15%	+8
High Tight Flag	Explosive advance then tight	3-5 weeks	10-25%	+8

	correction	(flag)		
Cup (no handle)	U-shaped cup without handle	6-65 weeks	15-35%	+7
Ascending Base	Three pullbacks to higher lows	9-16 weeks	10-20% each	+7
IPO Base	First base after IPO	Varies	Varies	+7
Consolidation	General constructive sideways action	Varies	Varies	+6

3.3 Base Stages: Counting the Cycles

One of the most important concepts in base analysis is the stage count. Every stock that makes a big advance goes through multiple cycles of breakout, advance, and consolidation. Each new base that forms after a breakout is numbered sequentially: Stage 1, Stage 2, Stage 3, and so on. The stage number has a dramatic impact on the probability of a successful breakout.

Stage 1 bases are the most powerful. The stock is emerging from a long consolidation or downtrend for the first time. Few people are paying attention to it, which means there is enormous potential for the stock to surprise the market. Stage 1 breakouts produce the biggest, most sustained price advances.

Stage 2 bases still carry good potential. The stock has already proven itself with a successful Stage 1 advance, pulled back, and built another base. Institutional investors who missed the first move are looking for an entry. Stage 2 breakouts are the bread and butter of most CANSLIM investors.

Stage 3 and later bases carry increasing risk. By the time a stock is forming its third, fourth, or fifth base, it has been advancing for months or even years. It has attracted widespread attention, analyst coverage, and media hype. Many of the institutions that drove the original advance already have full positions and are not adding. The pool of new buyers is shrinking. Breakouts from late-stage bases are much more prone to failure.

How the System Scores Stages

The scoring engine applies a penalty that increases with each stage. Stage 1 receives no penalty (0 points). Stage 2 receives a -1 penalty. Stage 3 receives -4 points. Stage 4 and beyond receive -8 to -10 points. This sliding scale reflects the empirically declining probability of success as a stock moves through later base cycles. Additionally, a "base on base" formation, where a new base forms on top of a previous one without a significant intervening advance, receives a +2 bonus because it often functions like an early-stage base.

3.4 What Makes a Healthy Pattern

Not all bases are created equal, even within the same pattern type. A Cup with Handle that forms with ideal characteristics is a far better setup than one with warning signs. Understanding what makes a pattern healthy versus faulty is one of the most important analytical skills you will develop. Here are the key characteristics the system evaluates.

Depth

The depth of a base is the percentage decline from its highest point to its lowest point. O'Neil's research shows that the ideal depth range for most patterns is 15% to 35%. Shallower bases (under 15%) indicate exceptionally strong demand. Deeper bases (over 35%) suggest more aggressive selling and a weaker foundation for the next advance. Bases that correct more than 50% are almost always faulty and should be avoided.

The system scores depth on a four-tier scale: Shallow (15% or less, +1 point), Normal (15-25%, 0 points), Deep (25-35%, -2 points), and Very Deep (over 35%, -5 points).

Length

Longer bases tend to be more reliable than shorter ones. A base that has formed over seven or more weeks has allowed more time for weak holders to sell and strong holders to accumulate. Very short bases (under five weeks) may not have allowed sufficient time for this transfer to occur, increasing the risk of a failed breakout.

The system awards +1 point for bases seven weeks or longer (Ideal), 0 points for five to six weeks (Acceptable), and -1 point for bases under five weeks (Short).

Volume Signature

As described earlier, the ideal volume pattern within a base shows declining volume on down weeks and expanding volume on up weeks. This signature indicates that sellers are exhausting their supply while buyers are gradually building positions. The Up/Down Volume Ratio, available on MarketSurge, quantifies this by comparing the total volume on up days versus down days over the past 50 trading days. A ratio above 1.0 means there has been more volume on up days than down days, which is bullish. A ratio of 1.1 or higher is considered particularly constructive for breakout candidates.

Tight Weekly Closes

Within a base, you want to see weeks where the stock closes near its high, particularly in the right side of the pattern (the recovery phase). Tight weekly closes, where the difference

between the week's open and close is small, indicate calm, controlled trading rather than wild volatility. Wide, volatile price swings within a base are a warning sign of uncertain institutional support.

Support at Key Moving Averages

The 10-week and 50-day moving averages act as reference lines for institutional support. During a healthy base, the stock will often pull back to its 10-week moving average and find support there, meaning institutional buyers step in at that level. Multiple successful tests of the 10-week line within a base build confidence that institutional demand is genuine and consistent.

3.5 How the System Scores Patterns

The CANSLIM Scoring Engine takes all of the factors described above and combines them into a single letter grade that represents the overall quality of a setup. This is not a replacement for your own analysis. It is a quick, consistent assessment that helps you compare candidates and prioritize your attention.

The scoring process works as follows. Each factor contributes points to a total score. The pattern type contributes up to +10 points, with the most reliable patterns scoring highest. The base stage can subtract up to -10 points for late-stage setups. The base depth adds or subtracts points based on how shallow or deep the correction is. The base length adds or subtracts based on duration. The RS Rating contributes up to +5 points for elite relative strength or subtracts -5 for weak performance.

All of these individual scores are summed into a total. That total is then mapped to a letter grade:

Grade	Score Range	What It Means
A+	20 or higher	Exceptional setup; highest probability of success
A	15-19	Very strong; well above average odds
B+	12-14	Good setup; above average odds
B	9-11	Solid; worth considering with supporting factors
C+	7-8	Below average; proceed with caution
C	5-6	Weak; only consider if no better alternatives
D	3-4	Poor; high probability of failure
F	Below 3	Avoid; fails fundamental quality checks

Remember the RS Rating floor rule: regardless of the total score, any stock with an RS Rating below 70 is automatically capped at a grade of C. This single guardrail prevents the system

from ever assigning a high grade to a stock that is underperforming the market, even if its pattern, stage, and base characteristics look attractive on paper.

These grades directly influence how the system handles alerts and recommendations. An A+ breakout alert carries more weight than a C+ alert. Position sizing recommendations may scale with grade quality. And over time, the system's learning engine analyzes which grades produce the best outcomes, allowing the scoring weights to be refined for even better accuracy.

Putting It All Together

When you receive a breakout alert from the system, it will include the stock's overall grade, the individual component scores, the pattern type, the base stage, and whether volume is confirming the breakout. All of this information, distilled from the CANSLIM methodology described in these chapters, arrives in a single Discord message within seconds of the breakout occurring. Your job is to review the alert, confirm it aligns with your own chart analysis, and decide whether to execute the trade. The system does the watching and scoring. You make the final call.

What Comes Next

Part I has given you the foundation: what CANSLIM is, why market direction matters above all else, and how chart patterns provide the timing for entries. These are the core principles that the entire system is built upon.

In Part II, you will learn the hands-on process of building your watchlist using MarketSurge. You will walk through the specific screens, reports, and lists that surface the best CANSLIM candidates each week, and you will learn how to evaluate each stock before adding it to the system for monitoring.

In Part III, you will dive into the system's architecture: how the Windows service works, what each monitoring thread does, how the scoring engine calculates grades, and how alerts are delivered. That section is designed for users who want to understand not just what the system does, but how it does it.

Parts IV through VII cover the complete trading workflow (from watchlist to exit), daily and weekly routines, the GUI application, and advanced topics including alternative entry strategies and the machine learning system that helps the scoring engine improve over time.

If you are new to CANSLIM, the single most important takeaway from Part I is this: this methodology is not about finding stocks that feel good. It is about finding stocks that meet specific, measurable criteria that have been proven over more than a century of market history. The system's job is to make sure those criteria are checked consistently, every time, without emotion and without exception.

CANSLIM Trading System

User Guide

Part II: Building Your Watchlist

Finding and Evaluating CANSLIM Candidates

Version 1.0 | February 2026

Chapter 4: The Growth 250 and Your Starting Universe

Part I gave you the foundation: what CANSLIM is, why market direction matters above all else, and how chart patterns provide the timing for entries. With those principles in hand, the next question is practical: where do you actually find the stocks worth monitoring?

There are roughly 8,000 individual stocks trading on U.S. exchanges on any given day. Most of them are irrelevant to a growth investor. They are declining businesses, thinly traded micro-caps, turnarounds that may never turn around, or perfectly fine companies that lack the earnings acceleration and institutional demand that drive big price moves. Manually reviewing all of them is not just impractical; it is a waste of the time you should be spending on the fifty or so names that actually deserve your attention.

This is where MarketSurge becomes indispensable. Its proprietary lists, reports, and screening tools are designed to do the initial heavy lifting, narrowing thousands of stocks down to the few dozen that exhibit the fundamental and technical characteristics of historical market leaders. Your job is to learn which of these tools to use, when to use them, and how to combine them into a systematic process that surfaces the best candidates every week.

4.1 The Growth 250: Your Pre-Screened Foundation

The Growth 250 is the single most important list in MarketSurge for a CANSLIM investor. It is a dynamically maintained list of up to 300 stocks that have already passed demanding fundamental and technical screens. Think of it as MarketSurge doing the first three rounds of elimination for you. The stocks on this list have strong earnings growth, solid sales growth, favorable institutional sponsorship, and sufficient price strength relative to the broader market.

The list expands and contracts with market conditions, and this behavior is itself a valuable piece of market intelligence. In a strong bull market, the Growth 250 reaches its maximum of 300 stocks, meaning there is no shortage of quality growth candidates. During corrections and bear markets, the count shrinks, sometimes to 150 or fewer. A shrinking Growth 250 confirms underlying market weakness, because fewer stocks are meeting the demanding criteria. Conversely, an expanding Growth 250 early in a new uptrend is a sign that leadership is broadening and the rally has substance.

Some traders use the Growth 250 count as an informal market health indicator alongside distribution day tracking and follow-through day analysis. When the count drops below 200, it suggests the environment is unfavorable for aggressive buying. When it returns to 250 or above, conditions are improving. This is not a replacement for the market regime analysis described in Part I, but it provides useful confirmation.

4.2 Target Lists Within the Growth 250

The Growth 250 is not just a flat list. It contains subfolders, called Target Lists, that organize the 250 members by specific technical characteristics. These subfolders are where the most actionable ideas surface, and learning to use them efficiently is one of the biggest time-savers available to you.

RS Line New High

This subfolder isolates stocks from the Growth 250 whose relative strength line is making new highs. As discussed in Part I, the RS Line compares a stock's price performance to the S&P 500 over time. When the RS Line reaches new high ground, it means the stock is outperforming the broader market so dramatically that its relative strength is at an all-time peak. This is one of the most powerful signals in CANSLIM analysis.

Stocks whose RS Line hits new highs while the stock itself is still forming a base or just beginning to emerge from one are exhibiting what MarketSurge calls the Blue Dot signal. The Blue Dot combines an RS Line new high with pattern recognition, meaning the stock is both outperforming the market and building a recognizable base structure. This combination represents the highest-probability setup in the CANSLIM methodology: the stock is showing you that institutional demand is accelerating even before the breakout has occurred.

The RS Line New High target list typically contains 10 to 25 names. It is compact enough to review in a single sitting, and every stock on it deserves your attention because it has already cleared multiple demanding filters.

Pattern Recognition

This subfolder shows Growth 250 members that MarketSurge's algorithm has identified as forming recognizable base patterns: Cup with Handle, Cup without Handle, Double Bottom, Flat Base, Ascending Base, Saucer, or IPO Base. The algorithm does not just look for the general shape; it evaluates depth, length, volume characteristics, and handle formation to determine whether the pattern meets quality standards.

The Pattern Recognition list is your primary source for stocks that are setting up, meaning they are actively building the base that will eventually produce a pivot point. By monitoring this list weekly, you can identify stocks in the early-to-middle stages of their bases and begin your detailed evaluation before the breakout occurs, rather than scrambling to analyze a stock after it has already triggered.

Near Pivot

This is arguably the most time-sensitive subfolder. It shows Growth 250 members that are approaching actionable pivot levels. These stocks have formed identifiable patterns and are within a few percentage points of their breakout price. When you see a stock appear on the Near Pivot list, it is telling you that the setup is nearly complete and you should have your analysis finished and your buy order ready.

In practice, the Near Pivot list is where you do your final homework. A stock that has been on your watchlist for several weeks, slowly building the right side of its base, will eventually migrate from the Pattern Recognition list to the Near Pivot list. That migration is your signal to finalize your evaluation, confirm your stop level, and prepare for execution.

Additional Target Lists

MarketSurge also provides Tight Areas (stocks exhibiting three-weeks-tight patterns or similar tight consolidations), Power from Pivot (stocks that have gained 20% or more within three

weeks of breakout, triggering the eight-week hold rule), and Additions/Deletions (recent changes to the Growth 250 membership). Each of these serves a specific function in a well-organized research process. The Tight Areas list surfaces add-on opportunities for stocks you may already own. The Power from Pivot list identifies your strongest current holdings. And the Additions list highlights fresh names entering the Growth 250 for the first time, which are often stocks just beginning their leadership phase.

How the System Uses the Growth 250

The CANSLIM Monitor automatically cross-references breakout candidates against the Growth 250 membership list. A stock that breaks out while appearing on the Growth 250 receives a scoring bonus because its presence on the list confirms it has passed MarketSurge's fundamental and technical screens. Stocks breaking out that are not Growth 250 members are still monitored, but the absence is noted in the alert as additional context for your decision-making.

Chapter 5: Using the Screener to Find Candidates

The Growth 250 and its target lists are excellent starting points, but they represent MarketSurge's default criteria, not yours. The screener allows you to apply additional filters on top of any list or against the entire database to surface stocks that meet your specific requirements. Building and maintaining a handful of custom screens is one of the most valuable habits a CANSLIM investor can develop.

5.1 The William O'Neil Screen

MarketSurge includes a pre-built screen based on William O'Neil's stock selection criteria. This screen applies a comprehensive set of fundamental and technical filters that reflect the core CANSLIM methodology: strong earnings growth, solid sales growth, high relative strength, adequate volume, and constructive price action. In a healthy market, this screen typically returns 60 to 80 stocks. During weak markets, the count drops significantly.

Like the Growth 250 count, the O'Neil Screen count serves as an informal market barometer. When fewer than 50 stocks pass these filters, the market is telling you that quality growth setups are scarce. When the count rises above 70, conditions are improving and there is no shortage of candidates.

You can use the O'Neil Screen as a standalone research tool, or you can combine it with the Growth 250 by screening from the Growth 250 list rather than the full database. This dual-layer approach, applying O'Neil's criteria to an already-filtered universe, produces an extremely concentrated list of the highest-quality candidates. A typical result might be 20 to 40 stocks. This is a manageable list that you can review in a single session.

5.2 Building Custom Screens

Beyond the pre-built options, you should create screens tailored to the specific setups you want to find. Here are the most useful custom screens for a CANSLIM investor and the parameters that define them.

RS Line New High Screen

This is one of the simplest and most effective screens you can build. It searches for stocks whose relative strength line is at a new high, regardless of whether they are Growth 250 members.

Parameter	Setting
Current Price	$15 minimum
50-Day Avg Volume	100,000 shares minimum
ETFs	Excluded
RS Line New High	Yes

This screen typically returns 30 to 50 names, depending on market conditions. It is easy to review once or twice a week because the names do not change rapidly. The purpose is to identify stocks with persistent institutional demand that may not yet be on the Growth 250 or the Blue Dot list. Some of the best setups emerge here first: stocks building three-weeks-tight patterns, pulling back to the 10-week line, or forming handles that the pattern recognition algorithm has not yet flagged.

Near Support Screen

This screen identifies stocks pulling back to potential support levels, which is particularly useful for finding add-on entries and second-chance opportunities.

Parameter	Setting
Distance from 50-Day MA	-1% to +2%
RS Rating	70 or higher
Current Price	$15 minimum
50-Day Avg Volume	100,000 shares minimum

Stocks that appear on this screen are testing their 50-day moving average. As described in Part I, the 50-day line is a key institutional support level. When a quality stock pulls back to this level and holds, it frequently provides an entry opportunity for investors who missed the original breakout or who want to add to an existing position.

Up on Volume Screen

MarketSurge includes a pre-built Up on Volume screen that shows stocks trading above their normal volume levels on the current day. This is an intraday screen, meaning its results change throughout the trading session. You can make a copy of this screen and add your own criteria to narrow it further.

For example, adding a Composite Rating of 80 or higher, an RS Rating of 70 or higher, and a minimum price of $15 transforms the generic Up on Volume screen into a powerful filter that shows you which quality growth stocks are attracting unusual institutional attention right now. On a typical day, this might produce two to five names, each of which warrants immediate chart review.

5.3 Screening from Lists

One of MarketSurge's most underutilized features is the ability to screen from any list or report rather than the full database. Instead of screening all 8,000 stocks, you can direct the screener to run against the Growth 250, the Bases Forming list, or any custom watchlist you have created.

This technique is the key to building what might be called super lists: the intersection of a curated universe with additional filters. For example, applying the O'Neil Screen criteria to the Growth 250 creates a concentrated list of perhaps 20 to 40 stocks that are both Growth 250

members and pass O’Neil’s more demanding requirements. This is the most powerful stock universe available to you on any given day.

To set this up, open the screener, click the hyperlink at the top that allows you to select which database or list to screen from, choose the Growth 250 (or any other list), and then apply your screening criteria. The results are saved automatically. Tomorrow, you can return to the same screen and it will recalculate with the latest data, showing you which stocks currently meet your combined criteria.

How the System Uses Screens

The CANSLIM Monitor does not directly interface with MarketSurge's screener, but the manual watchlist you build using these screens is what feeds the system. When you identify a stock through your screening process and add it to your monitoring watchlist through the GUI, the system begins tracking it for breakout events, volume surges, and moving average tests. The quality of your screen inputs directly determines the quality of the system's alert outputs.

Chapter 6: Evaluating Individual Stocks

Once your screens and lists have surfaced a manageable set of candidates, typically 15 to 30 stocks, you need to evaluate each one individually. This is where you apply the full CANSLIM framework to determine whether a stock deserves a place on your active watchlist and, ultimately, whether it merits a position in your portfolio.

The evaluation process has two components: fundamental analysis, which assesses the quality of the company's business, and technical analysis, which assesses the quality of the stock's price and volume action. Both must pass your standards before a stock earns a spot on your watchlist.

6.1 The Fundamental Checklist

MarketSurge provides a built-in CAN SLIM checklist accessible through the Related Information panel on any stock chart. This checklist evaluates whether the stock passes or fails each letter of the CANSLIM methodology. It is a quick, reliable first pass that tells you immediately whether a stock's fundamentals are in order.

Beyond the automated checklist, you should understand what each fundamental metric is telling you and where to find it on the chart. Here is a systematic walkthrough of the key metrics.

Earnings Per Share Rating (EPS Rating)

The EPS Rating is a proprietary score from 1 to 99 that combines a company's quarterly and annual earnings per share growth into a single metric, then compares it to every other company in the database. An EPS Rating of 90 means the company's earnings growth is stronger than 90% of all publicly traded companies.

For CANSLIM investing, you want an EPS Rating of 80 or higher as a minimum threshold. The best stocks, the ones with the highest probability of producing major gains, typically carry EPS Ratings of 90 or above. O’Neil was emphatic that quarterly earnings growth is the single most important factor in stock selection. The EPS Rating distills that principle into a number you can evaluate in a glance.

Pay attention to the trend. A stock whose EPS Rating has been rising over the past several months is showing improving fundamentals. A stock whose rating has been declining may be seeing its earnings momentum fade, even if the absolute number is still respectable.

SMR Rating (Sales, Margins, Return on Equity)

The SMR Rating is another proprietary score using an A-through-E letter grade system. It evaluates four fundamental factors: sales growth over the last three quarters, pre-tax profit margins, after-tax profit margins, and return on equity. You want to see an A or B rating. A C+ is acceptable if other factors are strong, but D and E ratings indicate fundamental weakness that should give you pause.

The SMR Rating captures what the EPS Rating does not: whether the company is growing its revenue (not just earnings), whether it is converting that revenue into profit efficiently, and

whether it is generating strong returns on shareholder equity. A stock with a high EPS Rating but a low SMR Rating may be growing earnings through financial engineering rather than genuine business expansion, which is a red flag for sustainability.

Composite Rating

The Composite Rating is MarketSurge's most comprehensive score, combining five key ratings into a single 1-to-99 metric: EPS Rating, RS Rating, SMR Rating, Accumulation/Distribution Rating, and Industry Group Relative Strength. Think of it as a quick snapshot of a stock's overall quality across both fundamental and technical dimensions.

A Composite Rating of 90 or higher is ideal. It means the stock is outperforming 90% of the database across the combined criteria. Stocks with Composite Ratings below 70 should generally be avoided. Like the other ratings, the trend matters: a rising Composite Rating suggests improving conditions across multiple dimensions simultaneously.

Current Quarterly Earnings and Sales

While the ratings provide a quick summary, you should also examine the raw earnings and sales data. On the MarketSurge weekly chart, the most recent three quarters of earnings per share and quarterly sales growth are displayed directly. You want to see earnings growth of at least 25% year-over-year, with acceleration being the ideal pattern: each successive quarter showing faster growth than the one before.

Sales growth should be at least 20% and preferably accelerating alongside earnings. If earnings are growing but sales are flat, the earnings growth is likely coming from cost-cutting or share buybacks rather than genuine demand for the company's products or services. That kind of earnings growth is less sustainable and less likely to drive a major stock price advance.

Also check the earnings estimates for the coming quarters. Strong companies in legitimate growth phases typically have analysts raising their estimates. You can find this information in the Related Information panel under the fundamentals tab.

6.2 The Institutional Sponsorship Check

The I in CANSLIM stands for Institutional Sponsorship, and it is one of the most important factors in determining whether a stock has the buying power behind it to sustain a significant advance. Remember: institutions account for roughly 75% of the buying activity in quality stocks. Without institutional participation, a stock simply does not have enough demand to drive and sustain a major move.

MarketSurge provides four primary tools for gauging institutional sponsorship. Each captures a different aspect of institutional activity, and you should check all four before adding a stock to your watchlist.

Accumulation/Distribution Rating

The A/D Rating is a proprietary metric that uses a rolling 13-week look-back period to gauge whether institutions are predominantly buying or selling a stock. It uses a letter grade system: A

or B indicates heavy or moderate buying (accumulation), C is neutral, and D or E indicates moderate or heavy selling (distribution). You want to see an A or B rating for any stock you are considering buying.

The 13-week window means this rating is not overly sensitive to a single day's trading activity. It captures the broad pattern of institutional behavior over a meaningful period, which makes it a reliable indicator of the underlying supply-and-demand dynamics.

Up/Down Volume Ratio

The Up/Down Volume Ratio is the cousin of the A/D Rating. It divides the total volume on days a stock closes higher by the total volume on days it closes lower over the past 50 trading days. The midpoint is 1.0. A ratio above 1.0 means there has been more volume on up days than on down days, indicating net institutional demand. A ratio of 1.1 or higher is constructive. A ratio of 1.3 or above is very strong.

The U/D Ratio is updated daily and uses a shorter look-back period than the A/D Rating (50 days versus 65 trading days for the 13-week A/D Rating). This means it can sometimes signal changes in institutional behavior before the A/D Rating catches up. If you see the U/D Ratio deteriorating while the A/D Rating is still positive, it may be an early warning that the supply-demand balance is shifting.

Number of Funds Increasing

On the MarketSurge weekly chart, the total number of mutual funds holding a position in the stock is displayed and updated at the end of each week. You want to see this number increasing quarter over quarter. A progression from, say, 400 funds to 420 to 440 to 460 over four consecutive quarters tells you that institutional investors are steadily building positions. A declining fund count, even if the number is large, is a warning sign.

Remember that it takes approximately three months for a single mutual fund to initiate a full position in a stock. They buy carefully, in small increments, to avoid driving up the price before they have finished accumulating. This is why the fund count increases gradually rather than in sudden jumps, and it is why a sustained upward trend is more meaningful than any single quarter's data.

IBD Mutual Fund Index

MarketSurge tracks a select list of approximately 20 top-performing growth-oriented mutual funds. These are funds with strong historical track records, managed by investors who have demonstrated skill in identifying and holding winning stocks. You can find this information in the Owners and Funds tab of the Related Information panel.

When one or two of these top-performing funds hold a position in a stock, it is a positive sign. When five, eight, or more of them hold positions, it is a powerful endorsement. These funds have professional research teams, extensive due diligence processes, and a proven ability to identify quality growth companies. If a stock is good enough for Fidelity Contrafund, it is worth your serious attention.

How the System Scores Institutional Sponsorship

The scoring engine captures the A/D Rating, U/D Volume Ratio, and fund count progression as inputs. A stock with A/B accumulation, a U/D ratio above 1.1, and increasing fund counts receives a positive institutional sponsorship score. Stocks with deteriorating institutional metrics receive deductions. The volume confirmation at breakout, requiring 40% or more above the 50-day average, serves as the final real-time check that institutions are actively participating in the move.

6.3 The Industry Group Check

The industry group a stock belongs to is not just background information. O'Neil's research showed that approximately 37% of a stock's price movement is directly linked to the performance of its industry group, and another 12% is tied to the broader sector. That means roughly half of a stock's movement is determined by forces outside the company itself. Ignoring the industry group is like evaluating a swimmer without considering which direction the current is flowing.

MarketSurge tracks 197 industry groups, ranked from 1 (best) to 197 (worst) based on the past six months of price and volume performance. O'Neil recommended focusing on stocks in the top 40 industry groups, which represent the top 20% of all groups. The majority of historical market leaders came from these top groups.

How to Use the 197 Industry Groups

Access the industry groups through Open Stock Ideas, then Weekly Review, then 197 Industry Groups. Sort by Group Rank to see the strongest groups at the top. Look for group rank progression over time: a group that ranked 155 three months ago but now ranks 4 is telling you that capital is rotating into that sector. That kind of dramatic improvement often precedes individual stock breakouts within the group.

Once you identify a strong group, double-click into it to view the stocks in the group. Use the Related Information panel to see the Stocks in Group, sorted by Composite Rating. The top one or two stocks in a leading group are your primary targets. You want the best stock in the best group, not the second- or third-tier names.

Also pay attention to which groups are weakening. If you hold a stock in a group that is deteriorating in rank, it may be an early warning that the favorable tailwind is fading. Groups tend to move together, and a stock in a weakening group faces an uphill battle even if its individual fundamentals remain strong.

Evaluating a Stock's Position Within Its Group

MarketSurge shows where a stock ranks within its own industry group on key metrics: EPS Rank in Industry, RS Rank in Industry, and Composite Rank in Industry. You want to see your candidate ranking number 1, 2, or 3 in its group. If a stock is ranked 10th out of 38 in its industry group on relative strength, there are nine stocks in the same group outperforming it, which means you may not be looking at the true leader.

The true leader in an industry group gets the biggest move. The second-best stock may advance, but rarely as far or as fast. This is why O'Neil repeatedly emphasized buying the number one stock in a leading group, not the cheaper, more comfortable alternative.

How the System Uses Industry Data

The scoring engine incorporates the Industry Group Rank as a factor. Stocks in the top 40 groups receive a scoring bonus, while stocks in the bottom 40 receive a penalty. The system also captures the stock's rank within its group to help prioritize among multiple simultaneous

breakout candidates. When two stocks break out at the same time, the one in the stronger industry group with the higher intra-group rank is flagged as the higher-priority trade.

Chapter 7: Building and Maintaining Your Watchlist

The watchlist is the bridge between your research and your trading. It is a curated, actively maintained list of stocks that have passed your fundamental and technical screens, have been individually evaluated, and are either currently setting up or approaching actionable levels. A well-maintained watchlist means you are never caught off guard by a breakout, because you have already done the work.

7.1 What Belongs on Your Watchlist

Your watchlist should contain stocks that meet all of the following criteria. First, the stock must have strong fundamentals: EPS Rating of 80 or higher, SMR Rating of A or B, Composite Rating of 85 or higher. Second, the stock must have constructive institutional sponsorship: A/D Rating of A or B, U/D Volume Ratio of 1.0 or higher, and increasing fund counts. Third, the stock must be in a proper base or approaching one: forming a recognizable pattern, preferably Stage 1 or Stage 2, with a depth of 15% to 35% and a length of five weeks or more. Fourth, the stock should be in a leading industry group, ideally in the top 40 of the 197 groups.

For each stock on your watchlist, you should record several key data points. The pivot point, calculated precisely based on the pattern type as described in Part I, is the most important. You also need the stop level, typically 7% to 8% below the pivot, the base stage, the pattern type, the key moving average levels (10-week and 50-day), the RS Line status, and the next earnings date. This information allows you to act immediately when a breakout occurs, without needing to scramble for data in the heat of the moment.

7.2 How Many Stocks to Track

A common mistake among new CANSLIM investors is maintaining a watchlist that is either too large or too small. A watchlist with 100 stocks on it is not a watchlist; it is a database. You cannot meaningfully track 100 stocks, review their charts regularly, and stay current on their fundamental developments. A watchlist with three stocks is too narrow; you are likely to miss opportunities or force trades on marginal setups because you have nothing better.

The optimal range is 15 to 30 stocks. This is large enough to ensure you have adequate candidates across different industry groups and base stages, but small enough that you can review every chart on the list in a single sitting. During strong bull markets, your watchlist may be on the higher end of this range as more stocks set up. During corrections, the list naturally shrinks as fewer quality setups exist.

7.3 Adding Stocks to Your Watchlist

Your primary sources for new watchlist additions are the Growth 250 target lists (especially RS Line New High, Pattern Recognition, and Near Pivot), your custom screens, the RS Line Blue Dot report, and the Bases Forming list. When you encounter a stock through any of these channels that passes your fundamental and technical evaluation, add it to your watchlist immediately with all relevant data points recorded.

The Bases Forming list in MarketSurge deserves special mention because many investors are unaware it exists. Located in the Stocks folder under the Technical subfolder in the List Manager panel, this list shows stocks that MarketSurge has identified as currently forming bases. It is a pre-screened list of stocks in the active setup phase. Combined with the Growth 250 Pattern Recognition target list, it gives you comprehensive coverage of stocks that are building the patterns you want to buy.

Another underutilized source is the Breaking Out Today list, which shows stocks that are breaking above their pivot points in the current session. While you should ideally have done your homework before a breakout occurs, the Breaking Out Today list occasionally surfaces names you may have missed. If a stock appears on this list with a strong Composite Rating, proper volume, and a pattern you can verify, it may still be within the buy zone and worth an intraday decision.

7.4 Removing Stocks from Your Watchlist

Pruning your watchlist is just as important as building it. A watchlist cluttered with dead setups, extended stocks, and broken patterns wastes your time and dilutes your focus. Remove a stock from your watchlist when any of the following occurs.

The stock breaks down. If the stock violates the low of its base or closes below its 50-day moving average on heavy volume, the pattern is damaged. Even if it recovers later, it needs to build a new base from scratch, and you should re-evaluate it with fresh eyes when it does.

The stock extends beyond the buy zone. If a stock breaks out and runs to 10% or more above its pivot without you buying it, remove it from the watchlist. Chasing extended stocks is one of the most common and costly mistakes in CANSLIM investing. The risk-reward relationship has changed: your stop distance is now wider than 7% to 8% from your entry, which means your position size must shrink or your risk per trade increases.

Fundamentals deteriorate. If a company reports disappointing earnings, misses revenue estimates, or if the EPS Rating and Composite Rating begin declining, the fundamental thesis has weakened. Do not hold onto a stock on your watchlist out of loyalty to your original analysis. The data has changed; your watchlist should change with it.

Better opportunities emerge. In an active market, new setups are forming constantly. If a stronger candidate appears in the same industry group or with clearly superior fundamental and technical characteristics, it may displace a marginal name on your list. Your watchlist has a capacity constraint (15 to 30 stocks), and you should treat that constraint as a feature, not a limitation. It forces you to keep only the best.

7.5 The Weekly Watchlist Review

Set aside time each weekend, ideally on Saturday or Sunday, for a comprehensive watchlist review. During this session, you should review every chart on your list using the weekly timeframe. Check for changes in base shape, volume patterns, RS Line behavior, and proximity to pivot. Update your data points: has the pivot changed? Has a handle formed? Has a new earnings date been announced?

Also use this session to scan your primary lists and screens for new additions. Run through the Growth 250 target lists, check your custom screens, and review the RS Line Blue Dot report. Flag any new candidates for deeper evaluation during the week.

The weekend review is your most important research session of the week because the market is closed and you can think without pressure. Decisions made on the weekend, when you are calm and methodical, are almost always better than decisions made during market hours, when prices are moving and emotions are engaged. The goal is to enter each trading week with a complete, current watchlist and a clear plan for every stock on it: what needs to happen for you to buy, what your entry price is, what your stop is, and what your initial position size will be.

How the System Supports Your Watchlist

When you add a stock to the CANSLIM Monitor through the GUI, the system begins tracking it in real time during market hours. It monitors the stock's price relative to your documented pivot point, watches for volume surges that indicate institutional participation, tracks the stock's behavior relative to key moving averages, and generates automated alerts when actionable events occur. The system's Kanban board organizes your stocks by status: Research, Watching, Ready, and Active, giving you a visual workflow that matches the watchlist management process described in this chapter.

Chapter 8: Daily and Weekly Routines

A trading system is only as good as the process that supports it. The tools, screens, and evaluation criteria described in the preceding chapters are powerful, but they produce results only if you use them consistently. This chapter describes the daily and weekly routines that turn your knowledge into disciplined, repeatable action.

8.1 The Morning Routine (First 30 Minutes)

Before the market opens, you should spend approximately 30 minutes preparing for the trading day. This is not a time for deep research; it is a time for situational awareness and order preparation. Here is what the morning session should cover.

Check Pre-Market Action on Your Watchlist

Open your watchlist and review the pre-market prices. Make sure Extended Hours Pricing is turned on in your MarketSurge settings (click the wrench icon to verify). Are any of your stocks gapping up or down significantly? A stock gapping up on strong volume after a positive earnings report may trigger a breakaway gap entry. A stock gapping down may invalidate a setup you were watching. Identify which stocks require intraday attention and which are unchanged.

Review the Market Indices

Check the S&P 500, NASDAQ, and Dow Jones in pre-market trading. What happened overnight in global markets? Is there any macroeconomic news (Fed announcement, jobs report, inflation data) that could drive volatility today? You do not need to predict the market; you need to know the context in which today's trading will occur.

Scan Key Reports

Quickly review three key MarketSurge reports. The Breaking Out Today list shows stocks that are breaking above their pivot points. Early in the session, this list may be sparse, but it updates in real time as stocks cross their pivots. The Near Pivot list shows your closest setups. The RS Line Blue Dot report highlights current leaders that are setting up. Each of these takes less than five minutes to scan.

Set Your Orders

If you identified a stock during your weekend review that is near its pivot, and the market is in a confirmed uptrend, this is when you place your buy order. Use a limit order at or slightly above the pivot price. You should also have your stop-loss order ready to place immediately after a fill. If you cannot monitor the market during the day, use bracketed orders (a buy order with an attached stop-loss) to automate your execution.

8.2 The After-Market Routine

The after-market session is where you do the real analytical work. Allow approximately one hour after the close for final end-of-day data and volume from all clearing houses to filter into MarketSurge before you begin. Here is the process.

Update Your Trading Journal

Record the day's action: what did the major indices do? What was the volume? Was today a distribution day? Did any follow-through day or other regime change occur? Note any trades you executed and the reasoning behind them. The trading journal is both a performance record and a learning tool. Over time, reviewing your journal entries reveals patterns in your decision-making that you can refine.

Market Analysis

Review the key market health indicators using the Favorites tab in MarketSurge to consolidate your most-used lists and screens into one place. Check the market indices and their volume, the advance/decline line, new highs versus new lows, and the VIX. Use the market indicator symbols (GMI_A, GMI_B, NASDQ, NYEXG) to access market breadth data. Track the Growth 250 count and the O'Neil Screen count as informal sentiment gauges.

Manage Open Trades

Review every open position. Is the stock still above its pivot? Is volume confirming the advance? Is the RS Line maintaining or improving? Is it approaching a sell signal (climax top, 50-day moving average violation, 20-25% profit target)? Mark any positions that require action the following day.

Find New Potential Trades

Run through your screens and lists to identify any new candidates that emerged during the day. Check the Breaking Out Today list for any breakouts you missed. Review the Bases Forming list for new setups. Flag promising names for deeper weekend evaluation.

This routine should take 30 to 60 minutes on a typical day. On days with significant market moves, earnings reports from your holdings, or multiple breakout events, it may take longer. The key is consistency: doing this routine every day, whether the market was exciting or dull, is what keeps you prepared for the opportunities that arrive without warning.

8.3 The Weekend Deep Dive

The weekend session, described in Section 7.5 above, is the most thorough research session of the week. In addition to the watchlist review already described, use this time for the following.

Review the 197 Industry Groups. Sort by rank and look for groups with significant rank improvement over the past three to six months. Identify the top one or two stocks in any newly leading group. Remove from your watchlist any stocks whose groups have deteriorated.

Review the IBD Daily Recap. Watch the IBD Stock Market Today video on YouTube or investors.com if you have not done so during the week. The panelists provide context on market action and highlight specific stocks to watch.

Evaluate your performance. Compare your recent trades against the methodology. Did you follow your rules? Did you sell at the right time? Did you miss any signals? This honest self-

assessment is what separates profitable CANSLIM investors from those who know the methodology but cannot execute it.

How the System Handles Routines

The CANSLIM Monitor automates the portions of these routines that are most prone to human error and delay. Market regime changes (distribution days, follow-through days) are detected automatically and generate Discord alerts. Breakout events trigger immediate notifications with all relevant scoring data. Position monitoring runs continuously during market hours, checking each holding against sell rules and moving average levels. The system does not replace your morning and evening routines. It supplements them, handling the time-sensitive detection work so you can focus on evaluation and decision-making.

What Comes Next

Part II has given you the hands-on process of building your watchlist using MarketSurge. You now know how to use the Growth 250 and its target lists as your starting universe, how to build custom screens that surface the specific setups you want, how to evaluate individual stocks using the full CANSLIM fundamental and technical framework, how to maintain a focused watchlist of 15 to 30 stocks, and how daily and weekly routines turn these tools into a consistent, repeatable process.

The evaluation workflow can be summarized as a series of questions. Does the market support new purchases? Is this stock in a leading industry group? Do the fundamentals pass the CANSLIM checklist? Is institutional sponsorship confirming demand? Is the base pattern healthy and the stock approaching a proper entry? If the answer to all five questions is yes, the stock belongs on your watchlist.

In Part III, you will dive into the system's architecture: how the Windows service works, what each monitoring thread does, how the scoring engine calculates grades, and how alerts are delivered through Discord and the GUI. That section is designed for users who want to understand not just what to look for, but how the system automates the detection and scoring of everything described in Parts I and II.

If there is one principle to carry from Part II into the rest of your trading, it is this: the quality of your watchlist determines the quality of your results. The system can only alert you to breakouts in stocks you are monitoring. The screens can only surface stocks that meet the criteria you define. The methodology can only work if you apply it consistently, with discipline, every single week. The tools are here. The process is here. Your job is to use them.

CANSLIM Trading System

User Guide

Part III: System Architecture

How the Monitor Detects, Scores, and Delivers Alerts

Version 1.0 | February 2026

Chapter 9: System Overview and Design Principles

Parts I and II taught you the CANSLIM methodology and the hands-on process of building a watchlist. Part III pulls back the curtain on the automated system that runs behind those processes: how it is structured, what each component does, and how data flows from market feeds to Discord alerts on your phone.

The CANSLIM Monitor is a Windows service that runs continuously in the background on your trading machine. It connects to Interactive Brokers for real-time market data, maintains a SQLite database as its single source of truth, scores every watchlist candidate using a configurable engine, and delivers alerts through Discord webhooks and a PyQt6 graphical user interface. The system is designed around five principles that govern every architectural decision.

9.1 Core Design Principles

SQLite as Source of Truth

All position data, alert history, scoring snapshots, and outcome records live in a local SQLite database. Google Sheets, Discord, and external tools are sync targets, not sources. When there is a conflict between what the database says and what any other system says, the database wins. This eliminates the ambiguity and data drift that plagued the earlier, spreadsheet-centric workflow.

GUI-First Interaction

All user interactions happen through the graphical interface. You do not need to open a terminal, edit configuration files, or write SQL queries during normal daily operations. The GUI provides controls for adding and editing positions, viewing alerts, managing the service, and reviewing analytics. The only time you interact with files directly is during initial setup or advanced configuration changes.

Service Architecture

The core monitor runs as a Windows service, meaning it starts automatically when your computer boots and runs in the background without requiring an open window. The GUI is a separate application that communicates with the service through a named pipe (an inter-process communication channel). This separation means the monitor keeps running even if you close the GUI, and the GUI can connect and disconnect without interrupting monitoring.

Multi-Threaded Monitoring

Different monitoring tasks have different time sensitivities. Checking whether a stock has broken out needs to happen every 60 seconds. Checking market regime can happen every 5 minutes. Monitoring active positions for stop violations needs to happen every 30 seconds. The system runs each of these tasks in a separate thread with its own poll interval, so urgent tasks are never delayed by less time-sensitive ones.

Configurable Without Code Changes

Every parameter that might need adjustment, from poll intervals to scoring weights to volume thresholds, lives in YAML configuration files. Changing a setting is as simple as editing the YAML and restarting the service (or, for some settings, sending a reload command through the GUI without restarting). This means you can tune the system to your preferences without touching the Python codebase.

Why This Architecture Matters to You

You do not need to understand every line of code to use this system effectively. What you do need to understand is the flow: you add stocks to the watchlist through the GUI, the service monitors those stocks in real time, the scoring engine evaluates each candidate against the CANSLIM criteria, and alerts arrive on Discord within seconds of an actionable event. This chapter gives you the mental model to trust the system's outputs and to know where to look when something needs adjustment.

Chapter 10: The Windows Service and Thread Architecture

The beating heart of the system is the Windows service. It is the component that actually monitors the market, and understanding its structure will help you interpret its behavior, troubleshoot issues, and make informed decisions about configuration.

10.1 How the Service Starts

When your computer boots, Windows starts the CANSLIM Monitor service automatically. The service entry point creates a ServiceController object, which orchestrates the entire startup sequence. First, it ensures an asyncio event loop exists (a technical requirement for the IBKR connection library). Then it initializes shared resources in a specific order: the database connection, the IBKR market data connection, the Discord webhook configuration, the scoring engine, and the position sizer. Finally, it spawns the monitoring threads and starts the IPC pipe server for GUI communication.

If any critical resource fails to initialize, such as the IBKR connection timing out because TWS is not running, the service logs the error and continues with reduced functionality. The breakout thread, for example, cannot operate without market data, but the GUI communication channel and database remain available. This graceful degradation means you can still manage your watchlist through the GUI even if the data feed is temporarily offline.

10.2 The Three Monitoring Threads

The service runs three primary monitoring threads, each responsible for a distinct domain of the trading workflow. Each thread operates independently, with its own poll interval, its own IBKR client connection (using offset client IDs to avoid conflicts), and its own error handling. If one thread encounters a problem, the others continue running unaffected.

Breakout Thread (Poll: 60 seconds)

The breakout thread is the most important thread for finding new trades. Every 60 seconds during market hours, it cycles through every stock in your watchlist (State 0 positions) and retrieves the current price and volume data from IBKR. For each stock, it calculates the distance from the current price to the pivot point and the current volume relative to the 50-day average.

When a stock crosses above its pivot, the thread triggers a multi-step evaluation. First, it classifies the event by subtype: Approaching (within 1% of pivot), In Buy Zone (above pivot but within 5%), Confirmed (above pivot with volume 40% or more above the 50-day average), or Extended (more than 5% above pivot). Then it invokes the scoring engine to calculate the setup grade. Then it runs the position sizer to determine recommended share counts based on your account size and risk parameters. Finally, it packages all of this into a structured alert and routes it to both Discord and the GUI.

The breakout thread also checks for suppression conditions. If the market is in a correction (as determined by the market thread), breakout alerts are tagged as Suppressed rather than Confirmed, signaling you to observe rather than act. This automatic suppression prevents the

system from encouraging new purchases during unfavorable market conditions, a direct implementation of the M in CANSLIM.

Alert Subtype	Trigger Condition	Recommended Action
APPROACHING	Price within 1% of pivot	Prepare order; confirm setup
IN_BUY_ZONE	Above pivot, volume < 40% above avg	Monitor for volume surge
CONFIRMED	Above pivot, volume ≥ 40% above avg	Enter 50% initial position
EXTENDED	Price > 5% above pivot	Do not chase; wait for pullback
SUPPRESSED	Market in correction	Observe only; no new buys

Position Thread (Poll: 30 seconds)

Once you have entered a trade and moved the stock from State 0 (Watching) to State 1 (In Position), the position thread takes over. It monitors all active positions every 30 seconds during market hours, checking each one against a comprehensive set of alert conditions.

Stop-loss monitoring is the most critical function. The thread continuously calculates how close each position is to its stop price. When a stock drops to within 1% of the stop, it generates a Warning alert. When it hits the stop level, it generates a Hard Stop alert. These alerts are designed to arrive on your phone in real time, giving you the information you need to act immediately.

The position thread also monitors for profit-taking opportunities. When a position reaches the first target (typically 20-25% above entry), it generates a TP1 alert. When it reaches a second target, it generates TP2. It checks whether the eight-week hold rule applies, meaning a stock that gained 20% or more within three weeks of breakout should be held for at least eight weeks from the breakout date, and if it does, it tags the position accordingly and adjusts the alert logic to encourage holding through normal pullbacks.

Additional alerts include pyramid opportunities (when conditions are favorable for adding to a winning position), moving average tests (when price approaches the 21-day EMA, 50-day MA, or 10-week line), and climax top warnings (when a stock shows signs of exhaustion after a rapid advance). Each alert type includes an action recommendation that aligns with the CANSLIM sell rules described in the textbook.

Alert Category	What It Monitors
Stop Alerts	Hard stop hit, stop warning (within 1%), trailing stop
Profit Alerts	TP1 (20-25%), TP2 (custom), 8-week hold status
Pyramid Alerts	P1 ready, P2 ready, extended conditions
Technical Alerts	50-MA test/sell, 21-EMA sell, 10-week sell, climax top
Health Alerts	Critical conditions, extended positions, earnings proximity, late stage

Market Thread (Poll: 300 seconds)

The market thread operates on a longer cycle, checking the overall market environment every five minutes. Its primary responsibility is maintaining the market regime classification: Confirmed Uptrend, Uptrend Under Pressure, Market in Correction, or Rally Attempt.

To determine the regime, the thread tracks distribution days on the S&P 500 and NASDAQ over a rolling 25-day window. A distribution day occurs when an index closes down 0.2% or more on higher volume than the previous session. When distribution days cluster (five or more in a 25-day span), the thread shifts the regime toward correction. When a follow-through day occurs (a rally day on higher volume after a correction low), it shifts toward confirmed uptrend.

The market thread also generates morning alerts at market open, providing a summary of the current regime, the distribution day count, and any regime changes that occurred. These alerts serve as your daily market pulse: a quick check on your phone that tells you whether the environment supports new buying, requires caution, or demands a defensive posture.

The market regime feeds directly into the breakout thread, where it determines whether breakout alerts are classified as Confirmed or Suppressed. It also influences the position thread, where the regime status affects how aggressively the system recommends profit-taking or defensive action.

Thread Configuration in YAML

All thread intervals are configurable in service_config.yaml. The default values (60s breakout, 30s position, 300s market) represent a balance between responsiveness and system resource usage. If you want faster breakout detection, you can reduce the interval to 30 seconds, though this increases IBKR API call volume. The market thread rarely needs adjustment because regime changes are inherently slow-moving events.

Chapter 11: The Scoring Engine

The scoring engine is the analytical core of the system. It takes the raw data you enter for each watchlist candidate, the pattern type, base stage, base depth, base length, and RS Rating, and converts it into a single letter grade that represents the overall quality of the setup. This grade is the primary factor in determining how the system presents alerts to you and how aggressively it recommends action.

11.1 How Scoring Works

The engine uses a point-based system. Each factor contributes a positive or negative score based on where the stock falls within defined tiers. The individual scores are summed into a total, and that total is mapped to a letter grade. The entire calculation is transparent: every alert includes the full breakdown so you can see exactly why a stock received the grade it did.

There are two categories of scores. Static scores are calculated from data you enter when you add the stock to the watchlist: the pattern type, base stage, base depth, base length, and RS Rating. Dynamic scores are calculated from real-time or historical data fetched by the system: volume confirmation, market regime, and any factors derived from the Polygon or Massive data APIs. The final score is the sum of both categories.

11.2 Static Scoring Factors

Pattern Type

Not all base patterns carry equal probability of success. O’Neil’s research showed that certain patterns, particularly the Cup with Handle and Flat Base, produce breakout winners more consistently than others. The scoring engine reflects this by assigning the highest points to the most reliable patterns and lower points to less proven ones.

Pattern	Score
Cup with Handle	+10
Double Bottom	+9
Flat Base	+8
Cup without Handle	+7
Ascending Base	+6
Saucer with Handle	+5
IPO Base	+4
High Tight Flag	+4
Base on Base	+2 bonus
Unknown / Other	+3

Base Stage

As described in Part I, the base stage has a dramatic impact on breakout success probability. Stage 1 and Stage 2 bases carry the highest probability, while Stage 3 and later bases face increasing headwinds from institutional profit-taking and market saturation. The scoring engine applies an escalating penalty for later stages.

Stage	Score
Stage 1	0 (no penalty)
Stage 2	-1
Stage 3	-4
Stage 4	-8
Stage 5+	-10
Base on Base	+2 bonus

The Base on Base bonus of +2 is applied when a new base forms directly on top of a previous one without a significant intervening advance. This formation often functions like an early-stage base despite technically being a later count, because the stock did not advance enough between bases for institutions to take meaningful profits.

Base Depth

The depth of the base measures how far the stock corrected from its peak to its trough during the consolidation. Shallower bases indicate stronger institutional support (buyers would not let the stock fall far), while excessively deep bases suggest aggressive selling and a weaker foundation.

Depth Range	Score
15% or less (Shallow)	+1
15-25% (Normal)	0
25-35% (Deep)	-2
Over 35% (Very Deep)	-5

Base Length

Longer bases allow more time for the transfer of shares from weak holders to strong, institutional hands. Very short bases may not have completed this process, increasing the risk that selling pressure resurfaces quickly after the breakout.

Length	Score
7+ weeks (Ideal)	+1
5-6 weeks (Acceptable)	0
Under 5 weeks (Short)	-1

RS Rating

Relative Strength is the most heavily weighted factor after pattern type. O'Neil consistently emphasized that the best stocks have elite relative strength before their breakouts. The scoring engine rewards RS Ratings in the top tier and penalizes weak performers, with one critical safeguard: the RS Rating Floor.

RS Rating Range	Score
95-99 (Elite)	+5
90-94 (Excellent)	+3
85-89 (Strong)	+1
80-84 (Adequate)	0
70-79 (Below Average)	-3
Below 70 (Weak)	-5 + Floor Cap

11.3 The RS Rating Floor Rule

This is the single most important guardrail in the scoring engine. Based on validation data showing that stocks with RS Ratings below 70 have a 0% historical success rate in this system, any stock with an RS Rating below 70 is automatically capped at a grade of C, regardless of how strong its other factors may be.

The floor rule is implemented as an immutable constraint. The learning engine (described in a later part) is not allowed to modify or remove it, even if its optimization algorithm suggests doing so. This ensures that the system never assigns a high-confidence grade to a stock that is materially underperforming the market, no matter how attractive its pattern or fundamentals may appear.

When the floor is applied, the alert includes a notation showing both the original grade (what the stock would have received without the floor) and the capped grade. For example, an alert might show: Grade: C (was B+, RS Floor applied). This transparency lets you see the impact of the floor and make your own judgment about whether to override it.

11.4 Grade Boundaries

After all static and dynamic scores are summed, the total is mapped to a letter grade using the following boundaries.

Grade	Score Range	Meaning
A+	20 or higher	Exceptional setup; highest probability of success
A	15-19	Very strong; well above average odds
B+	12-14	Good setup; above average odds

B	9-11	Solid; worth considering with supporting factors
C+	7-8	Below average; proceed with caution
C	5-6	Weak; only consider if no better alternatives
D	3-4	Poor; high probability of failure
F	Below 3	Avoid; fails fundamental quality checks

11.5 YAML Configuration

Every scoring parameter, the pattern scores, the stage penalties, the depth tiers, the RS Rating tiers, the grade boundaries, and the floor rule, is defined in scoring_config.yaml. This file is the single source of truth for the scoring logic. If you want to increase the weight of RS Rating, reduce the penalty for Stage 3 bases, or add a new pattern type, you edit this file and restart the service. No Python code changes are required.

The configuration file also includes a version number that is embedded in every scoring result and every alert. This versioning allows you to track which configuration was in effect when a particular trade was scored, which is essential for the learning engine's ability to analyze historical performance by configuration version.

Practical Example: Reading a Breakout Alert

Suppose you receive this alert: "🚀 BREAKOUT: NVDA — Price: $142.30 (+1.2% above pivot) — Pivot: $140.60 — Volume: 1.8x avg ✔️ CONFIRMED — Grade: A+ (Score: 22) — Pattern: Cup w/Handle | Stage 1 | RS: 97." Here is how to read it. The stock is 1.2% above its pivot, which is within the buy zone. Volume is 1.8 times the 50-day average, well above the 40% confirmation threshold. The grade is A+ with a score of 22, meaning the pattern type (+10), stage (+0), depth, length, and RS rating (+5 for 97) combined to produce an exceptional score. Action: this is a Confirmed breakout with the highest-quality grade. Enter your initial 50% position.

Chapter 12: The Database and Data Flow

Every piece of information the system generates, from the moment you add a stock to your watchlist through the final outcome of a closed trade, is stored in a SQLite database. Understanding the database structure helps you appreciate how the system tracks the complete lifecycle of every position and how it builds the historical record that powers the learning engine.

12.1 The Positions Table

The positions table is the center of the data model. Every stock you add to the watchlist creates a row in this table, and that row follows the stock through its entire lifecycle. The state column is the primary workflow indicator, tracking the stock from initial research through entry, profit-taking, and eventual closure.

State	Name	Meaning
0	Watching	On your watchlist; monitored for breakout by the breakout thread
1	Initial Position	First entry (50% of target position) has been made
2	Building	Pyramid add (second tranche) has been added
3	Full Position	Third tranche added; full target position established
4	Taking Profits (TP1)	First partial profit taken
5	Taking Profits (TP2)	Second partial profit taken
-1	Closed (Winner)	Position closed with a profit
-2	Closed (Stopped)	Position closed at a loss (stop hit)

The positions table stores every data point you provide through the GUI: the pattern type, pivot price, base stage, base depth, base length, RS Rating, Composite Rating, SMR Rating, Accumulation/Distribution Rating, Up/Down Volume Ratio, Industry Group Rank, fund count, and earnings date. It also stores data the system generates: the entry grade and score, the breakout date, the pivot status (Fresh, Aging, Stale, or Extended), and the prices and dates for each tranche entry and partial exit.

Multi-tranche tracking is a core feature. The table records up to three entry tranches (E1, E2, E3) with separate prices, dates, and share counts for each. It also records up to two partial exits (TP1, TP2) with their prices, dates, and share counts. This granular tracking enables precise P&L calculation and supports the pyramid-then-reduce workflow that CANSLIM methodology prescribes.

12.2 The Alerts Table

Every alert the system generates is persisted in the alerts table. This includes breakout alerts, position alerts, market regime alerts, and system health alerts. Each alert record includes the symbol, alert type, alert subtype, the price at the time of the alert, the scoring grade, a timestamp, whether it was sent to Discord, and whether you acknowledged it through the GUI.

The cooldown system prevents alert fatigue. After the system generates a breakout alert for a symbol, it will not generate another breakout alert for the same symbol for a configurable cooldown period (default: 60 minutes). This prevents repeated alerts for the same event when a stock oscillates around its pivot during the trading day. Cooldown values are configurable in service_config.yaml.

12.3 Supporting Tables

Several additional tables round out the data model. The scoring_snapshots table records the full scoring breakdown (every factor, every tier, every point) for each alert event. This creates an audit trail that allows the learning engine to retroactively analyze which factors predicted success and which did not. The position_history table tracks changes to position fields over time, providing a timeline of how each position evolved. The outcomes table links completed positions to their final results, capturing the entry grade, the exit price, the P&L, and the hold duration, forming the training data for the learning engine.

The market_regime table stores a historical record of every regime change: when the market entered correction, when a follow-through day occurred, when distribution days accumulated. This history is invaluable for analyzing how your trading performance correlates with market conditions.

12.4 Data Flow: From Watchlist to Alert

Understanding the complete data flow helps you trust the system and troubleshoot when something seems unexpected. Here is the path a stock takes from your watchlist to your Discord alert.

Step 1: You add a stock to the watchlist through the GUI. The GUI writes a new row to the positions table with State 0 and all the fundamental and technical data you provide. Step 2: The breakout thread picks up the new position on its next cycle (within 60 seconds). It begins requesting real-time price data from IBKR for this symbol. Step 3: Each cycle, the thread compares the current price to the pivot. When the price crosses above the pivot, the thread evaluates the event. Step 4: The scoring engine calculates the grade. The position sizer calculates the recommended share count. Step 5: The alert service creates an alert record in the alerts table and a scoring snapshot in the scoring_snapshots table. Step 6: The alert is formatted and sent to Discord via webhook. Simultaneously, the GUI is notified via the IPC pipe and updates the position card to show the alert. Step 7: You receive the alert on your phone, review the grade and data, and decide whether to enter the trade.

This entire sequence, from price crossing the pivot to the alert arriving on your phone, completes in under five seconds under normal conditions. The speed is limited primarily by the 60-second poll interval; once the breakout is detected, the evaluation, scoring, and delivery happen almost instantaneously.

Database Location and Backup

The SQLite database file is located at C:\Trading\canslim_monitor\canslim_positions.db by default. This path is configurable in service_config.yaml. The database is a single file, making

backups trivially simple: just copy the file. You should back up this file regularly, as it contains your complete trading history, all alert records, and the training data that the learning engine will eventually use to optimize your scoring weights.

Chapter 13: The GUI Application

The GUI is your primary interface to the system. It is a PyQt6 desktop application that communicates with the Windows service through a named pipe. The GUI does not perform any monitoring itself; its purpose is to let you manage data, view alerts, control the service, and analyze performance.

13.1 The Kanban Board

The main view of the application is a Kanban board, a visual layout with columns representing each position state. Stocks flow from left to right as they progress through the trading lifecycle: Watching, Initial Position, Building, Full Position, Taking Profits, and Closed.

Each stock is represented by a position card that displays the key data at a glance: the symbol, current price, pattern type, grade, P&L percentage (for active positions), and the most recent alert. The cards are color-coded based on their state and alert status. A card with an unacknowledged alert shows a highlighted notification row. Cards can be dragged between columns to update their state, and the system validates each transition to prevent illogical moves (for example, you cannot drag a stock from Watching directly to Full Position, skipping the initial entry).

The Watching column (State 0) includes an Add button that opens the position entry dialog, where you input all the fundamental and technical data for a new watchlist candidate. It also supports filtering by symbol, pattern, and alert status, and sorting by various fields, so you can quickly find the candidates that need attention.

13.2 The Position Entry Dialog

When you click Add or double-click an existing card to edit it, the position entry dialog opens. This dialog has fields for every data point the system needs: the symbol, portfolio assignment, pattern type, pivot price, base stage, base depth, base length, RS Rating, EPS Rating, Composite Rating, SMR Rating, A/D Rating, Up/Down Volume Ratio, Industry Group Rank, EPS Rank in Industry, RS Rank in Industry, fund count, and earnings date.

The dialog also includes the CANSLIM checklist that was described in Part II. As you enter ratings, the checklist automatically evaluates whether each CANSLIM criterion passes or fails, giving you a real-time quality check before you commit the stock to your watchlist. When you save, the system writes the data to the database and the breakout thread begins monitoring on its next cycle.

13.3 Service Control and Status

The bottom of the Kanban window includes a Service Control Panel that shows the current status of the background service: whether it is running or stopped, which threads are active, and how many alerts have been generated in the current session. Start and Stop buttons let you control the service directly from the GUI.

A separate Service Status Bar shows the status of the Windows service itself (the background process), as opposed to the in-GUI IBKR connection. This distinction matters because the service can be running in the background even when the GUI is closed, and the GUI can show you whether the background service is healthy without being directly connected to IBKR itself.

13.4 Alert Acknowledgment

When alerts appear on position cards, they include a clickable notification row. Clicking the alert acknowledges it, which serves two purposes. First, it clears the visual indicator on the card, so your Kanban board shows only unacknowledged alerts that still need your attention. Second, it records the acknowledgment timestamp in the database, creating a record of when you saw and processed each alert. This audit trail is useful for post-trade review: you can see not just when the system generated an alert, but when you acknowledged it and how long you took to act.

13.5 The Market Regime Banner

At the top of the Kanban board, a Market Regime Banner displays the current market status. This banner is color-coded: green for Confirmed Uptrend, yellow for Uptrend Under Pressure, red for Market in Correction, and blue for Rally Attempt. It also shows the current distribution day count for both the S&P 500 and NASDAQ. This banner ensures that market direction, the most important factor in CANSLIM investing, is always visible in your primary workspace.

Navigation Tip

The GUI includes a menu bar with access to additional views: an Alerts view that shows the complete alert history with filtering and search capabilities, a Settings view for managing configuration without editing YAML files directly, and (in future versions) an Analytics view that displays the learning engine's factor analysis and weight optimization results. The Kanban board is your daily workspace; the additional views are for deeper analysis sessions.

Chapter 14: Discord Alerts and Notification Flow

Discord is the primary notification channel for time-sensitive alerts. While the GUI displays alerts within the application, Discord delivers them to your phone, tablet, or any other device with the Discord app installed. This means you receive critical alerts even when you are away from your trading station.

14.1 Channel Architecture

The system supports separate Discord channels for different alert types. The service_config.yaml file allows you to configure individual webhook URLs for breakout alerts, position alerts, market regime alerts, and system alerts. This separation lets you manage notification priorities: you might enable phone notifications for breakout and stop alerts while keeping market regime updates on a separate, quieter channel that you review at your convenience.

If you prefer simplicity, you can configure a single default webhook that receives all alert types. The system falls back to this default when a channel-specific webhook is not configured.

14.2 Alert Message Format

Every Discord alert follows a structured format designed for rapid comprehension. Breakout alerts include the stock symbol, current price, percentage above pivot, buy zone boundaries, volume ratio with confirmation status, the setup quality grade and score, the pattern type, stage, and RS Rating, and a specific action recommendation. Position alerts include the same identifying information plus the relevant condition (stop warning, profit target hit, moving average test) and a recommended action aligned with IBD sell rules.

The system uses Discord embeds with color-coded borders: green for A-grade breakouts, cyan for B-grade, yellow for C-grade, and red for stop and sell alerts. This visual coding lets you triage alerts at a glance, even from a notification preview on your phone’s lock screen.

14.3 Alert Suppression and Cooldowns

The system implements several layers of intelligent suppression to prevent alert overload. The cooldown system prevents repeated alerts for the same event within a configurable time window (default: 60 minutes). The grade filter allows you to configure a minimum grade threshold for Discord delivery, so that D and F grade breakouts, which are rarely actionable, do not clutter your notification feed. Market regime suppression automatically tags breakout alerts during corrections, reducing the urgency of notifications that should not prompt action.

The combination of these mechanisms means that your Discord channel shows only the alerts that genuinely require your attention: high-quality breakouts in favorable market conditions, stop violations that need immediate response, and profit targets that need evaluation. Everything else is recorded in the database for review but does not interrupt your day.

14.4 The Connection to Your Decision

An alert is not an instruction. It is information delivered in the structure described throughout this guide, scored against the criteria you learned in Parts I and II, and presented with a recommendation based on the methodology. Your job, every time you receive an alert, is to verify the data, apply your own chart analysis, and make the final call.

The system reduces the time between market event and informed decision from minutes to seconds. It eliminates the risk of missing a breakout because you were away from MarketSurge. It provides a consistent, emotion-free evaluation through the scoring engine. But it does not make the trade for you, and this is by design. The human in the loop, applying judgment, context, and discipline, is what makes the system a tool rather than a black box.

What Comes Next

Part III has given you a complete mental model of how the system works: the Windows service architecture with its three monitoring threads, the scoring engine and its YAML-configurable factor weights, the SQLite database that serves as the system's source of truth, the GUI with its Kanban board and position management workflow, and the Discord alert pipeline that delivers actionable notifications to your phone.

You now understand the path from watchlist entry to Discord alert. You know why the service runs as a background process, what each thread monitors and at what interval, how the scoring engine calculates grades, what the grade boundaries mean, and how alerts are suppressed during unfavorable conditions.

In Part IV, you will learn the complete trading workflow from the system's perspective: how to execute the initial entry after a confirmed breakout alert, how to pyramid into a position as it advances, how to implement the sell rules through the position thread's alerts, and how to close positions and record outcomes for the learning engine. That section connects the architecture described here to the daily act of trading.

In later parts, you will learn about the learning engine itself: how it analyzes your historical trades to find which scoring factors most strongly predict success, how it optimizes the YAML weights, and how the human-in-the-loop approval process ensures that no optimization change takes effect without your review and consent.

The system exists to enforce discipline. It watches when you cannot watch. It scores without emotion. It alerts without hesitation. But every trade remains yours. The architecture serves the methodology, and the methodology serves a single goal: finding and capitalizing on the stocks with the highest probability of producing significant gains, while protecting your capital when the odds are not in your favor.

CANSLIM Trading System

User Guide

Part IV: The Complete Trading Workflow

From Breakout Alert to Closed Position

Version 1.0 | February 2026

Chapter 15: Executing the Initial Entry

You have received a breakout alert on Discord. The stock crossed above its pivot on volume 40% or more above the 50-day average. The scoring engine assigned it an A grade. The market is in a confirmed uptrend. Everything you have learned in Parts I through III has converged into this moment. What exactly do you do?

This chapter walks you through the complete execution process, from adding a stock to your watchlist through the alert arriving on your phone to the order filling in your brokerage account. It begins with how to enter a stock into the system and score its setup quality, then covers the pre-entry checklist, order execution, and recording the trade. The goal is to turn each step into a disciplined, repeatable action rather than a panicked scramble.

15.0 Adding a Stock to the Watchlist

Before a stock can generate breakout alerts, it must exist in the system as a State 0 (Watching) position. This section explains how to evaluate a candidate stock, score its setup quality, and enter it into the GUI with all the data the system needs to monitor it effectively. This is the critical first step in the trading workflow: without a properly configured watchlist entry, the breakout thread has nothing to monitor.

The Two Paths to Adding a Stock

The GUI provides two paths for adding a stock to the watchlist, both accessible from the Position menu in the menu bar.

The first and recommended path is Score Symbol (Ctrl+Shift+S). This opens the Score Preview dialog, where you enter the stock's base characteristics and calculate its CANSLIM entry grade before committing to add it. If the grade meets your standards, clicking "Add to Watchlist" carries the scored data forward into the Add Position dialog with fields pre-populated. This path ensures you never add a stock without first knowing its grade.

The second path is Add to Watchlist (Ctrl+N), which opens the Add Position dialog directly. Use this path when you have already evaluated the stock externally (in MarketSurge, for example) and simply need to enter it into the system. All fields are blank and must be entered manually.

Using the Score Preview Dialog

Open the Score Preview dialog from Position → Score Symbol or press Ctrl+Shift+S. The dialog is modeless, meaning it stays open while you work in MarketSurge or other applications alongside it. Enter the following fields:

Symbol (optional but recommended): Enter the ticker symbol. When IBKR is connected, the system can fetch dynamic factors such as relative volume and moving average positioning to supplement the static score. If left blank, scoring is based only on the static factors you enter manually.

Pattern: Select the base pattern from the dropdown. Valid patterns include Cup w/Handle, Cup, Flat Base, Double Bottom, High Tight Flag, Ascending Base, IPO Base, Consolidation, Saucer,

Saucer w/Handle, 3 Weeks Tight, and Shakeout +3. The pattern type directly affects the score; Cup w/Handle and Double Bottom score highest.

Pivot Price (optional): Enter the precise breakout pivot level. When both a symbol and pivot are provided and IBKR is connected, the system calculates dynamic factors: how far the current price is from the pivot, whether the stock is above key moving averages, and the current relative volume.

Base Stage: Select the base stage from the dropdown (1, 2, 3, 4+, Late, and sub-stages like 2(2), 3(3), etc.). Stage 1 and Stage 2 bases score highest. Later-stage bases receive progressively lower scores reflecting the increased risk of failure as institutional accumulation matures.

Base Depth: Enter the percentage correction from peak to trough within the base. Ideal depths range from 12% to 33% in normal markets; deeper corrections are acceptable during broad market declines. The scoring engine evaluates depth relative to the current market environment.

Base Length: Enter the duration of the base in weeks. A minimum of five to seven weeks is required for a proper base; longer bases of 13 or more weeks suggest more thorough institutional accumulation.

RS Rating: Enter the IBD Relative Strength Rating from MarketSurge (1–99 scale). This is the single most predictive factor in the scoring engine. Stocks with RS 90 or above show 75% success rates in backtesting; stocks below RS 70 show 0% success rates. The scoring engine applies an RS floor: any stock below RS 70 is automatically capped at grade C regardless of other factors.

Click “Calculate Score” to see the entry grade (A+ through F), the numeric score, and a detailed breakdown of how each factor contributed. The dialog also fetches and displays the next earnings date from Polygon, with color-coded warnings based on proximity: green for 30+ days away, amber for 14–30 days, and red for fewer than 14 days.

If the grade meets your criteria, click “Add to Watchlist” to carry all scored data into the Add Position dialog with fields pre-populated.

The Add Position Dialog: Field Reference

The Add Position dialog is the primary data entry point for watchlist positions. It contains all fields the system uses for monitoring, scoring, and eventual outcome analysis. Fields are organized into groups. The required fields are:

Field	Description	Where to Find It
Symbol	Stock ticker (auto-converted to uppercase)	MarketSurge chart header
Pattern	Base pattern type from dropdown	MarketSurge weekly chart analysis
Pivot Price	Precise breakout level (pivot + $0.10)	MarketSurge pattern recognition or manual identification
Stop Loss %	Maximum loss percentage (default 7%)	Standard: 7–8% below pivot

Portfolio	Account assignment (Swing, Position, Paper)	Your account structure

The base characteristics fields capture the technical quality of the setup:

Field	Description	Scoring Impact
Base Stage	Stage count (1, 2, 3, 4+, Late)	Stage 1–2 score highest; Stage 4+ penalized
Base Depth	Peak-to-trough correction %	Evaluated relative to market conditions
Base Length	Duration in weeks	Minimum 5–7 weeks; 13+ weeks preferred

The CANSLIM ratings fields come from the MarketSurge stock profile and are critical inputs for the scoring engine:

Field	Range	Description	Source in MarketSurge
RS Rating	1–99	IBD Relative Strength Rating	Stock Checkup or chart header
RS 3-Month	1–99	Short-term relative strength	Stock Checkup
RS 6-Month	1–99	Medium-term relative strength	Stock Checkup
EPS Rating	1–99	Earnings Per Share strength	Stock Checkup or chart header
Composite Rating	1–99	Overall IBD rating	Stock Checkup or chart header
SMR Rating	A–E	Sales, Margins, ROE combined	Stock Checkup
A/D Rating	A+ to E	Accumulation/Distribution	Stock Checkup or chart header
U/D Volume Ratio	0–10	Up/Down volume ratio	Stock Checkup

The industry and institutional sponsorship fields capture the I and S factors of CANSLIM:

Field	Description	Source in MarketSurge
Industry Rank	IBD 197 Industry Group rank (1 = best)	Industry Groups panel
EPS in Industry	Stock's EPS rank within its group (e.g., "3 of 38")	Industry Groups detail
RS in Industry	Stock's RS rank within its group (e.g., "10 of 38")	Industry Groups detail
Fund Count	Number of mutual funds holding the stock	Owners panel
Prior Fund Count	Fund count from prior quarter	Owners panel (prior quarter)
Fund Qtr Change	Auto-calculated from current and prior fund counts	Computed

Additional fields capture context for entry timing and position management:

Field	Description
Watch Date	Date added to watchlist (defaults to today)
Breakout Date	Date the stock broke out of the base (if already occurred)
Earnings Date	Next earnings report date (auto-fetched if using Score Preview)
Prior Uptrend %	Percentage advance before the base formed
Notes	Free-text field for observations, links, or reminders

You do not need to fill every field to add a position. The minimum required fields are Symbol, Pattern, and Pivot Price. However, the more data you provide, the more accurate the entry grade and the richer the dataset for the learning engine. At a minimum, always enter the RS Rating, Base Stage, Base Depth, and Base Length in addition to the required fields.

The Score-First Workflow

The recommended workflow for every new watchlist addition is: (1) Find the candidate in MarketSurge during your screening routine. (2) Open Score Preview (Ctrl+Shift+S) and enter the base characteristics. (3) Review the calculated grade. If it's below your threshold (typically B or higher), pass on the stock. (4) Click "Add to Watchlist" to carry the data into the Add Position dialog. (5) Fill in the remaining fields (CANSLIM ratings, institutional data, earnings date). (6) Click "Add to Watchlist" to create the State 0 position. The stock is now live in the system and the breakout thread will begin monitoring it on the next 60-second cycle.

15.1 The Pre-Entry Checklist

Before placing any order, run through the pre-entry checklist. This takes less than 60 seconds, and it prevents the most common execution errors.

First, confirm the market regime. Check the Market Regime Banner in the GUI or the most recent market thread alert on Discord. If the market is in correction, do not enter regardless of how strong the individual stock looks. If the market is in Uptrend Under Pressure, proceed with extra caution and consider a smaller initial position. Only in a Confirmed Uptrend do you proceed with full conviction.

Second, verify the setup on your own chart. Open the stock in MarketSurge and confirm the pattern, the pivot level, and the volume. The system is accurate, but you are the final quality check. Make sure the breakout looks the way you expect: price clearing the pivot with expanding volume, not a thin, unconvincing move on light participation.

Third, check the earnings date. If earnings are within two weeks, the risk profile changes significantly. A stock can gap 10% or more on earnings, rendering your stop-loss ineffective. Many CANSLIM practitioners avoid initiating new positions within two weeks of an earnings report. If the earnings date is imminent, consider waiting until after the report.

Fourth, confirm your position size and stop level. The breakout alert includes a recommended share count from the position sizer, calculated based on your configured account size and risk parameters. Verify that the recommended shares align with your current portfolio exposure and risk tolerance. Confirm the stop price: 7% to 8% below your intended entry price.

15.2 Order Execution

With the checklist complete, you are ready to place the order. The system recommends buying 50% of your target position on the initial entry. This is not timidity; it is risk management. If the breakout fails immediately, you lose half of what you would have lost on a full position. If the breakout succeeds, you add the remaining shares at higher prices, confirming the stock's strength with each add.

Intraday Timing

The first 5 to 15 minutes of the trading session are the most volatile. Stocks frequently gap up at the open and then pull back. If the breakout occurs at the open, consider waiting for the 25-to-30-minute mark, when the initial volatility subsides and a secondary entry opportunity often presents itself. If the breakout occurs mid-session, execute promptly because the price is already reflecting post-open conditions.

If you cannot monitor the market during the day, use bracketed orders set the evening before. A bracketed order consists of a buy stop at your pivot price (or slightly above it) with an attached stop-loss order at your stop level. If the stock crosses the pivot, the buy executes automatically. If it subsequently falls to the stop level, the sell executes automatically. This approach allows you to participate in breakouts without being glued to the screen.

Order Types

For breakout entries, a buy stop order is the most common choice. Set it at the pivot price plus ten cents. When the stock reaches that level, the order converts to a market order and fills at the best available price. In highly liquid stocks (50-day average volume above 400,000 shares), slippage is minimal.

Alternatively, you can use a buy stop-limit order, which converts to a limit order rather than a market order when triggered. This prevents excessive slippage in fast-moving stocks, but it carries the risk of missing the entry entirely if the stock gaps past your limit. For most CANSLIM entries in liquid stocks, a simple buy stop is sufficient.

15.3 Recording the Entry in the System

After your order fills, update the system immediately. Open the GUI and find the position on the Kanban board (it will be in the Watching column). To advance the state from 0 (Watching) to 1 (Initial Position), either drag the position card from the Watching column to the Initial Position column, or right-click the card and select “Move to” and choose Initial Position. Then double-click the card to open the edit dialog, enter the E1 price (your fill price), the E1 shares (the number of shares purchased), and the E1 date, and save the changes.

This update triggers two important things. First, the position moves from the Watching column to the Initial Position column on the Kanban board, giving you a visual confirmation that the trade is active. Second, the position thread takes over monitoring, checking this position every 30 seconds for stop violations, pyramid opportunities, and profit targets. The breakout thread stops monitoring this symbol because it is no longer in State 0.

Why 50% on the Initial Entry?

The 50/25/25 pyramid structure is a core IBD risk management principle. If you buy a full position on the breakout and the stock immediately reverses, you take a full-sized loss. If you buy 50% and the stock reverses, your loss is half the size. The other 50% is only deployed after the stock proves itself by advancing from your entry, confirming that the breakout has institutional follow-through. You earn the right to a full position through the stock’s behavior, not

through your prediction.

Chapter 16: Building the Position — Pyramiding

The initial entry is a test. You have committed 50% of your planned capital to this stock. Now you watch to see whether the stock confirms the breakout by advancing from your entry or denies it by reversing. The pyramid strategy dictates how and when you add the remaining 50%.

16.1 The 50/25/25 Framework

IBD methodology recommends building positions in three tranches: 50% on the initial entry, 25% on the first pyramid (P1), and 25% on the second pyramid (P2). This structure ensures that you have the most shares at the lowest price and progressively fewer shares at each higher level, keeping your average cost well below the current price.

Tranche	Position %	Cumulative	Trigger Condition
E1 (Initial)	50%	50%	Breakout confirmed with volume
P1 (Pyramid 1)	+25%	75%	Stock 2-2.5% above entry
P2 (Pyramid 2)	+25%	100%	Stock 4-5% above entry

The trigger conditions are critical. You only add shares when the stock is advancing from your entry price, never when it is declining. This is the fundamental principle of pyramiding: add to winners, never average down on losers. If a stock drops from your entry price, it is telling you something is wrong with the trade. Adding more shares to a losing position increases your risk when the evidence says you should be reducing it.

16.2 How the System Tracks Pyramids

The position thread monitors active positions for pyramid opportunities. When a stock reaches the P1 zone (2% to 5% above your E1 entry price), it generates a P1 Ready alert on Discord and updates the position card in the GUI. This alert includes the recommended number of additional shares (25% of the target position) and the updated average cost basis if you execute the add.

If the stock advances past the P1 zone before you can act, the system generates a P1 Extended alert, informing you that the first pyramid opportunity has passed. Do not chase it. Wait for either the P2 zone or a pullback to the 21-day EMA for your next add opportunity.

When the stock reaches the P2 zone (5% to 10% above your E1 entry price), the system generates a P2 Ready alert. After executing P2, your position is at full size (100% of target). From this point forward, no further adding is recommended. The position is fully built, and your focus shifts to monitoring and eventual profit-taking.

16.3 Recording Pyramid Adds

After each pyramid fill, update the position in the GUI. Drag the position card to the next column on the Kanban board, or right-click the card and select “Move to” to advance the state. Then

double-click the card to open the edit dialog. For P1, enter the E2 price, E2 shares, and E2 date. For P2, enter the E3 price, E3 shares, and E3 date. The system automatically calculates the weighted average cost from all tranches and updates the P&L display accordingly.

Each add also advances the position state on the Kanban board: from State 1 to State 2 after P1, and from State 2 to State 3 after P2. This visual progression lets you see at a glance which positions are fully built and which are still in the pyramiding phase.

16.4 When Not to Pyramid

There are situations where adding to a position is inappropriate, even if the stock is advancing. If the market regime has shifted from Confirmed Uptrend to Uptrend Under Pressure since your initial entry, consider holding your current position rather than adding more capital. If the stock is approaching its earnings date, avoid adding shares that could be exposed to a post-earnings gap. If your portfolio is already concentrated (more than two or three active positions), the marginal risk of adding to any single position increases.

The system does not automatically suppress pyramid alerts in these conditions (except for market regime suppression), so you must apply your own judgment. The alert tells you the stock has reached the pyramid zone; you decide whether conditions warrant adding shares.

Position Sizing Math

Suppose your account is $100,000 and you risk 1% per trade ($1,000). Your stop is 7% below the pivot at $140, so the stop price is $130.20. The risk per share is $9.80. Maximum risk-based position: $1,000 ÷ $9.80 = 102 shares. The initial entry (50%) would be 51 shares. P1 (25%) adds 26 shares. P2 (25%) adds 25 shares. Total position: 102 shares, approximately $14,280 invested. This is 14.3% of the account, within the typical 10-15% maximum position concentration guideline.

Chapter 17: The Sell Rules — Offense and Defense

Every trade ends in a sell. The question is whether you sell on your terms (taking a planned profit or cutting a planned loss) or on the market's terms (panicking out of a position after an unplanned decline). The sell rules are the framework that ensures you almost always sell on your terms.

The CANSLIM sell rules divide into two categories: offensive sells, where you take profits from a winning position, and defensive sells, where you cut losses or protect remaining gains. Both are equally important. Offensive sells compound your capital. Defensive sells preserve it.

17.1 The 3:1 Reward-to-Risk Principle

The foundational math of CANSLIM selling is the 3:1 ratio: you target 20% to 25% profits and limit losses to 7% to 8%. This ratio means you can be wrong on three out of four trades and still break even. In practice, CANSLIM investors who follow the rules are right significantly more than 25% of the time, which means the compounding effect of consistent 20% gains combined with small, well-controlled losses produces substantial long-term returns.

This is not a rigid formula. In strong markets with high-quality breakouts, you may let profits run well beyond 25%. In choppy markets where breakouts fail frequently, you may take profits at 10% to 15% rather than waiting for the full 20%. The 20-25% target is a baseline, not a ceiling.

17.2 Offensive Sell Rules

Profit Target 1 (TP1): 20-25% Above Entry

When a stock reaches 20% to 25% above your average cost, the position thread generates a TP1 alert. This is your primary profit-taking signal. The standard action is to sell approximately one-third of your position, locking in profits while leaving the majority of shares in place for further gains.

After taking TP1, advance the position state from State 3 (Full Position) to State 4 (Taking Profits — TP1) by dragging the card to the TP1 column or right-clicking and selecting "Move to." Then double-click the card to record the TP1 shares sold, the TP1 price, and the TP1 date. The system updates the remaining share count and recalculates the P&L based on the reduced position.

Profit Target 2 (TP2): 25%+ Above Entry

If the stock continues advancing, a second profit-taking opportunity arrives at 25% or more above your entry. The TP2 alert prompts you to sell approximately half of your remaining shares, bringing your total position to roughly one-third of the original size. This remaining tranche is held with a trailing approach: you let it ride as long as the stock stays above its key moving averages and shows no signs of exhaustion.

Climax Top: Recognizing Exhaustion

A climax top is one of the most important offensive sell signals. It occurs at the end of a long stock advance, typically after months of gains, and is characterized by one or more of the following: the stock makes its largest single-day gain since the start of the advance, the stock gaps up on massive volume but closes near the low of the day (an exhaustion gap), or the stock advances rapidly over one to three weeks in a near-vertical fashion.

The position thread generates a Climax Top alert when it detects these patterns. A climax top is a signal to sell the remaining position, regardless of whether you have reached your profit targets. Stocks that exhibit climax behavior frequently decline sharply in the weeks that follow, often falling 30% or more from their peak. Selling into the climax captures profits near the high.

17.3 Defensive Sell Rules

The 7-8% Stop Loss

This is the non-negotiable foundation of CANSLIM risk management. When a stock declines 7% to 8% below your purchase price, sell. No exceptions. No hoping it will come back. No averaging down. Every major loss in investing history started as a small loss that was not taken. O'Neil was emphatic: the 7-8% stop is both a risk management tool and a diagnostic one. Stocks that break out properly from sound bases with institutional volume do not typically fall 8% from the entry. If yours does, something is wrong with the stock, the setup, or the market.

The position thread monitors this continuously. When the stock drops to within 1% of the stop level, it generates a Stop Warning alert. When the stop is hit, it generates a Hard Stop alert. The system does not execute the sell automatically; it alerts you to act. You place the sell order yourself, maintaining human control over every trade.

The 50-Day Moving Average Sell

A close 4% to 5% below the 50-day moving average on above-average volume is a sell signal. This rule recognizes that the 50-day line is a key institutional support level. When a stock breaks decisively below it on heavy volume, institutions are no longer defending the stock at that level, and further declines are likely.

The system generates a 50 MA Warning when the stock tests the 50-day line and a 50 MA Sell when it closes below the line on confirming volume. Note that volume confirmation is required: a close below the 50-day on light volume may be a temporary pullback, not a genuine breakdown. The YAML configuration parameter require_volume_confirmation controls this behavior.

The 10-Week Moving Average Sell

On the weekly chart, the 10-week moving average serves the same function as the 50-day on the daily chart, but with a longer-term perspective. A decisive weekly close below the 10-week line on above-average volume is a significant sell signal, particularly if the stock has already violated the line in previous weeks (showing weakening bounces).

The distinction between daily and weekly is important. A stock might close below its 50-day line on a single volatile day and recover the next day, which is noise. But a stock that closes the entire week below its 10-week line has sustained the breakdown for five trading sessions, which is signal. The position thread tracks both, but the weekly signal carries more weight.

Market Turns to Correction

When the market thread shifts the regime to Market in Correction, the position thread adjusts its behavior. It does not automatically generate sell signals for all positions, but it increases the urgency of any existing warning signals. A stock that is testing its 50-day line during a market correction receives more aggressive sell recommendations than the same test during a confirmed uptrend. The system recognizes that individual stock risk is amplified when the overall market is hostile.

Sell Rule Summary

Offensive (Taking Profits): TP1 at 20-25%, TP2 at 25%+, climax top behavior, eight-week hold completion.

Defensive (Cutting Losses): 7-8% stop loss, 50-day MA breakdown on volume, 10-week line violation, market correction.

The system generates alerts for all of these conditions. Your responsibility is to act on them promptly. Delayed defensive action, holding through a stop violation hoping for recovery, is the single most destructive habit a growth investor can develop.

Chapter 18: The Eight-Week Hold Rule

The eight-week hold rule is the most important exception to the standard profit-taking framework. It exists because O'Neil discovered that by consistently selling at 20-25% profits, he was repeatedly exiting stocks that subsequently tripled, quadrupled, or more. The rule creates a mechanism for identifying and holding potential big winners, the rare stocks that drive lifetime investing success.

18.1 When the Rule Activates

The rule activates when a stock advances 20% or more from its pivot point within three weeks or less from the breakout date. This rapid advance signals exceptional institutional demand. A stock that gains 20% in three weeks is behaving differently from one that grinds up 20% over three months. The speed of the advance is the distinguishing factor.

When this condition is detected, the position thread generates an 8-Week Hold alert. The alert shows the gain percentage, the number of weeks since breakout, and the hold expiration date (eight weeks from the breakout date). Critically, the alert also notes that TP1 alerts will be suppressed during the hold period. This suppression prevents the system from recommending profit-taking on a stock that the methodology has identified as a potential big winner.

18.2 How to Implement the Hold

Count eight weeks from the breakout date, not from the date the 20% threshold was crossed. For example, if a stock broke out on January 6 and hit +20% on January 15, the eight-week hold period runs from January 6 through March 3. You evaluate the position for potential selling starting in the week of March 3.

During the eight-week period, expect volatility. The stock may pull back to its 10-week or 50-day moving average. It may spend several weeks drifting sideways. These are normal consolidation behaviors in a stock with strong institutional demand, and they do not invalidate the hold. Your hard stop remains in place at all times: if the stock declines to your stop level, sell regardless of the hold. The rule is about letting profits run, not about accepting losses.

There is one critical exception beyond the stop: if the stock declines back to your purchase price, sell. The eight-week hold assumes you are holding a profit. If the profit evaporates entirely and the stock returns to breakeven, the thesis has failed and there is no reason to continue holding.

18.3 After the Eight Weeks Expire

When the eight-week hold period ends, re-evaluate the position using the weekly chart. Ask three questions. Is the stock still above its 10-week moving average? Has the RS Line maintained or improved? Are the fundamentals still strong (no earnings misses, no guidance cuts)? If all three answers are yes, continue holding and manage the position using the weekly chart and the 10-week line as your trend guide. If any answer is no, consider taking profits or tightening your stop.

MarketSurge provides a visual indicator called the Power from Pivot flag: a green flag that appears on the chart when the eight-week rule criteria have been met. This flag appears in both the Growth 250 Power from Pivot target list and on the individual stock chart. Use it as a trigger to evaluate whether to apply the rule, not as an automatic hold signal. The rule should be reserved for fundamentally strong stocks in early-stage bases (Stage 1 or Stage 2). Applying it indiscriminately to every stock that happens to gain 20% in three weeks dilutes its power.

How the System Handles the 8-Week Hold

When the position thread detects a power move (20%+ in ≤3 weeks), it sets the eight_week_hold_active flag on the position, records the hold start and end dates, and suppresses all TP1 alerts for the duration. The hard stop remains active throughout. When the hold period expires, the flag clears automatically and normal profit-taking alerts resume. The entire mechanism is designed to prevent you from selling a potential big winner at 20-25% when the evidence says it could go much further.

Chapter 19: Closing Positions and Recording Outcomes

Every trade ends, and how you close it matters not just for the immediate P&L but for the system's ability to learn and improve over time. The outcome tracking system captures the complete history of each position, from the entry grade to the final exit, creating the training data that powers the learning engine described in a later part.

19.1 Closing a Position in the GUI

When you sell your final shares in a position, update the system by transitioning the position to its closed state. In the GUI, drag the position card to the appropriate Closed column, or right-click the card and select "Move to" to set it to Closed, Winner or Closed, Stopped Out. Then double-click the card to enter the close price, close date, and close reason.

The close reason field captures why the position was closed. Standard reasons include: Stop Hit, TP1 Hit, TP2 Hit, Manual Exit, 50-Day MA Breakdown, 10-Week Line Violation, Climax Top, Earnings Exit, and Market Correction. This categorization is essential for the learning engine, which analyzes exit patterns to identify whether specific close reasons correlate with grade quality, market conditions, or other factors.

19.2 The Outcome Record

When a position transitions to a closed state, the system automatically creates an outcome record in the outcomes table. This record captures the entry grade and score, the entry price and date, the exit price and date, the gross P&L in both dollars and percentage, the hold duration in trading days, the market regime at both entry and exit, and the close reason. These fields form the input features for the learning engine's factor analysis.

The outcome record also includes a field for TradesViz validation. If you use TradesViz to track your brokerage trades, you can import TradesViz CSV exports through the GUI. The system matches imported trades to their corresponding outcome records and flags any discrepancies between the system's recorded P&L and the brokerage's actual P&L. This validation ensures data accuracy before the learning engine uses the outcomes for weight optimization.

19.3 Why Outcomes Matter

The outcome table is the foundation of the learning engine. Without accurate, comprehensive outcome data, the system cannot determine which scoring factors predict success and which do not. Every closed position, winner or loser, contributes to the statistical picture that will eventually allow the system to optimize its scoring weights.

The learning engine requires a minimum of 50 outcomes (100 or more preferred) with a balanced distribution of successes and failures before it can produce statistically meaningful optimization results. Until this threshold is reached, the system operates on the default scoring weights derived from O'Neil's research and initial validation testing. Every trade you record brings the system closer to its first optimization cycle.

19.4 The Position State Machine

Every position in the system exists in exactly one state at any given time. The state determines which monitoring thread watches the position, which alerts can fire, and what actions are available in the GUI. Understanding the state machine is essential for using the system effectively.

State Definitions

State	Name	Color	Description	Monitored By
0	Watching	Cyan	On watchlist, awaiting breakout	Breakout Thread (60s)
1	Entry 1	Green	Initial 50% position taken	Position Thread (30s)
2	Entry 2	Teal	First pyramid (+25%) added	Position Thread (30s)
3	Full Position	Dark Green	Second pyramid (+25%) complete	Position Thread (30s)
4	TP1 Hit	Yellow	First profit target taken (~33% sold)	Position Thread (30s)
5	TP2 Hit	Orange	Second profit target taken (~50% sold)	Position Thread (30s)
6	Trailing	Purple	Trailing stop active on remainder	Position Thread (30s)
-1.5	Exited Watch	Purple	Previously owned, monitoring for re-entry	Position Thread (30s)
-1	Closed	Gray	Position fully closed (winner)	None (archived)
-2	Stopped Out	Red	Position closed at stop loss	None (archived)

State Transition Diagram

The following diagram shows all valid state transitions. Each arrow represents an action you take in the GUI (drag or right-click “Move to”) along with the trigger that prompted the move. The system enforces these transitions: you cannot skip states or move backward except through the defined paths.

Position State Machine — Transition Map

BUILDING THE POSITION (forward progression): State 0 (Watching) → State 1 (Entry 1): Breakout confirmed, initial 50% buy executed State 1 (Entry 1) → State 2 (Entry 2): Stock +2–2.5% above entry, Pyramid 1 filled State 2 (Entry 2) → State 3 (Full Position): Stock +4–5% above entry, Pyramid 2 filled TAKING PROFITS (offensive sells): State 3 (Full Position) → State 4 (TP1 Hit): Stock +20–25%, first profit take State 4 (TP1 Hit) → State 5 (TP2 Hit): Stock +25%+, second profit take State 5 (TP2 Hit) → State 6 (Trailing): Trailing stop set on remaining shares CLOSING THE POSITION (final exits): Any active state (1–6) → State -1 (Closed): Voluntary exit with profit Any active state (1–6) → State -2 (Stopped Out): Stop loss hit, 50-day MA breakdown, or market correction exit State 0 (Watching) → State -1 (Closed): Remove from watchlist without entering RE-ENTRY WATCH (second chance pathway): Any active state (1–6) → State -1.5 (Exited Watch): Stopped out or technical sell, stock still has potential State -1.5 → State 1 (Entry 1): MA bounce or pivot retest confirmed, re-enter position State -1.5 → State 0 (Watching): New base forming, return to standard watchlist State -1.5 → State -1 or -2: Archive, no longer monitoring SKIP TRANSITIONS (experienced traders): State 1 → State 3: Quick fill to full position (e.g., fast-moving breakout) State 1 →

State 4: Skip pyramids, take first profit directly State 2 → State 4: Take profit from Entry 2 without completing pyramids State 2/3/4 → State 6: Move directly to trailing stop

Transition Triggers and Required Fields

Each state transition requires specific data entry. When you drag a card or right-click “Move to,” the system presents a transition dialog requesting the required fields. You cannot complete the transition without providing this data.

Transition	Trigger	Required Fields	Optional Fields
0 → 1	Breakout alert, order filled	E1 Shares, E1 Price, Stop Price	Entry Date, Breakout Date
1 → 2	P1 Ready alert, pyramid filled	E2 Shares, E2 Price	
2 → 3	P2 Ready alert, pyramid filled	E3 Shares, E3 Price	
3 → 4	TP1 alert, partial sell executed	TP1 Shares Sold, TP1 Price	TP1 Date
4 → 5	TP2 alert, partial sell executed	TP2 Shares Sold, TP2 Price	TP2 Date
5 → 6	Decision to trail remaining	(none)	
Any → -1	Voluntary close	Exit Date, Exit Price, Exit Reason	Notes
Any → -2	Stop loss hit	Exit Date, Exit Price	Notes
Any → -1.5	Stopped/technical sell with re-entry potential	Close Date, Close Price, Close Reason	Notes
-1.5 → 1	MA bounce or pivot retest re-entry	E1 Shares, E1 Price, Stop Price	Entry Date, Notes
-1.5 → 0	New base forming	Pivot	Notes

The Complete Position Lifecycle

To summarize the full lifecycle that Parts I through IV have described, a stock progresses through the following states. It enters the system when you add it to the watchlist through the GUI using the Add Position dialog or the Score Preview workflow (State 0). It advances to State 1 when you execute the initial 50% entry after a confirmed breakout alert. It advances to State 2 and then State 3 as you pyramid with 25% tranches. It moves to State 4 and State 5 as you take partial profits at TP1 and TP2. It may advance to State 6 (Trailing) if you choose to trail the remaining position with a moving stop. And it transitions to State -1 (Closed) or State -2 (Stopped Out) when the final shares are sold. Alternatively, it may move to State -1.5 (Exited Watch) if the stock was stopped out but still shows potential for a re-entry opportunity through an MA bounce or pivot retest.

At every stage, the system is monitoring, scoring, and alerting. The breakout thread watches State 0 positions. The position thread monitors States 1 through 6 and State -1.5. Alerts are generated at each transition point. The scoring snapshot captures the setup quality at entry. The outcome record captures the final result. And the complete history, from first watchlist entry to final close, is preserved in the database for analysis, learning, and continuous improvement.

State	Action	Thread	Key Alerts
0 → 1	Initial 50% entry	Breakout	Confirmed, In Buy Zone
1 → 2	Pyramid 1 (+25%)	Position	P1 Ready, P1 Extended
2 → 3	Pyramid 2 (+25%)	Position	P2 Ready, P2 Extended
3 → 4	TP1 (sell ~33%)	Position	TP1 Hit, 8-Week Hold
4 → 5	TP2 (sell ~50% remaining)	Position	TP2 Hit
5 → 6	Trail remaining shares	Position	Trailing Stop Set
Any → -2	Stop loss hit	Position	Hard Stop, Stop Warning
Any → -1	Final exit (winner)	Position	50 MA Sell, Climax Top
Any → -1.5	Exit to re-entry watch	Position	MA Bounce, Pivot Retest
-1.5 → 1	Re-enter position	Position	Alt Entry Confirmed
-1.5 → 0	New base, back to watchlist	Position	New Base Forming

The Feedback Loop

The system is not static. Every outcome you record feeds back into the learning engine, which will eventually analyze factor correlations, identify which setup characteristics most strongly predict success, and propose optimized scoring weights. The trading workflow described in this chapter is not just a process for making money; it is a data collection process for making the system smarter over time. The more disciplined and complete your data entry, the more powerful the learning engine becomes.

What Comes Next

Part IV has walked you through the complete trading workflow from the system's perspective. You now know how to respond to a breakout alert: run the pre-entry checklist, confirm the setup on your own chart, execute the initial 50% position, and record the entry in the GUI. You know how to build the position through the 50/25/25 pyramid structure, adding shares only when the stock confirms the breakout by advancing. You know the offensive sell rules (profit targets, climax top, eight-week hold expiration) and the defensive sell rules (7-8% stop, 50-day MA breakdown, 10-week line violation, market correction). And you know how to close positions, record outcomes for the learning engine, and understand the complete state machine including State 6 (Trailing) for extended winners and State -1.5 (Exited Watch) for re-entry monitoring.

In Part V, you will learn about the daily and weekly operational routines from a system management perspective: monitoring service health, reviewing alert logs, managing the database, and ensuring the system is running optimally. Part VI covers advanced topics including alternative entry strategies (Shakeout+3, Three Weeks Tight, Moving Average pullbacks) and how the system detects and alerts on these secondary setups.

Part VII, the final section, covers the learning engine: how it analyzes your historical outcomes, identifies which scoring factors predict success, optimizes the YAML weights, and implements the human-in-the-loop approval process that ensures you review and consent to every configuration change before it takes effect.

The workflow described in Part IV is the core of your daily trading activity. Every other part of the system exists to support this workflow: the methodology provides the rules, the watchlist provides the candidates, the architecture provides the automation, and the learning engine provides the continuous improvement. Master this workflow, and you have mastered the system.

CANSLIM Trading System
User Guide

Part V: Daily and Weekly Operational Routines

Chapters 23 – 27

Consistency separates successful investors from everyone else.
This section defines the exact routines to follow every day and every week
for maximum effectiveness with the CANSLIM Monitor.

Part V: Daily and Weekly Operational Routines

By now you understand the CANSLIM methodology, you know how to build a watchlist, you understand the system architecture, and you have learned the complete trade lifecycle from initial entry through profit-taking and exit. All of that knowledge amounts to nothing without consistent execution.

This section is about turning knowledge into habit. It defines the specific actions you should take before the market opens, during the first critical thirty minutes of trading, throughout the regular session, after the market closes each day, and during your weekend preparation. Each routine is designed around two parallel activities: what you do manually in MarketSurge and your brokerage account, and what the CANSLIM Monitor does for you automatically.

The routines described here are not arbitrary. They are synthesized from the practices of MarketSurge product coaches, IBD methodology, the habits of three-time U.S. Investing Champion David Ryan, and the specific capabilities of the CANSLIM Monitor system you built. They represent the minimum consistent effort required to trade growth stocks successfully. You can always do more, but you should never do less.

One important principle: your automated system handles the mechanics of monitoring. It watches prices every sixty seconds, scores setups, tracks your positions, and delivers alerts. Your job as the human in the loop is to make the decisions that require judgment: evaluating chart quality, assessing risk-reward, executing trades, and maintaining emotional discipline. The routines in this section are organized around that division of labor.

Chapter 23: The Pre-Market Routine

The trading day begins well before the 9:30 AM Eastern opening bell. For West Coast traders, this means a 4:30 to 5:30 AM Pacific start. For Central Time, 6:30 to 7:30 AM. The pre-market routine takes approximately thirty minutes and accomplishes three goals: understanding the overnight market context, reading your system's morning briefing, and preparing mentally for the day ahead.

23.1 Check Overnight Market Sentiment

Your first task each morning is understanding what happened while you slept. The global markets trade nearly around the clock, and events in Europe or Asia can dramatically affect the U.S. open. Start with three data points.

Index Futures

Check the S&P 500 futures (ES), Nasdaq 100 futures (NQ), and Dow futures (YM). These contracts trade on the CME Globex platform starting at 6:00 PM Eastern the prior evening and continue through the market open. A large gap in futures, typically defined as more than half a percent, signals that the market will open significantly higher or lower than the prior close. Futures gaps of one percent or more often lead to volatile opens and should make you more cautious about placing market orders in the first few minutes. Any financial news website or your brokerage platform will show you current futures prices. The CANSLIM Monitor's regime thread also captures overnight futures data from IBKR when the connection is available, so this information will appear in your morning alert.

The Fear and Greed Index

CNN's Fear and Greed Index aggregates seven market indicators into a single sentiment gauge ranging from Extreme Fear to Extreme Greed. It is free and available at CNN.com. While you should never trade solely based on a sentiment indicator, it provides useful context. Extreme readings in either direction tend to be contrarian signals. When the index reads Extreme Fear, the market is often near a bottom. When it reads Extreme Greed, the market may be overextended. Check it each morning and note the trend over the past week.

Global Markets and Overnight News

Spend a few minutes reviewing overnight news that could affect your positions or watchlist stocks. In MarketSurge, the news panel on the right side of the chart view aggregates stories from Investor's Business Daily, NASDAQ, MarketWatch, Barron's, and the Wall Street Journal. Pay particular attention to any FDA approvals or clinical trial results for biotech holdings, earnings reports released after the prior close or before the current open, major geopolitical events, and central bank announcements. Also check global market performance. Significant moves in European or Asian indices can foreshadow the U.S. session's direction.

> 📋 **How the System Helps**
>
> The CANSLIM Monitor's regime thread runs automatically at 8:30 AM Eastern (7:30 AM Central). It

sends a Discord alert with the current market regime score, distribution day counts for SPY and QQQ, overnight futures changes, the current IBD exposure recommendation, and whether a Follow-Through Day has occurred. This alert arrives before you need to make any trading decisions, giving you an automated overnight briefing that would otherwise take fifteen minutes of manual research.

23.2 Read the Morning Market Regime Alert

The morning regime alert is the single most important piece of information you receive each day. It tells you whether the market environment is favorable for new purchases. Here is how to interpret each component of the alert.

Distribution Day Counts

The alert shows the current distribution day count for both the S&P 500 and the Nasdaq Composite, along with the individual dates of each distribution day. IBD considers five or more distribution days on either index as a warning sign. The alert also shows a D-Day histogram that visualizes the clustering of distribution days over the trailing 25-day window. Clustered distribution days are more bearish than scattered ones, because clustering indicates persistent institutional selling pressure rather than isolated events.

Regime Score and Classification

The regime thread calculates a weighted composite score from distribution day analysis, overnight futures direction, and Follow-Through Day status. This score maps to one of three classifications: BULLISH, NEUTRAL, or BEARISH. The classification directly informs your exposure level. In a BULLISH regime, you can be fully invested at 80 to 100 percent exposure. In a NEUTRAL regime, limit exposure to 40 to 60 percent and be selective with new entries. In a BEARISH regime, reduce to 0 to 20 percent exposure and avoid new purchases entirely.

Follow-Through Day Status

After a market correction, the regime alert will track active rally attempts and report when a Follow-Through Day has occurred. A Follow-Through Day is a significant gain of 1.25 percent or more on higher volume on Day Four or later of a rally attempt. It is the green light that a new uptrend may be beginning. The alert clearly identifies whether the market is in correction, whether a rally attempt is underway, and whether that attempt has been confirmed by a Follow-Through Day. This is critical information because you should not be making new purchases during a correction, even if individual stocks look attractive.

23.3 Review Your Watchlist and Open Positions

Before the market opens, review any pre-market price moves on your watchlist stocks and open positions. In MarketSurge, make sure you have extended hours pricing turned on (Settings, the wrench icon, and check “Extended Hours Pricing”). This lets you see pre-market and after-hours activity directly on the chart.

For each open position, ask three questions. First, is the stock gapping significantly in either direction? A gap up may accelerate your profit-taking schedule. A gap down may put a stop level in jeopardy. Second, does the stock report earnings today or this week? Never hold a position through earnings without a deliberate plan. Third, has any overnight news changed the fundamental thesis for this stock?

For your watchlist, check whether any stocks are approaching their pivot points. If a stock is within two to three percent of its pivot and showing pre-market strength, you may need to act quickly at the open. Set price alerts in MarketSurge by right-clicking on the chart at the pivot level. These alerts will carry over to the mobile app, so you will be notified even if you step away from your desk.

📋 How the System Helps

The CANSLIM Monitor's breakout thread begins polling at market open. It checks every watchlist stock every 60 seconds and will alert you within one minute if a stock crosses its pivot. You do not need to manually watch every stock. However, reviewing your watchlist pre-market helps you form an opinion about which stocks are most likely to act, so you can make faster decisions when alerts arrive.

Chapter 24: The First 30 Minutes (9:30 – 10:00 AM ET)

The first thirty minutes after the opening bell are the most volatile period of the trading day. Large institutional orders that accumulated overnight are executed, retail traders react to overnight news, and algorithms process the initial price action. This is when most breakouts occur and when most false breakouts get shaken out.

The consensus among experienced IBD practitioners, including MarketSurge coaches and David Ryan, is nuanced. During the first thirty minutes, you should primarily manage existing positions rather than initiate new ones. False breakouts and shakeouts are common during this window. However, if a stock on your watchlist breaks out on genuinely strong volume and you have been monitoring the setup closely, waiting too long can mean missing the move entirely. The key distinction is between conviction and impulse. Act on setups you have studied. Do not act on setups you discover for the first time at the open.

24.1 Monitoring Breakout Alerts

Your Discord channel will light up during the first thirty minutes. The breakout thread polls every sixty seconds, and if multiple watchlist stocks are approaching pivots simultaneously, you may receive several alerts in quick succession. For each alert, evaluate three things before taking action.

Grade: The alert displays the scoring engine's grade for this setup, from A+ to D. In a healthy market, you should generally only act on grades of B or higher. In a weaker market, raise your threshold to A- or above. The grade incorporates pattern type, base stage, base depth and length, RS Rating, and dynamic factors like Up/Down Volume ratio and 50-day moving average position.

Volume Confirmation: This is the single most important real-time indicator. IBD's threshold is 40 percent or more above the 50-day average volume. The alert shows the current Relative Volume (RVOL), which is time-adjusted. An RVOL of 1.4 at 10:00 AM means the stock is on pace for 140 percent of its average daily volume, which clears the institutional conviction threshold. Early in the session, volume can be misleading. A stock might show very high RVOL at 9:35 AM simply because a few large orders hit the tape. Wait for at least fifteen to twenty minutes of data for a more reliable volume reading.

Price Action Quality: Is the stock breaking out cleanly with a strong candle, or is it churning around the pivot level with long wicks? Clean breakouts typically show a sharp move through the pivot on a wide-range candle. Churning at the pivot often means the breakout will fail.

24.2 Checking MarketSurge Reports

While the CANSLIM Monitor covers your watchlist automatically, MarketSurge can reveal new opportunities that you have not yet added to the system. Three reports are particularly valuable in the first thirty minutes.

Breaking Out Today: Found under Open Stock Ideas, this report shows stocks from the Growth 250 that are currently crossing into their pivot zones. Any stock on this list has already

been vetted by the Growth 250's thirty-plus fundamental and technical filters. If something appears here that is not on your watchlist, it deserves a quick look. Check the chart pattern, RS Rating, and fundamentals. If it passes your buying checklist, you can add it to the CANSLIM Monitor immediately through the GUI for ongoing monitoring.

Near Pivot: This report shows stocks that are close to their pivot points but have not yet broken out. These are stocks you want to have on your radar for the rest of the day and the coming days. Set alerts on any that interest you.

RS Line Blue Dot: Updated in chronological order, this report identifies stocks whose Relative Strength Line has reached a new 52-week high while the stock is building or breaking out of a base. This combination of relative strength leadership and technical readiness is one of the strongest predictive signals in the IBD methodology. These stocks are outperforming the market at a historic rate while simultaneously forming actionable chart patterns.

24.3 Early Position Management

If you hold open positions, the first thirty minutes require attention but not necessarily action. Check each position against its stop level. If a stock gaps down and opens below your stop, the standard IBD approach is to sell immediately at the market. Do not wait and hope for a recovery. The system will already be generating stop warning alerts if any position is within one percent of its stop level.

For stocks that gap up, resist the urge to sell too quickly. A significant gap up may trigger a profit target or even the 8-week hold rule (if the stock gained 20 percent or more within three weeks of its breakout). Check whether the gap occurred on heavy volume, which suggests institutional accumulation and often leads to further gains. A gap up on light volume is less meaningful.

For positions approaching pyramid levels (the +2.5 percent and +5 percent tiers above your initial entry), the system will alert you when these zones are reached. Do not rush to add shares in the first few minutes of trading. Wait for the stock to hold and confirm its move. A stock that reaches your pyramid level at 9:32 AM may retreat back below it by 9:45 AM. Patience during this volatile window will save you from many whipsaw entries.

📋 How the System Helps

The position thread polls every 30 seconds for open positions, providing near-real-time tracking of stop levels, pyramid zones, and profit targets. Alerts are delivered instantly to Discord. The breakout thread simultaneously monitors all watchlist stocks at 60-second intervals. Between these two threads, you have comprehensive coverage without needing to manually check individual charts.

During the first 30 minutes, let the alerts come to you. Focus your manual effort on evaluating alert quality and making decisions, not on scanning through charts.

Chapter 25: The Intraday Routine (10:00 AM – 4:00 PM ET)

After the first thirty minutes, volatility typically settles into a more normal rhythm. The intraday routine is deliberately lighter than the pre-market and first-thirty-minute routines. One of the system's primary benefits is that it eliminates the need to watch screens all day. The CANSLIM Monitor does the watching. You do the deciding.

25.1 Responding to System Alerts

Throughout the trading day, alerts may arrive on Discord for several reasons. Each alert type requires a different response.

Alert Type	Urgency	Your Response
Breakout Alert	High	Evaluate grade, volume, and chart. Decide within 5–15 minutes. If volume confirms and grade is B+, consider entry.
Pyramid Alert	Medium	Stock has reached your add-on zone. Verify the move is on volume and the stock is behaving constructively. Add shares per your plan.
Stop Warning	Critical	Stock is within 1% of your stop level. Prepare a sell order. If it hits the stop, execute immediately. No exceptions.
Profit Target	Medium	Stock has reached TP1 (20%) or TP2 (25%). Sell the planned portion. Consider trailing stop for remainder.
Regime Change	High	Market conditions have shifted. If moving to BEARISH, stop all new purchases. If moving to BULLISH, resume normal activity. Review exposure level.

25.2 Using the GUI During Market Hours

The Kanban board interface provides a visual overview of all your positions organized by state. During market hours, the board updates in real time as the service pushes data through the named pipe IPC channel. The Kanban columns correspond directly to the position state machine: Watching (State 0), Entry (State 1), Building (States 2–3), Profit Taking (States 4–5), and Closed (States -1 and -2).

Each position card on the Kanban board shows the stock symbol, current price, gain or loss percentage, setup grade, and time since last alert. You can drag cards between columns to update their state, or right-click a card and select "Move to" to change its state. This is particularly useful when you execute a trade outside the system, such as manually buying a stock through your brokerage, and need to update the system's state to reflect the new position.

The alert acknowledgment feature is important during active trading. When an alert fires, it appears both on Discord and in the GUI's alert panel. Clicking the acknowledgment button tells

the system you have seen and acted on (or deliberately ignored) the alert. This prevents alert fatigue from repeated notifications about the same event, as the system applies cooldown periods of sixty minutes for breakout alerts and thirty minutes for pyramid alerts. Stop and profit alerts have no cooldown because they always require your attention.

25.3 When You Cannot Watch the Market

Many traders have day jobs and cannot monitor the market continuously. The CANSLIM Monitor was designed specifically for this reality. The system runs as a Windows service in the background, monitoring and alerting regardless of whether you are at your desk.

For traders who are away during market hours, the after-market close routine described in Chapter 26 becomes even more critical. Before you leave for work, set up any necessary orders in your brokerage. MarketSurge product coach Jerry Volkers recommends bracketed orders, which are conditional orders that include both a buy trigger at your pivot point and a stop loss at your predetermined level. If the stock breaks out and your order fills, you are automatically protected by the stop. If it does not break out, the order simply expires.

On your mobile device, the MarketSurge app mirrors your desktop watchlists and price alerts. Any alerts you set on the desktop carry over. Discord notifications will reach your phone as well, so you will see breakout alerts, stop warnings, and regime changes even if you are in a meeting. The key is to have your plan set before the market opens so that you can act on alerts without needing extensive analysis in the moment.

25.4 Industry Group Rotation

Throughout the trading session, pay attention to industry group rotation. IBD tracks 197 industry groups, ranked by six-month price and volume performance. The top 40 groups (roughly the top 20 percent) are where you want to concentrate your efforts. As MarketSurge coach Nicholas explains, *stocks tend to move in packs*. When an industry group begins rotating into the top ranks, multiple stocks within that group often set up simultaneously. Conversely, when a formerly leading group starts declining in rank, even the strongest stocks in that group may struggle.

You can track industry group rankings in MarketSurge under the Industry Groups section. Pay particular attention to groups that are accelerating upward in rank, as these represent sectors where institutional money is flowing in. The earnings tab in MarketSurge also helps identify rotation, as stocks within the same industry group often report earnings in similar windows.

Chapter 26: The After-Market Close Routine

The after-market close routine is where you process the day's events, manage your positions, and prepare for the next session. MarketSurge product coach Jerry Volkers recommends starting this routine at least one hour after the 4:00 PM ET close. The delay is deliberate: it takes approximately one hour for final end-of-day data and volume from all clearing houses to filter down into charting platforms. The data you see at 4:05 PM may not match the final official numbers.

The delay also serves a psychological purpose. After a volatile day, stepping away from screens to walk, eat dinner, or spend time with family helps you approach your after-hours analysis with clearer judgment. Emotional decisions made in the heat of a market close are rarely good ones.

26.1 Watch the IBD Daily Recap

The IBD Stock Market Today daily recap video is available on investors.com and YouTube shortly after the close. The panelists break down the day's action across all major indices, highlight key stocks to watch, and discuss the current market condition. Watching this video takes ten to fifteen minutes and provides professional-grade market commentary that contextualizes what your system observed during the day. Make this a daily habit.

26.2 Update Your Trading Journal

A trading journal is essential for long-term improvement. It provides a record of your observations, decisions, and the reasoning behind them. It also serves as documentation that you are trading as a business rather than a hobby, which has tax implications.

There is no single right way to keep a journal. David Ryan, three-time U.S. Investing Champion, prints out the index chart each day, marks it up by hand, and keeps it in a binder. Other traders use Excel spreadsheets to track daily index levels, volume, support and resistance, screen results, and notes on active groups. Still others use Evernote or similar apps that allow pasting charts, screenshots, and annotations. MarketSurge also has a built-in Notes feature on each chart where you can annotate directly on the stock's chart and access those notes anytime.

At minimum, your daily journal should capture the closing levels and volume for the S&P 500 and Nasdaq Composite, whether the day was a distribution day or an accumulation day, any actions you took (buys, sells, pyramid adds) with brief reasoning, any alerts from the system that you chose not to act on and why, and notes on any stocks that are approaching actionable setups.

📋 How the System Helps

The CANSLIM Monitor logs all alerts, state changes, and scoring snapshots to the SQLite database with timestamps. The market_regime_alerts table captures daily regime scores, distribution day counts, and futures data. The alerts table records every alert that fired during the day. Together, these logs provide a machine-readable trading journal that complements your personal notes.

The outcomes table, used by the Phase 7 Learning Engine, will eventually track the full lifecycle of

every trade from entry to exit, including P&L, holding period, and the conditions that led to each decision.

26.3 Manage Open Trades

With final end-of-day data available, review each open position. You have a limited set of options, and the discipline is in choosing correctly.

Sell for profit: If a stock has reached your profit target during the day and you did not sell intraday, place a sell order for the next morning. Or sell half and let the rest ride.

Sell for a loss: If a stock closed below your stop level, you must sell. The 7 to 8 percent maximum loss rule from IBD is non-negotiable. Keeping your losses small is the single most important factor in long-term trading success. The system will have already alerted you if a stop was hit, but verify the closing price against your stop level.

Hold and adjust: If a stock is working, check whether the stop should be tightened. For a stock that has gained 15 percent or more from entry, consider raising the stop to break even or slightly above. This converts a profitable position into a free trade where the worst outcome is a small gain.

Check earnings dates: Verify that none of your holdings are reporting earnings in the next few trading sessions. If a stock is reporting soon, decide now whether you will hold through the report or sell before. Do not let an earnings report surprise you.

26.4 Find New Potential Trades

After managing your existing positions, spend time looking for new opportunities. Review the alerts that triggered during the day in the MarketSurge alerts panel to see what hit your price targets. Go through your watchlist and note any stocks that moved closer to or further from their pivots. Review the Breaking Out Today, Near Pivot, and RS Line Blue Dot reports for stocks you may not have considered.

If you find a new candidate, run it through the full CANSLIM buying checklist. Check the Composite Rating (target 90 or above), EPS Rating (80 or above), RS Rating (80 or above, ideally 90+), SMR Rating (A or B), and A/D Rating (A through C+). Review the chart for a proper base pattern, confirm the stock is in an early-stage base (stage one or two), check institutional sponsorship trends, and verify the industry group is ranked in the top 40. If the stock passes, add it to the CANSLIM Monitor through the GUI as a new State 0 (Watching) position with the correct pivot price and stop level.

26.5 Set Up Orders for Tomorrow

If you cannot watch the market during the day, the after-close routine is when you set up your orders. Bracketed orders are particularly useful. A bracketed order places a buy-stop at your pivot price and, if filled, automatically places a stop-loss at your predetermined level. If the stock

never reaches your pivot, the order simply expires. This approach ensures you participate in breakouts even when you are not at your desk, while maintaining risk management discipline.

When setting orders, check the earnings calendar to ensure you are not leaving an order open that could fill just before an earnings report. Cancel or adjust orders accordingly.

Chapter 27: The Weekend Deep Dive

The weekend is when you do your most thorough analysis. With the markets closed and a full week of data behind you, Saturday and Sunday provide the space for careful research that is impossible during the heat of live trading. The Growth 250 list updates late Friday night, so Saturday morning is the optimal time to begin.

The weekend deep dive typically takes one to three hours, depending on market conditions and the number of stocks requiring attention. In a hot market with many setups forming simultaneously, expect to spend more time. In a correction when new setups are scarce, the review may be shorter but no less important, because corrections are when you build the watchlist that will power your next run of trades.

27.1 Step 1: Check the Market Exposure Level

Begin by assessing the current market condition. IBD now uses a five-tier percentage exposure scale rather than the older three-state system. The five tiers are 0 to 20 percent, 20 to 40 percent, 40 to 60 percent, 60 to 80 percent, and 80 to 100 percent. Check the current recommended exposure level in the IBD Big Picture column, which is updated after the Friday close. Also review your system's most recent regime alert for the current BULLISH, NEUTRAL, or BEARISH classification.

The exposure level sets the ceiling for your weekend analysis. If the recommended exposure is 0 to 20 percent, your weekend should focus primarily on building and refining your watchlist for the eventual recovery, not on finding stocks to buy on Monday. If the exposure is 80 to 100 percent, your watchlist should contain actionable setups that you can act on quickly when breakouts occur.

Exposure Level	Weekend Focus	Expected Activity Next Week
0–20%	Build watchlist for recovery. Study chart patterns. Review and learn from recent trades.	No new buys. Manage remaining positions with tight stops.
20–40%	Refine watchlist. Identify 3–5 highest-conviction setups. Smaller position sizes.	Selective buying only. Half-size initial positions. Tighter-than-normal stops.
40–60%	Active screening. Balance watchlist between near-term and developing setups.	Normal buying with standard position sizing. Monitor existing positions closely.
60–80%	Focus on highest-quality setups. Rank watchlist by conviction. Prepare pyramid plans.	Full-size positions on A-grade setups. Active pyramiding on winning positions.
80–100%	Identify the best 2–3 setups. Aggressive screening. Review industry group leaders.	Full conviction on top setups. Aggressive pyramiding. Let winners run.

27.2 Step 2: Run MarketSurge Screens

With the market condition established, run your screening routine. The goal is to refresh your watchlist with the highest-quality candidates currently available. A systematic screening process follows a funnel: start broad and narrow progressively.

Start with the Growth 250

Open the Growth 250 list in MarketSurge. This list, updated every Friday night, is your pre-screened universe. It runs approximately thirty filters covering fundamentals, technicals, and institutional sponsorship to identify the best growth stocks in the best industry groups. Check the total count. A healthy market typically produces 100 or more names on the Growth 250. When the count drops below 50, the market is under stress and setups will be lower quality.

Review Key Sub-Lists

Within the Growth 250 ecosystem, focus on five target lists: RS Line New High (stocks showing relative strength leadership), Pattern Recognition (stocks forming identifiable base patterns), Near Pivot (stocks approaching breakout points), Tight Areas (stocks showing tight weekly closes indicating institutional accumulation), and Power from Pivot (stocks that recently broke out and are performing well). Each list represents a different stage of the setup lifecycle, and reviewing all five gives you comprehensive coverage.

Run Custom Screens

In addition to the pre-built reports, run your custom screens. At minimum, maintain an Up on Volume screen (stocks trading higher on above-average volume today), an RS Line Blue Dot screen (relative strength leaders building bases), and the O'Neil Screen (the classic CAN SLIM fundamental filter). The screening-from-lists technique is particularly powerful: apply your custom screen to the Growth 250 list rather than the entire database. This creates a super list of stocks that pass both the Growth 250's thirty-plus filters and your custom criteria.

27.3 Step 3: Chart Review

With your screen results in hand, perform a chart review on each candidate. This is the most time-intensive part of the weekend routine, and it cannot be automated. The CANSLIM Monitor scores setups based on pattern type, base stage, depth, length, and RS Rating, but you must visually confirm the chart quality.

For each candidate, open both the daily and weekly charts. Remember the IBD principle: weekly charts take precedence over daily charts for pattern recognition and buy zone determination. The daily chart is used for precise entry timing. On the weekly chart, identify the base pattern (cup with handle, double bottom, flat base, or ascending base), count the base stage, and assess the RS Line direction. On the daily chart, identify the exact pivot point, check volume patterns within the base, and note any areas of support or resistance.

Rank your reviewed candidates into tiers. Tier 1 stocks are the highest-conviction setups that you would buy on Monday if they broke out. These should number no more than five to eight at any time. Tier 2 stocks are developing but not yet ready. Tier 3 stocks are interesting but have identifiable weaknesses. Only Tier 1 stocks warrant active monitoring in the CANSLIM Monitor.

27.4 Step 4: Update the CANSLIM Monitor

With your weekend research complete, update the system. Open the GUI and perform these actions.

Add new candidates: For any Tier 1 stock not already in the system, add it as a State 0 (Watching) position. Enter the pivot price, stop level, and base pattern information. The scoring engine will immediately calculate a grade.

Remove stale candidates: Review your existing watchlist for stocks that have deteriorated. If a stock has broken below its 10-week moving average, if its RS Rating has dropped below 70, or if the base pattern has failed, remove it from the watchlist. A clean watchlist is more valuable than a large one. Target 15 to 30 active symbols.

Update pivot levels: Bases evolve. A stock's pivot point may change as it forms a handle, or as the right side of a base develops further. Update any pivot levels that have shifted.

Update CANSLIM ratings: For each active watchlist stock, update the latest Composite Rating, EPS Rating, RS Rating, SMR Rating, A/D Rating, industry group rank, and mutual fund count in the GUI's position detail view. The CANSLIM Monitor's database timestamps each update, creating a historical record that reveals trends in fundamental quality over time. For a watchlist of 15 to 30 stocks, this weekly update adds approximately 10 to 15 minutes to your review. Watch for deteriorating trends: a declining Composite Rating, falling RS Rating, or decreasing fund ownership are early warning signals that a stock may not perform well even if the chart looks good.

27.5 Step 5: Portfolio Review and Position Sizing

The weekend is also when you review your overall portfolio allocation. Calculate your current exposure as a percentage of total capital. Compare this to the recommended exposure level from Step 1. If you are overexposed relative to the market condition, identify positions to trim. If you are underexposed in a strong market, ensure your watchlist has enough Tier 1 candidates to deploy capital when breakouts occur.

For each potential new trade, pre-calculate your position size using your standard risk formula. If you allocate 5 percent of your portfolio to each position and your stop is 7 percent below the pivot, you know exactly how many shares to buy before the market opens. Having these numbers ready eliminates the need for quick math during volatile market conditions and ensures consistent risk management across all positions.

27.6 Step 6: Sync and System Health

The final step of the weekend routine is ensuring your system is running properly and all data is synchronized.

Service status: Open the GUI's service control panel and confirm that the Windows service is running with all three threads active (breakout, position, and regime). Check the log files in the logs directory for any errors or warnings from the past week.

IBKR connection: Verify that IBKR TWS or Gateway is running and connected. The service needs this connection to poll real-time prices starting at Monday's open.

Google Sheets sync: If you use TrendSpider chart overlays powered by the Google Sheets sync, confirm that the latest data has been pushed from SQLite to the spreadsheet.

Database backup: The SQLite database file is the single source of truth for all system data. Back it up weekly. Copy the database file to a separate location. This takes seconds and protects against data loss.

📋 Weekend Routine Summary

1. Check market exposure level (IBD Big Picture + regime alert)
2. Run MarketSurge screens (Growth 250, sub-lists, custom screens)
3. Chart review on all candidates (weekly chart first, then daily)
4. Update the CANSLIM Monitor (add/remove symbols, update pivots and ratings)
5. Portfolio review and position sizing (calculate sizes for potential new trades)
6. System health check (service status, IBKR connection, database backup)

Part V Summary

The routines described in this section are the operational backbone of your trading practice. The pre-market routine gives you context. The first thirty minutes demand focused attention. The intraday routine leverages your automated system to reduce screen time. The after-market close routine processes the day and prepares for tomorrow. The weekend deep dive refreshes your entire pipeline.

Consistency is the theme. The traders who succeed with the CANSLIM methodology are not necessarily the smartest or the most experienced. They are the most disciplined. They follow the same process every day, every week, in every market condition. When the market is exciting and breakouts are everywhere, they follow the process. When the market is grinding and nothing is working, they follow the process. The process protects you from your own emotions and ensures you are always prepared when opportunity arrives.

In Part VI, we will turn to system maintenance, troubleshooting, and the Phase 7 Learning Engine, which uses machine learning to analyze your trading outcomes and optimize the scoring algorithm's factor weights over time.

CANSLIM Trading System
User Guide

Part VI: Advanced Topics

Chapters 28 – 30

Beyond the standard pivot breakout lies a world of alternative entries, machine learning optimization, and complementary trading strategies. This section teaches you how to use them all within the CANSLIM Monitor.

Part VI: Advanced Topics

Parts I through V taught you the core CANSLIM methodology, how to build a watchlist, how the system architecture works, how to execute the complete trade lifecycle, and how to maintain consistent daily and weekly routines. That foundation is sufficient for profitable trading. Many successful investors never go beyond it.

This section is for those who want to go further. It covers three areas that extend the system's capabilities: alternative entry strategies that provide additional ways into leading stocks beyond the standard pivot breakout, the learning engine that uses machine learning to analyze your trading outcomes and optimize the scoring algorithm, and swing trading integration that lets you run a complementary short-term strategy alongside your position trades.

A word of caution before we begin: these are advanced topics for a reason. Alternative entry strategies require more experience and faster decision-making than standard pivot breakouts. The learning engine requires a meaningful sample of completed trades before it can produce reliable recommendations. And swing trading demands a different psychological framework than position trading. Master the fundamentals first. Then return here when you are ready to expand your toolkit.

Chapter 28: Alternative Entry Strategies

The standard CANSLIM entry is the pivot breakout: a stock completes a proper base pattern, you identify the pivot point, and you buy when price clears that pivot on above-average volume. This is the bread and butter of the methodology, and it should remain your primary entry technique. But it is not the only valid way to enter a leading stock.

William O'Neil himself identified several alternative entry methods that allow you to buy stocks at lower prices or catch stocks you may have missed on the initial breakout. These alternative entries share a common philosophy: they all rely on identifying points where institutional investors are actively accumulating shares, and they all require the same underlying stock quality—strong fundamentals, proper base formation, and favorable market conditions.

The CANSLIM Monitor system detects and alerts on four alternative entry types. Each generates a distinct alert in Discord with its own color coding and recommended action. This chapter explains each entry type, when to use it, how the system identifies it, and how to manage the additional risk that comes with non-standard entries.

28.1 Moving Average Pullback Entries

After a successful breakout, growth stocks typically advance for several days or weeks before pulling back to digest their gains. The most common pullback targets are the 21-day exponential moving average for short-term support and the 50-day simple moving average (or its weekly equivalent, the 10-week line) for intermediate support. These pullbacks represent opportunities to enter a stock you may have missed at the initial pivot, or to add shares to an existing position at a more favorable price.

The logic is straightforward: institutional investors—mutual funds, pension funds, hedge funds—use these moving average levels as reference points for adding to positions. When a stock they already own pulls back to the 50-day line, they view it as a discount and add shares. This buying pressure creates support at the moving average. As MarketSurge product coach Jerry Volkers explains, *the 10-week moving average is the most important support level for growth stocks* because it represents approximately one quarter of trading activity and is the primary reference line for institutional portfolio managers.

The system identifies moving average pullback entries by monitoring the distance between a stock's current price and its key moving averages. When a stock that was previously extended from its pivot—meaning it had advanced more than five percent above the buy point and was no longer in the buyable range—pulls back to within one percent of its 21-day EMA or 50-day SMA, the system generates an alternative entry alert.

The Probability Hierarchy

Not all pullbacks to moving averages are created equal. The first pullback to the 50-day line after a breakout has the highest probability of success, roughly comparable to a standard pivot breakout. The second pullback is still tradeable but carries slightly elevated risk. By the third time a stock tests the 50-day line, the odds of support holding have diminished significantly, and you should either pass or use a meaningfully smaller position.

This hierarchy exists because each successive test of support weakens that support level. The first test typically features volume drying up on the decline (sellers exhausted) followed by heavy volume on the bounce (institutions buying aggressively). By the third test, the volume pattern often reverses: heavier selling into the decline and weaker bouncing. The system tracks how many times a stock has tested its 50-day line and includes this count in the alert, allowing you to assess probability accordingly.

Pullback #	Success Rate	Position Size	Stop Placement
1st to 50-day	High (comparable to pivot)	Normal (50% initial)	1–2% below moving average
2nd to 50-day	Moderate	Reduced (25–50% initial)	1–2% below moving average
3rd+ to 50-day	Low	Pass or minimal pilot	N/A — consider passing
1st to 21-day EMA	High (short-term)	Normal add-on size	2 closes below 21 EMA

Volume Confirmation

Volume behavior during a pullback is as important as the price action. Healthy pullbacks show declining volume as the stock drops toward the moving average—this indicates that selling pressure is dissipating, not intensifying. When the stock bounces off the moving average, you want to see volume expand, confirming that institutional buyers are stepping in at that level. If volume increases on the decline and decreases on the bounce attempt, the moving average is more likely to fail as support.

The CANSLIM Monitor evaluates volume patterns automatically when generating MA pullback alerts. The alert includes the volume ratio on the bounce day compared to the 50-day average volume, giving you an instant read on institutional conviction. A ratio above 1.2 suggests strong institutional interest; below 0.8 suggests the bounce may lack conviction.

💻 How the System Helps

The monitor generates ALT_ENTRY alerts with subtypes MA_BOUNCE (for 50-day) and 21_EMA (for the 21-day EMA).

Each alert includes: the number of prior MA tests, the volume ratio on the bounce, and the distance from the moving average.

For stocks already in your portfolio, these appear as ADD alerts rather than new entry alerts.

For watchlist stocks that were previously EXTENDED, the system reclassifies them as actionable when they pull back to support.

28.2 The Three Weeks Tight Pattern

The three weeks tight pattern is one of the most powerful secondary entry signals in the CANSLIM methodology. It occurs when a stock's weekly closing prices cluster within a very narrow range—typically 1 to 1.5 percent—for three consecutive weeks. This extreme tightness

signals that supply and demand have reached a near-perfect equilibrium: holders are unwilling to sell despite accumulated profits, and buyers are steadily accumulating without pushing the price higher.

Think of it as compressed energy waiting to be released. The tight trading range represents a period of digestion after an advance, where the stock consolidates its gains without giving back meaningful ground. When the stock finally breaks above the high point of the three-week tight pattern on above-average volume, it often launches into another significant advance.

MarketSurge product coach Jerry Volkers considers the three weeks tight to be one of his favorite patterns. As he explains, the pattern is *primarily an area where you add to a position, but it is a pattern that I like so much that I use it to start a position*. This is notable because most secondary entry techniques are used exclusively for adding to existing winners. The three weeks tight is strong enough to justify initiating a new position if you missed the original breakout.

Identifying the Pattern

To qualify as a valid three weeks tight, each of the three weekly closing prices must fall within 1.5 percent of the prior week's close. This is measured on the weekly chart using closing prices only—intraweek volatility does not disqualify the pattern. A stock can swing several percent during the week as long as it closes near where it closed the prior week.

Volume during the three-week tight period should be declining or at least below average. This confirms that the tightness is caused by an absence of selling rather than heavy buying and selling that happen to offset each other. When you see very tight closes combined with drying-up volume, you have the ideal setup.

Trading the Three Weeks Tight

The entry point is a break above the highest price reached during the three-week pattern on above-average daily volume. Your stop goes below the lowest point of the pattern. Because the pattern is inherently tight, the distance from entry to stop is typically small—often three to five percent—which means you can take a larger position with the same dollar risk. This is one of the key advantages of the three weeks tight pattern.

Consider the math: if your standard breakout stop is seven to eight percent below the entry and you risk one percent of your portfolio on each trade, your maximum position size is approximately 12.5 to 14 percent of the portfolio. But if a three weeks tight setup has only a four percent distance from entry to stop, that same one percent portfolio risk allows a position of 25 percent—nearly double the size. Tight patterns create asymmetric opportunity because they compress the risk side of the risk-reward equation.

💻 How the System Helps

The monitor detects three weeks tight patterns by comparing weekly closing prices for the most recent three weeks.

When closing prices fall within the 1.5% threshold for three consecutive weeks, the system creates a 3WT alert.

The alert includes the buy point (high of the pattern + $0.10), the stop level (low of the pattern), and the risk percentage.

The pattern type "3 Weeks Tight" is available in the Google Sheets watchlist dropdown for scoring purposes.

28.3 The Shakeout Plus 3 Entry

The shakeout plus 3 is the most aggressive of the alternative entry strategies. It is designed to get you into a stock alongside institutional investors during a manufactured decline—a shakeout—before the stock resumes its uptrend. The concept originates with Jesse Livermore, one of the most famous traders in stock market history, and was later refined by William O'Neil.

The setup occurs when a stock forming a base undercuts a prior low, triggering stop-loss orders from retail investors, and then reverses back above that low. This undercut-and-recover action is the shakeout itself: institutions deliberately allow or even encourage the decline to shake out weak holders, allowing them to accumulate shares at lower prices. Once enough shares have changed hands, the stock reverses and eventually breaks out to new highs.

Calculating the Entry Point

The entry point for a shakeout plus 3 is calculated as the first low of the base plus approximately ten percent. The name comes from Livermore's era when most active stocks traded around thirty dollars, making the addition three points. For a modern stock, you scale the addition to the price level: a fifty-dollar stock with a first low at forty-eight dollars would have a shakeout plus 3 entry around fifty-three dollars. A one-hundred-dollar stock with a first low at ninety-five dollars would trigger at approximately one hundred and five dollars.

This entry point is deliberately placed below the standard pivot point. The advantage is a lower average cost—you are buying before the crowd—but the disadvantage is that you are buying within the base, before the stock has proven itself with a breakout. This is why the shakeout plus 3 is considered an aggressive, advanced technique.

Risk Management for Early Entries

Because you are buying before the standard pivot breakout, the shakeout plus 3 carries elevated risk and demands strict risk management. MarketSurge coach Arusha Paris emphasizes: *it is a more advanced buy point and non-traditional approach. We want to adjust our risk accordingly*. This means using a smaller initial position—typically half your normal size—and being prepared to cut quickly if the stock fails to follow through.

The position sizing logic works like this: start with a half-size pilot position at the shakeout plus 3 entry. If the stock continues higher and eventually breaks out through the standard pivot point, you can add to bring the position to full size. If the stock rolls over and fails to recover, you sell the pilot position at a small loss. Either way, your risk is capped because you started small.

About fifty percent of stocks that break out through their pivot point will pull back to retest that pivot level. If you entered at the shakeout plus 3 buy point, your average cost is meaningfully lower than the pivot, which means you can endure the retest with minimal stress. This

psychological advantage is one of the key benefits of the early entry—it allows you to sit through normal base-building volatility that might otherwise shake you out.

💻 How the System Helps

The monitor tracks base formation and identifies undercut-and-recover patterns.

When a stock undercuts a prior base low and then recovers above the first low + 10%, the system generates a SHAKEOUT_PLUS_3 alert.

The alert includes the calculated entry price, the standard pivot for comparison, and the recommended pilot position size.

The "Shakeout +3" pattern type is available in the watchlist dropdown for manual tracking and scoring.

28.4 Confluence Zone Entries

A confluence zone occurs when multiple support levels converge within a narrow price range. For example, a stock might have its 50-day moving average at one hundred dollars, a prior pivot point at ninety-nine dollars, and a trend line connecting prior lows at one hundred and one dollars. The clustering of these support levels creates a zone where institutional buying pressure is likely to be strongest, because different groups of institutional investors are referencing different support levels that all happen to align.

Confluence zones are powerful because they provide clear stop-loss placement: if the stock drops through the entire confluence zone, all three support levels have failed simultaneously, which is an unambiguous exit signal. Conversely, if the stock bounces from the zone, you have high confidence that institutional support is genuine because multiple reference points held.

Types of Confluence

The most common confluence combinations include the 50-day moving average meeting a prior pivot point (the level the stock originally broke out from), the 50-day moving average converging with the 21-day EMA and a rising trend line, and a round number (like one hundred or two hundred dollars) aligning with a moving average. The system identifies confluence zones by measuring the spread between all active support levels. When three or more support references fall within a two percent range, it flags the zone and generates an alert.

MarketSurge product coach Nicholas notes that these overlapping support areas represent *a very strong support area when you see something like this*—the combination of a prior buy point acting as support plus a key moving average creates a high-probability entry point. The system evaluates confluence using the prior pivot level, the 21-day EMA, the 50-day SMA, and the 200-day SMA.

💻 How the System Helps

The system continuously tracks the distance between price and all active support levels.

When three or more support levels converge within a 2% spread, it generates a CONFLUENCE alert.

The alert lists each support level, its exact price, and the overall spread of the zone.

Stop placement guidance: 1–2% below the lowest support level in the zone.

28.5 The Pivot Retest Entry

After a stock breaks out through its pivot point, it is not uncommon for the stock to pull back and retest the pivot—sometimes called “kissing the pivot goodbye.” About half of all successful breakouts will pull back to touch or come very close to the original pivot level before resuming their advance. This retest transforms the pivot from resistance into support, confirming institutional commitment to the stock.

For traders who missed the original breakout, the pivot retest provides a second-chance entry with excellent risk-reward characteristics. Your stop is tight—just one to two percent below the pivot—because if the pivot fails as support, the breakout has likely failed entirely. Your upside target remains the same as the original breakout target. This combination of tight stop and full upside potential makes the pivot retest one of the most efficient entry techniques available.

The system detects pivot retests by monitoring stocks that have broken out and subsequently pulled back to within one percent of their original pivot level. The alert includes the pivot price, the distance from the current price to the pivot, and the volume pattern during the pullback (you want declining volume on the pullback and increasing volume on the bounce).

💻 How the System Helps

The system generates ALT_ENTRY:PIVOT_RETEST alerts when a broken-out stock returns to within 1% of its pivot.

Volume analysis is included: declining volume on the pullback = healthy; rising volume on the pullback = caution.

The alert recommends normal 50% initial position size with a stop 1–2% below the pivot.

This alert type only fires for stocks that have already achieved a valid breakout (not stocks that never cleared the pivot).

Chapter 29: The Learning Engine

The CANSLIM Monitor's scoring engine assigns grades to potential trade setups based on a set of weighted factors: RS Rating, pattern type, base stage, base depth, base length, and various dynamic technical indicators. These weights were initially set based on historical research, IBD methodology, and empirical observation. But here is the fundamental question: are those initial weights optimal?

The learning engine is designed to answer that question. It analyzes the outcomes of your actual trades—which setups succeeded, which failed, and what factors were present at the time of entry—to determine whether the scoring weights should be adjusted. It uses statistical analysis and machine learning to identify which factors most strongly predict success in your trading, and it proposes weight adjustments that would improve the scoring algorithm's accuracy.

The critical word in the previous paragraph is "proposes." The learning engine never changes weights automatically. It follows a strict human-in-the-loop approval process: the system analyzes outcomes, generates suggestions, presents those suggestions for your review through the GUI and Discord, and waits for your explicit approval before activating any changes. This design ensures that you remain in control of the system's behavior at all times.

29.1 Data Requirements

Machine learning is only as good as the data it learns from. The learning engine requires a minimum dataset before it can produce reliable recommendations. Without sufficient data, any patterns it identifies could be noise rather than signal, and weight adjustments based on noise would degrade rather than improve performance.

Requirement	Minimum (Analysis)	Ideal (Optimization)
Closed positions	50	100+
Successful trades	20	40+
Failed trades	20	40+
Trading history	3 months	6+ months
Market regimes represented	At least 1 (bull or bear)	2+ (bull and bear)

Outcomes are classified into four categories based on the final result of each closed trade. A SUCCESS trade gained twenty percent or more from the entry price, earning a score of 1.0 for regression purposes. A PARTIAL trade gained between zero and twenty percent, scoring 0.5. A STOPPED trade hit the seven to eight percent stop loss, scoring 0.0. And a FAILED trade lost money but was closed for a reason other than the stop—perhaps a market regime change or a fundamental deterioration—also scoring 0.0. This four-tier classification provides more nuance than a simple binary win/loss system.

The outcome data is populated automatically when you close positions in the CANSLIM Monitor. The system captures a snapshot of all relevant factors at the time of entry—RS Rating,

EPS Rating, Composite Rating, A/D Rating, base stage, base depth, pattern type, market regime, and more—and stores it alongside the exit data. You can also import historical trades from TradesViz CSV exports to seed the learning engine with past data.

29.2 Factor Correlation Analysis

Before adjusting any weights, the learning engine performs a comprehensive factor analysis. For each scoring factor, it calculates the correlation with trading outcomes, breaks success rates down by quintile, and identifies optimal thresholds. This analysis reveals which factors in your trading actually predict success and which are noise.

Early analysis of CANSLIM trades has already revealed one powerful finding: RS Rating above 90 correlates with a 75 percent success rate, while RS Ratings below 70 show a zero percent success rate. This finding validated the RS Rating floor rule that caps any stock below 70 RS at a maximum grade of C, regardless of how strong its other factors might be. It also confirmed that RS Rating deserves heavy weighting in the scoring algorithm.

The Factor Analysis Process

The analysis proceeds in six steps. First, data collection assembles all closed positions with their entry conditions and outcomes. Second, factor correlation calculates the statistical correlation between each individual factor and the outcome score, revealing how strongly each factor predicts success. Third, quintile analysis breaks each factor into five equal groups (quintiles) and calculates the success rate within each group, showing whether the factor has a linear, threshold, or nonlinear relationship with outcomes.

Fourth, optimal threshold detection identifies the specific value of each factor that best separates winning trades from losing trades. For RS Rating, this might confirm that 85 is a stronger dividing line than the current 70 floor. Fifth, confidence assessment uses bootstrap methods to calculate confidence intervals around each finding, ensuring that the results are statistically significant rather than artifacts of a small sample. Sixth, the system generates a comprehensive report that you can review in the analytics dashboard or receive as a Discord notification.

Factor	Expected Correlation	Direction	Weight Impact
RS Rating	Strong (+0.30 to +0.40)	Positive	High weight justified
Base Stage	Strong (–0.25 to –0.35)	Negative	Heavy penalty for late stages
Pattern Type	Moderate (+0.15 to +0.25)	Positive	Cup w/Handle scores highest
Base Depth	Mild (–0.10 to –0.15)	Negative	Deeper = worse, but complex
Market Regime	Strong (+0.25 to +0.35)	Positive	Bullish regime = higher success
Volume Dry-Up	Moderate (+0.15 to +0.25)	Positive	Drier = better setup

💻 How the System Helps

Factor analysis runs on demand from the GUI analytics dashboard or via CLI command.

Results include correlation coefficients, quintile success rates, and optimal thresholds for each factor.

The analytics dashboard visualizes factor importance as horizontal bar charts and success curves as line charts.

All analysis results are logged to the database with timestamps for historical tracking.

29.3 Weight Optimization with Ridge Regression

Once factor analysis has identified which factors predict success, the next step is determining the optimal weights. The learning engine uses Ridge regression—a machine learning technique that finds the best linear combination of factors to predict outcomes while preventing any single factor from dominating the model.

Ridge regression was chosen specifically for this application because it handles correlated inputs gracefully. In CANSLIM scoring, several factors are correlated: stocks with high RS Ratings tend to also have high Composite Ratings, and stocks in Stage 1 bases tend to have shallower depths. Ordinary least squares regression can produce unstable weights when inputs are correlated, but Ridge regression adds a regularization term that stabilizes the solution and produces more generalizable weights.

The Optimization Process

The optimizer starts with the current weights as a baseline. It constructs a feature matrix from all closed trade outcomes, encoding each factor at the time of entry, and a target vector encoding the outcome scores. It then fits a Ridge regression model using five-fold cross-validation to estimate the model's accuracy on unseen data. The resulting weights represent the model's best estimate of each factor's importance.

After optimization, the system normalizes the weights so they sum to a reasonable total, then compares the new weights to the baseline. It calculates the expected accuracy improvement—what percentage of trades would have been correctly graded under the new weights versus the old ones—and presents both the current and suggested weights side by side for your review.

A minimum improvement threshold of five percent accuracy gain is required before the system will recommend activation. This prevents chasing marginal improvements that might not generalize to future trades. If the optimization produces only a two percent improvement, the system will report the finding but recommend keeping the current weights.

29.4 Preserving IBD Immutable Rules

The learning engine operates within strict guardrails that prevent it from undermining the core principles of the CANSLIM methodology. Certain rules are immutable—they are hardcoded into the system and cannot be overridden by any data-driven optimization.

The most important immutable rule is the RS Rating floor. No stock with an RS Rating below 70 can receive a grade higher than C, regardless of how strong its other factors might be. This rule exists because decades of IBD research have shown that stocks with weak relative strength dramatically underperform, and our own data confirmed this with a zero percent success rate below RS 70. The learning engine is not permitted to modify this floor, even if it finds some small subset of low-RS trades that happened to succeed.

Other immutable rules include the requirement for above-average volume on breakouts (the system will never learn to ignore volume), the maximum loss limit of seven to eight percent from the entry price (the system will never suggest wider stops), and the market regime awareness (the system will never recommend buying breakouts during confirmed market corrections). These rules are the bedrock of the methodology, and preserving them ensures that the system stays true to proven principles regardless of what the data might temporarily suggest.

29.5 The Weight Activation Workflow

When the learning engine has a recommendation, it follows a formal activation workflow with five stages: analysis trigger, suggestion generation, review, decision, and monitoring.

The analysis can be triggered either manually—when you request it from the GUI or CLI—or automatically after a configurable number of new closed positions (default: every 10 new outcomes). When triggered, the system runs both factor analysis and weight optimization, generating a comprehensive report.

The suggestion appears in the GUI analytics dashboard as a side-by-side comparison of current weights versus proposed weights, along with the expected accuracy improvement, the sample size used, the training period, and confidence intervals. A Discord notification is sent simultaneously with a summary of the key findings.

At this point, you have three options. You can reject the suggestion, which keeps the current weights unchanged and logs the rejection. You can activate immediately, which replaces the current weights with the new ones, archives the old weights, and begins tracking outcomes under the new configuration. Or you can choose to A/B test, which runs the new weights on a parallel scoring track for thirty days. During the test period, the system scores every setup with both the old and new weights, tracks which set of weights would have produced better outcomes, and presents the results after the test period for a final decision.

💻 How the System Helps

The full weight activation workflow is managed through the GUI analytics tab.

All weight changes are logged with timestamps, sample sizes, and performance metrics.

A/B testing runs automatically once initiated, with no additional action required during the test period.

If performance degrades after activation, the system alerts you and suggests rolling back to prior weights.

The learned_weights database table maintains a complete history of all weight sets for audit purposes.

Chapter 30: Swing Trading Integration

The CANSLIM Monitor system is designed primarily for position trading: identifying institutional-quality breakout setups, holding for 20 to 60 days, and targeting gains of 20 percent or more. This is the classic CAN SLIM approach that has produced the methodology's best historical results. But the system also supports a complementary swing trading strategy for shorter-term opportunities.

Swing trading within this system means holding positions for approximately five to seven days, targeting gains of two to four percent, and using simplified entry criteria compared to full CANSLIM analysis. The two strategies are not competing—they are complementary. Position trades capture the big moves that produce the majority of annual returns. Swing trades generate consistent smaller gains during periods when position trade setups are scarce or when the market environment favors shorter holding periods.

This chapter explains how the swing trading module works, how it differs from position trading, and how the two strategies interact within the system.

30.1 Position Trading vs. Swing Trading

The fundamental difference between position trading and swing trading is the holding period, and everything else flows from that difference. A position trade targets a major price advance of twenty percent or more, which requires holding through the normal volatility of a multi-week uptrend. A swing trade targets a smaller advance of two to four percent, which can typically be captured in under a week.

Characteristic	Position Trade (CANSLIM)	Swing Trade
Holding Period	20–60 days	5–7 days
Profit Target	20–25%+ (with 8-week hold rule)	2–4% (take half at 2%)
Stop Loss	7–8% from entry	2–3% from entry (ATR-based)
Screening Rigor	Full CANSLIM (RS, fundamentals, base)	Technical-only (RSI, BB, MAs, volume)
Entry Criteria	Pivot breakout or alternative entries	Pullback to support in uptrend
Market Regime	Confirmed Uptrend preferred	Market above 50-day MA
Position Sizing	Pyramiding (50% → 30% → 20%)	Full size at entry, no adds
Portfolio Risk	1% of portfolio per trade	1% of portfolio per trade

Both strategies use the same fundamental risk management principle: risk one percent of your portfolio on each trade. The difference is that the tighter stop on swing trades allows larger absolute positions. If you risk one percent of a one hundred thousand dollar portfolio (one thousand dollars) with a three percent stop, your position size is approximately thirty-three thousand dollars. With an eight percent stop on a position trade, the same risk gives you a position of about twelve thousand five hundred dollars.

30.2 Swing Trade Entry Criteria

Swing trade entries use a simplified technical scoring system rather than full CANSLIM analysis. The screening focuses on momentum and mean-reversion indicators that are more relevant for short-term price movements. Each factor is scored, and the composite determines whether a setup qualifies.

The primary entry conditions are as follows. The RSI (Relative Strength Index) should be between 50 and 70—this range indicates upward momentum without overbought conditions. The Bollinger Band position should be between 0.5 and 0.8, meaning the stock is in the upper half of its recent trading range but not yet at the upper band. Volume should show a dry-up pattern—the ratio of recent 10-day average volume to the 40-day average should be below 0.8, indicating a consolidation with declining selling pressure.

The consolidation tightness ratio measures how narrow recent trading has been relative to the broader range. A ratio below 0.5 indicates the stock has compressed into a tight range, suggesting energy is building for a move. Finally, the stock must be trading above its 10-day, 21-day, and 50-day moving averages, confirming the underlying trend is up. When all conditions align, the swing setup scores above 60 (grade B or better) and qualifies for entry.

The Market Filter

Swing trades also require a market filter: the S&P 500 should be trading above its 50-day moving average. This is a looser requirement than the CANSLIM position trading standard of a confirmed uptrend, reflecting the shorter holding period. Even in an uptrend under pressure, swing trades can work because you are not asking the stock to advance for weeks—you just need a few days of favorable movement.

Additionally, swing trades should be avoided within five trading days of a stock's expected earnings report. Earnings events create unpredictable gap risk that cannot be managed with a stop loss, and the potential downside from an earnings miss far exceeds the two to four percent target of the swing trade.

💻 How the System Helps

The swing trading module evaluates all watchlist stocks against the swing criteria in parallel with CANSLIM scoring.

Qualified swing setups receive a separate swing grade (A/B/C/D) independent of the CANSLIM grade.

Discord alerts for swing setups use a distinct color to differentiate them from position trade alerts.

The system automatically checks the earnings calendar to suppress swing alerts near earnings dates.

30.3 Swing Trade Exit Rules

Exit discipline is even more critical for swing trades than for position trades. The smaller profit targets mean that letting a winner turn into a loser is especially costly—you would need two or three winning trades just to offset one losing trade at full stop. IBD's SwingTrader philosophy is clear: exit quickly at the first sign of weakness and never let a winner turn into a loser.

The primary exit rules are structured in layers. The initial profit target is two to three percent from the entry price. When this target is hit, you sell half the position and raise your stop on the remaining shares to breakeven. This locks in a guaranteed profit and turns the remaining position into a free trade—it can only go higher or stop out at flat.

If the stock continues to advance, a secondary target of four percent triggers selling the remaining shares. Alternatively, you can trail the stop below the prior day's low once the position has gained more than two percent. This trailing stop approach occasionally catches larger moves—historically, some swing trades have captured moves of eight to twelve percent when they coincided with strong institutional buying.

The maximum holding period is seven to ten days. If the stock has not hit the initial profit target within this window, close the position regardless of gain or loss. Time decay is a real cost in swing trading—capital tied up in a stagnant position cannot be deployed to the next opportunity.

Weakness Exits

Beyond the primary rules, several weakness signals warrant immediate attention. If the stock closes below its 10-day moving average after you have entered, consider closing or reducing the position—this level represents very short-term momentum, and a violation suggests the upward impulse may be exhausted. Similarly, if the first red day (a day that closes lower than it opened) occurs after the stock has gained more than two percent from entry, consider taking partial or full profits to protect the gain.

30.4 Running Both Strategies in Parallel

The CANSLIM Monitor supports running position trades and swing trades simultaneously with separate portfolio allocations. A common approach is to allocate 70 to 80 percent of your portfolio to position trades and 20 to 30 percent to swing trades. The exact split depends on market conditions—during strong confirmed uptrends, position trades deserve the larger allocation because they capture bigger moves. During choppy or transitional markets, swing trades may deserve a larger share because their shorter holding periods reduce exposure to sudden reversals.

Each swing trade outcome feeds into the same learning engine as position trades. The outcome classification uses adjusted thresholds—a swing trade SUCCESS might be defined as gaining three percent or more, while PARTIAL is zero to three percent. This allows the learning engine to optimize the swing scoring weights independently from the position trading weights.

The key to running both strategies successfully is maintaining strict separation in your mind. A position trade should never be mentally converted into a swing trade (or vice versa) after entry. If you buy a stock for a position trade and it stalls after gaining three percent, you do not sell it at the swing target—you manage it according to your position trading rules. Similarly, if a swing trade starts to show the characteristics of a major winner, you close the swing position and open a new position trade with proper CANSLIM analysis and sizing.

💻 How the System Helps

The system tracks position trades and swing trades as separate portfolio categories with independent exposure limits.

Each trade is tagged with its strategy type (POSITION or SWING) from entry, and exit rules are applied accordingly.

The GUI Kanban board can filter by strategy type to show only position trades or only swing trades.

Learning engine analysis can be run separately for each strategy type to optimize their respective scoring weights.

Discord alerts clearly distinguish between position trade and swing trade opportunities using different embed colors.

Part VI Summary

Part VI has extended your toolkit beyond the standard CANSLIM pivot breakout in three important directions. Alternative entry strategies—moving average pullbacks, three weeks tight patterns, shakeout plus 3 entries, confluence zones, and pivot retests—give you additional ways to enter leading stocks at favorable prices. The learning engine provides a data-driven feedback loop that analyzes your actual trading outcomes and proposes scoring improvements through a rigorous human-in-the-loop process. And swing trading integration adds a complementary short-term strategy that keeps capital productive during periods when position trade setups are scarce.

Each of these advanced topics builds on the foundation established in Parts I through V. Alternative entries still require the same underlying stock quality—strong fundamentals, proper base formation, and favorable market conditions. The learning engine preserves the immutable rules of the CANSLIM methodology while optimizing the configurable weights. And swing trading uses the same risk management framework of risking one percent per trade, just applied to a shorter time horizon.

In Part VII, we will cover system configuration and customization: tuning YAML settings, adjusting alert preferences, and configuring external integrations. In Part VIII, you will find comprehensive reference appendices including the complete scoring rubric, alert catalog, state machine diagram, and glossary of terms.

CANSLIM Trading System
User Guide

Part VII: Configuration and Customization

Chapters 31 – 33

Every trading style is unique. This section teaches you how to tune the CANSLIM Monitor to match your risk tolerance, schedule, and preferences.

Part VII: Configuration and Customization

The CANSLIM Monitor is designed to be configurable without code changes. Every threshold, weight, timing interval, and integration endpoint is controlled through YAML configuration files that you can edit with any text editor. This approach means you can tune the system to match your personal trading style, risk tolerance, and schedule without ever touching a line of Python.

This section covers three areas of configuration. First, the YAML configuration system itself—how the three-tier priority structure works, what each setting controls, and how to make changes safely. Second, the scoring weight customization—how to adjust the factors that determine a stock's grade, including the relationship between manual tuning and the learning engine's recommendations. Third, external integrations—setting up Discord webhooks, Google Sheets sync, IBKR connections, and data provider APIs.

Before changing anything, internalize this principle: the default configuration represents months of testing and validation. Every threshold was set for a reason. Change one setting at a time, document what you changed and why, and monitor the results for at least two weeks before making additional adjustments. The fastest way to degrade system performance is to change multiple settings simultaneously, because you will never know which change caused which effect.

Chapter 31: The YAML Configuration System

YAML (Yet Another Markup Language) is a human-readable data format commonly used for configuration files. If you have never worked with YAML before, the essential rules are simple: indentation matters (use spaces, never tabs), colons separate keys from values, and hashes mark comments. The system's entire behavior can be understood by reading the YAML files—there are no hidden settings buried in code.

31.1 The Three-Tier Priority System

The CANSLIM Monitor uses a three-tier configuration priority system. When the system loads, it reads settings from multiple sources and merges them together, with higher-priority sources overriding lower-priority ones. Understanding this hierarchy is essential for making changes that actually take effect.

Priority	Source	Location	Purpose
1 (Highest)	Command line argument	python monitor.py -c path	One-off overrides, testing
2	user_config.yaml	canslim_monitor/	Your personal settings
3 (Lowest)	config/config.yaml	canslim_monitor/config/	System defaults

The system defaults in config/config.yaml represent the base configuration. You should never edit this file directly because it will be overwritten during updates. Instead, create a user_config.yaml file in the canslim_monitor directory with only the settings you want to change. The system will load the defaults first, then layer your overrides on top. This means your user_config.yaml only needs to contain the specific values that differ from the defaults—you do not need to reproduce the entire default file.

For testing or one-off scenarios, you can specify a configuration file on the command line. This takes highest priority and overrides both the defaults and your user config. This is useful for running the system in test mode with a separate database path, or for temporarily changing thresholds while you validate a new setting.

> ⚠️ **Important: Hot Reloading**
>
> The service supports hot configuration reloading via the IPC reload_config command.
>
> This means you can edit user_config.yaml while the service is running and apply changes without restarting.
>
> The GUI provides a reload button in the service control panel that triggers this command.
>
> Not all settings can be hot-reloaded—database path and IBKR connection changes require a full restart.

31.2 Service and Thread Settings

The service section controls the fundamental behavior of the monitoring threads. The three polling intervals—breakout, position, and market—determine how frequently each thread checks

for changes. The defaults of 60 seconds for breakouts, 30 seconds for positions, and 300 seconds (five minutes) for market regime analysis were calibrated through extensive testing.

The breakout thread runs every 60 seconds because pivot breakouts are time-sensitive events—you want to know within a minute when a stock clears its pivot. The position thread runs every 30 seconds because stop-loss violations require even faster response—if a stock is crashing through your stop level, seconds matter. The market thread runs every 5 minutes because market regime changes are slow-moving phenomena based on end-of-day data that do not require real-time monitoring.

Setting	Default	Type	Notes
poll_interval_breakout	60	seconds	Lower = faster alerts, more CPU
poll_interval_position	30	seconds	Critical for stop detection
poll_interval_market	300	seconds	5 min is sufficient for regime
market_hours_only	true	boolean	Pause threads outside 9:30–16:00 ET
timezone	America/ New_York	string	All market hours calculated in ET

If you are a West Coast trader who occasionally checks pre-market activity, you might set market_hours_only to false and let the system monitor during extended hours. Be aware that volume data during pre-market and after-hours sessions is significantly thinner, which means breakout signals generated outside regular hours should be treated with additional skepticism.

31.3 Alert Configuration

The alert settings control what triggers notifications and how often you receive them. This is the section you are most likely to customize, because alert frequency is deeply personal—some traders want to know about every stock that approaches a pivot, while others only want confirmed breakouts with strong volume.

Breakout Alert Thresholds

The breakout section contains volume thresholds for each alert subtype. The key insight is that different alert types serve different purposes, and they deserve different volume requirements.

Setting	Default	Effect when 0	Recommendation
volume_threshold_confirmed	1.4	N/A (always required)	IBD standard: 40% above avg
volume_threshold_buy_zone	0.0	Alert any stock in zone	0 catches early setups
volume_threshold_approaching	0.0	Alert any stock near pivot	0 gives maximum heads-up
max_extended_pct	7.0	N/A	Don’t alert stocks >7% above

			pivot
min_alert_grade	C	N/A	Filter out low-quality setups
min_avg_volume	500000	N/A	Minimum ADV for institutional liquidity

The confirmed breakout threshold of 1.4 (meaning 40 percent above the 50-day average volume) is the IBD standard and should rarely be changed. However, the buy zone and approaching thresholds default to zero, which means no volume requirement. This is intentional: you want early warning that a stock is entering the buy zone even before volume surges, because volume typically accelerates as the breakout progresses. If you find these alerts too noisy, set them to 0.8 or 1.0 to require at least average volume.

Cooldown Settings

Cooldown settings prevent alert spam by suppressing repeated alerts for the same symbol within a specified time window. Each alert type has its own cooldown because different alerts have different urgency levels.

Alert Type	Default (min)	Rationale	Adjustable?
hard_stop	0 (no cooldown)	Always alert	Yes, but not recommended
stop_warning	120	2-hour buffer	Yes
trailing_stop	0 (no cooldown)	Always alert	Yes, but not recommended
pyramid	240	4-hour buffer	Yes
tp1 / tp2	1440	Daily (24 hours)	Yes
ma_50_warning	1440	Daily	Yes
earnings	1440	Daily	Yes
late_stage / ten_week_sell	10080	Weekly	Yes

The general principle is that urgent alerts (stop violations) have no cooldown—you always want to know immediately. Informational alerts (earnings warnings, late-stage notifications) have longer cooldowns because they represent persistent conditions rather than discrete events. Adjust these based on your personal tolerance for notification frequency.

Alert Routing

The alert routing system lets you control which alerts go to Discord and at what log level, without changing how the system generates or stores alerts. Every alert still gets written to the database for analytics and the learning engine—routing only affects the notification delivery.

To suppress Discord notifications for a specific alert type while keeping database logging, add an alert_routing section to your user_config.yaml. For example, if you find the P1_EXTENDED pyramid alerts too frequent, you can set them to log at DEBUG level with Discord disabled. The

alert still gets recorded, but your phone stops buzzing about it. This is preferable to disabling the alert entirely, because the data remains available for learning engine analysis.

💻 How the System Helps

The GUI settings panel provides a visual interface for editing alert thresholds without touching YAML files.

Changes made through the GUI are written to user_config.yaml automatically.

The IPC reload_config command applies changes without restarting the Windows service.

A validation step checks that your YAML is syntactically correct before applying changes.

Chapter 32: Scoring Weight Customization

The scoring engine is the heart of the CANSLIM Monitor's stock evaluation system. It takes the raw data about a stock's setup—pattern type, base stage, depth, length, RS Rating, and various technical indicators—and produces a composite score that maps to a letter grade. The weights assigned to each factor determine which characteristics the system values most heavily when ranking setups.

Scoring weights are configured in a separate file, scoring_config.yaml, which is loaded by the ScoringEngine class. This separation keeps scoring logic independent from service configuration, allowing you to version-control scoring changes separately and even run multiple scoring configurations for A/B testing.

32.1 Understanding the Scoring Architecture

The scoring system divides factors into two categories: static factors and dynamic factors. Static factors come from your Google Sheet and MarketSurge data—they include pattern type, base stage, base depth, base length, and RS Rating. These are populated when you add a stock to your watchlist and they change infrequently. Dynamic factors come from real-time technical analysis—they include the up/down volume ratio, the stock's position relative to its 50-day moving average, the number of support bounces from the 10-week line, the RS trend direction, and volume dry-up patterns. These are calculated from historical price data each time the scoring engine runs.

The final score is the sum of static and dynamic factor scores. This total maps to a letter grade using configurable thresholds:

A+	A	B+	B	C+	C / D / F
≥ 20 pts	≥ 15 pts	≥ 12 pts	≥ 9 pts	≥ 7 pts	≥ 5 / ≥ 3 / < 3

32.2 Static Factor Weights

Static factors are the foundation of the score. They represent the characteristics that IBD research has identified as most predictive of breakout success over decades of historical analysis.

Factor	Points	Range	How It Works
Pattern Type	+6 to +10	Per canonical list	Cup w/Handle = 10, Double Bottom = 9, Flat = 8, etc.
RS Rating	+1 to +4	80–99	+1 per 10 pts above 80; floor rule below 70
Base Stage	0 to −8	Stage 1–4+	Stage 1 = 0 (best), Stage 4+ = −8 (worst)
Base Depth	0 to +1	≤25% ideal	Normal depth = 0; shallow/ideal depth = +1

Base Length	−1 to +1	5–52 weeks	Too short (−1), ideal 7+ weeks (+1)
Base-on-Base Bonus	+2	Boolean	Awarded when base forms on top of prior base

To customize these weights, edit the corresponding sections in scoring_config.yaml. Each pattern type has its own score and tier assignment. Stage penalties are configured per stage number. Depth and length thresholds define the boundaries between ideal, normal, and excessive values.

The RS Rating floor rule deserves special attention. This rule caps any stock with an RS Rating below 70 at a maximum grade of C, regardless of how strong its other factors might be. The floor threshold (70) and the maximum grade (C) are both configurable in the YAML file. However, based on the data showing zero percent success rate below RS 70, we strongly recommend leaving this rule unchanged. If anything, consider raising the floor to 80 as you gain experience.

32.3 Dynamic Factor Weights

Dynamic factors add real-time technical context to the static foundation. These are calculated from historical price and volume data fetched from your data provider (Polygon or IBKR) and represent the stock's current technical condition rather than its fundamental setup characteristics.

Factor	Max Points	What It Measures
Up/Down Volume Ratio	+2	Ratio of volume on up days vs. down days over 50 periods. Strong accumulation (≥1.5) = +2, Moderate (≥1.0) = +1
50-MA Position	+2	Stock's position relative to its 50-day MA. Above rising MA = +2, Above flat/falling = +1, Below = 0
10-Week Support	+2	Number of successful bounces from the 10-week line. 2+ bounces = +2, 1 bounce = +1, None = 0
RS Trend	+2	Direction of the relative strength line. Trending up = +2, Flat = +1, Trending down = 0
Volume Dry-Up	+2	Recent volume contraction vs. average. Significant dry-up (ratio < 0.6) = +2, Moderate = +1

Dynamic factors add up to a maximum of 10 additional points, which can push a borderline B+ setup into A territory or elevate a C+ to B range. The thresholds for each dynamic factor (what constitutes strong accumulation versus moderate, for example) are configurable in the dynamic_factors section of scoring_config.yaml.

32.4 Manual Tuning vs. Learning Engine Recommendations

There are two paths to adjusting scoring weights: manual tuning based on your trading experience and intuition, and data-driven optimization through the learning engine (described in Chapter 29). Both approaches modify the same YAML configuration, and they can be used in combination.

Manual tuning is appropriate when you have a clear hypothesis based on market observation. For example, if you notice that your flat base breakouts consistently underperform your cup with handle breakouts, you might reduce the flat base score from 8 to 7 or increase the cup with handle score from 10 to 11. Make the change in scoring_config.yaml, restart the scoring engine (or use hot reload), and monitor results for at least two weeks before evaluating.

Learning engine tuning is appropriate when you have accumulated enough trade outcomes (50+ minimum, 100+ ideal) and want a systematic, statistically rigorous approach to weight optimization. The learning engine analyzes your actual results, identifies which factors predict success in your trading, and proposes specific weight adjustments with confidence intervals and expected accuracy improvements.

The two approaches complement each other. Use manual tuning for quick adjustments based on clear observations. Use the learning engine for comprehensive optimization when you have sufficient data. Never apply both simultaneously to the same factor—if the learning engine suggests a change to pattern weights, do not also manually adjust pattern weights at the same time.

> ⚠️ **Best Practice: Change One Thing at a Time**
>
> Change only one factor or threshold per adjustment period.
>
> Document every change with the date, the old value, the new value, and your rationale.
>
> Monitor results for at least two weeks (approximately 10–20 trades) before evaluating the impact.
>
> If performance degrades, revert immediately rather than trying to fix it with additional changes.
>
> Keep a changelog in your user_config.yaml file using YAML comments (lines starting with #).

Chapter 33: External Integrations

The CANSLIM Monitor does not operate in isolation. It connects to several external systems to receive data, deliver alerts, and synchronize state. This chapter covers the setup and configuration of each integration, including troubleshooting guidance for common connection issues.

33.1 IBKR TWS/Gateway Connection

Interactive Brokers provides the real-time price data that drives the breakout and position monitoring threads. The system connects to either IBKR's Trader Workstation (TWS) application or IB Gateway—a lighter-weight alternative that runs without a graphical interface.

Application	Paper Port	Live Port	Best For
TWS (Trader Workstation)	7497	7496	Visual trading + monitoring
IB Gateway	4001	4002	Headless/background use

The client_id_base setting in your YAML configuration determines the starting client ID for connections. The system uses separate client IDs for each thread to avoid connection conflicts: the GUI uses the base ID, the breakout thread uses base + 1, the position thread uses base + 2, and the market thread uses base + 3. The default base of 10 means the system uses client IDs 10 through 13. If you run other applications that connect to IBKR (like a trading bot or a charting tool), ensure their client IDs do not overlap with this range. Setting client_id_base to 20 or higher provides a safe buffer.

The connection settings include a timeout (default 30 seconds) and a max_retries count (default 3). If the initial connection attempt fails, the system will retry up to three times with exponential backoff. If all retries fail, the system falls back to cached prices from the last successful poll and logs a warning. IBKR connections can be disrupted by TWS/Gateway restarts, daily server resets (which occur around midnight ET), or network interruptions.

💻 Troubleshooting: IBKR Connection Issues

Ensure TWS or IB Gateway is running and logged in before starting the CANSLIM Monitor.

Verify that API connections are enabled in TWS: File → Global Configuration → API → Settings.

Check that "Allow connections from localhost only" is enabled for security.

Confirm the port number matches: 7497 (TWS paper), 7496 (TWS live), 4001 (Gateway paper), 4002 (Gateway live).

If you see "client ID already in use" errors, another application is using the same client ID range.

33.2 Discord Webhook Configuration

Discord webhooks provide the notification delivery system for all CANSLIM Monitor alerts. The system supports multiple webhook URLs, allowing you to route different alert types to different Discord channels for organized monitoring.

To create a webhook, open your Discord server settings, navigate to Integrations, and create a new webhook for each channel. The recommended channel structure separates alerts by urgency and category:

Channel	Config Key	Alert Types
#breakout-alerts	webhooks.breakout	Breakout confirmed, in buy zone, approaching pivot, extended
#position-alerts	webhooks.position	Pyramid, profit target, stop warning, MA warnings, health
#market-alerts	webhooks.market	Distribution days, follow-through days, regime changes, morning summary
#system-alerts	webhooks.system	Service start/stop, connection errors, sync failures

If you prefer a simpler setup, you can use a single webhook URL for all alert types by setting it as the default_webhook. Channel-specific webhooks take priority—if a breakout webhook is configured, breakout alerts go there; if not, they fall back to the default webhook. The rate_limit setting (default 30 messages per minute) prevents the system from exceeding Discord's API limits during periods of high market activity.

Each alert type uses a distinct embed color in Discord, making it easy to visually scan your alert feed. Breakout alerts appear in green, pyramid signals in blue, stop warnings in red, profit targets in gold, and market regime alerts in purple. These colors are configurable in the discord.colors section of your config file.

33.3 Google Sheets Synchronization

Google Sheets serves as the bridge between the CANSLIM Monitor's SQLite database and external tools—primarily TrendSpider for chart overlays. The sync direction is outbound: the SQLite database is the source of truth, and changes are pushed to Google Sheets on a configurable interval.

Setting up Google Sheets integration requires a Google Cloud service account with Sheets API access. The credentials file (a JSON file downloaded from the Google Cloud Console) is referenced in your configuration. The service account's email address must be shared as an editor on your target spreadsheet. The column mapping follows the CANSLIM Position Manager V36 Template structure, with columns A through AO covering all position data from portfolio assignment through calculated fields like stop prices and profit targets.

The sync process works incrementally: only positions with the needs_sheet_sync flag set are pushed to the sheet on each cycle. This minimizes API calls and prevents hitting Google's rate

limits. When you modify a position in the GUI or when the service detects a state change, the flag is set automatically. A force sync option in the GUI pushes all active positions regardless of the flag, which is useful after database maintenance or if you suspect the sheet is out of sync.

Closed positions (state less than zero) are automatically removed from the sheet during sync to keep the active watchlist clean. Orphaned rows—rows in the sheet that no longer correspond to any database record—are also cleaned up automatically.

33.4 Data Provider Configuration

The CANSLIM Monitor uses a provider-agnostic data architecture that supports multiple sources for historical price and volume data. IBKR provides real-time quotes during market hours, while Polygon (or its Massive API equivalent) provides the historical bars needed for dynamic scoring calculations like up/down volume ratios, moving average positions, and volume dry-up analysis.

The Polygon API key is configured in the polygon section of your YAML file. The system makes efficient use of API calls by caching historical data and only requesting incremental updates. A typical scoring cycle for 30 watchlist stocks requires approximately 30 API calls for daily bars—well within Polygon's free tier limits for most users.

The data abstraction layer is designed so that additional providers can be added without modifying the core scoring or monitoring logic. Each provider implements a standard interface for fetching daily OHLCV bars, and the service controller routes requests to the configured provider. This architecture protects against vendor lock-in and supports users with different data access arrangements.

33.5 Database and Backup Configuration

The SQLite database is the single source of truth for all position data, alert history, market regime records, and learning engine outcomes. The database path is configured in the database section of your YAML file, with a default of canslim_positions.db in the working directory.

Automatic backups are configured with two settings: backup_interval (default 86400 seconds, or once daily) and backup_retain (default 7, keeping one week of backups). Backups are created as timestamped copies of the database file in a backups subdirectory. The backup process uses SQLite's online backup API, which creates a consistent snapshot even while the service is running and writing data.

For critical trading periods—earnings season, major market moves—consider reducing the backup interval to every 4 hours (14400 seconds) and increasing retention to 14 days. The storage cost is minimal since each database backup is typically under 10 megabytes, but the peace of mind from having frequent recovery points is significant.

> 💻 **Recovery Procedure**
>
> Stop the CANSLIM Monitor service.
>
> Locate the desired backup file in the backups/ directory (named with timestamps).

Copy the backup file over the main database file (canslim_positions.db).

Restart the service. The system will pick up from the backup's state.

Trigger a force sync to Google Sheets to re-align the sheet with the restored data.

Part VII Summary

Part VII has given you the tools to make the CANSLIM Monitor truly your own. The three-tier YAML configuration system lets you override any default without risk of losing changes during updates. Alert thresholds, cooldown periods, and routing rules let you control exactly when and how the system communicates with you. Scoring weight customization lets you emphasize the factors that matter most in your trading, whether through manual tuning or data-driven learning engine recommendations. And the external integration guides ensure your connections to IBKR, Discord, Google Sheets, and data providers are properly configured and resilient.

Part VIII, the final section, provides comprehensive reference appendices: the complete scoring rubric, the full alert type catalog with Discord embed examples, the position state machine diagram, configuration templates, and a glossary of all CANSLIM and system-specific terms used throughout this guide.

CANSLIM Trading System
User Guide

Part VIII: Appendices

Appendices A – E

Quick-reference tables, complete catalogs, and glossary for daily use.

Appendix A: Complete Scoring Reference

This appendix provides the complete scoring rubric used by the CANSLIM Monitor's ScoringEngine (v2.3). All values are configurable via scoring_config.yaml.

A.1 Pattern Scores

Pattern	Score	Tier	Notes
Cup w/Handle	10	A	Highest probability; institutional favorite
Double Bottom	9	A	W-shaped; second low undercuts first slightly
Flat Base	8	B	Shallow (<15% depth); forms after prior advance
High Tight Flag	8	B	Rare; 100%+ gain then <25% pullback
Cup (no Handle)	7	B	U-shaped; no handle shakeout
Ascending Base	7	B	Three pullbacks with rising lows
IPO Base	7	B	Forms within first 2–3 years of IPO
Consolidation	6	C	Generic tight range; doesn't fit named patterns
Saucer	6	C	Slow, rounded bottom over many months
Saucer w/Handle	6	C	Saucer with handle shakeout
3 Weeks Tight	6	C	Alternative entry; weekly closes within 1.5%
Shakeout +3	6	C	Alternative entry; first low + 10%
Unrecognized	5	—	Default for patterns not in canonical list

A.2 Stage Penalties

Stage	Adjustment	Success Rate	Guidance
Stage 1	0 (none)	~70%	Best odds; full position size
Stage 2	−1	~55%	Still good; normal position size
Stage 3	−4	~30%	Elevated risk; reduce position size
Stage 4+	−8	~15%	High risk; consider passing entirely
Base-on-Base	+2 bonus	Resets effectively	Base forming atop prior base; favorable

A.3 RS Rating Floor Rule

Any stock with an RS Rating below 70 is capped at a maximum grade of C, regardless of total score. This rule is immutable—the learning engine cannot override it. Data shows 0% success rate below RS 70 and 75% success rate above RS 90.

A.4 Grade Thresholds

A+	A	B+	B	C+	C	D	F
≥20	≥15	≥12	≥9	≥7	≥5	≥3	<3

Appendix B: Alert Type Catalog

Complete catalog of all alert types generated by the CANSLIM Monitor. Each entry includes the Discord color, emoji, recommended action, and default cooldown.

B.1 Breakout Alerts (Watchlist → Entry)

Subtype	Emoji	Color	Recommended Action	Cooldown	Priority
CONFIRMED	🚀	Green	Buy initial 50% position	60 min	P0
SUPPRESSED	⚠️	Lt Green	Wait for volume confirmation	60 min	P0
IN_BUY_ZONE	✅	Yellow	Evaluate for entry; check volume	60 min	P1
APPROACHING	👀	Blue	Prepare buy order; review setup	60 min	P1
EXTENDED	⏸️	Red	Do not chase; wait for pullback	60 min	P1

B.2 Position Management Alerts

Type.Subtype	Emoji	Color	Recommended Action	Cooldown	Priority
PYRAMID.P1_READY	📈	Blue	Add 25–30% to position	4 hr	P0
PYRAMID.P2_READY	📈	Blue	Add final 20–25%	4 hr	P0
PROFIT.TP1	💰	Gold	Sell 1/3 of position	24 hr	P0
PROFIT.TP2	💎	Gold	Sell another 1/3; raise stop	24 hr	P0
PROFIT.8_WEEK_HOLD	⏳	Gold	Hold through 8-week rule; suppress TP1	Weekly	P0
STOP.HARD_STOP	🛑	Red	SELL IMMEDIATELY — no hesitation	None	P0
STOP.WARNING	⚠️	Orange	Prepare sell order; monitor closely	2 hr	P1
STOP.TRAILING_STOP	🛑	Red	SELL — trailing stop triggered	None	P0

B.3 Technical & Health Alerts

Type.Subtype	Emoji	Color	Recommended Action	Cooldown	Priority
TECH.50_MA_WARNING	⚡	Orange	Monitor; tighten mental stop	24 hr	P1
TECH.50_MA_SELL	📉	Red	Sell if closes below on heavy volume	24 hr	P0
TECH.21_EMA_SELL	📉	Purple	Sell if 2 consecutive closes below	24 hr	P0
TECH.10_WEEK_SELL	📉	Red	Sell on weekly close below 10-week	Weekly	P0
TECH.CLIMAX_TOP	🎢	Red	Sell into strength; exhaustion signal	24 hr	P1

HEALTH.WARNING	⚠️	Orange	Review position; assess conditions	1 hr	P1
HEALTH.CRITICAL	🚨	Red	Immediate review; likely exit	1 hr	P0
HEALTH.EARNINGS	📅	Orange	Plan earnings strategy (hold/sell)	24 hr	P1
HEALTH.LATE_STAGE	⚠️	Orange	Reduce position size expectations	Weekly	P2

B.4 Market Alerts

Type.Subtype	Emoji	Color	Recommended Action	Cooldown	Priority
MARKET.REGIME_CHANGE	📊	Royal Blue	Adjust exposure per IBD exposure model	None	P0
MARKET.FTD	🎯	Royal Blue	Green light for new entries; begin buying	None	P0
MARKET.CORRECTION	🛑	Royal Blue	HALT new purchases; raise cash	None	P0
MARKET.WEAK	📉	Royal Blue	Reduce exposure; tighten stops	24 hr	P1
MARKET.RALLY_ATTEMPT	📈	Royal Blue	Watch for FTD; build watchlist	None	P1

B.5 Alternative Entry Alerts

Subtype	Emoji	Color	Recommended Action	Cooldown
MA_BOUNCE	🔄	Blue	Enter on bounce from 50 MA with volume confirm	4 hr
PIVOT_RETEST	🎯	Blue	Enter if pivot holds as support on bounce	4 hr
CONFLUENCE	🔷	Blue	Enter at zone; stop 1–2% below lowest support	4 hr
SHAKEOUT_3	💥	Blue	Half-size pilot position; aggressive entry	4 hr
THREE_WEEKS_TIGHT	🔒	Blue	Enter on break above pattern high + volume	Weekly

Appendix C: Position State Machine

Every position in the CANSLIM Monitor follows a defined state machine from initial watchlist entry through the complete trade lifecycle to closure. States are stored as numeric values in the database and displayed as descriptive labels in the GUI.

C.1 State Definitions

State	Name	Description	Kanban Column
0	Watching	On watchlist; no position. System monitors for breakout.	Watch List
0.1	Approaching	Within 2% of pivot; alerts generated.	Watch List
0.2	In Buy Zone	Between pivot and pivot + 5%; actionable.	Watch List
0.3	Extended	5–7% above pivot; do not chase.	Watch List
1	Entry 1	Initial 50% position entered.	Active
2	Entry 2 (P1)	First pyramid added; ~75% invested.	Active
3	Entry 3 (P2)	Second pyramid; full position (100%).	Active
4	TP1 Hit	First profit target reached; sold 1/3.	Profit Taking
5	TP2 Hit	Second profit target; sold another 1/3.	Profit Taking
6	Trailing	Remaining shares on trailing stop.	Profit Taking
−1	Closed (Profit)	All shares sold at profit.	Closed
−2	Stopped Out	Hard stop or trailing stop triggered.	Closed

C.2 State Transitions

Valid state transitions follow these paths:

Forward (normal progression): 0 → 0.1 → 0.2 → 1 → 2 → 3 → 4 → 5 → 6 → −1

Stop exits (from any active state): States 1–6 → −2

Manual close (from any active state): States 1–6 → −1

Skip states (common): 0 → 1 (direct entry without substates), 1 → 4 (TP1 without pyramids), 3 → −2 (stopped at full position)

Watchlist removal: 0 (any substate) → removed from database

Key Design Principle

States only move forward or to closed. A position never moves backward (e.g., from State 4 back to State 3).

The only exceptions are watchlist substates (0.1, 0.2, 0.3) which can cycle as price moves around the pivot.

Every state transition is logged to the alerts table for audit and learning engine analysis.

Appendix D: Configuration Templates

These templates provide starting points for common trading profiles. Copy the relevant sections into your user_config.yaml and adjust as needed.

D.1 Conservative Trader (Lower Risk)

For traders who prioritize capital preservation. Higher grade requirements, wider stops avoided, focus on Stage 1–2 bases only.

Setting	Conservative Value	Default Value
alerts.breakout.min_alert_grade	B	C
alerts.breakout.volume_threshold_confirmed	1.6	1.4
position_monitoring.stop_loss.base_pct	6.0	7.0
position_sizing.max_position_pct	8.0	10.0
scoring.rs_floor	80	70

D.2 Aggressive Trader (Higher Risk)

For experienced traders comfortable with higher volatility. Lower grade floors allow more setups, alternative entries enabled.

Setting	Aggressive Value	Default Value
alerts.breakout.min_alert_grade	D	C
alerts.breakout.volume_threshold_buy_zone	0.0	0.0
position_monitoring.stop_loss.base_pct	8.0	7.0
position_sizing.max_position_pct	15.0	10.0
alerts.alt_entry (all enabled)	Enabled	Enabled

D.3 Part-Time Trader (Away During Market)

For traders who cannot watch the market during hours. Relies on bracketed orders and after-hours review.

Setting	Part-Time Value	Default Value
alerts.breakout.volume_threshold_buy_zone	1.0	0.0
alerts.breakout.volume_threshold_approaching	0.8	0.0
cooldowns.stop_warning	60	120
cooldowns.pyramid	480	240
service.market_hours_only	true	true

Appendix E: Glossary of Terms

Definitions of all CANSLIM methodology terms and system-specific terminology used throughout this guide.

A/D Rating — Accumulation/Distribution rating from MarketSurge (A through E). Measures institutional buying versus selling pressure. A–B indicates net accumulation; D–E indicates net distribution.

Ascending Base — A base pattern with three pullbacks, each making a higher low. Requires a 12–20% correction from the prior high over at least 9–16 weeks.

Base — A period of price consolidation following an advance. The foundation for the next breakout. Minimum length is typically five weeks for most patterns.

Base Depth — The percentage decline from the base's high point to its low point. Normal depth is 12–33%. Deeper than 35% is concerning; shallower than 15% is a flat base.

Base Stage — The count of how many bases a stock has formed during its current price cycle. Stage 1–2 bases have the highest success rates. Stage 3+ carries elevated risk.

Bollinger Band Position — A value from 0 to 1 indicating where price sits within its Bollinger Bands. 0 = lower band, 0.5 = middle, 1 = upper band. Used in swing trading criteria.

Breakout — When a stock's price rises above its pivot point on above-average volume, signaling institutional demand and the start of a new advance.

Buy Zone — The range from the pivot point to approximately 5% above it. Purchases within this zone carry acceptable risk. Above 5% is considered chasing.

CANSLIM — William O'Neil's growth stock investing methodology. C=Current earnings, A=Annual earnings, N=New products/highs, S=Supply/demand, L=Leader, I=Institutional sponsorship, M=Market direction.

Climax Top — An exhaustion signal where a stock advances rapidly on heavy volume after an extended run, often marking a significant top.

Confluence Zone — An area where three or more support levels (moving averages, prior pivots, trend lines) converge within a 2% range, creating strong support.

Cup with Handle — The most common and reliable base pattern. A U-shaped cup (7–65 weeks) followed by a short downward drift (the handle, 1–4 weeks).

Distribution Day — A day when a major index falls 0.2% or more on higher volume than the previous day. Indicates institutional selling. Five or more within 25 days signals trouble.

Double Bottom — A W-shaped base pattern where the stock makes two distinct lows, with the second low typically undercutting the first by 1–3%.

Dynamic Factors — Scoring components calculated from real-time technical data: up/down volume ratio, 50-MA position, support bounces, RS trend, and volume dry-up.

Eight-Week Hold Rule — When a stock gains 20% or more within three weeks of breakout, hold for a minimum of eight weeks from the breakout date before selling.

EPS Rating — Earnings Per Share rating from MarketSurge (1–99). Measures a company's earnings growth versus all other stocks.

Flat Base — A base pattern with less than 15% depth, formed during a market correction or after a prior advance. Minimum five weeks. Signals strength.

Follow-Through Day (FTD) — A day (Day 4 or later of a rally attempt) when a major index gains 1.25% or more on volume higher than the previous day. Signals a potential new uptrend.

Grade — The letter grade (A+ through F) assigned by the scoring engine based on the total score from static and dynamic factors.

Handle — A short consolidation on the right side of a cup pattern. Should drift downward, last 1–4 weeks, and show declining volume.

Hot Reload — The ability to apply configuration changes without restarting the Windows service, triggered via IPC command.

IBD — Investor's Business Daily, the financial media company founded by William O'Neil that publishes the research and data used in CANSLIM methodology.

Immutable Rule — A scoring or trading rule that cannot be overridden by the learning engine. Examples: RS Rating floor, maximum loss limit.

IPC — Inter-Process Communication. The mechanism by which the GUI communicates with the background Windows service.

Kanban Board — The GUI's main interface, displaying positions as cards organized in columns by state (Watch List, Active, Profit Taking, Closed).

Learning Engine — The machine learning component (Phase 7) that analyzes trade outcomes using Ridge regression to optimize scoring weights.

Market Regime — The current classification of overall market conditions: BULLISH (Confirmed Uptrend), NEUTRAL (Uptrend Under Pressure), or BEARISH (Market in Correction).

MarketSurge — IBD's stock screening and charting platform (formerly MarketSmith). Primary source for fundamental data and base pattern identification.

Moving Average — A smoothed price line calculated over a specific period. Key levels: 21-day EMA (short-term), 50-day SMA (intermediate), 200-day SMA (long-term), 10-week MA (weekly).

Pivot Point — The price level at which a stock breaks out of its base. Calculated as the highest point in the formation plus ten cents.

Polygon — A financial data API provider used for historical OHLCV bars. Used by the dynamic scoring engine for technical analysis calculations.

Position Sizer — The module that calculates recommended share quantities based on account risk percentage, stop distance, and maximum position limits.

Power from Pivot — A MarketSurge flag indicating a stock gained 20%+ within three weeks of breakout, triggering the eight-week hold rule.

Relative Strength (RS) Line — A line on price charts showing the stock's performance versus the S&P 500. Rising RS line = outperformance.

RS Rating — Relative Strength Rating from MarketSurge (1–99). Compares a stock's price performance over the past 12 months to all other stocks.

Ridge Regression — A machine learning technique used by the learning engine to find optimal scoring weights while handling correlated inputs.

RVOL — Relative Volume. Time-adjusted volume ratio comparing current intraday volume to the expected volume at that time of day.

Scoring Engine — The v2.3 module that assigns composite scores and letter grades to watchlist stocks based on static and dynamic factors.

Shakeout Plus 3 — An aggressive alternative entry technique. Entry = first low of base + 10%. Requires half-size pilot position and quick exits if wrong.

Snap-Back Rally — A rapid price recovery after an undercut of support, often driven by institutions buying the dip.

Static Factors — Scoring components from MarketSurge/Google Sheet data: pattern type, base stage, depth, length, and RS Rating.

Three Weeks Tight — A pattern where weekly closing prices cluster within 1–1.5% for three consecutive weeks. Entry on break above the high point with volume.

Trailing Stop — A stop-loss level that rises with the stock price, activated after a position gains a configurable percentage (default 15%).

Volume Dry-Up — A decline in trading volume during base formation, indicating sellers are being exhausted. Bullish when followed by volume expansion on breakout.

YAML — Yet Another Markup Language. The human-readable configuration format used by all CANSLIM Monitor config files.

— End of CANSLIM Trading System User Guide —