CQG, **Inc.**

Statware

Contents

Introduction

Mission Statement

Trading is primarily a function of three tasks: entry, money management and exit. You will find that the Indicators in the Kase StatWare package will help you to perform all three tasks in a more efficient and successful manner. Where many older indicators are based on empirical observations, we now have the ability to derive indicators from the natural structure of the market itself. Patterns that were difficult to observe with primitive tools now emerge for examination. A fitting analogy would be between two warriors facing off, one using a sling shot and the other using a modern assault rifle.

This manual has been written to explain these indicators and to give traders an increased understanding of the markets to diminish risk and increase profits. Keep in mind that the Kase indicators are tools, which support a methodology, and not a “black box” system. A trader’s personality and experience will play a role in the development of his or her ability to use Kase StatWare.

Philosophy

It is Kase and Company Inc.'s philosophy to view the markets scientifically and accurately without making the procedure for doing so too complex. Through the application of statistics and mathematics a whole new generation of indicators has been made possible.

Bar Chart Construction

Bar Charts Constructed From Time

The first type of bar chart is constructed from time bars. We find the total number of minutes in a session and divide it by between 1/5 and 1/8.

Setting the Bar Length Charts

Our philosophy is to “scale-up” into trades using three chart lengths. We recommend using:

- a daily chart.
- a monitor chart consisting of 1/5 to 1/8 of a day.
- a timing chart with a bar length of 1/3 to 1/5 of the monitor chart.

Number of Minutes for Monitor Chart:

Use a 1/5 - 1/8 of a day monitor chart. For example, if you are setting up a chart for a commodity, which trades for 325 minutes such as crude oil, this translates to 41 to 65 minutes.

Number of Minutes for Timing Chart:

The timing chart should be 1/3 to 1/5 the length of the monitor chart. Simply take the number of minutes you have chosen for the monitor and divided by either 3 or 5 to find the appropriate timing chart length.

Bars Constructed From Tick Volume (Constant Volume Bars)

There is a second way to set up bar charts. This type of chart is the constant volume bar chart, a recent innovation and improvement in traditional bar charting. Each "tick" represents one change in price. A constant volume bar, with the flat filter parameter checked, constructed using a tick count of 20, for example, would contain the price activity over 20 price changes or ticks.

Tick volume and time are similar measures in that both are proportional to the square root of volatility and risk.

A major advantage of constant volume bars is that they are more regular, building slowly when the market is quiet and quickly when the market is busy, and thus, due to lower variability, are less risky.

Choosing a Constant Volume Bar (CVB) Chart

Right Click on the Chart title

Select Chart Type, and then slide the mouse to the right to select ***Constant Volume Bar***.

You may also add the **Bar** and **CVB** buttons to your chart toolbar and use them to switch between time and constant volume bars.

Setting the Number of Ticks for a Constant Volume Bar

In the command entry box, type in the number ***55*** and press ***Enter***.

Count the number of bars per day.

If the number is greater than 8, increase the tick bar length to decrease the number of bars until the average number of bars per day appears to be between 5 and 8. Err on the side of having more bars, not less.

If possible, use Fibonacci numbers for your CVB bar length (3, 5, 8, 13, 21, 34, 55, 89, 144, etc.), adjusting as necessary.

Additionally, use the following suggested parameters for the Constant Volume Bars:

1. Flat filtering
2. Ticks (for the data setting)

The Indicators

Adding Indicators to your Charts

To add a Kase indicator:

Left click on the **Study** button.

Left click on the **Kase** tab.

Left click on the abbreviation next to the desired Kase study.

The Kase indicators currently available in ***CQG*** are:

Error! Not a valid link.

Changing Indicator Parameters

To change the parameters for an indicator:

Right click in the study chart

Select Modify Study Parameters

Left click on the parameter to be modified

Select one of the options from the drop-down list, or enter the value you desire.

KPO - Kase Peak Oscillator

Philosophy:

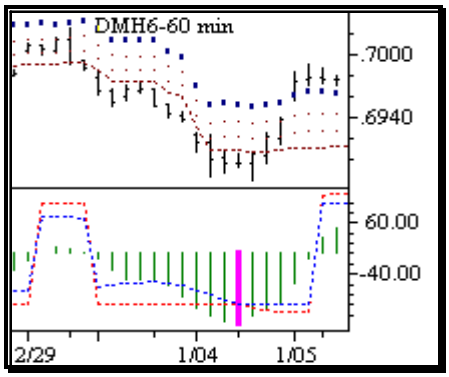
The ***PeakOscillator*** plot is a momentum indicator designed to measure the strength of a market trend. It is used similarly to traditional oscillators, but it is derived from a mathematically sound, statistical evaluation of trend, which analyzes over 50 different trend lengths, rather than just two as the traditional oscillator does. It automatically adapts for cycle length and volatility changes.

The ***PeakOscillator*** is "universal" in that it scales to volatility, and can be compared over differing commodities and time frames.

Other features of the PeakOscillator are the **PeakOu**t and **PeakMin** lines.

The **PeakOut** line is the maximum of 2 standard deviations of the local PeakOscillator reading, and the 90th percentile of momentum, historically. The **PeakMin** is the minimum of the two.

Valid PeakOut with Spike Turn



Interpretation:

The ***PeakOscillator*** is used two ways:

Divergence: The ***PeakOscillator*** may be used to generate traditional divergence signals. The difference between it and traditional divergence indicators lies in its accuracy.

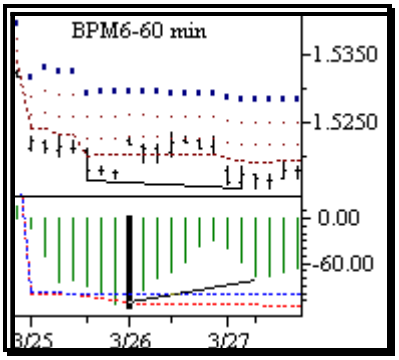
PeakOut: The second use is to look for a PeakOut. A PeakOut ***occurs*** when the histogram breaks beyond the PeakOut line and then pulls back. A PeakOut through the maximum line will be displayed magenta

A PeakOut***, which*** only extends through the PeakMin line is called a local PeakOut***,*** and is less significant than a normal PeakOu***t*** signal. These local PeakOuts are to be relied upon more heavily during sideways or corrective markets.

PeakOuts may be based on either the maximum line or the minimum line**.** Maximum PeakOuts, however, are rarer and thus more significant than minimum PeakOuts. The magnitude of the price move may be greater following the maximum PeakOut, but the likelihood of the break in trend is essentially the same. Thus, our research indicates that we should react equally to a ***PeakOut*** in a trendy market and a ***PeakMin*** in a choppy or corrective market.

For further usage information - see danger signals, in ***Trading Guidelines***, Chapter 6.

Classic PeakOut with Traditional Divergence Signal



Parameters for Kase PeakOscillator

Parameter	Description	Defaults
Info>>>	Accesses the help for the KPO study	None
Color	The color used to display the PkOsc, PkOut, PkConfirm, and PkMin values.	PkOsc = Green PkOut = Red PkConfirm = Magenta PkMin = Blue
MarkIt	Allows the user to select which conditions to apply to the display and how those conditions should be marked.	None
Range	Starting and ending points for the calculation window.	8 and 65
F	# of standard deviations over the average PeakOscillator value at which the local PeakOut line is set.	2
Display	The type of display for the PkOsc, PkOut, PkConfirm, and PkMin values.	PkOsc = Histogram PkOut = Dotted Line PkConfirm = Histogram PkMin = Dotted Line

KCD - Kase CD

Philosophy:

The ***KaseCD*** is a sensitive, second derivative acceleration indicator, the derivative of the ***PeakOscillator***. It is calculated in the same way as the ***MACD*** histogram--from a moving average oscillator. It is the difference between the ***PeakOscillator*** and the average of the ***PeakOscillator***, where the ***MACD*** is the difference between an exponential moving average

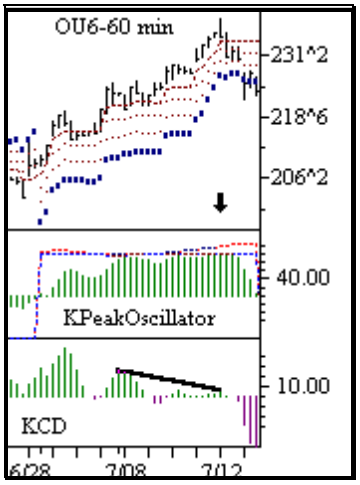
oscillator and its average. When used in conjunction with the Kase ***PeakOscillator*** this signal indicates the market's direction.

However, because its basis is statistical, it generates cleaner crossover signals and more reliable divergences.

Interpretation:

The ***KaseCD*** is used as a confirming divergence indicator. Its use is primarily to confirm, as it is more sensitive than the ***PeakOscillator***, and will generate divergences for minor turns and corrections.

Valid KCD divergence confirming PeakMin (arrow).



For further usage information - see danger signals, in Trading Guidelines, Chapter 6.

Parameters for Kase CD:

Parameter	Description	Defaults
Info>>>	Accesses the help for the KCD study.	None
Color	The color used to display the KCD+ and KCD-- values.	KCD+ = Green KCD-- = Magenta
MarkIt	Allows the user to select which conditions to apply to the display and how those conditions should be marked.	None
Range	Starting and ending points for the calculation window.	8 and 65
Display	The type of display for the KCD values.	Histogram

KPrmSt - Kase Permission Stochastic

Philosophy:

Trades taken in the direction of the major trend tend to be more successful than trades against the trend. Thus, it behooves traders to screen trades with a higher time frame filter.

Traders are often too impatient to do so. Thus the ***Permission Stochastic*** computes a synthetic higher time frame stochastic, which is based on a moving higher time frame window that ends with each bar. For example, a weekly bar is defined as the last 5 business days, ending today.

The sped up filter is thus the best compromise between filtering in a higher time frame and minimizing delays in trading.

Interpretation:

Permissioned traders may take long trades when the ***Permission Stochastic*** is riding the top of the chart and when ***Permission K*** is above ***Permission D*** and both are close together. The opposite applies to short trades.

Traders are also permissioned long when the market has been oversold, the difference between ***Permission K*** and ***Permission D*** is large and ***Permission K*** has already turned up. Again, the opposite applies to permissioning short trades.

Parameters for Kase Permission Stochastic:

Parameter	Description	Defaults
Info>>>	Accesses the complete help for the Kase Permission Stochastics study.	None
Color	The color used to display the PermK and PermD values.	PermK = Magenta PermD = Black
MarkIt	Allows the user to select which conditions to apply to the display and how those conditions should be marked.	None
Period	# of synthetic bars in the Permission Stochastic	9
X	# of bars that make up the longer term. For example, if you are trading a daily chart, setting X to 5 will give you a five day or weekly stochastic to screen your signals	5
Display	The type of display for the PermK and PermD values.	PermK = Histogram PermD = Dotted line

Characteristics of the Permission Stochastic:

Permission To Go Long

- When the stochastic values are near the top of the chart and close in value.
- When the ***Permission Stochastic*** values have been near the bottom of the chart, ***Permission K*** is both well above the ***Permission D*** and above (or has risen out of) oversold territory.
- When the ***Permission Stochastic*** values are both below 85 percent and above 15 percent and ***Permission K*** is above ***Permission D.***

Permission To Go Short

- When the ***Permission Stochastic*** values are near the bottom of the chart and close in value.
- When the ***Permission Stochastic*** values have been near the top of the chart, ***Permission K*** is both well below the ***Permission D*** and below or has fallen out of overbought territory.
- When the ***Permission Stochastic*** values are both below 85 percent and above 15 percent, and ***Permission K*** is below ***Permission D.***

KPrmSc - Kase Permission Screen

Philosophy

It is easier to use an "on-off" histogram, which simply displays one color for ***Permission Long*** and another for ***Permission Short***, than to interpret the ***Permission Stochastic*** manually. The ***Permission Screen*** takes the rules for the ***Permission Stochastic*** and translates them to a simple color histogram biasing the signal in favor of the market's long-term direction

Interpretation

If the histogram is dark green, the trader has a ***Permission Long*** and is able to take any long trades generated shorter term. The opposite is true for the dark magenta ***Permission Short***.

Use on a multi-data chart for spread trading. Plot one ***Permission Screen*** in sub-graph 2 for data 1 and in sub-graph 3 for data 2. If both screens match, don't trade. If the screens oppose, take a spread trade accordingly, going long the ***Permission Screen*** histogram green data (above 0) and short the red data (below 0).

Parameters for Kase Permission Screen

Parameter	Description	Defaults
Info	Accesses the help for the Kase Permission Screen study.	None
Color	The color used to display the XPermK and XPermD values.	XPermK = Green XPermD = Red
MarkIt	Allows the user to select which conditions to apply to the display and how those conditions should be marked.	None
Period	# of synthetic bars in the Permission Stochastic	9
X	# of bars that make up the longer term. For example, if you are trading a daily chart, setting X to 5 will give you a five day or weekly stochastic to screen your signals	5

KCCSS - Kase Color Coded Support System

The ***KCCSS*** provides an at-a-glance method for gauging the strength of buy and sell signals, using blue shades for longs and red shades for shorts.

1st Class Longs

Philosophy

A first-class buy signal has occurred when traditional timing signals, one for each dot, have triggered AND have been permissioned long by the imbedded ***Permission Screen.***

Interpretation

When three blue dots appear on a bar, a buy signal has occurred.

Note: Sometimes the size (range) of the bar will not be sufficient for all three blue dots to appear. In such cases, the color of the bar should be used to confirm the signal.

1st Class Shorts

Philosophy

A first-class sell signal has occurred when traditional timing signals, one for each dot, have triggered AND have been permissioned short by the imbedded ***Permission Screen.***

Interpretation

When three magenta dots appear on a bar, a sell signal has occurred.

Note: Sometimes the size (range) of the bar will not be sufficient for all three magenta dots to appear. In such cases, the color of the bar should be used to confirm the signal.

2nd Class Longs

Philosophy

Sometimes the ***Permission Stochastic*** does not trigger clear permission long rules. When the permission trigger is ambiguous, but traditional timing signals, one for each dot, have triggered, a 2nd class long signal has been generated.

Interpretation

Second-class buy signals are generated when 2 consecutive bars contain 2nd class long signals. The 2nd bar should exhibit a higher high and higher low.

Warnings to Shorts

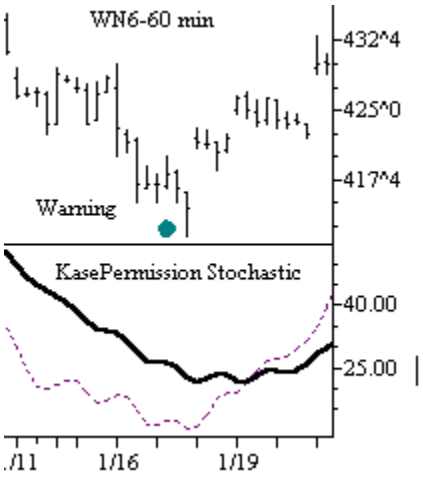
Philosophy

On the ***Permission Stochastic*** "roll-over" effect, where, due to a sharp turn, the ***%D*** lags the ***%K*** to a great degree and does not trigger traditional permission rules, a ***warning*** is generated. (Inverse for *KS2Shorts & Warning).

Interpretation

On ***Warnings*** traders should drop down to the ***Permission Stochastic*** for examination. Further, traders should exercise discretion relative to exiting existing short trades and/or taking new long trades.

Warning to Longs and Rollover Effect



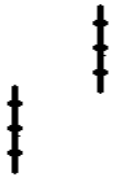
2nd Class Shorts

Philosophy

Inverse of 2nd Class Longs.

Interpretation

Inverse of 2nd Class Longs and Warnings to Shorts.

Valid 2nd Class Sell	Invalid
	

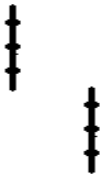
Warnings to Longs

Philosophy

Inverse of Warnings to Shorts

Interpretation

Inverse of Warnings to Shorts

Valid 2nd Class Sell	Invalid
	

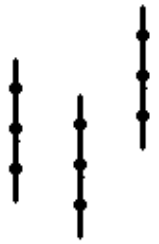
3rd Class Danger Longs

Philosophy

A danger signal triggers when traditional timing signals, one for each dot, occur AND have NOT been permissioned by the imbedded ***Permission Screen.***

Interpretation

Three consecutive danger bars constitute a buy signal, if the bars exhibit higher highs and higher lows, and vice versa for sell signals. The danger signal also can identify a pullback from which a second entry signal is generated. For example, a blue followed by a red danger then a new blue is a second signal. Conversely, a red followed by a blue danger then a new red is a second signal.

Valid 3rd Class Buy	Invalid
	

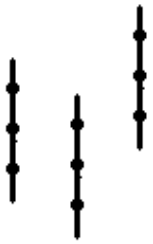
3rd Class Danger Shorts

Philosophy

A danger signal triggers when traditional timing signals, one for each dot, occur AND have NOT been permissioned by the imbedded ***Permission Screen.***

Interpretation

Three consecutive danger bars constitute a buy signal, if the bars exhibit higher highs and higher lows, and vice versa for sell signals. The danger signal also can identify a pullback from which a second entry signal is generated. For example, a blue followed by a red danger then a new blue is a second signal. Conversely, a red followed by a blue danger then a new red is a second signal.

Valid 3rd Class Buy	Invalid
	

Parameters for Kase Color Coded Support System:

Parameter	Description	Kase Defaults
Info>>>	Accesses the help for the KCCSS study.	None
Display	Accesses the display characterisitics for the KCCSS study.	None
>>>Info	Accesses the help for the KCCSS study.	None
>>>Color	The colors used to display the C1L, C1S, C2L, W2L, C2S, W2S, C3L, and C3S values	C1L = Lt. Blue C1S = Pink C2L = W2L Green = Green C2S = W2S Magenta = Magenta C3S = Dk. Blue C3L = Red
>>>Display	The display of the C1L, C1S, C2L, W2L, C2S, W2S, C3L, and C3S values can be individuallly controlled.	On

Abbreviation	Definition
C1L	1st Class Long
C1S	1st Class Short
C2L	2nd Class Long
W2L	2nd Class Long and Warning to Shorts
C2S	2nd Class Short
W2S	2nd Class Short and Warning to Longs
C3L	3rd Class Long
C3S	3rd Class Short

C1L, C2L, and ***C3L*** display with an up arrow. ***C1S, C2S,*** and ***C3S*** display with a down arrow. ***W2L*** displays with a square above and ***W2S***, displays with a square below the bar.

KDevStp - Kase DevStop

Philosophy

The ***DevStop*** is the closest we can come to an ideal stop level in the real world, by accounting for volatility (which is directly proportional to risk), variance of volatility (how much risk changes from bar to bar) and volatility skew (the propensity for volatility to spike higher from time to time).

The ***DevStop*** evaluates average market range, as well as the distribution and variability of the range, identifying points where there is a high probability of the market move being non-random. Specifically the ***DevStop*** places exit points at 1, 2 and 3 standard deviations over the mean two-bar true range, corrected for skew. Therefore, we can take profit or cut losses at levels at which the probability of a trade remaining profitable is low, without taking more of a loss or cutting profits any sooner than necessary.

Interpretation

The stop consists of four exit points, a ***warning line*** and ***Dev 1, 2, and 3.*** Two closes against the ***Warning*** count as ***Dev 1***.

To speed up the crossover of the stop from long to short, simply change the moving averages to crossover more quickly, for example to 3 and 13. To decrease the amount of the stops, that is, to pull them in, reduce the standard deviation settings.

For further usage information, see Danger Signals, in Trading Guidelines, Chapter 6.

Parameters for Kase DevStop

Parameter	Description	Defaults
Info>>>	Accesses the help for the Kase DevStop study.	None
Color	The color used to display the Warning, Dev1, Dev2, and Dev3 values.	Warning = Red Dev1 = Dark Blue Dev2 = Lt. Blue Dev3 = Pink
MarkIt	Allows the user to select which conditions to apply to the display and how those conditions should be marked.	None
L1	# of bars used to calculate the standard deviation	30
L2, L3	# of bars in the moving averages used to default the indicator to long or short.	10, 21
V2,V3	# of standard deviations used to calculate the Dev stops.	2.2 and 3.6
Prices P1, P2, P3	Prices used to calculate the indicator	Close, High, Low

KStpAm - Kase Stop Amounts

Philosophy

The philosophy is the same as the ***DevStop***. The stop amount is the difference between the highest high or lowest low and the exit point (the actual ***DevStop***).

Interpretation

The stop amount tells the trader how much - the actual dollar amount per unit - is at risk at the warning line, and the three stop levels.

Parameters for Kase Stop Amounts (KStpAm):

Parameter	Description	Defaults
Info>>>	Accesses the help for the Kase Stop Amounts study.	None
Color	The color used to display the Warning, Risk1, Risk2, and Risk3 values.	Warning = Red Risk1 = Dark Blue Riskv2 = Lt. Blue Risk3 = Pink
MarkIt	Allows the user to select which conditions to apply to the display and how those conditions should be marked.	None
S1,S2,S3,S4	# of Standard Deviations used for the stop amounts	0, 2, 2.2, 3.6
L	# of bars used to calculate the Standard Deviation.	30
Prices P1, P2, P3	Prices used to calculate the indicator	Close, High, Low

KCI - Kase Candlestick Identifiers

Philosophy

This set of indicators identifies the 5 pairs of candlestick patterns, which Kase finds the most useful and screens them for significance.

They can be used to identify the danger of a possible turn and also, with the exception of the ***Hammer*** and ***Hanging Man***, to accelerate exits, especially on the daily chart, or a chart one time frame higher than you are trading, substituting the candle exit for ***Dev 1***.

Evening and Morning Stars, since they are three candle patterns, generate a warning and setup after two candles are completed. We then know that all we need is a third candle to complete the pattern. In a two-candlestick pattern, we do not know whether the pattern is complete until the second candlestick is in place.

Given that reversals generally take place at the "top" or "bottom" of trends, in order to filter out less meaningful patterns, we screen our candle patterns with the ***Stochastic***, only identifying the patterns under "overbought" (bearish) or "oversold" bullish (conditions).

These patterns are especially significant when accompanied by ***divergence*** and ***PeakOut*** signals.

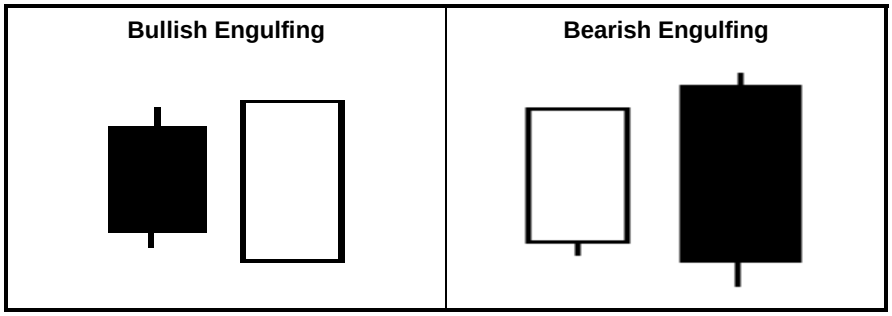
A cross on the high of the candle identifies Bearish candle patterns and a cross on the low indicates a bullish candle pattern. All candles contain the same inputs as follows:

Parameters for Kase Candlestick Identifiers

Parameter	Description	Defaults
Info>>>	Accesses help for the KCI study.	None
Color	The color used for the candlestick identifier text.	Black
Threshold	The extremes for the slow stochastic pattern filter. For example, a default of 75 means that bearish formations will only be identified when the stochastic is above 75 and bullish formation s below 25. Likewise, a threshold of 90 would identify candlestick patterns only if the stochastic is above 90 or below 10.	75
Display>>>	The color and display of each candlestick pattern identifier can be individually controlled. **Note:** Each candlestick pattern should be a different color to enhance readability.	Piercing — Dark Magenta Harami — Green Engulfing — Dark Cyan Evening and Morning Star — Red Hammer and Hanging Man — Yellow
>>>Info	Accesses help for the KCI study.	None
>>>Color	Selects the colors for each of the KCSI patterns.	None
>>>Display	Turns on and off each KCSI	On

Engulfing Patterns

Interpretation:

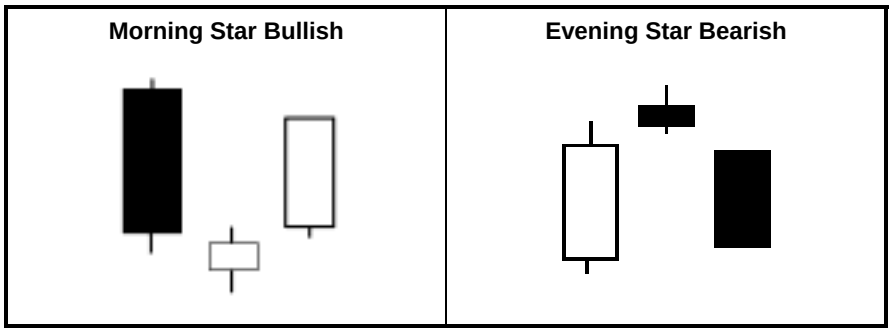


The bullish and bearish engulfing lines are reversal patterns, which entirely "engulf" the previous bar as shown above.

If this pattern is coincident with an extreme PeakOscillator reading and or divergence, wait to see if that pattern is completed. If there is a gap higher on the next bar in a bull market or lower in a bear market, substitute the ***Harami*** line mid-point for ***DevStop*** 1.

Evening & Morning Star Patterns

Interpretation



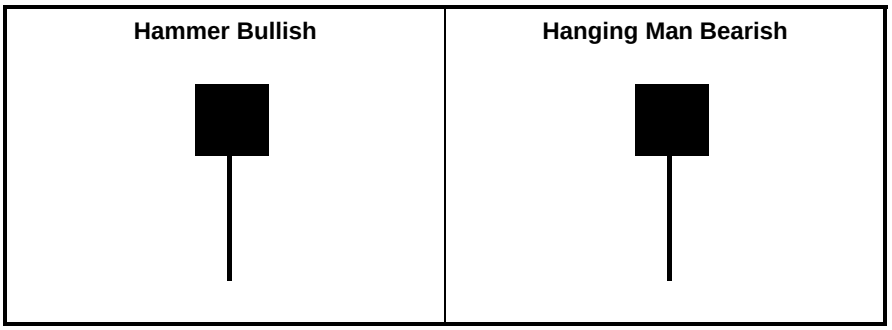
This 3-candle reversal pattern includes a large range day with the trend, an exhaustion gap, stall day, breakaway gap, and a large range reversal candle.

After the formation of the first two candles, pull in your ***DevStop1*** to the mid-point of the 1st candlestick.

For example, on day 3 of the patterns, exit the portion of the trade that would have normally been exited on the ***DevStop1*** at the mid-point of the blank ***Harami*** line (first bar of the pattern).

Hammer & Hanging Man Patterns

Interpretation

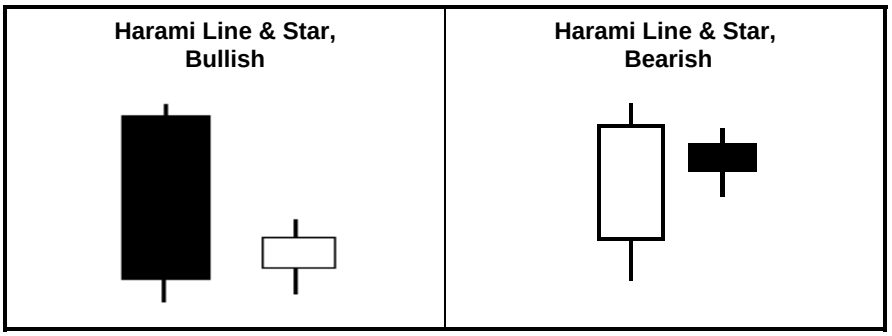


These patterns, while identical, occur at the bottom of the market for the bullish ***Hammer***, and at the top of the market for the bearish ***Hanging Man.***

While not as significant as other patterns on its own, it adds weight to other patterns, for example, as the star in a ***Harami Line and Star***. Also, it acts well as a warning, taking place often a few bars before an actual reversal.

Harami Line Patterns

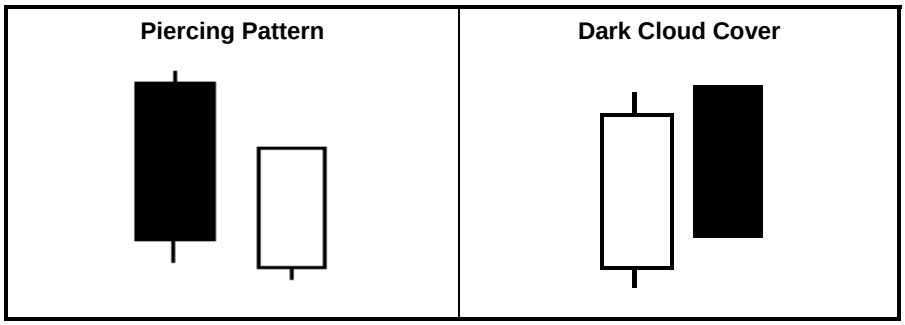
Interpretation



In the case of the ***Harami Line & Star*** pattern, look for closes against the open of the Harami Line. In the case of a bearish pattern at the top of a bull market, watch for a close of the candlestick following the star that is below the opening of a blank ***Harami line.*** The opposite holds true in a bear market. This level is substituted for ***DevStop 1***.

Piercing Patterns

Interpretation



If this pattern is coincident with an extreme ***KCD*** or ***PeakOscillator*** reading and/or divergence, we wait to see if that pattern is completed. If there is a gap higher on the next bar, in the case of a bull market, or a gap lower in the case of a bear market, substitute the mid-point of the ***Harami line*** for ***DevStop 1.***

Trading Guidelines

Valid Entry Triggers

Statware defines valid buy entry triggers and valid sell entry triggers.

Buy Entry:

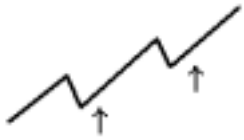
One ***first class buy***, 2 ***second*** or 3 ***third-class***, or a ***warning sign***, screened on the ***Permission Stochastic***, accompanied by at least one ***third-class buy***.

Sell Entry:

One ***first-class sell***, two ***second-*** or three ***third-class sells***, or a ***warning sign***, screened on the ***Permission Stochastic***, accompanied by at least one ***third-class sell***.

First vs. Second Signals

A first signal is any ***first-, second-*** or ***third-class*** signal generated, as described in the indicator section. A second buy signal is one that occurs after a pullback, wherein the previous low is held. A second sell signal is one that occurs after a pullback, wherein the highs are held.

Valid 1st and 2nd Buys	Two 1st Buys only
	

Entry System

To initiate a trade from a "flat" position, take second signals generated.

To take first signals, a danger sign must have been generated on the higher time frame chart, usually daily, or very strong danger signs on the monitor.

Upon a confirmed signal on the monitor level, follow trades on the monitor chart.

If you wish to trade longer term, upon a confirmed entry on the daily, follow trade on the daily chart.

Re-Entry System

If stopped out under a mild correction, if both the ***DevStop 3*** has not been violated and the previous cycle low (for longs) or high (for shorts) holds as well, reenter the entire original position on first timing signals, otherwise cycle back to normal entry rules above.

Danger Signals and Related Stop Settings

Choosing the exit point for any trade presents a set of conflicting decision processes. We want to stay in the trade through minor, random price fluctuations, in order to allow profit to accumulate; yet we do not want to allow a reversal to persist to the point that it causes substantial erosion of our gain on the trade.

To improve our decision making process on market exits, we have examined the use of three Kase indicators on our monitor chart: the ***PeakOscillator,*** the ***KCD*** and the ***DevStop***. The ***PeakOscillator*** is used to identify extremes of trend strength, while the ***KCD*** is used to identify declining and, specifically diverging momentum. These are primary signals that portend a high probability for change in trending behavior. The ***DevStop*** is used to identify significant price points for exiting, based on recent volatility.

Exit Guideline Grid

The following chart lists the exit guidelines in order of importance:

Divergence on PeakOscillator AND KCD	100%
Divergence on Peak Oscillatro OR KCD	80% + Dev 1
PeakOut late in the direction of the dominant trend, or during a correction, no divergence.	80% + Dev 1
PeakOut early in the direction of the dominant trend (often following a sharp correction)	Dev 1, 2, and 3 equally

The studies of the Exit Guidelines related above were performed primarily on the monitor length chart. Several observations were also confirmed on a timing length chart. Because the indicators used are statistically based, they should perform equally well on the daily chart for longer-term position holders as well.

Whenever we see divergence on the ***KCD and*** the ***PeakOscillator***, we now exit 100% of our trade. In our study, we hit ***DevStop 1*** **95%** of the time (20/21) following this signal**.** ***DevStop 2*** was hit 86% of the time (18/21)

Divergence Indicator	Action Taken	Probable Outcome
KCD AND Peak Oscillator	Exit 100% of the trade	DevStop 1 hit 95% DevStop 2 hit 86%
KCD OR Peak Oscillator	Exit 80% of the trade and Pull in stops to DevStop1	DevStop 1 hit 83% DevStop 2 hit 79%
PeakOut late (with no divergence) in the idirection of the dominant trend or during a correction	Exit 80% of the trade and Pull in stops to DevStop1	DevStop 1 hit 79%
PeakOut early in the direction of the dominant trend	Stops set at DevStop 1,2,and 3 equally	Stops hit on 37% of the time

More Exit Guidelines

- When in no danger, default to ***DevStop 3.***
- It has been determined that a full exit, of either a monitor or a timing chart, whichever triggers first, beats a half-and-half exit system.
- If stops are hit before new signals are generated in the opposite direction, exit the trade.
- If there is no profit in the trade after 5 to 8 bars, exit on inactivity.

Daily Chart Exit Rules and Stops

- When in no danger, default equally to ***DevStops 1, 2 and 3.***
- Exit on the first signals in the opposite direction.
- If there is no profit on the trade after 3 to 5 bars, exit on inactivity.
- Otherwise same as above.

Choppy Market Trading Guidelines

- When the market is in a corrective, sideways, or coalescing mode, it is prudent to modify the standard trading guidelines as follows:
- Trade lighter volume, e.g., 50% vs. 100%
- Remain on the timing chart for exit signals (i.e., PeakOuts, divergences, warnings, etc.), **even if** confirmed on the monitor chart
- Exit more aggressively, e.g., 100% instead of 80%
- Default to DevStop 2 instead of DevStop 3.

- If you feel you are exiting too aggressively, if confirmed on the monitor chart, you may move up to the monitor chart and exit on monitor chart signals. However, lower the time frame on monitor chart, i.e., 10-15 bars/day vs. 5-8 bars.

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