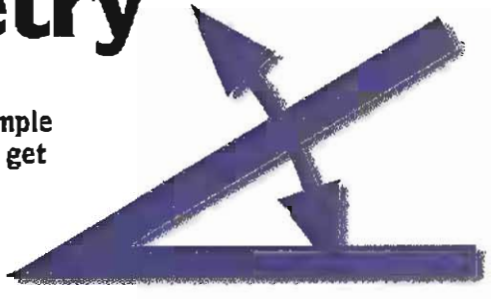
Getting the angle with Drummond geometry



Markets are extensions of the crowds that trade them. Using three simple tools, you can assess the intentions of the crowd accurately enough to get a distinct trading edge, from the monthly time frame to the intraday.

By Ted Hearne

Past performance may not predict future results, but if this were always the case, technical analysis would be worthless. We analyze patterns to understand what the market did the last time it had the present configuration. This geometry, the repeating patterns a market leaves in its wake, should be self-similar over the time frame used to observe them. This is the basis of Drummond geometry, a tool for dissecting patterns and making projections developed by Canadian trader Charles Drummond.

First, all traders must have clear objectives; this will determine your arrangement of time frames. If you are trying to wring the most out of a weekly bar, to sell the weekly high and buy the weekly low, you should make the weekly chart your focus time frame. A focus time frame is the chart on which you should place your trades. By extension, day-traders have a daily focus time frame, while some very long-term traders have a monthly or longer time frame.

Second, place your focus time frame in the context of a higher time period. Day-to-day position traders should refer to weekly charts. Such a practice provides perspective.

Third, and just the opposite of the point above, select a lower time frame. The lower time frame allows you to monitor the market at key decision points. You now are in position to determine, at the earliest possible moment, exactly what is occurring at those critical areas of significant support and resistance levels.

Drummond geometry basics Many traders recognize the potential of short-term position trading, trades from two to five days in duration. A reliable method of picking off the tops and bottoms of these short-term market swings can have high rewards, as the combined wins from these short-terms swings are substantial. This so-called swing trading should appeal to traders who want to trade frequently but cannot spend all day, every day looking at the trading screen in the manner of the red-eyed day-trader.

Drummond geometry offers a method for identifying these highs and lows. To illustrate the methodology, we need to outline some basic concepts. Drummond geometry is both a trend-following and a congestion-action methodology. It leads, rather than lags, the market by its chart projections. These projections define the highest probability scenario for the immediate future. As an added benefit, its adaptability over different time frames allows customization to your personality and trading style.

The key elements of Drummond geometry include a combination of the following three basic categories of trading tools and techniques:

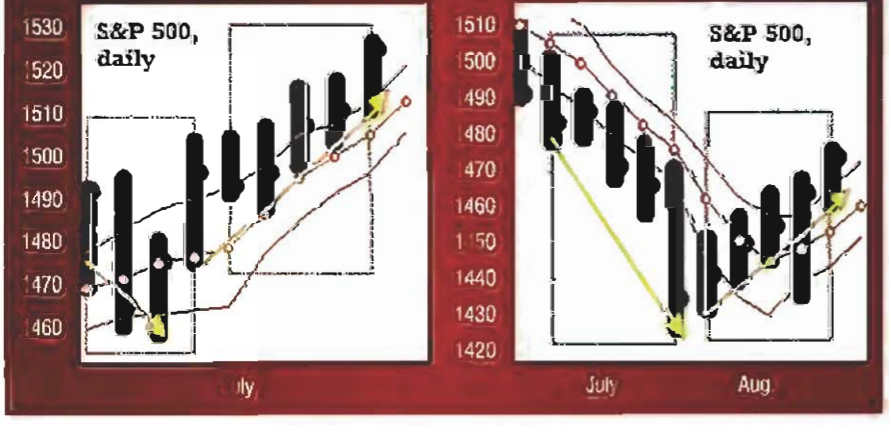
- A series of short-term moving averages
- Short-term trendlines
- Multiple time-period overlays

Of these, the most important is a moving average called the PLdot, which represents a flow concept central to Drummond geometry. Markets move from one extreme to another in a cyclical or wave-like manner. Traders can learn to visualize this flow, and a good tool for helping them do so is the PLdot.

The PLdot is a short-term moving average based on three bars of data. It can be applied to any time frame,

FOLLOWING THE CROWD

These charts show some significant daily trends in the S&P 500, but trading them profitably requires another level of analysis.



and captures the trend/non-trend activity of the time frame being charted. The PLdot from the last three bars is plotted as a dot or line on the next bar to appear. The formula for the PLdot is the average of the high, low and close of the last three bars.

```
Pldot = (Avg[H(1),L(1),C(1)] +
  Avg[H(2),L(2),C(2)] +
  Avg[H(3),L(3),C(3)]) / 3
```

The PLdot describes the market consensus in a mathematical sense. It bears a constant relationship to the immediate past and captures the recent energy of the hour, day or some other time period. It represents the consensus of the crowd.

A crowd can be an incredibly powerful force. When it moves, the crowd wants to move everything and everyone with it. When it stops, it wants to make everything around it stop as well. The crowd is collective energy and manifests attractive energy. It is built out of the need to belong, the need for protection, the need for safety and the need to feed, reproduce and continue in its existence. The crowd has momentum. If a trader follows the crowd and goes with its flow, he will not be hurt. That is the nature of a crowd, to protect its members. Of course, the crowd does not always go in the same direction. It stops, reconsiders and it changes direction, sometimes chaotically. Moreover, a crowd tends to overshoot its goal; in its wild rush, it does not realize until it's too late that it has swept past its target.

The essential point in Drummond geometry is that crowd momentum does not stop at some random point in time and space, but rather at certain specific areas dictated by larger or smaller energy flows. Energy forces are wave-like, and in their various configurations, they are the cause of economic conditions, emotional states and all collective and most individual actions.

The PLdot moves in a straight line in a trending market and horizontally in a congestion zone. Experience has shown it to be extraordinarily sensitive to the trendiness of markets. It is quick both to register the change of a market out of congestion into trend and to recognize the end of a trend.

The second element of Drummond geometry is the use of short-term, two-bar trendlines. Like the PLdot, these short-term trendlines are projected into the future. They indicate points of interest on the first upcoming bar, the bar that has yet to trade. These Drummond lines indicate areas of energy termination, zones where the market is likely to stop its movement. There are several of these lines, and in the world of Drummond geometry, they are drawn in various configurations under different market conditions.

These two tools, the short-term moving averages and the short-term termination trendlines, taken together can establish support and resistance areas in the near-term future with a high degree of accuracy.

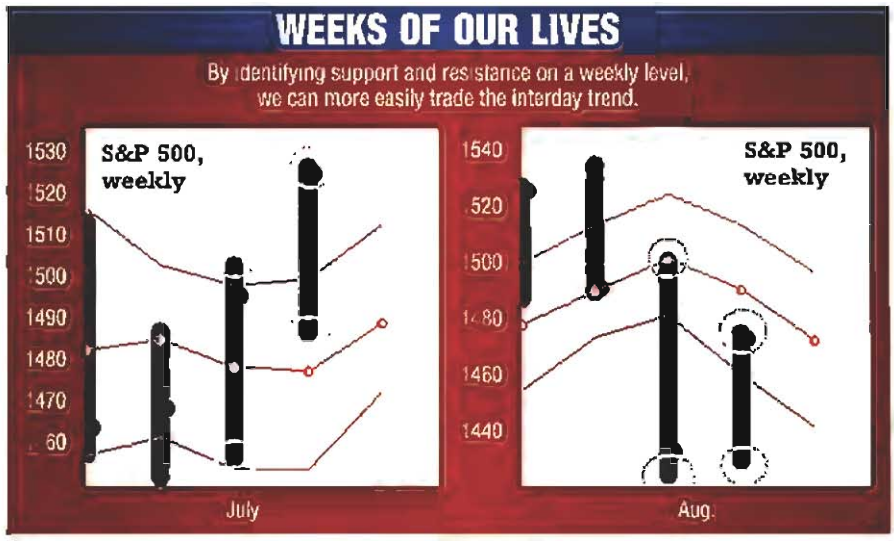
Hold that line Although it is obviously helpful to know where support and resistance will form in the upcoming bar, this information alone is not enough to trade successfully. Success in trading depends not just on knowing where support and resistance are located, but whether or not that support or resistance will be strong or weak. Strong resistance will hold and drive the market back down, whereas weak resistance will break and permit the market to rise higher. Similarly, strong support will hold and send the market higher, while weak support will break and let the market move lower.

The problem is especially thorny because a single time frame chart provides little or no information to tell a trader if support or resistance will hold. Only when a trader can make this determination reliably can trading proceed with confidence. How can Drummond geometry help in this regard?

Drummond geometry places markets in a context defined by time frame coordination to ascertain whether support and resistance are either strong or weak. This contextual placement, the coordination of support and resistance in different time frames, may be Drummond's most important contribution to the field of technical analysis.

In principle, the concept of time frame coordination is simple and clear: If you can align support and resistance levels on various time frames and take action when they coincide and avoid action when they do not reinforce each other, your success ratio will be up to three times better than if you rely on just a single time frame. Drummond observed this while studying how chart patterns played out in a single time frame chart. As he was looking at the short-term moving average and some of the short-term, two-bar trendlines that form the basis of his methodology, he realized that these patterns existed on any chart. It did not matter if they were on hourly, daily, weekly, monthly or yearly charts.

If these different time frame charts were superimposed over each other, the support or resistance points from one time frame sometimes lined up with those of a higher time frame. Daily support or resistance sometimes could be seen in areas of weekly support or resistance, and weekly resistance sometimes in areas of monthly resistance, and so forth. This multiple time frame



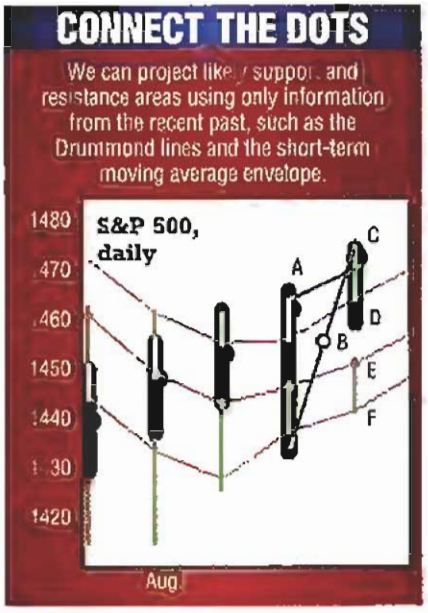
approach has proven to be a fundamental advance in the field of technical analysis and one that can improve trading results significantly.

The Drummond PLdot and the Drummond geometry support and resistance lines appear on any time frame. If market analysis is coordinated to show the interaction of these time frames, traders can monitor what happens when the support and resistance lines of the different time frames coincide. This technique of time frame coordination combined with the projection of support and resistance areas permits us to anticipate, accurately and confidently, where and how a market will react on its approach to such combined support or resistance areas.

The measure of a market Like all forms of geometry, illustrations are required for more complete understanding. Let's add the PLdot and two-bar moving averages to the S&P 500 over a pair of two-week windows in July through August 2000; the weeks are outlined in blue boxes.

July 7 through July 14 the market started higher, made a new low and then reversed into a steady uptrend. July 24 through Aug. 4, another reversal from a downtrend to an uptrend occurred, with Aug. 3, manifesting a large price swing down and then up on an intraday basis (see "Following the crowd," page 40). The desired trading strategy in both cases is simple: Find a way to catch the reversal points within these short and volatile ranges.

Now consider weekly charts of the same period (see "Weeks of our lives," page 41). An order starts to



emerge. Each daily market swing forms the high or low of a weekly bar. If we can project the weekly high and the weekly low, the swing-trading problem becomes simpler. Each trade will last from one to five days, and the range is sufficient to garner significant returns.

The PLdots and Drummond termination lines can be used to establish projected support and resistance areas and the bar's high and low price points. The narrow green bars represent support and resistance zones and are created in advance using information from previous bars. Looking at the projected resistance area between points C and D in "Connect the dots" (above), we see that it has been created by the Drummond lines A and B, and by the top of the moving average envelope. The lower green zone for that day is a support zone created by the PLdot (point E) and the envelope bottom (point F).

Now return to the S&P 500 swing trade from the first week of August and view it from monthly, weekly and daily perspectives (see "Time frames in concert," below). On the monthly bar in development, the support and resistance points are labeled B and A. These points are projected onto the weekly chart as large blocks of green. Finally, the daily view contains projected resistance and support from both weekly and monthly charts.

The previous month closed near the bottom of the bar but off the lowest level of support. The next anticipated move would be back toward the PLdot. Monthly support is shown as "strong," which has the potential to push price upward. The first day of the week opens at the top of projected weekly support and with the monthly giving a bias toward the upside. The trader buys when daily support touches weekly support. Profits can be taken anywhere within weekly resistance. The more experienced trader would take profits between the weekly PLdot, about 1485, and the weekly live PLdot, which is next week's PLdot, at about 1470. Following daily action as price moves between weekly projected support and resistance lets us harvest the bulk of the weekly move. **FM**

Ted Hearne is a Chicago-based writer and trader. The material in his article is adapted from The 30 Lessons of the P&L School of Drummond Geometry *(copyright 2001, Ted Hearne and Charles Drummond). Reach Hearne via www.tedtick.com.*