

Born of a marriage between technical analysis, physics, and pattern recognition, *pH*-indicators are forward-looking, leading indicators formulated specifically to keep up with today's broadband electronic markets.

With these indicators, static, two-dimensional terms such as overbought and oversold give way to elastic, three-dimensional terms that illustrate the direction in which the market itself wants to flow. These indicators also show entry and exit points for position-building within that flow.

As CAT-scans are to X-rays, these indicators offer a new but complementary view of market internals in all time frames. Last year, Richard demonstrated how he uses the indicators to take positions in individual equities. This year's session will focus on how to use these sometimes surprising measures to trade market indices such as the S&P and OEX in real time.

Richard Lees is President and Principal of Richard Lees Capital Management, a registered investment advisory in the Studio City area of Los Angeles, where his client list includes members of the entertainment industry and other high net-worth individuals. He is also President and Editor of *21Forward.com*, an Internet investment letter that provides subscribers with Richard's sharp wit and contrarian commentary in addition to his insightful analysis and updates on the *pH*-Indicators.

An active trader since 1982, Richard was educated at Stanford, Yale, and the University of Michigan. He has written for and been quoted by *Barron's*, *Investors Intelligence*, *The Dick Davis Digest*, *Investors Digest*, and other publications. He publicly presented his unique *pH*-indicators for the first time last year at TAG20, and in 1999 at the 24th Annual MTA Conference in Manhattan Beach, CA. He makes select media appearances, and is a sought-after speaker in Europe and the United States.

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TRADING THE S&P IN 3D— HOW TO USE pH-INDICATORS TO TRADE US STOCK INDICES

COVERING: US STOCK
INDICES

LEES



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1 – The Trading Process

- The Psychology of The True Contrarian
- Discretionary Trading vs. System Trading
- Seeing The Game As The Point

2 – The Indicators

- where we're starting
- where we're going
- pH-Market Internals (*pH-I*)

3 – Executing The Trade

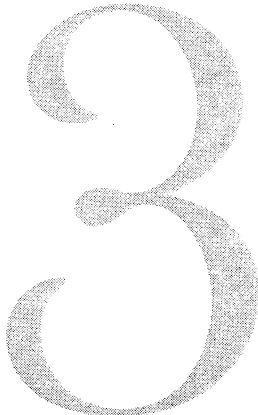
- Good Entry
- Good Exit
- Good Night

1 – the trading process

- The Psychology of The True Contrarian
 - The Popcorn Line Test
 - Predicting
 - what the market will do vs. what you will do
 - Williams' Crystal Ball
- Discretionary Trading vs. System Trading
 - Blake vs. Sting
 - The Holiness of The Minute Particular
vs.
The Sacred Geometry of Chance
 - FAA & Flying
 - Flexibility, Awareness, Acceptance
- Seeing The Game As The Point
 - The Player Who Wins The Big Points
 - *Borg's Flaw*

the universal cycle

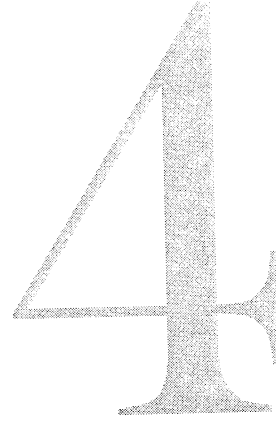
- Bull Market acknowledged

A large, stylized number 3, representing the third phase of the market cycle.

- Bull - Brain

Higher Risk

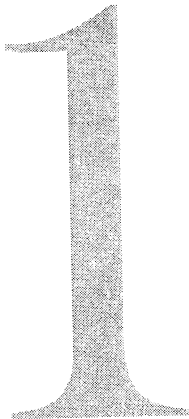
- Bear Market forgotten

A large, stylized number 4, representing the fourth phase of the market cycle.

- Bull Market end

Undervalued

- Bull Market forgotten

A large, stylized number 1, representing the first phase of the market cycle.

- Bear Market end

Overvalued

- Bear Market's end acknowledged

A large, stylized number 2, representing the second phase of the market cycle.

- Bull Market begins

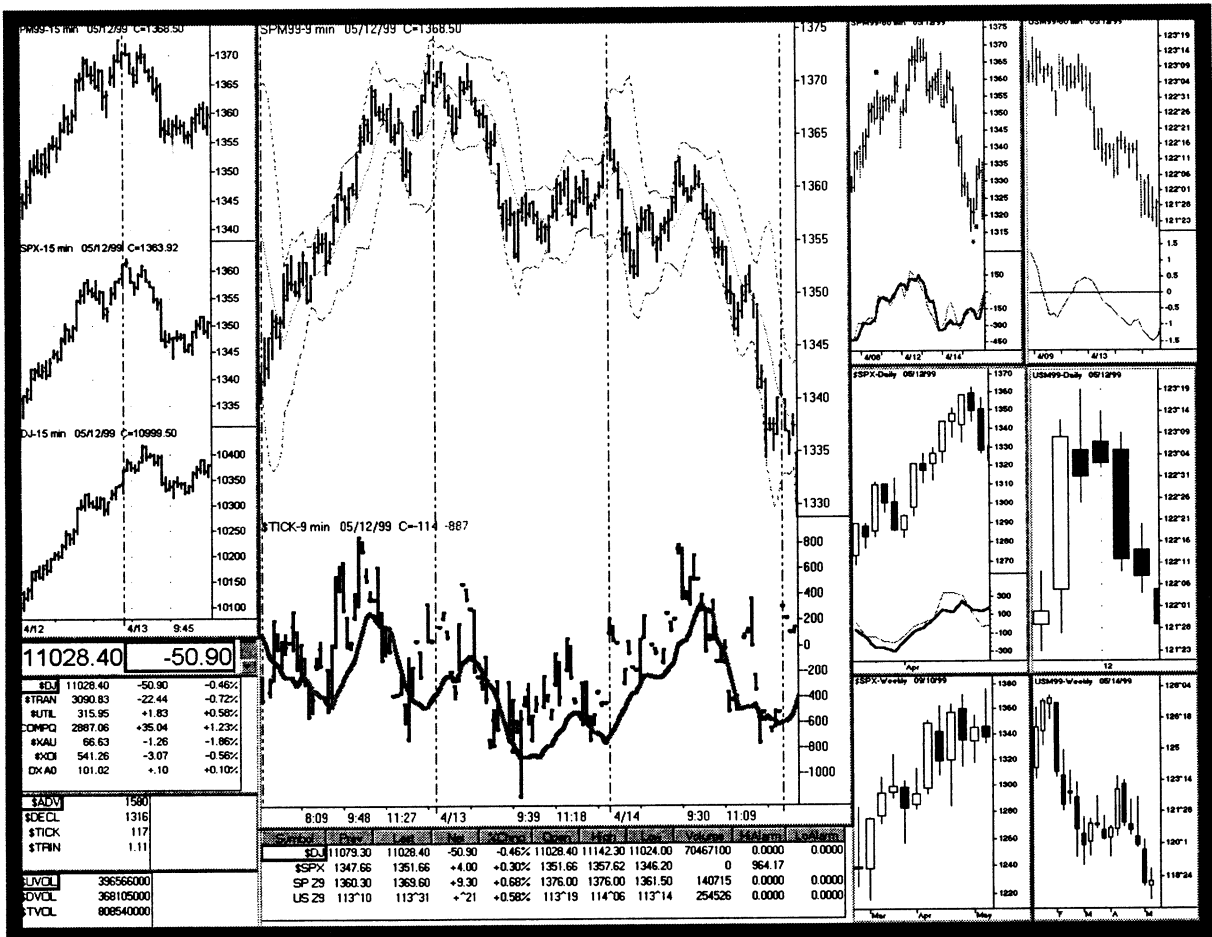
Lower Risk

the indicators: where we're starting

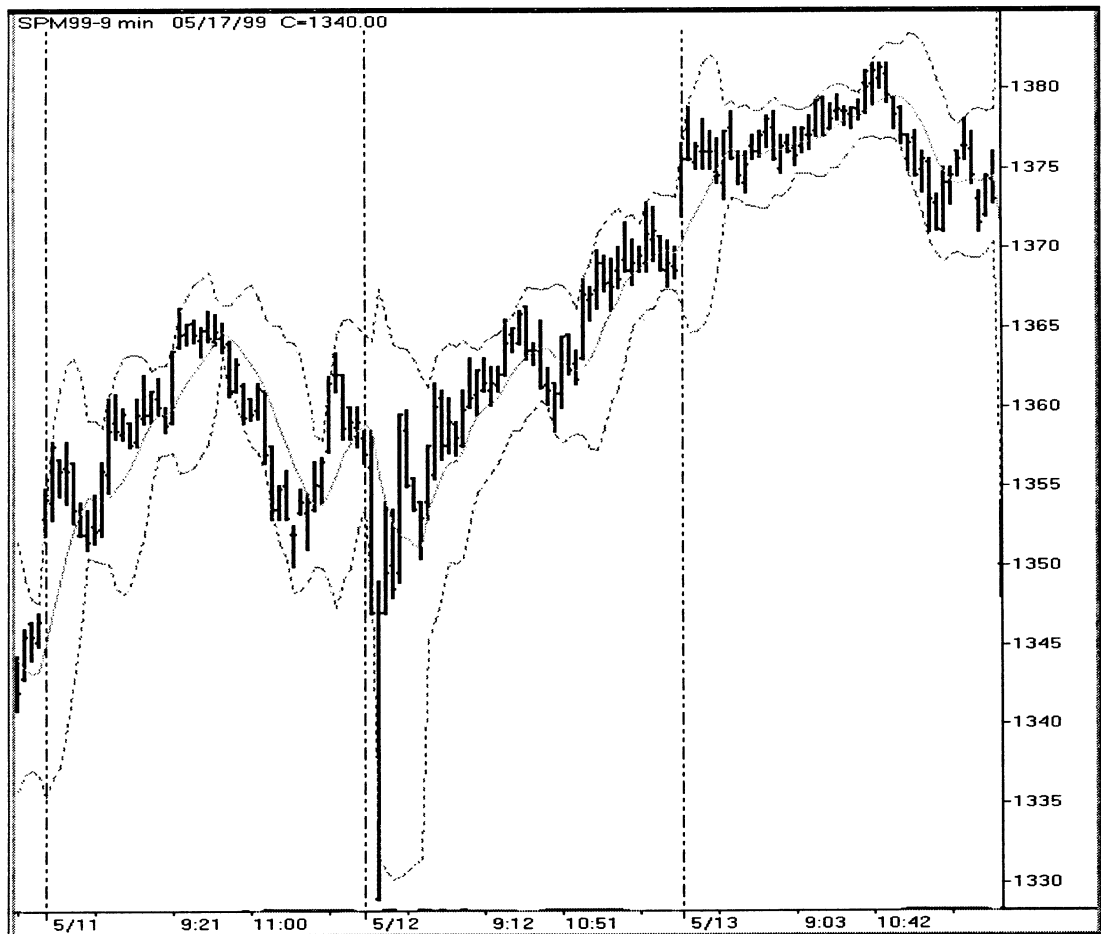
8		1		9		10									
				11		12									
								7		2					
5		3		13		14									
4															

clean screen 14

the indicators: where we're going



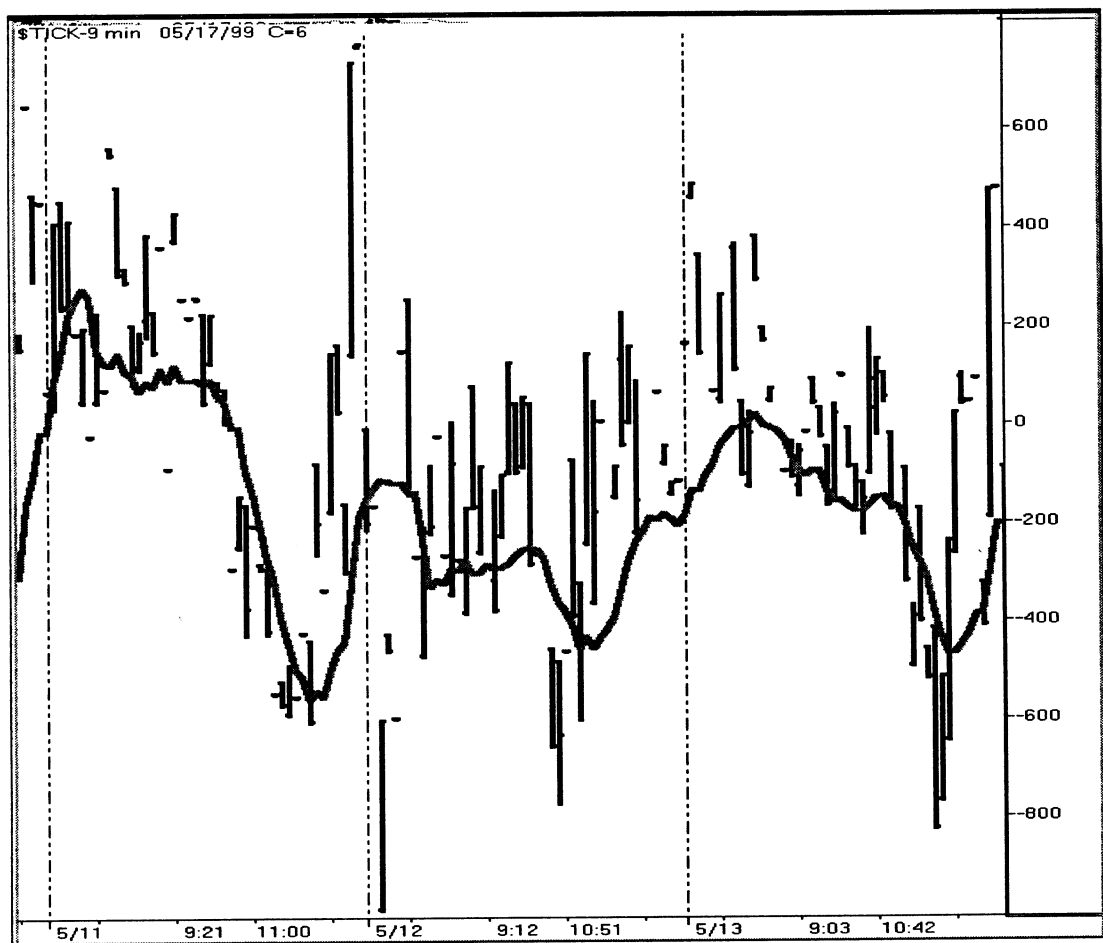
the S&P in 3D



- S&P current contract
- TICK
- UVOL
- DVOL

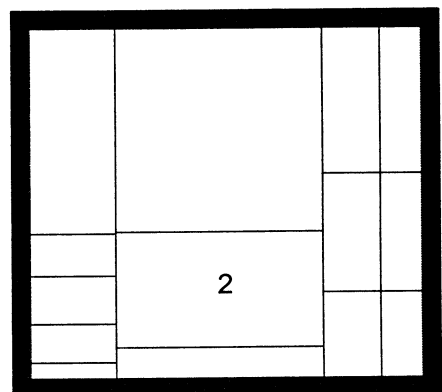
- BBands (7,2)
- Avg ((H+L)/2,7)

Diagram 1: A 2D grid with 10 columns and 5 rows. The top-left cell is labeled '1'.



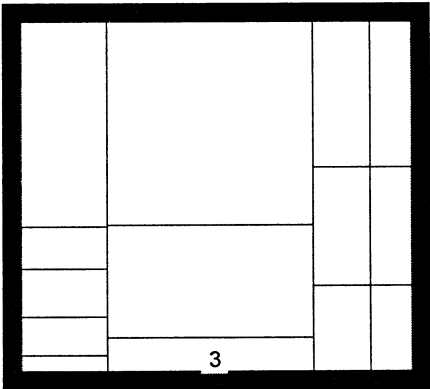
9-minute bars NYSE Tick with 9-min pH-I

for TradeStation users:
 Window No.2 is actually
 just Subgraph No.2
 in Window No.1



Quotes										
Symbol	Prev	Last	Net	%Chng	Open	High	Low	Volume	HiAlarm	LoAlarm
\$DJ	11079.30	11028.40	-50.90	-0.46%	11028.40	11142.30	11024.00	70467100	0.0000	0.0000
\$SPX	1347.66	1351.66	+4.00	+0.30%	1351.66	1357.62	1346.20	0	964.17	
SP Z9	1360.30	1369.60	+9.30	+0.68%	1376.00	1376.00	1361.50	140715	0.0000	0.0000
US Z9	113^10	113^31	+^21	+0.58%	113^19	114^06	113^14	254526	0.0000	0.0000

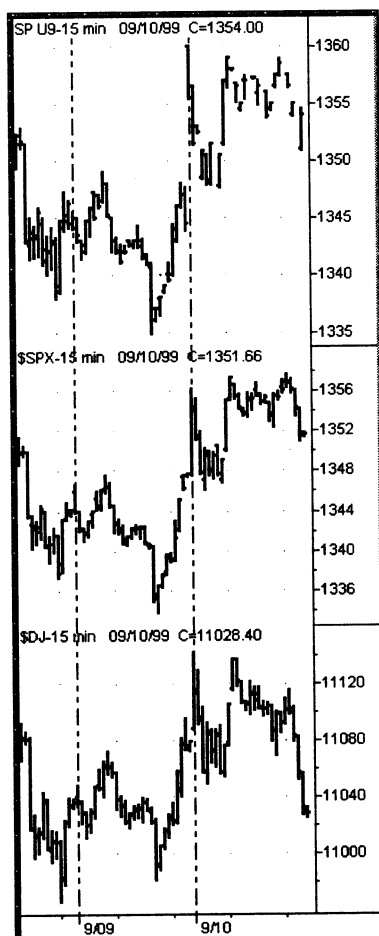
Quote Window 3



11028.40		-50.90		
\$DJ	11028.40	-50.90	-0.46%	
\$TRAN	3090.83	-22.44	-0.72%	
\$UTIL	315.95	+1.83	+0.58%	
\$COMPQ	2887.06	+35.04	+1.23%	
\$XAU	66.63	-1.26	-1.86%	
\$XOI	541.26	-3.07	-0.56%	
DX A0	101.02	+1.10	+0.10%	
\$ADV	1580			
\$DECL	1316			
\$TICK	117			
\$TRIN	1.11			
\$UVOL	396566000			
\$DVOL	368105000			
\$TVOL	808540000			

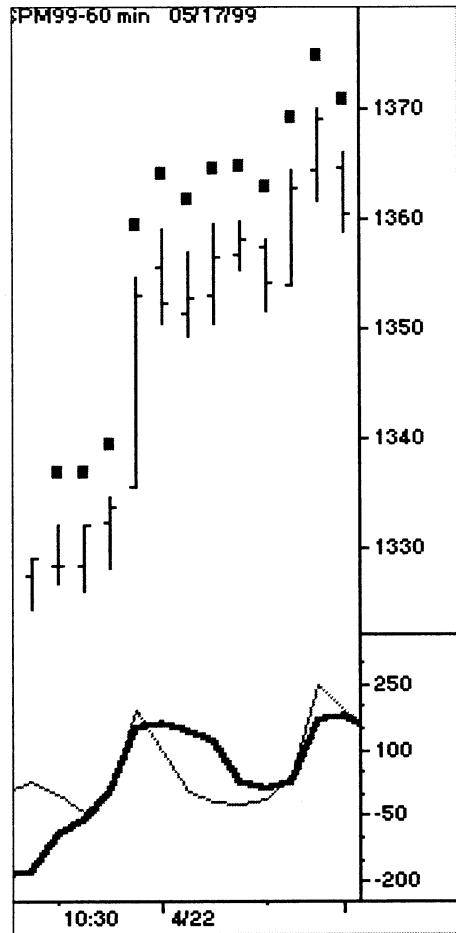
Quote Windows 4, 5, 6, & 7

7			
6			
5			
4			



Divergence Window: 15-min bars S&P futures, S&P cash, Dow cash

8				

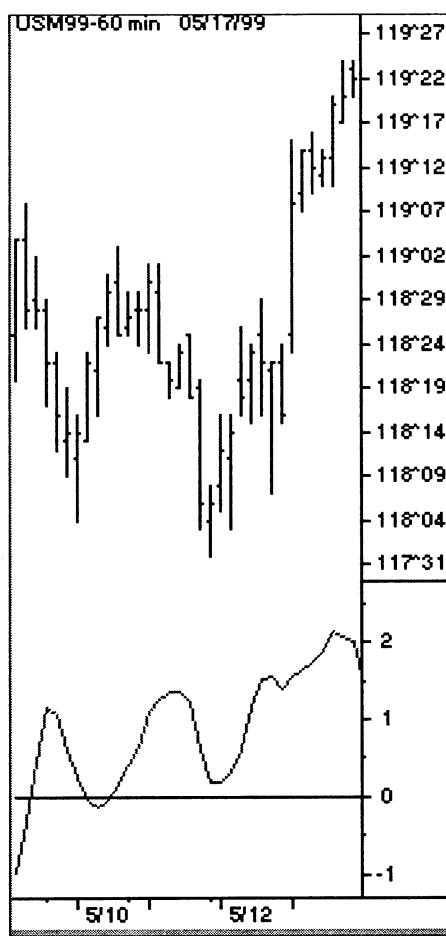


Window No.9 : Hourly S&P futures with Hourly pH-I

Data to load in Window No.9 :

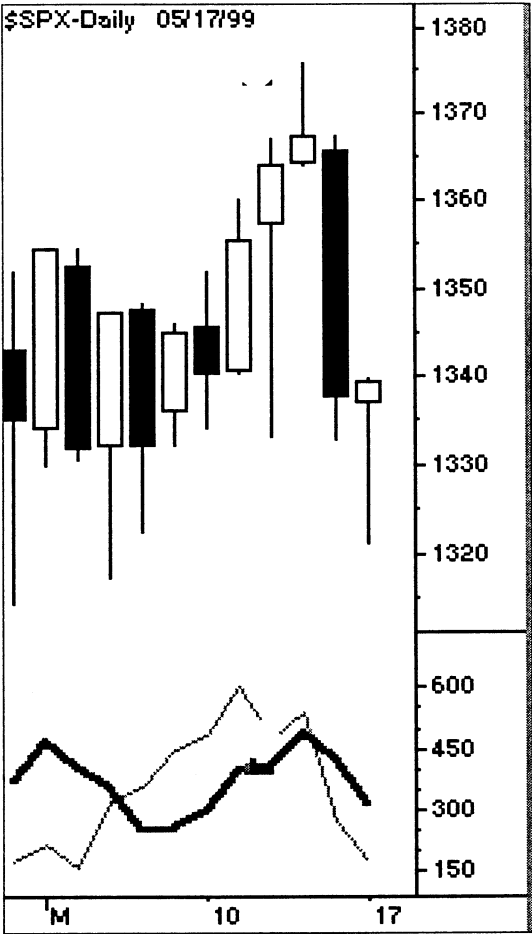
- S&P current contract
- TICK
- UVOL
- DVOL

		9	



Window No.10 : Hourly Bond futures

			10

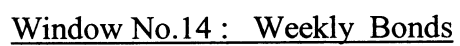


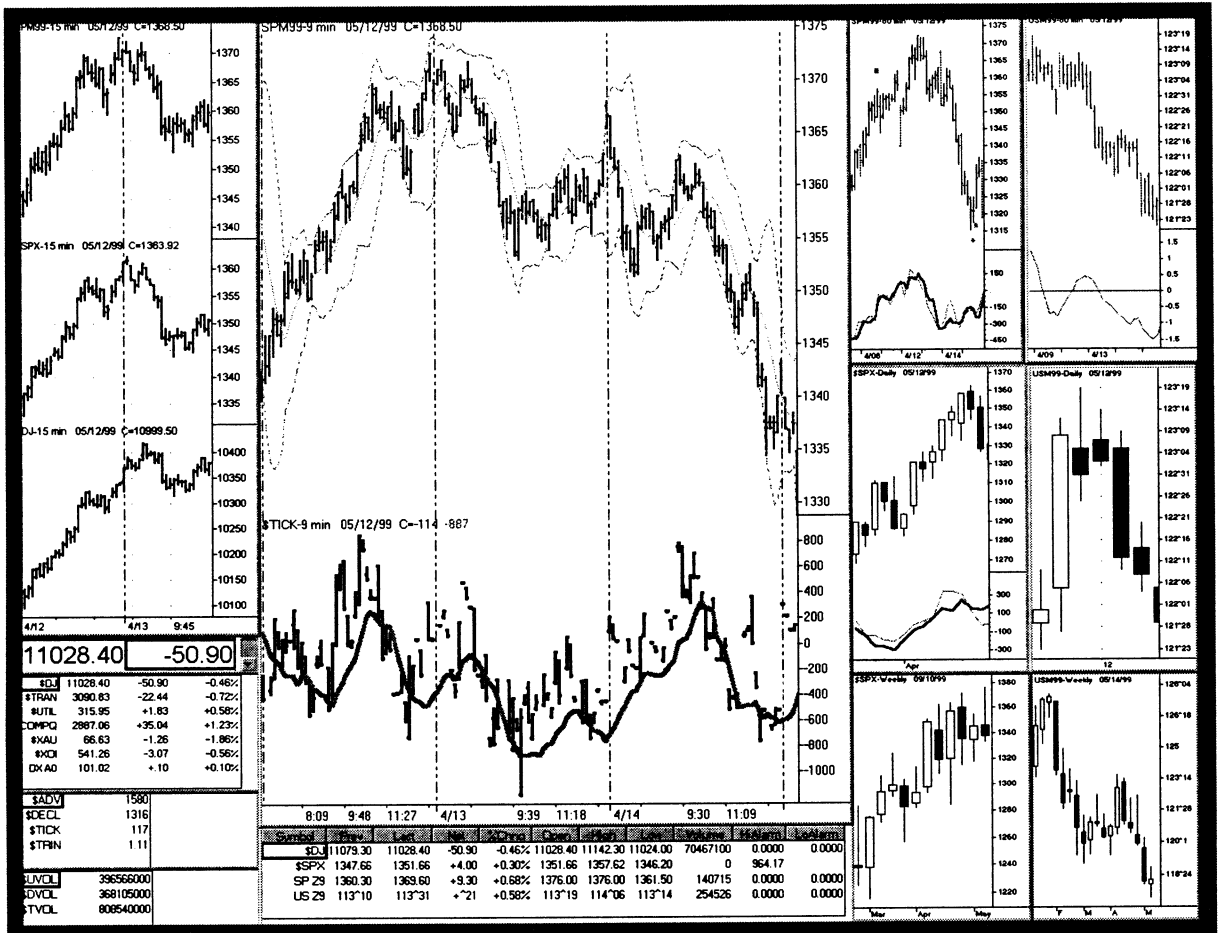
Window No.11 : Daily S&P futures with **Daily pH-I**

Data to load in Window No.11 :

- S&P current contract
- TICK
- UVOL
- DVOL

		11	

[illegible]



the pH-trading screen

pH-Market Internals / pH-ITM

• $pH-I = (10\text{-bar-sma of TICK}) \times (10\text{-bar-sma of (Up Vol. / Down Vol.)})$

• $TICK = \# \text{ stocks whose last trade was up} - \# \text{ stocks whose last trade was down}$

• $UVOL / DVOL$ ratio measures the degree of trend in the market

- elastic — by using TICK rather than an A-D ratio, we move the concept of a Trading Index forward into the real time, broadband age
- looks at trend, not another overbought / oversold oscillator
- signals given @ trend changes
- signals given @ divergences
- signals given at penetration of zero line

- Easy Language code for plotting $pH-I^{TM}$

Data1 = DJIA

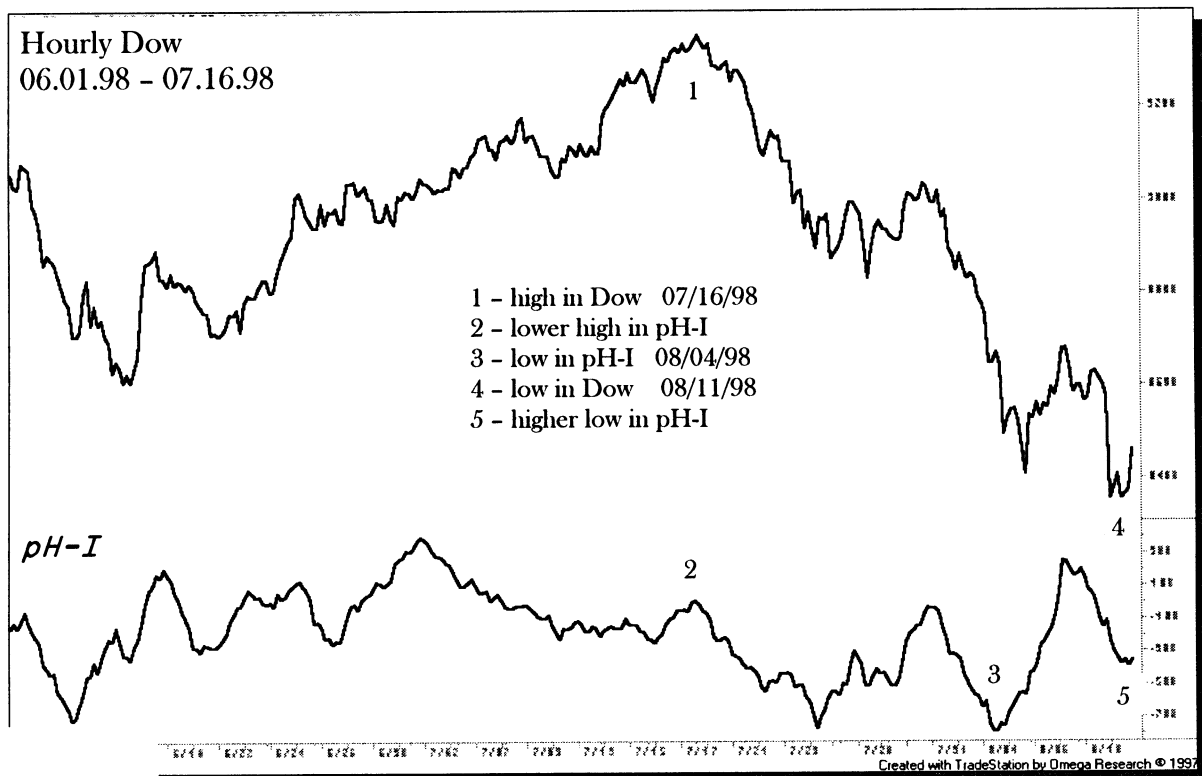
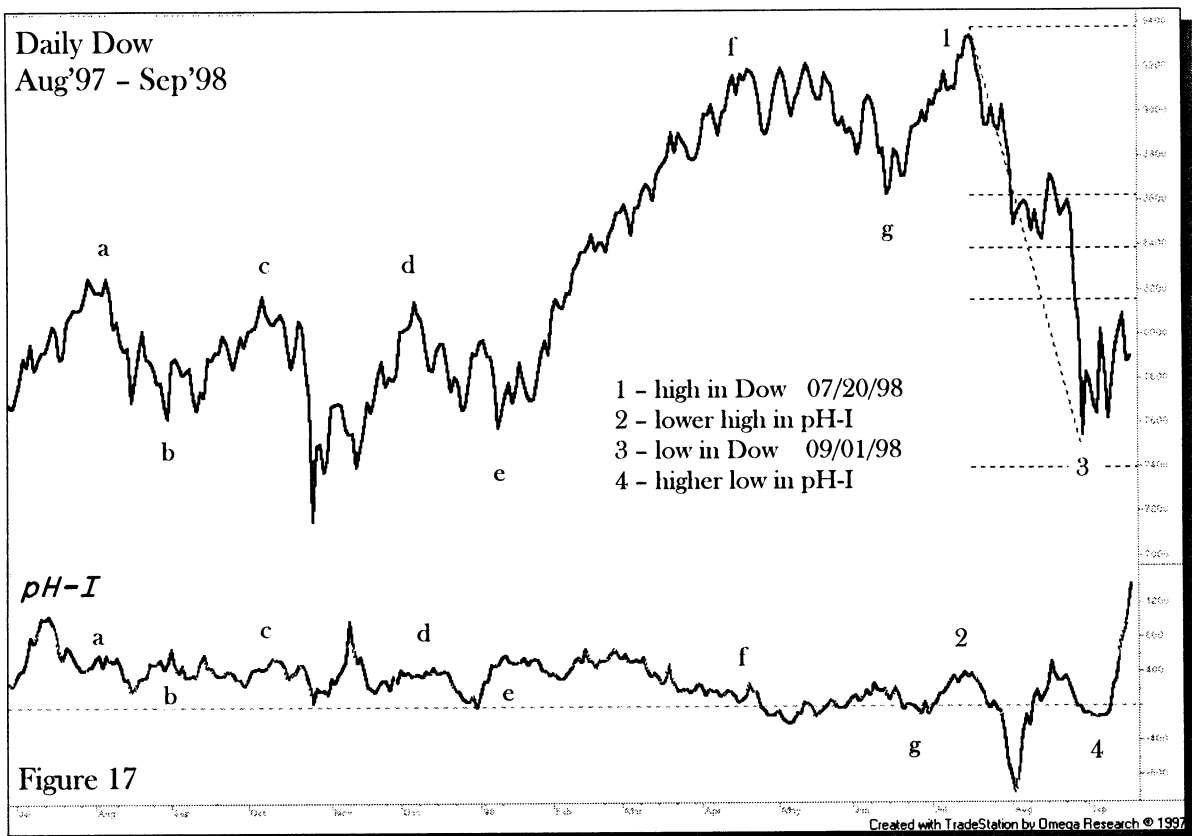
Data2 = TICK

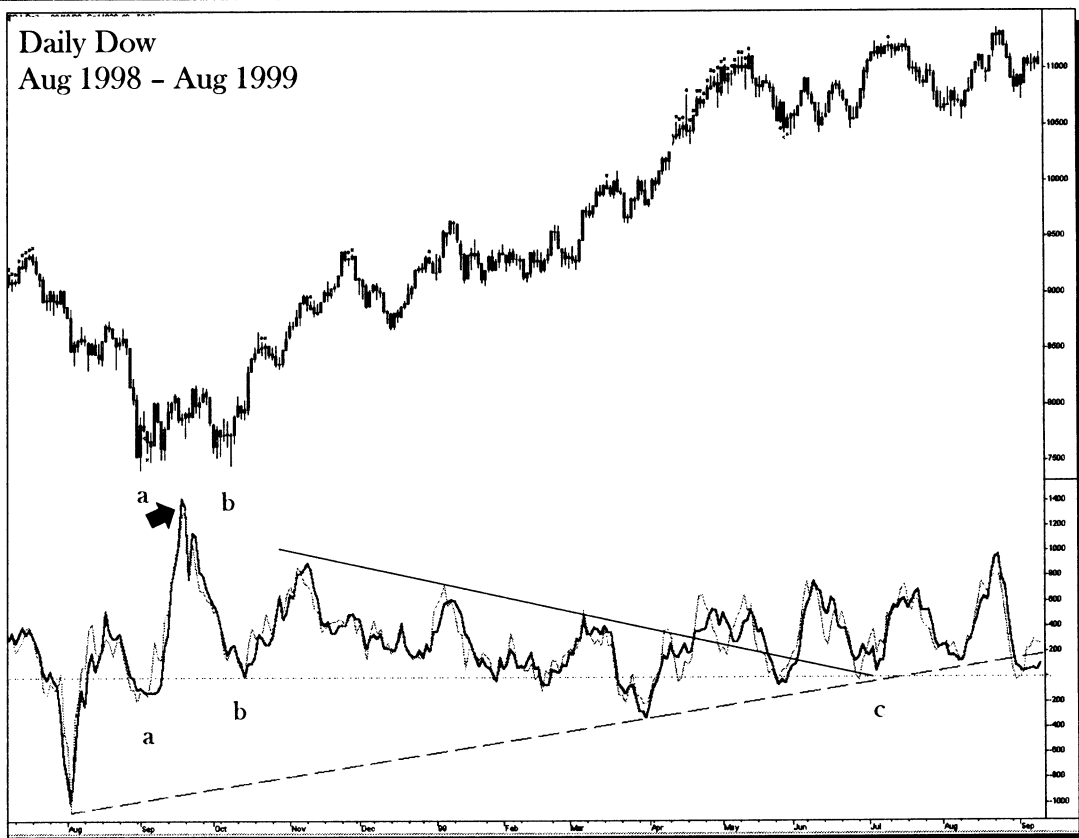
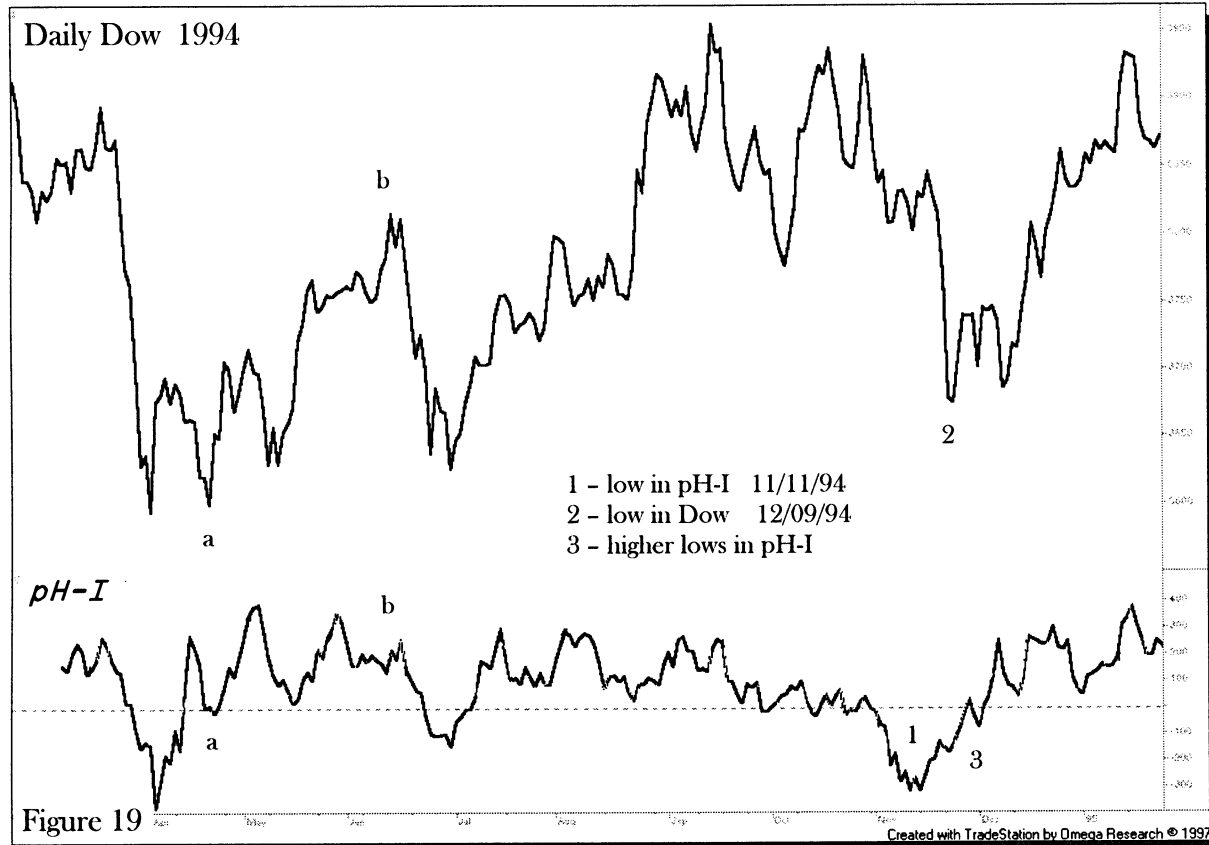
Data3 = UVOL

Data4 = DVOL

Plot1 (Average (c data2, 10) *

Average (volume data3 / volume data4, 10))







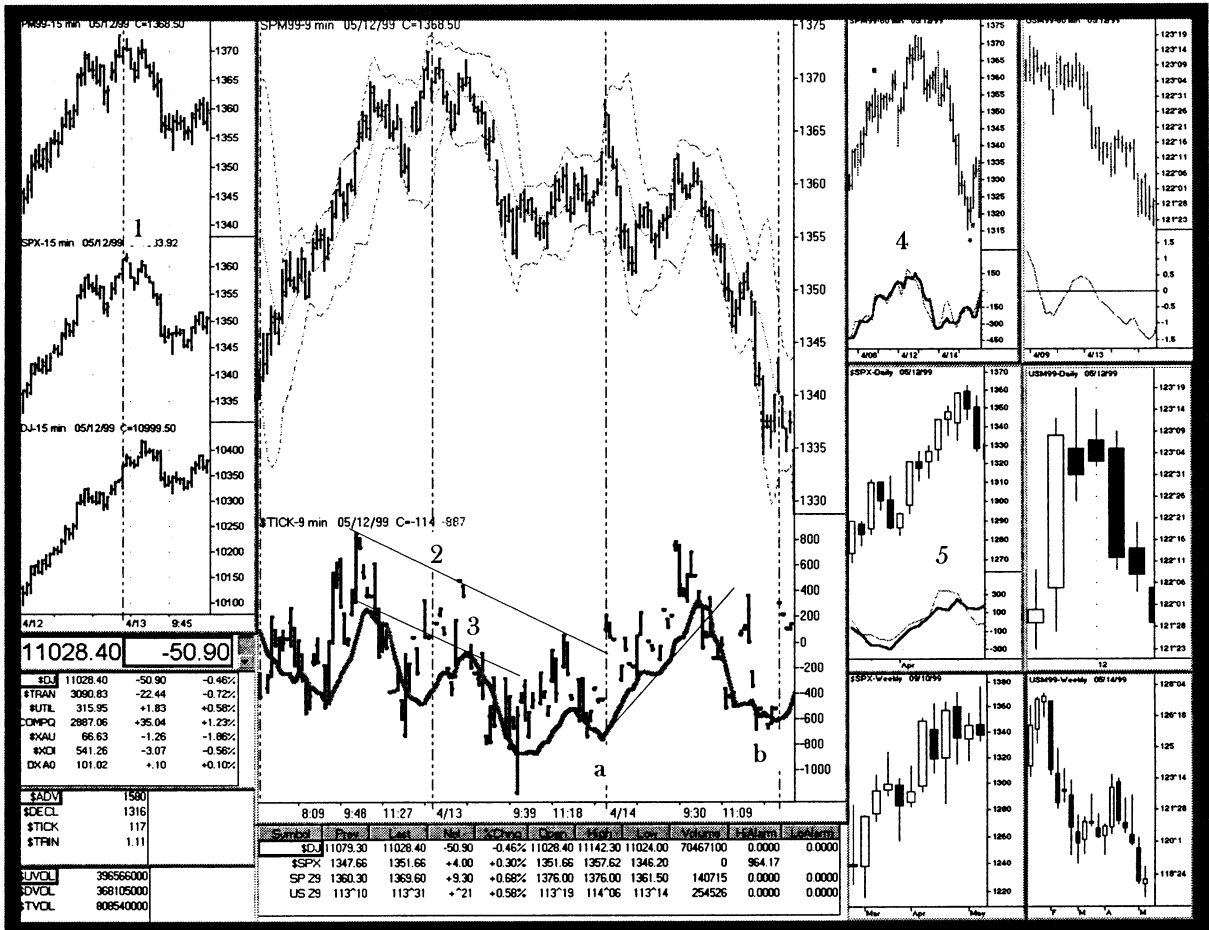
with divergence in *pH-I* = Sell



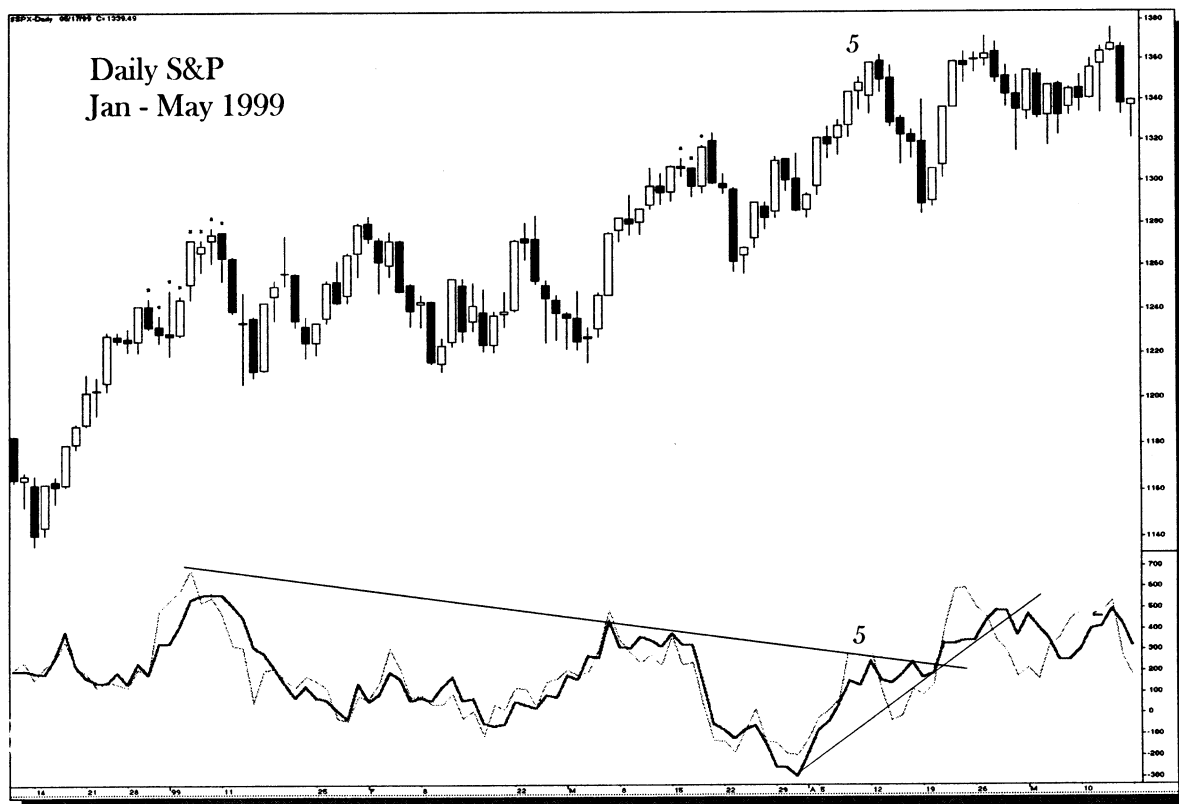
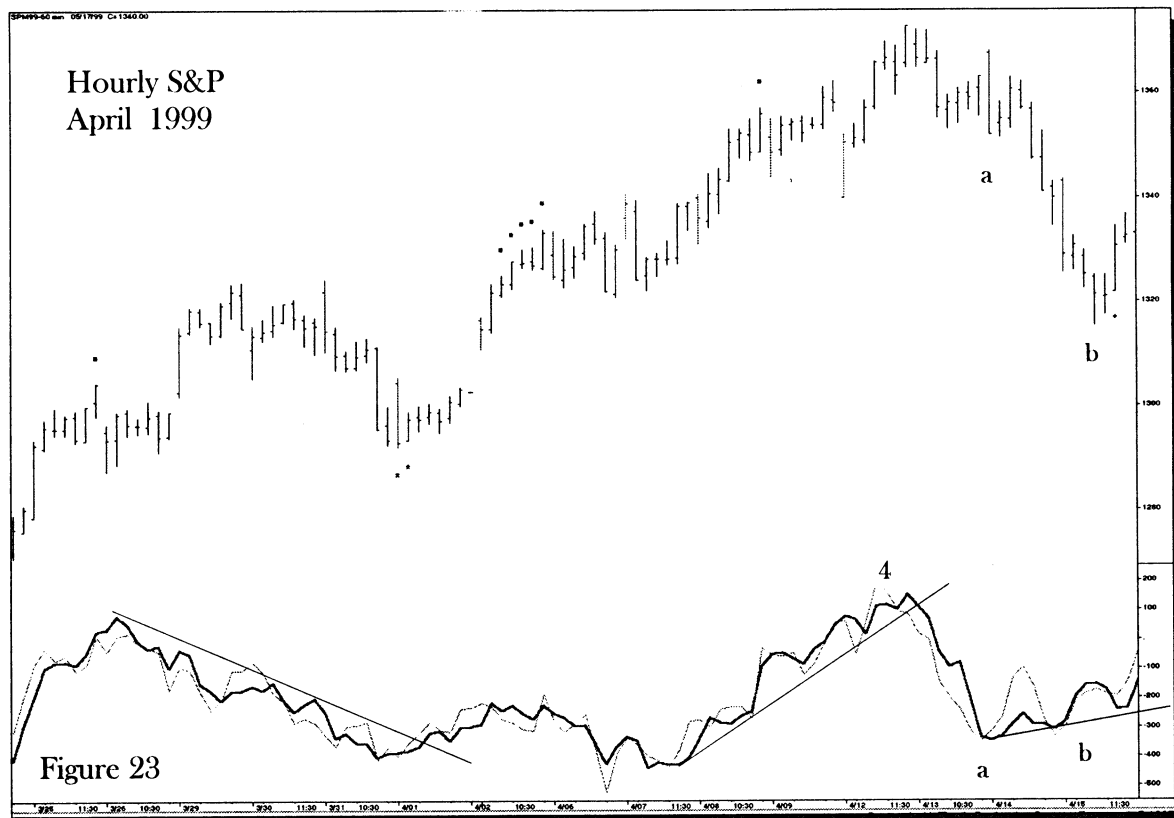
with divergence in *pH-I* = Buy



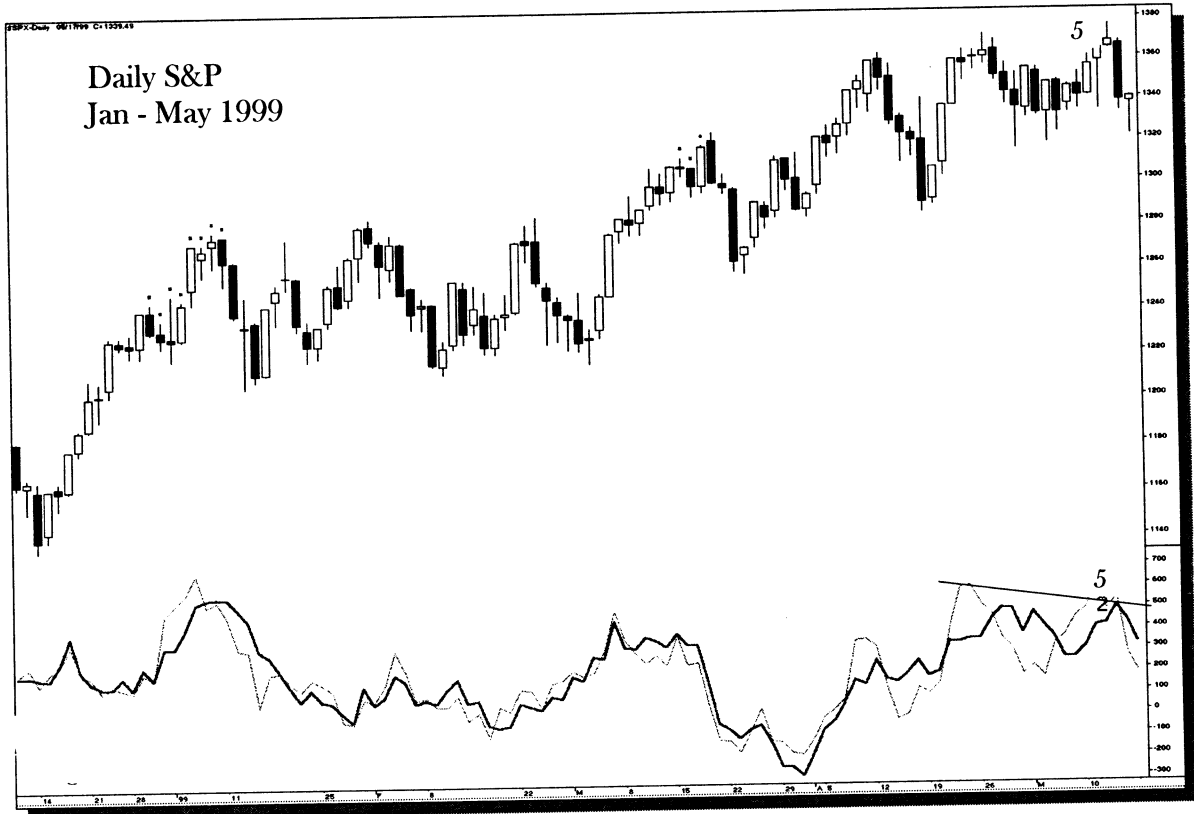
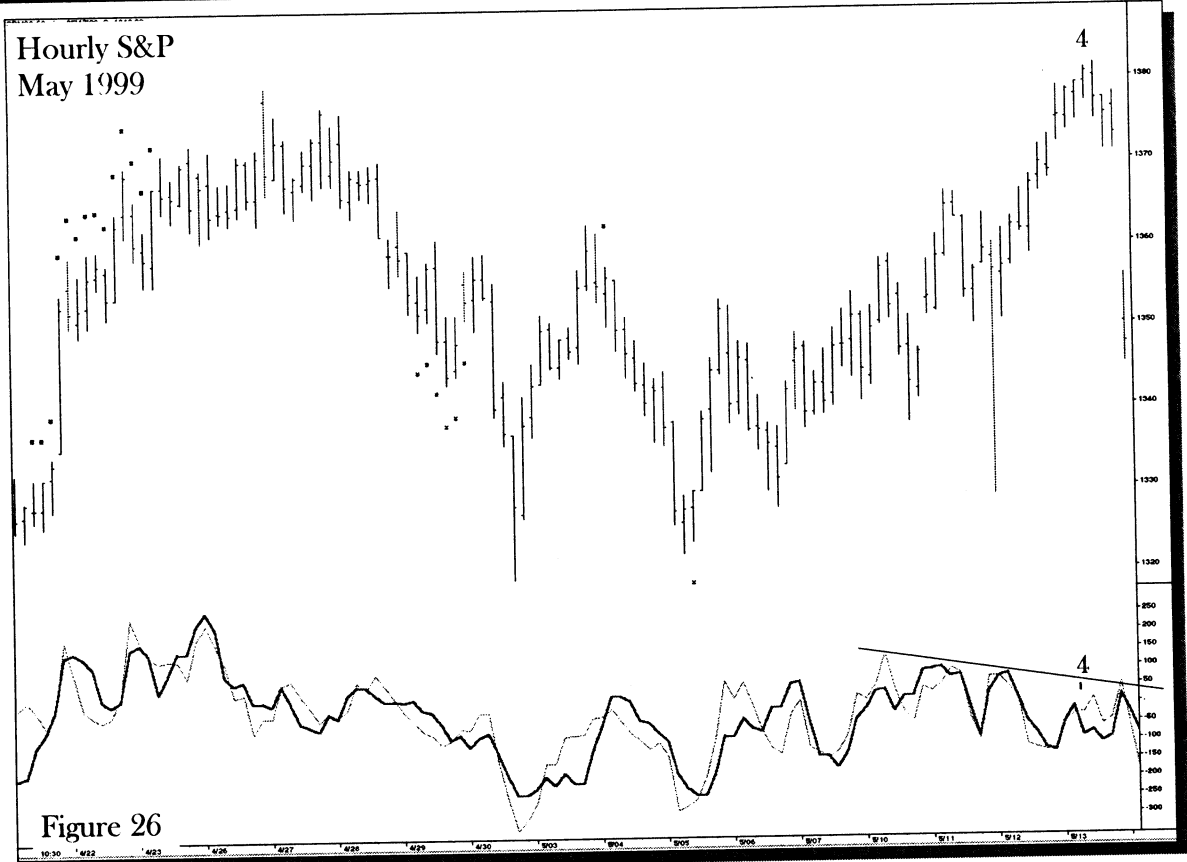
pH-Bottle Grenade = Sell

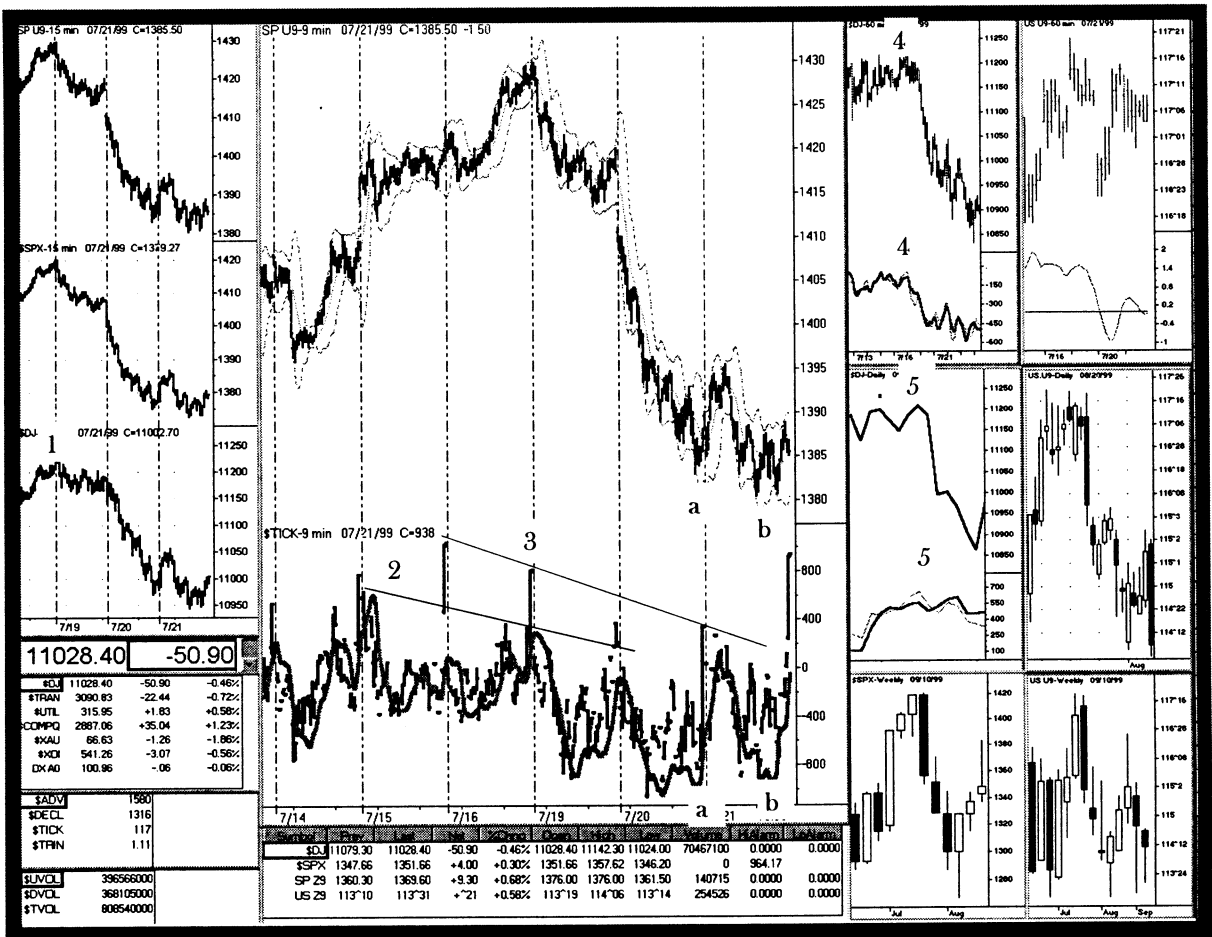


the pH-trading screen: example no.1

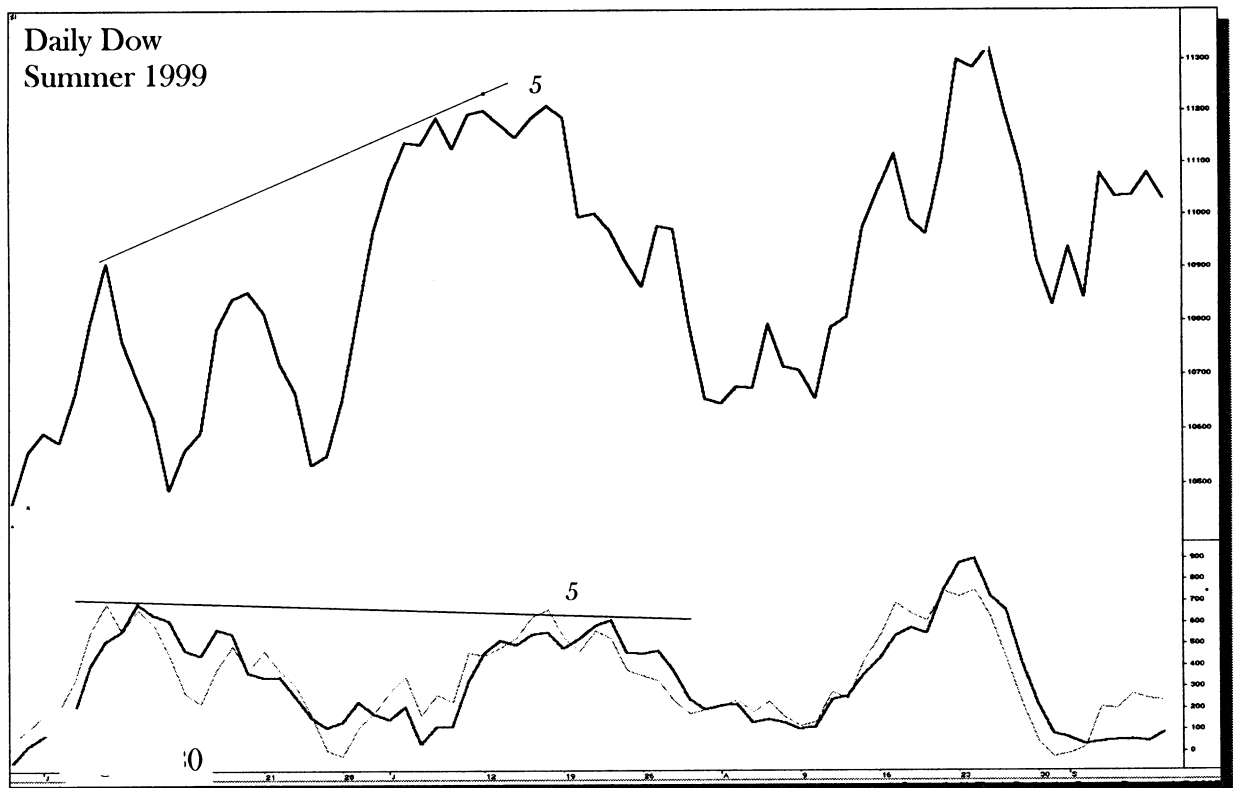
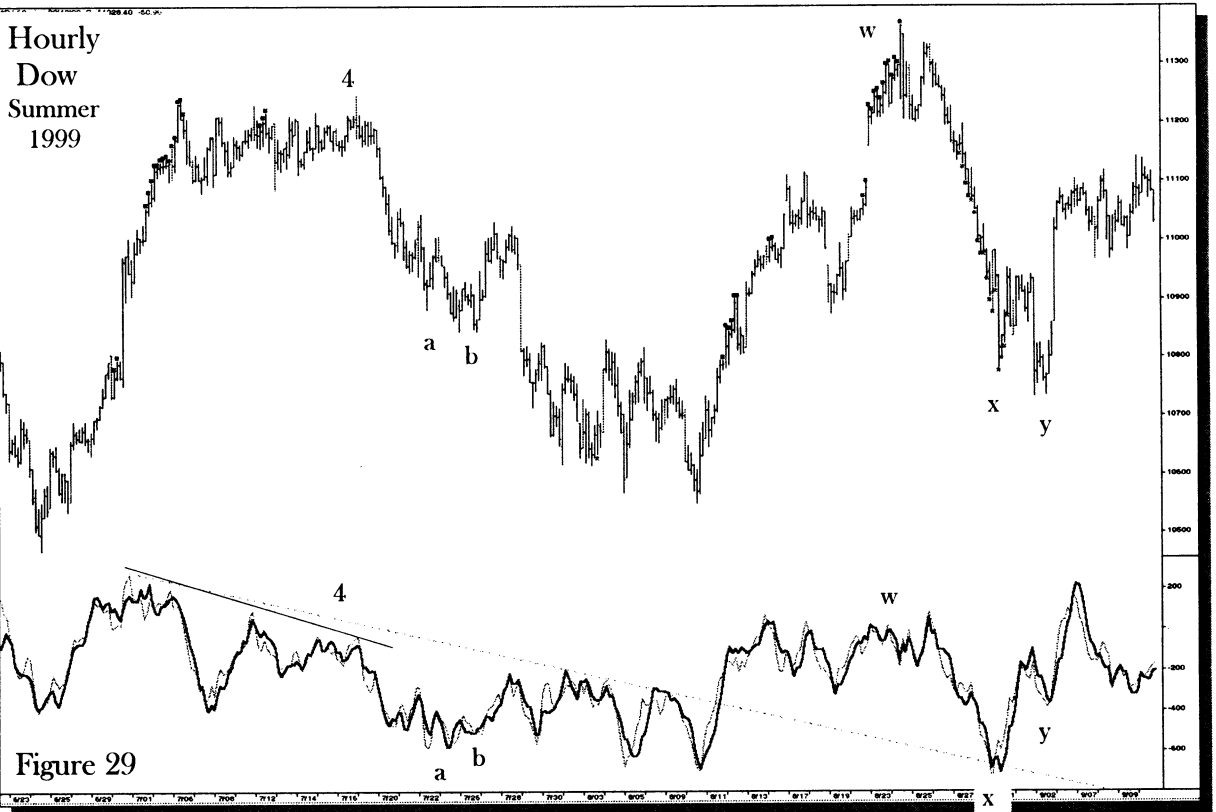


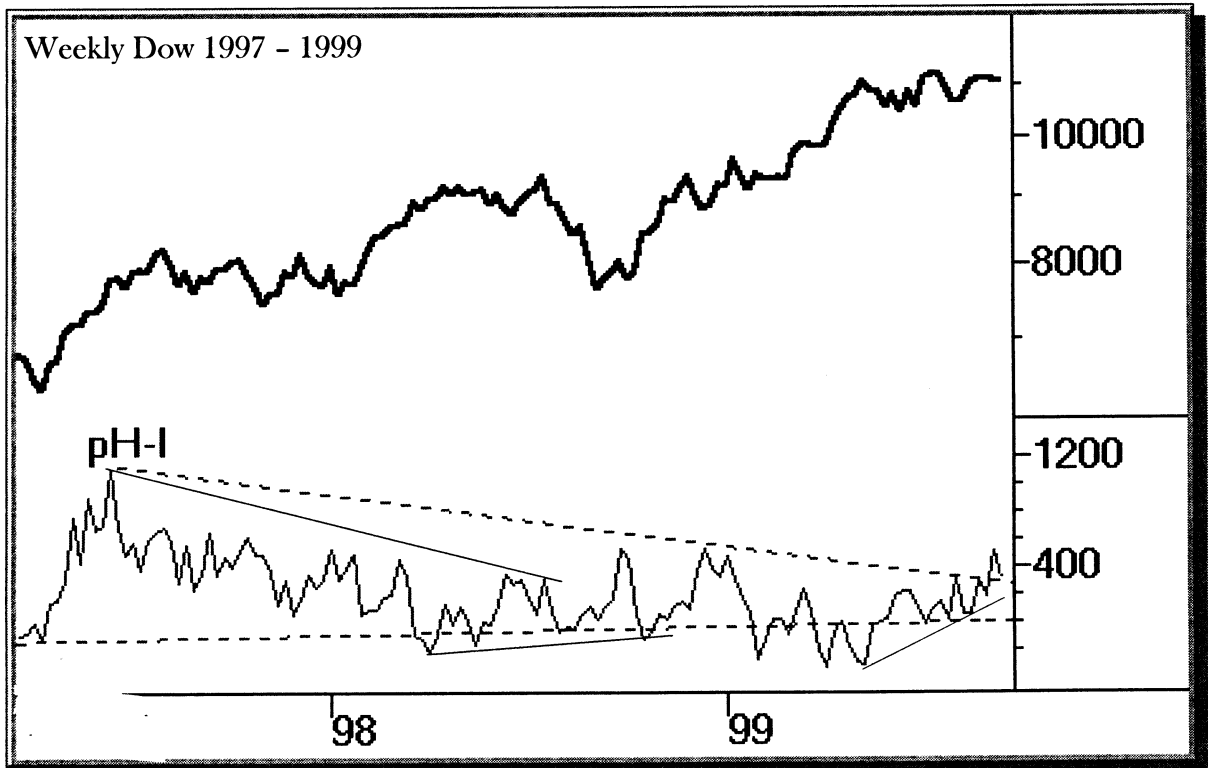
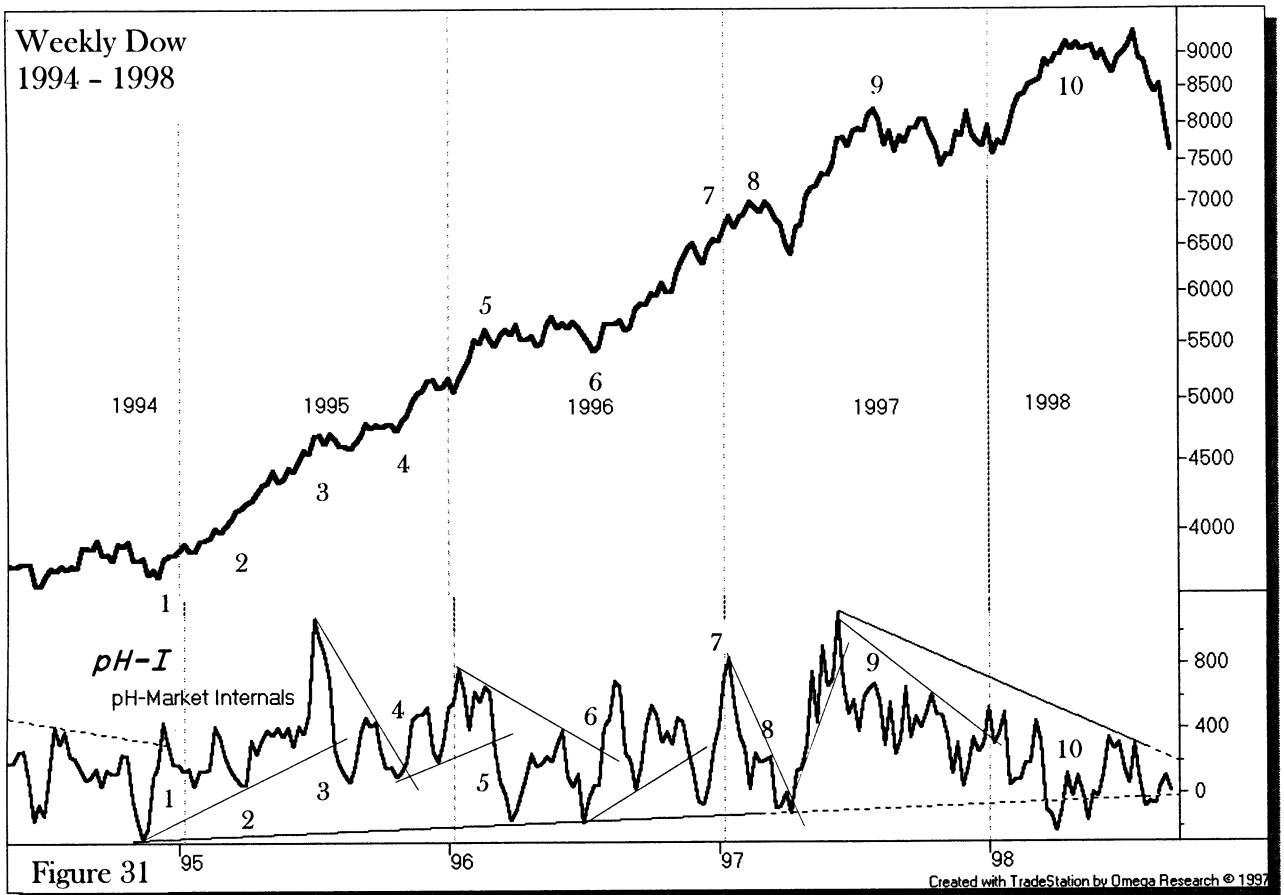






the pH-trading screen: example no.3





21forward.com

21forward.com is an investment journal on the World Wide Web where money manager and editor **Richard Lees** discusses his unique *pH-Indicators™* and how he uses them in real time to trade the stock market.

The site is uniquely organized in a graphic interface that lets the user go directly to the time frame and type of investment s/he might be looking for, whether it is to trade the overall market or to look for individual equity investments.

Annotated with real time charts as well as interpretation of where they fit within the bigger picture being presented by markets, the site tries at all times to live up to its motto, which is *“get it—before it’s news.”*

There is monthly, weekly, daily, and intraday commentary, and the site is available by subscription at monthly, yearly, and two-year rates.

More information can be found @ www.21forward.com in the left column of the home page, or by sending an e-mail to RLees@21forward.com or via regular mail to:

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