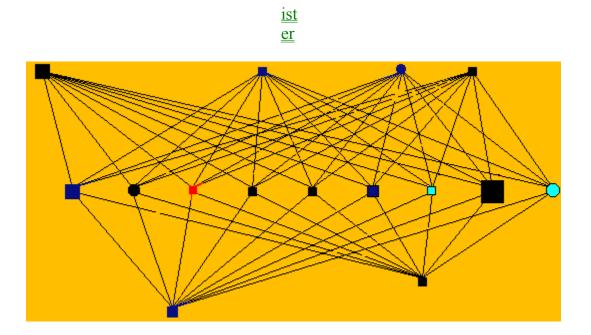
# **ANN-PRO**

1. <u>In</u> tr <u>₀</u> <u>d</u> <u>uc</u> ti <u>0</u> <u>n</u> 2. Ī <u>m</u> ₽ <u>or</u> <u>ta</u> <u>nt</u> 3. <u>M</u> ai <u>n</u> <u>S</u> <u>cr</u> <u>ee</u> <u>n</u> 4.  $\frac{\underline{A}}{\underline{ct}}$  $\frac{\underline{iv}}{\underline{w}}$ <u>or</u> <u>ki</u> <u>n</u> g S <u>cr</u> <u>ee</u> <u>n</u> 5≟ <u>R</u> eg



#### Important Information Before Using ANN-PRO

If you do nothing else then read the Help file - read about strategies. This is very important to fully understand the possibilities using ANN-PRO.

(v1.0) ANN-PRO needs to be upgraded every day with new-trained networks and data. You get the updates from our URL: http//ann-pro.com. Go to the download page and follow the instructions. The daily download will take about one (1) minute with a 28.8-Kb modem. If you do not download the file daily, you will not be able to get the forecast for the day. We are training the networks every day, and upload the networks and the data to our home page twice a day, normally around 1600 GMT and 2300 GMT. This is necessary because of the different time zones for the different financial instruments. After download, unzip the file and copy it to the directory, where you have installed ANN-PRO, and you will now be able to run with the latest networks and data. Because of this concept, you will only be able to run ANN-PRO if you have an Internet Connection.

The ANN PRO Networks performance is shown in the Data Statistics.

When you use ANN PRO use it according to one of the <u>strategies</u>, or combine some of the strategies with your own experience.

The Data Statistics shows how the networks have performed without using Stop Profit or Stop Loss signals. You will see some huge differences in the performance from instrument to instrument. This is not solely because some networks are better than others. A very important factor is the volatility of the market. If a market has a low volatility, the networks performance will not be as good as it could be. If on the other hand, the volatility is very high, the networks performance is normally extremely good too.

An important consideration is to observe how the last profit has performed. Has it performed well within the last short period, etc.?

As an overall consideration: The most important factors are the size of the net profit compared with the hit ratio and the signal ratio.

The statistics do not show ANN PRO's best performance, as this can only be experienced using one or more of the strategies including Stop Profit/Stop Loss. However, regardless of strategy employed, ANN PRO will at least have performed at the level indicated by the statistics.

Disclaimer of Damages:

REGARDLESS OF WHETHER ANY REMEDY SET FORTH HEREIN FAILS OF ITS ESSENTIAL PURPOSE, IN NO EVENT WILL ANN-PRO BE LIABLE TO YOU FOR ANY SPECIAL, CONSEQUENTIAL, INDIRECT OR SIMILAR DAMAGES, INCLUDING ANY LOST PROFITS OR LOST DATA ARISING OUT OF THE USE OR INABILITY TO USE THE SOFTWARE EVEN IF ANN-PRO HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. NO REPRESENTATION IS BEING MADE THAT ANY ACCOUNT WILL OR IS LIKELY TO ACHIEVE PROFITS OR LOSSES SIMILAR TO THOSE SHOWN. HYPOTHETICAL TRADING DOES NOT INVOLVE FINANCIAL RISK. NO HYPOTHETICAL TRADING RECORD CAN COMPLETELY ACCOUNT FOR THE IMPACT OF FINANCIAL RISK IN ACTUAL TRADING. REMEMBER WHERE THERE IS THE POSSIBILITY OF PROFIT THERE IS ALWAYS THE POSSIBILITY OF LOSS.

#### Performance.

The ANN PRO Networks performance is shown in the <u>Data Statistics</u>. When you use ANN PRO, use it according to one of the <u>strategies</u>, or combine some of the strategies with your own expirience.

The Data Statistics shows how the networks have performed without using Stop Profit or Stop Loss signals. You will see some huge differences in the performance from instrument to instrument. This is not only because some networks are better than others. A very important factor is the volatility of the market. If a market has a low volatility, the networks performance will not be as good as it could be. On the other hand if the volatility is very high, the networks performance is normally extremely good too.

A important consideration is to observe how the <u>Last Profit</u> has performed. Has it performed well within the last short period, ect.?

As an overall consideration: The most important factors are the size of the <u>Net Profit</u> compared with the <u>Hit Ratio</u> and the <u>Signal Ratio</u>.

The statistics do not show ANN PRO's best performance, as this can only be experienced using one or more of the <u>strategies</u>, including <u>Stop Profit/Stop Loss</u>. However, ANN PRO will never perform to a lesser degree than displayed by the statistics.

See also: <u>Important</u> <u>Data Statistic Explanation.</u> <u>Strategy.</u> <u>Strategy Example.</u>

#### **Data Statistics.**

Date	Close	Sign	DaylyProfit	NetProfit	TotalProfit	TotalLoss	ProfitPct	TotalDeal	HitRatio	Dε
26-May-97	164.00	BUY	1.04	47.80	83.84	-36.04	29.57%	85	62.09%	
27-May-97	163.11	BUY	-0.89	46.91	83.84	-36.93	29.02%	85	61.79%	
28-May-97	163.44	BUY	0.33	47.24	84.17	-36.93	29.22%	85	61.97%	
29-May-97	163.94	BUY	0.50	47.74	84.67	-36.93	29.53%	85	62.15%	

You use the Data Statistics information to decide the quality of the networks performance, which is based upon the chosen data collection.

To see a <u>graphic presentation</u> of the data 'click' on the column header, and the graph for the chosen statistics shows up.

The statistics do not show ANN PRO's best performance, as this can only be experienced using one or more of the <u>strategies</u> including <u>Stop Profit/Stop Loss</u>. However, regardless of strategy employed, ANN PRO will at least have performed at the level indicated by the statistics..

Click here on the explanation you want to learn about.

Total Signals:	Total Deal	<u>Total Profit</u>	Total Loss
<u>Net profit</u>	<u>Max Profit</u>	Max Loss	Daily Profit
Average Profit	Average Loss	Profit Pct.	<u>Close</u>
<u>Sign</u>	Signal Ratio	Deal Ratio	<u>Hit Ratio</u>

See also: <u>Network Performance</u>

#### **Data Statistics.**

You use the Data Statistics information to decide the quality of the networks performance.

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#### **Net Profit**

The difference between <u>Total Profit</u> and <u>Total Loss</u>. This data statistic is very important in order to decide the quality of the ANN PRO Network.

See also:

Network Performance.

#### Total Signals.

The total number of **BUY & SELL** Signals (Trading Days). ANN-PRO is basically always in the market, either Long or Short. It can be out of the market during a <u>Stop</u> <u>Profit</u> or <u>Stop Loss</u> situation, but when a <u>new time period</u> occurs, it will allways again be in the market. Be aware that this number is not the same as <u>Total Deals</u>.

#### Hit Ratio.

The relationship between all Positive Signals and <u>Total Signals</u>. The number should be at least 50%.

A Positive Signal means a signal that has poduced a profit.

This data statistic is very important in order to decide the quality of the ANN PRO Network.

See also: Network Performance

## Signal Ratio.

The relationship between all Positive Trades and <u>Total Trades</u>. The number should be above 50%.

A Trade happens when the signal changes from **BUY** to **SELL** or from **SELL** to **BUY**. A Positive Trade is a series of signals or a single signal that produced a profit. This data statistic is very important in order to decide the quality of the ANN PRO Network.

See also: Network Performance

## Total Trades.

The total number of trades from the first date.

A Trade happens when the signal changes from **BUY** to **SELL** or from **SELL** to **BUY**. Trades because of using <u>Stop Profit/Stop Loss</u> are not shown in this statistic, as it will differ depending on the chosen <u>strategy</u>.

## Daily Profit.

The profit or loss for the last time period. This data statistic is important in order to decide the quality of the ANN PRO Network. See also:

Network Performance

## Total Loss.

The total loss of all Negative Signals. A Negative Signal is a signal that produced a loss.

# Max Profit.

The highest profit a single Signal has produced.

# <u>Max Loss.</u>

The biggest loss a single Signal has produced.

# Average Profit.

The average of <u>Total Profit.</u>

# Average Loss.

The average of <u>Total Loss.</u>

## Profit Pct.

The Net Profit in relation to the average dealing price. The average dealing price is the average of all <u>Closing Prices</u> in the database.

## Close.

Close is either the official Closing Price for the Financial Instrument, or the Price at a specific time of the day.

See also: Basic Signal.

#### **Basic Signal.**

05/30/97 1500 GMT Basic Signal: BUY 164.03

The Basic Signal for the current time period.

If the price change during a time period results in an action caused by the <u>strategy</u> you are following, you should return to the basic signal as soon as you are able to make a satisfactory profit .

See also: Buy and Sell Signals.

## <u>Signal.</u>

The **Buy** or **Sell** signal for the <u>current Time Period</u>. The signal corresponds to the advice received from the previous period. This signal is called the <u>Basic signal</u>, because the position during the current Time Period should never be changed, except when you are using an active strategy.

## **Deal Ratio.**

The relationship between the <u>Total Deals</u> and <u>Total Signals</u>. A low number is the best, it means fewer deals and thereby smaller trading costs.

# Total Profit.

The total profit of all Positive Signals. A Positive Signal is a signal that produced a profit.

#### Strategies.

#### You have several choices for the investment strategy.

#### 1. Follow the <u>Basic Signal without</u> using <u>Stop Profit/Stop Loss:</u>

You trade <u>only once</u> during a time period. The trade is made only according to the <u>Basic</u> <u>Signal</u>, and <u>you do not follow</u> the Stop Profit or Stop Loss advice at all. <u>This is the</u> <u>strategy the data statistic is based upon</u>. If the signal in the <u>Next Time Period</u> is the same as the Basic Signal for the current time period, you either follow the advice with additional buying or selling, or you skip further investments until the signal changes. This strategy is very inactive, and is not advisable for spot dealers who can achieve far better results by using ANN PRO more actively.

# The statistics do not show ANN PRO's best performance, as this can only be experienced using one or more of the strategies including Stop Profit/Stop Loss. However, regardless of strategy employed, ANN PRO will at least have performed at the level indicated by the statistics.

2. Investment strategy utilizing Stop Profit/Loss only once:

Trade <u>only when the Time Period changes</u>, but use either a Stop Profit or Stop Loss if the market price hits the signals. Do nothing until the next time period starts, where you follow the Basic Signal for the new time period.

#### 3. Investment strategy utilizing Stop Profit/Loss:

Trade when a Stop Profit or Stop Loss situation occurs. Follow the SP or SL signals throughout the entire time period with either **Buy** or **Sell** Again. At the beginning of the next time period, follow the Basic Signal.

The above mentioned strategies are all very conservative and will not produce ultimate results. The following strategy however will take full advantage of ANN PRO's ability to "look into the future".

# **<u>4.</u>** Investment strategy utilizing the signals in Next Time Periods Action in combination with SP/SL:

If the market price reaches a range wherein a change of the Basic Signal occurs, <u>do not</u> <u>wait</u> until the time period ends to see what action to take, but, based on the information you have in front of you, trade in "advance", see the <u>Strategy example</u>.

Choose either to close or change the position, depending on the strategy you are following. You should return to the Basic Signal as soon as you have the opportunity to

make a satisfactory profit. In combination with this active strategy, use of Stop Profit/Stop Loss is adviceable.

Remember that the signals for Stop Profit & Stop Loss should only be used as alerts and not as exact prices to trade upon. When the market price enters the zone for a Stop Profit / Loss situation, you have to follow the market closely and decide when to react.

When the current Time Period ends and the next period starts, follow the new Basic Signal.

#### Strategy Example.

	Financial F					7
Download	Currencies	Indices	Stocks	Bonds	Utilities	
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- 05/20/	97 1500 GN	IT David	Cional		e4 02-	
	EXT BASIC S					
	>= 159.03					
SELL	>= 163.71	<b>K=</b> 16	4.71			
BUY	>= 164.72	<b>K=</b> 16	7.55			
SELL	>= 167.56	<b>K</b> = 16	9.02			
_ SP/SL 0	Current Period: (	5/30/97 15	00 GMT (	06/02/97 1	500 GMT	
Stop	Profit >= 164	175				
	Again <= 164		BUY Ag	ain >= 10	65.21	
	.oss <= 16				0.50	
BUY	\gain ⇒= 16:	s.71 - Or	BUY Ag	ain <= 10	62.56	

This is the information you have in front of you.

**1.**You are in a long position (**BUY**) at the beginning of the Time Period (05-30-97 1500 GMT).

**2.** By the end of this Time Period you have to change your long position to a short (**Sell**) position if the market price is above 167.55 or stays below 164.72. Otherwise, stay in your current long position.

3. Stop Profit above 164.74 Buy Again below 164.53 or above 165.20.

4.Stop Loss below 163.49, Buy Again below 162.57 or above 163.70.

**5.** The data statistics showing the networks performance to date. Remember that the statistics do not show ANN PRO's best performance, as this can only be experienced using one or more of the strategies. However, ANN PRO will never perform to a lesser degree than displayed by the statistics.

Based on the information and on your usual experience in the market, trade your position. ANN PRO is a tool designed for the active spot dealer, it is not a crystal ball. It will never-the-less help you to frequently draw the right conclusions.

#### a) If the market price goes up:

In case the Next Time Period price (02-06-97 1500 GMT) stays below 164.75 (the Stop Profit signal) you have to change your long position to a short (**Sell**) position. During the current Time Period You have to decide whether a further raise into the **Buy** 

range above 164.71 is possible. If the price surpasses 164.71 you are to remain in your long position.

Remember that the signals for Stop Profit & Stop Loss should only be used as alerts and not as exact prices to trade upon. When the market price enters the zone for a Stop Profit / Loss situation, follow the market closely and decide when to react.

During the current time period you should have either closed your long position (<u>Stop</u> <u>Profit</u>) or changed it to a short position, depending on the strategy you follow.

You should return to the Basic Signal (**Buy** Again) as soon as you have the opportunity to make a satisfactory profit. This does however depend on how much time you have left before the new Time Period starts.

When the current Time Period ends and the next period starts, follow the new Basic signal.

#### b) If the market price goes down:

In case the Next Time Period price stays below 163.49 (the <u>Stop Loss</u> signal) you are to remain in your long position. If the price during the current time period goes below the stop loss signal, close the position, and wait for an opportunity to go "long" once more following the **Buy** Again signal.

When the current Time Period ends and the next period starts, follow the new Basic signal.

See also:

Strategy.

#### Introduction

#### What is an Artificial Neural Network?

The utmost complex computer known to man is the human brain. The powerful process of thought, of remembering, and in connection herewith the ability to solve new problems through the process of combination are all capacities associated with the human brain. These abilities have inspired scientists around the World, by way of computers, to attempt to imitate human brain functions in a simplified manner. The result of this research has become <u>Neural Computing</u>.

Neural computing attempts to utilize the principles applying to the brain by developing structurally parallel and distributed programs. It is in this way feasible to simulate <u>parallel</u> <u>data processing</u> on an ordinary serial computer.

Fundamental to the human brain is the ability to combine and to acquire new skills on the basis of previously attained knowledge. Contrary to conventional computer systems the Artificial Neural Networks possesses this very capacity for development.

The knowledge of a network is present in the combination, the structure of the network, and the power of the connections.

Conventional computer systems leave the computer with a perhaps long and complicated program process. Step by step the program process dictates the action the machine is supposed to take. If the program has as much as a single error, and that is almost always the case, it can have most unfortunate consequences. At best the program stops, at worst it provides an incorrect answer.

If the program finally functions as intended, the answer it furnishes is invariably a result already foreseen by the programmer who in actuality has enclosed it through deterministic programming.

In traditional expert systems knowledge is explicitly shaped by the programmer in the form of rules. Contrary to the traditional system the Artificial Neural Networks deduces its own rules from shown examples.

One has thus with utilization of Artificial Neural Networks eliminated the traditional problem often found in dealing with other AI (Artificial Intelligence) programming. The traditional problem being gathering expert knowledge and having to formalize this knowledge, in the shape of rules, into a program. A task in many cases practically impossible to complete.

An efficient and usable network can only be created through strictly empirical examinations. Consequently, when creating Artificial Neural Networks experience is of greatest importance. It is equally necessary for those who will be dealing with the future development of Artificial Neural Networks to have thorough knowledge of the professional field in which the completed application is supposed to be employed.

With the aid of neural networks in combination with <u>Abductive Information Modeling</u> we have been able to overcome this problem. As previously mentioned neural networks

find and develop relevant rules on their own. They furthermore alter the rules during the training process and continue to do so when in use.

Artificial Neural Networks can most obviously be utilized when attempting to predict exchange rates, currency rates, and the more general market trend within any financial instrument. The reason for the efficiency of the network is that it extracts the hidden underlying rules of the market. It is of course evident that no network can predict a Golf War, a change of government, or a "NO" or "YES" to a Common Market election. Before these occurrences take place though, there is an underlying perhaps unconscious attitude in the market and the economy of being prepared for such happenings. Supposing this is true the network will catch on to the signals and will react accordingly. Should a totally surprising incident occur, an incident expected by no one and decisively influencing the market, the network is in this case naturally as incapable of correctly predicting the market trend as anyone else. The network however will learn from its mistake and will not repeat it in a later development.

When using Abductive Modeling with Neural Networks and inventing a completely new training method the 'TUNING', we at last succeeded with at network model that was stable and only needed to be tuned very seldom. The networks delivered to you are tuned and ready for use, you do not have to be an expert on Artificial Neural Neural Networks, you do not need to know anything at all about Neural Networks, for using ANN-PRO successfully.

If you are interested in a deeper knowledge about Artificial Neural Networks and <u>Abductive Information</u> <u>Modeling</u> please refer to appendix B in the USER GUIDE.

## **Neural Computing**

The research surrounding neural networks was not surprisingly initiated within the biological sector approximately fifty years ago.

The researchers attempted in a purely mathematical fashion to copy the processes of the human brain in order to deduct how in fact the brain works.

#### Parallel Data Processing

Contrary to the human brain the computer works in a serial manner. The computer is designed to execute only one instruction at a time. It can however do so at an extreme rate, up to as much as several million commands per second.

The nerve cells of the human brain on the other hand are only capable of approximately ten reactions per second. BUT, the human brain operates in a parallel fashion, in other words, it works with numerous different items simultaneously.

The computer is a high-speed serial machine whereas the human brain is a relatively slow but 100 percent parallel machine.

In a matter such as addition the computer of course is highly superior to the human brain. Regarding problematic situations though, situations involving the parallel process of many factors being analyzed simultaneously (e.g. speech, hearing or sight) the brain is by far the most superior of the two.

Neural computing attempts to utilize the principles applying to the brain by developing structurally parallel and distributed programs.

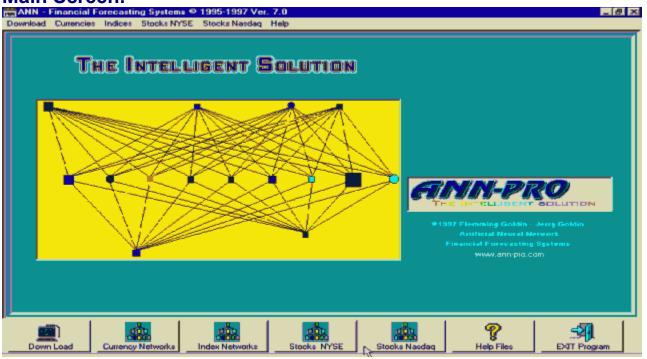
It is in this way feasible to simulate parallel data processing on an ordinary serial computer.

#### **Abductive Information Modeling**

The term Abduction means reasoning under uncertainty. Uncertainties exist when there is insufficient information to draw conclusions with absolute certainty, as is the case in most problems.

Abduction differs from deduction where decision factors are assumed to be known with complete certainty. Conventional software and expert systems generally perform deduction, but are unable to deal effectively with uncertainty. Deductive reasoning is performed using true/false, black/white relationship rather than continuous numeric ones. Numeric functions compactly describe complex relationships which could otherwise require many thousands of symbolic rules. Therefore, because abduction involves reasoning using functions, it can often handle much more complexity than deductive methods.

#### Main Screen.



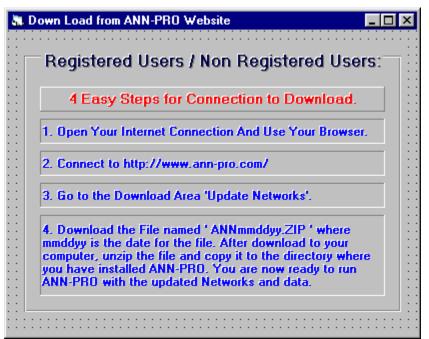
On the Main Screen you choose the type of <u>Network</u> you want to work with.

ANN PRO can have any numbers of different Networks installed.

It is possible for ANN PRO to deliver Networks to almost any <u>Financial Instrument</u>

Click on the picture to see the different commands and functions.

#### Down Load Screen.



All ANN PRO Networks for financial instruments, predict a forecast trend for the future time period, as well as what action to take.

The future time period is 24 hours.

You receive the daily trained networks and data which ANN-PRO uses for predicting from our web site

#### www.ann-pro.com

The Networks and Data is updated approximately at 1600 GMT and 2200 GMT, depending on the financial instruments.

Just follow the instructions on the screen for downloadning, and for copying the downloaded file.

# <u>Help Files.</u>

Show this helpfile.

# <u>Exit.</u>

Exit ANN-PRO, close the program down.

### **Currencies - World Indices - Stocks.**

6/16/97 1500 GMT Basic Signal: DUY 172.98         NEXT BASIC Signal: At 06/17/97 1500 GMT         UV >> 171.25 <<= 177.97         SP/SL Current Period: 06/16/87 1500 GMT         SP/SL Current Period: 06/17/97 172.35         Or BUY Again <- 172.57         Or BUY Again <- 172.57         Statistics         Ob/17/97 171.57         BUY       0.08         48.47       88.57         40.08       30.233       56         SO/17/97 172.58       SUY         06/17/97 172.98       SUY       0.61       46.26       69.15       -40.69       30.133       58       60.442       25.782       -60.163       25.662         SU/17/97 172.98       SUY       0.00       48.26       69.15       -40.69       30.133       58 <th></th> <th>-</th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th>		-									
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Statistics           Date         Close         Sign         DailyProfit         NetProfit         TotalProfit         TotalLoss         ProfitPct         TotalDeal         HitRatio         DealBatio         I           06/11/97         171.57         BUY         0.08         48.47         88.55         -40.08         30.293         56         60.54%         25.11%           06/13/97         172.58         BUY         0.00         48.47         89.15         -40.08         30.655%         57         60.712         25.45%         25.11%         06/13/97         172.98         BUY         -0.81         48.26         69.15         -40.69         30.13%         58         60.44%         25.78%         06/16/97         172.98         BUY         0.00         48.26         69.15         -40.69         30.12%         58         60.18%         25.66%			Or BUY Agai	in >= 174.11		10-					
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On the Working Screen you choose the type of Network you want to work with.

ANN PRO can have any numbers of different <u>Networks</u> installed. It is possible for ANN to deliver Networks to almost any <u>Financial Instrument</u>

Click on the picture to see the different commands and functions.

## Stop Profit / Stop Loss.



The Stop Profit or Stop Loss advice is for the current time period

Stop Profit or Stop Loss means: Close position.

If the position is long and Stop Profit/Loss is realized, you will receive a **Buy Again** signal.

If the position is short and Stop Profit/Loss is realized, you will receive a **Sell Again** signal.

The signals for Stop Profit & Stop Loss should only be used as alerts and not as exact prices to trade upon. When the market price enters the zone for a Stop Profit / Loss situation, it means that you have to follow the market closely and decide when to react.

See also: <u>Stop Profit</u> <u>Stop Loss</u> <u>Strategy</u>

## **Position Long - Short / Signals.**

05/30/97 1500 GMT Basic Signal: BUY 164.03	
NEXT BASIC Signal At: 06/02/97 1500 GMT	
BUY >= 159.03 <= 163.70	
SELL >= 163.71 <= 164.71	
BUY >= 164.72 <= 167.55	
SELL >= 167.56 <= 169.02	
	_

Buy	<=: <b>Buy</b> at this price or lower.
Buy	>=: <b>Buy</b> at this price or higher.
Sell	<=: <b>Sell</b> at this price or lower.
Sell	>=: <b>Sell</b> at this price or higher.

If you have a Long position, and the Next Basic Signal is in a **Buy** range, you either keep your position and follow the new Stop Profit and Stop Loss advice, or you **Buy** again and add to your position.

If you have a Long position, and the Next Basic Signal is within a **Sell** range, you change your position to a Short position and follow the new Stop Profit and Stop Loss advice.

If you have a Short position, and the Next Basic Signal is within a **Sell** range, you either keep your position and follow the new Stop Profit and Stop Loss advice, or you **Sell** again and add to your position.

If you have a Short position, and the Next Basic Signal is within a **Buy** range, you change your position to a Long position and follow the new Stop Profit and Stop Loss advice.

If you have no position due to: Stop Profit or Stop Loss having been activated, but the possibility to open a new position has not occurred, or you have closed the position according to one of the strategies, just open a new position according to the advice given when the next time period starts.

#### 05/30/97 1500 GMT Basic Signal: BUY 164.03

The Buy or Sell signal for the <u>current Time Period</u>. The signal corresponds to the advice received from the previous period. This signal is called the <u>Basic Signal</u>, because the position during the current Time Period should never be changed, except when you are using an active <u>strategy</u>.

Advice - Signals.

05/30/97 1500 GMT Basic Signal: BUY 164.03

- **Buy** <=: **Buy** at this price or lower.
- **Buy** >=: **Buy** at this price or higher.
- **Sell** <=: **Sell** at this price or lower.
- **Sell** >=: **Sell** at this price or higher.

If you have a Long position, and the Next Basic Signal is in a **Buy** range, you either keep your position and follow the new Stop Profit and Stop Loss advice, or you **Buy** again and add to your position.

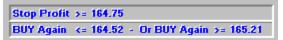
If you have a Long position, and the Next Basic Signal is within a **Sell** range, you change your position to a Short position and follow the new Stop Profit and Stop Loss advice.

If you have a Short position, and the Next Basic Signal is within a **Sell** range, you either keep your position and follow the new Stop Profit and Stop Loss advice, or you **Sell** again and add to your position.

If you have a Short position, and the Next Basic Signal is within a **Buy** range, you change your position to a Long position and follow the new Stop Profit and Stop Loss advice.

If you have no position due to: Stop Profit or Stop Loss having been activated, but the possibility to open a new position has not occurred, or you have closed the position according to one of the strategies, just open a new position according to the advice given when the next time period starts.

## Stop Profit.



#### Stop Profit - Buy or Sell Again

If the market price is within the Stop Profit range, close your position (long or short). If at a later time the market price comes within the range of the shown prices for **BUY** or **Sell Again**, just follow advice.

When advice has been followed, you have completed a Stop Profit situation. You have closed your original position, and you have started a new one according to the Stop Profit advice.

Should the market price, during the current time period, once again be within the Stop Profit/Stop Loss range, you can start all over again: Close your position (long or short), if possible complete the Stop Profit/Stop Loss situation by opening a new position.

The Stop Profit advice is for the current time period. Stop Profit means: Close position.

See also: <u>Strategy</u> <u>Stop Loss</u>

### Stop Loss.



If the market price is within the Stop Loss range, close your position (long or short). If at a later time the market price comes within the range of the shown prices for **BUY** or **Sell** Again, just follow advice.

When advice has been followed, you have completed a Stop Loss situation. You have closed your original position, and you have started a new one according to the Stop Loss advice.

Should the market price, during the current time period, once again be within the Stop Profit/Stop Loss range, you can start all over again: Close your position (long or short), if possible complete the Stop Profit/Stop Loss situation by opening a new position.

The Stop Loss advice is for the current time period. Stop Loss means: Close position.

See also: <u>Strategy</u> <u>Stop Profit</u>

### Networks.

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ANN PRO is capable of developing networks for forecasting on almost any Financial Instrument.

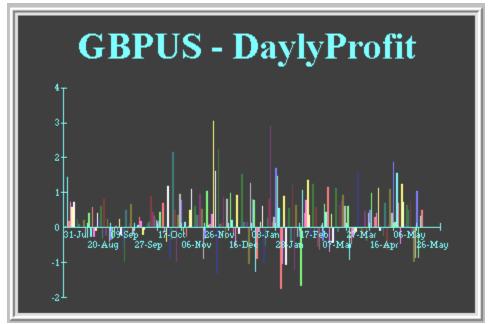
ANN-PRO is delivered to you with the Networks available at the time you have ordered. Therefore the picture may differ from the one you have on your system, but the fundamentals are the same whichever Financial Instrument you have chosen.

Click on the button which represent the network you want to use, and ANN-PRO starts the training process, and after a short time depending on the power of your computer, you receive the <u>advice for **Buy** and **Sell**</u>, the <u>Stop Profit /Stop</u> Loss and the <u>Statistics</u>.

We constantly develop new networks for our customers, and will update ANN-PRO free of charge with the new networks, as soon as we have finished the testing. At this moment, July 1997 the following Networks are ready:

<u>Currencies</u>	World Indices	Stocks NYSE	Stocks Nasdaq
US\$ - DEM	S&P 500	KO / Coca Cola	ORCL / Oracle
US\$ - JPY	DAX 40	MO / Philip Morris	COMS / 3 Com
GBP - US\$	FTSE 100	GE / Gen. Electric	CSCO / Cisco
AUD - US\$	AEX 40	IBM	WCOM / World Com
NZD - US\$	NZ 40	XON / Exxon	INTC / Intel Corp.
US\$ - CHF	ALL Ordinaries	WMT / Wall Mart	MSFT / Microsoft

## Graphic Display.



A graphic presentation of the data chosen by clicking the grid header in the statistics.

### **Financiel Instrument**

ANN PRO can be purchased with networks developed for

a) FX Currencies (US\$ against all major Currencies)

b) World Stock Indices

c) Individual Stocks - NYSE

d) Individual Stocks - NASDAQ

We constantly develop new networks , based upon our customers needs. After a thorough test , these new networks will be added to ANN-PRO free of charge for our customers.

## Currencies - FX.

US\$ - DEM US\$ - JPY GBP - US\$ AU\$ - US\$ NZ - US\$ US\$ - CHF

## World Indices.

S&P 500 FTSE 100 DAX 40 AEX 40 NZ40 All Ordinaries

#### Stocks - NYSE.

KO - Coca Cola MO - Philip Morris GE - General Electric IBM XON - Exxon Corp. WMT - Wall Mart

More networks will be added. When you are using ANN-PRO you will automatically receive messages if new networks have been developed .

#### Stocks - NASDAQ.

ORCL - Oracle COMS - 3 Com. CSCO - Cisco WCOM - World Com. INTC - Intel Corporation MSFT - Microsoft

More networks will be added. When you are using ANN-PRO you will automatically receive messages if new networks have been developed .

## Time Period.

#### **Current / Next Time Period**

The data in the Databases have been updated with the same time period.

All ANN PRO Networks for financial instruments, predict a forecast trend for the future time period, as well as what action to take when the Next Timeperiod Starts. The time period is allways 24 hours.

The Current Time Period is the period starting from the last update of the Database until the next update of the Database, 24 hours later.

The Next Time Period is the period starting from the next update of the Database.

### **Registration/Licenses for ANN-PRO**

The software is being distributed as Shareware. You may evaluate it free of charge for 7 days. If, after the 7-day evaluation period, you choose to continue using the software, you must register it.

Register your copy of **ANN-PRO** by selecting the Register Form in the Registration Information window. Follow the instructions shown to you in the registration panels. This program relies on your support for continued development. When you register **ANN-PRO**, you will receive a password that enables the software to be used for the period you have subscribed to. You will also be able to obtain free upgrades of the program through our Web page (address below). You will be alerted when using the software if a new update is available.

To register a copy of **ANN-PRO**, please use the Register program provided with the software to make payments. We use KAGI Registration service, which accepts different payment methods, including checks, mail orders, credit cards and invoices.

You can also register directly with us using the registration from our Web Site. You will then recieve your password within 12 hours from registration.

#### URL: http://www.ann-pro.com

#### E-mail: goldin@ann-pro.com E-mail: support@ann-pro.com

License cost: (July 1997)

Single user license, 1. Month subscription, for personal use only:	\$39.00 per copy
Single user license, 3. Month's subscription for personal use only:	\$99.00 per copy
Single user license, 6. Month's subscription, for personal use only:	\$179.00 per
сору	
Single user license, 12. Month's subscription, for personal use only:	\$299.00 per
сору	

Site licenses or world licenses available, run the register program (Register.exe)

Upgrades from previous versions free of charge.

Distribution is permitted provided you follow these instructions: You are free to make copies of the distribution archive (**ANN-PRO**xxxxx.ZIP) and pass it along to others for evaluation provided that no modifications or additions are made to the software, its documentation, or any associated files.

Support is available through the addresses listed above, only if you are a registered user. E-mail inquiries typically receive the quickest responses.

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