

EasyLanguage Cheat Sheet

TradeStation & MultiCharts Programming Reference • Quick Guide

BASIC SYNTAX

```
If Close > Open Then Buy at Market;
```

Key Rules: Every statement ends with semicolon (;). Statements are evaluated bar-by-bar sequentially.

PRICE & BAR REFERENCES

TERM	DESCRIPTION
O, Open	Opening price
H, High	Highest price
L, Low	Lowest price
C, Close	Closing price
V, Volume	Trading volume
OI	Open interest
[1]	1 bar ago value
AvgPrice	(H+L+C)/3

Examples

```
Close[1], High of 5 bars ago, Low[10]
```

OPERATORS

ARITHMETIC

+	Add	-	Subtract
*	Multiply	/	Divide
^	Power	Mod	Modulo

COMPARISON

=	Equal	<>	Not equal
>	Greater	<	Less than
>=	Greater/eq	<=	Less/eq

LOGICAL

and	Both true
or	Either true
not	Negate

CROSSOVER

Crosses Above	Value crosses up
Crosses Below	Value crosses down

VARIABLES & DECLARATIONS

```
Var: MyValue(0);  
Input: Period(14);  
Define: EMA = AvgExp(Close, Period);
```

TYPE	USAGE
Var	Strategy/indicator variables
Input	User-editable parameters
Define	Custom calculations
Array	Multiple values storage

TRADING VERBS

ACTION	DESCRIPTION
Buy	Enter long position
Sell	Enter short position
BuyToClose	Close short position
SellToClose	Close long position
ExitLong	Exit all long
ExitShort	Exit all short

```
Buy next bar 50 stop;  
Sell next bar at Close + 10 limit;
```

ORDER TYPES

next bar	Entry on following bar
at market	Market order
at [price] limit	Limit order
at [price] stop	Stop order
on close	At close of bar

CONTROL FLOW

IF-THEN

```
If Close > High[1] Then Buy at Market;
```

IF-ELSE

```
If Close > Open Then  
MyValue = 1  
Else  
MyValue = -1;
```

FOR LOOP

```
For i = 1 to 20  
Sum = Sum + Close[i];
```

MOVING AVERAGES

Average(Close,14)	Simple MA
AvgExp(Close,14)	Exponential MA
DEMA(Close,14)	Double EMA
LinearReg(C,14)	Linear Regression

MOMENTUM OSCILLATORS

RSI(Close,14)	Relative Strength
Stochastic	K%, D% lines
MACD(C,12,26,9)	Histogram, signal
CCI(14)	Commodity Channel
ROC(Close,12)	Rate of Change
Momentum(C,14)	Price momentum

BANDS & CHANNELS

BBand(C,14,2)	Bollinger Bands
KeltnerChannel	ATR-based channel
Donchian(14)	High/Low range

VOLATILITY FUNCTIONS

ATR(14)	Average True Range
StdDev(Close,14)	Standard Deviation
TrueRange	True range value
Highest(H,20)	20-bar high
Lowest(L,20)	20-bar low

VOLUME INDICATORS

VolOsc(14,20)	Volume Oscillator
OBV	On Balance Volume
VWAP	Vol Weighted Avg
MoneyFlow	Money Flow Index

TREND INDICATORS

ADX(14)	Avg Directional Index
DMI(14)	Directional Movement
Aroon(25)	Aroon Up/Down
SuperTrend	Trend direction

MATH FUNCTIONS

AbsValue(x)	Absolute value
Square(x)	x ²
SquareRoot(x)	√x
Power(x,n)	x ⁿ
Log, ExpValue	Logarithm, e ^x
IntPortion	Integer part

DATA ACCESS

Highest(H,20)	Highest value
Lowest(L,20)	Lowest value
HighestBar(H,20)	Bars ago of high
LowestBar(L,20)	Bars ago of low
CountIf(cond,20)	Count true bars

DRAWING & OUTPUT

Plot1(Close,"Close")	Plot value
Alert("Signal!")	Show alert
DrawLine(...)	Draw line
Text(...)	Draw text

BUILT-IN VALUES

BarNumber	Current bar #
CurrentBar	Bar index
Time, Date	Bar time/date
LastBarOnChart	Last bar flag

STRATEGY MANAGEMENT

EntryPrice	Entry price
PositionSize	Contracts open
AvgEntryPrice	Average entry
OpenEquity	Unrealized P&L
Profit	Realized P&L

DATE & TIME

GetYear/Month/Day	Extract date
DayOfWeek(Date)	Day # (1-7)
NumToStr(v,d)	Num to text
StrToNum(txt)	Text to num

STRATEGY PATTERNS

Golden Cross

```
If FastMA Crosses Above SlowMA Then Buy  
at Market;
```

RSI Extreme

```
If RSI(14) > 70 Then Sell;  
If RSI(14) < 30 Then Buy;
```

ATR Stop Loss

```
MyStop = EntryPrice - 2 * ATR(14);  
Sell next bar MyStop Stop;
```

Volume Confirm

```
If Close > High[1] and Volume >  
AvgVolume(20) Then Buy;
```

BEST PRACTICES

- Test strategies on historical data first
- Always include stop losses in trades
- Use `LastBarOnChart` to avoid repainting
- Initialize variables to 0 or False
- Comment code for clarity
- Avoid look-ahead bias in conditions
- Use `Once` for one-time init
- Track position with `PositionSize`

RESOURCES

- **F1 Key:** In-editor Help
- **Verify Tab:** Syntax errors
- **Strategy Opt:** Parameter testing
- **RadarScreen:** Multi-symbol
- **Print:** Debug strategies