

## Unit Step Market Breadth

### 1. McClellan Oscillator

$$ANA = (\text{Advance} - \text{Decline}) / (\text{Advance} + \text{Decline})$$

$$\text{McClellan Oscillator} = \text{EMA19}(ANA) - \text{EMA39}(ANA)$$

$$\text{McClellan Oscillator} > 0: \text{Unit Step} +1$$

$$\text{McClellan Oscillator} = 0: \text{Unit Step} 0$$

$$\text{McClellan Oscillator} < 0: \text{Unit Step} -1$$

### 2. McClellan Volume Oscillator

$$ANVA = (\text{UpVolume} - \text{DownVolume}) / (\text{UpVolume} + \text{DownVolume})$$

$$\text{McClellan Volume Oscillator} = \text{EMA19}(ANVA) - \text{EMA39}(ANVA)$$

$$\text{McClellan Volume Oscillator} > 0: \text{Unit Step} +1$$

$$\text{McClellan Volume Oscillator} = 0: \text{Unit Step} 0$$

$$\text{McClellan Volume Oscillator} < 0: \text{Unit Step} -1$$

### 3. New High In 1 Year - New Low in 1 Year

$$NH = \text{New High In Year}(260 \text{ days})$$

$$NL = \text{New Low in Year}(260 \text{ days})$$

$$NH - NL > 0: \text{Unit Step} +1$$

$$NH - NL = 0 : \text{Unit Step} 0$$

$$NH - NL < 0: \text{Unit Step} -1$$

### 4. New High In 1 Quarter - New Low in 1 Quarter

$$NH = \text{New High In Quarter}(65 \text{ days})$$

$$NL = \text{New Low in Quarter}(65 \text{ days})$$

$$NH - NL > 0: \text{Unit Step} +1$$

$$NH - NL = 0 : \text{Unit Step} 0$$

$$NH - NL < 0: \text{Unit Step} -1$$

### 5. New High In 1 Month - New Low in 1 Month

$$NH = \text{New High In Quarter}(20 \text{ days})$$

$$NL = \text{New Low in Quarter}(20 \text{ days})$$

$$NH - NL > 0: \text{Unit Step} +1$$

$$NH - NL = 0 : \text{Unit Step} 0$$

NH-NL < 0: Unit Step -1

6. Advance Up Volume/Decline Up Volume Ratio

AdUv = Advance Up Volume

DcUv = Decline Up Volume

AdUv/DcUv Ratio = (AdUv)/(AdUv+DcUv+1)

AdUv/DcUv Ratio >= 0.5: Unit Step +1

AdUv/DcUv Ratio < 0.5: Unit Step -1

7. MACD Positive - MACD Negative

MACDP = MACD Positive

MACDN = MACD Negative

MACDP - MACDN > 0: Unit Step +1

MACDP - MACDN = 0: Unit Step 0

MACDP - MACDN < 0: Unit Step -1

8. MACDSig Positive - MACDSig Negative

MACDSigP = MACD > Signal (All Count in the market)

MACDSigN = MACD < Signal (All Count in the market)

MACDSigP - MACDSigN > 0: Unit Step +1

MACDSigP - MACDSigN = 0: Unit Step 0

MACDSigP - MACDSigN < 0: Unit Step -1

9. RSI Positive - RSI Negative

RsiP = RSI > 50 (All Count in the market)

RsiN = RSI < 50 (All Count in the market)

RsiP - RsiN > 0: Unit Step +1

RsiP - RsiN = 0: Unit Step 0

RsiP - RsiN < 0: Unit Step -1

10. EMA Golden Cross

EmaP = Close > EMA89 (All Count in the market)

EmaN = EMA89 (All Count in the market) < Close

EmaP - EmaN > 0: Unit Step +1

EmaP - EmaN = 0: Unit Step 0

EmaP - EmaN < 0: Unit Step -1