The inchcalc & inchcalc + iPhone/iPod Touch calculators allow you to work with everyday dimensional problems using the same FOOT•INCH•FRACTION units found on the common tape measure or ruler. Prevent errors, save time & get your building project done right the first time.

# information below applies to both incheale & incheale+

#### **GETTING STARTED**

Both inchcalc & inchcalc + are designed to be simple & intuitive to use. You enter FOOT•INCH•FRACTION measurements just the way you say them:





The display shows 5' - 3 5/8"

Now you can perform common calculator operations on your entry to get the FOOT•INCH•FRACTION answers you need to get the job done right quickly & accurately.

#### **DATA TYPES**

NUMBERS no dimension units e.g., 8 windows

LENGTHS linear dimensions such as Feet, Inches, Decimal Inches, Meters, etc. e.g. 5' – 5 ¾"

AREAS expressed in Dec Sq Ft, Dec Sq In, Sq Meters, Sq Miles, etc. e.g., 13.45 sq ft

VOLUMES expressed in Dec Cu Ft, Dec Cu In, Cu Meters, Cu Yards, etc. e.g., 13.45 cu ft

# **KEYS**



Keys for entering Numbers into the display

Enters Feet when pressed after a Number has been entered

Enters Inches when pressed after a Number has been entered

Fraction Bar – divides the numerator from the denominator when pressed after the numerator is entered

#### **ENTERING NUMBERS**

Chaining logic is used to enter sucessive intermediate operations using the to complete the chain



#### **ENTERING LENGTHS**

When entering FEET, INCHES & FRACTIONS you must always enter the largest dimension first. displays 5' - 4 3/4" Fractions can only be entered with the following familiar denominators used on rulers & tape measures: x/2 x/4 x/8 x/16 x/32 x/64 To help prevent errors all other denominators are blocked. Likewise, the maximum numerator allowed is 99. x/16 x/32 x/64 are quickly entered with a single keystroke. Mixed unit entries such as 5' - 2'' + 3.75'' stay in the units of the first entry. ENTERING SQUARE or CUBIC DIMENSIONS (Inchesion only - these entries can be made only BEFORE an operator key is pressed) 7.0 sq ft AREA: Press unit key twice 7.0 cu ft VOLUME: Press unit key three times Sucessive presses of FT or IN cycles through LENGTH > AREA > VOLUME > LENGTH ... FEET & INCH CONVERSIONS (INCheale only - these conversions can only be made after the FEET: Repeated presses of toggles between FOOT-INCH -FRACTION & Decimal Feet 7' – 5" 7.4167" 7' - 5" INCH: Repeated presses of IN toggles between INCH •FRACTION & Decimal Inch 5 3/4 " IN 5.75" IN 5 3/4" **MEMORY** Clears Memory If Memory is clear, enters displayed value into Memory. If a value is already stored in Memory this will add displayed value to it. Subtracts the value currently being displayed from the total presently in Memory. Recalls & displays the total presently in Memory – also can recall a single stored value for for use in a chain or for reference.

# **EXAMPLES - BASIC DIMENSIONAL MATH**

Adding: 5 FT 2 IN + 4 IN 1 4 1 3 IN 1 IN 5 5'- 6 7/16"

Subtracting: 5 FT 2 IN 1 / 4 - 3 / 1 IN = 5' - 2 3/16"

Multiplying: 5 FT 2 IN 3 / 8 ÷ 4 = 1' - 3 9/16"

Area SF: 5 FT 2 IN 3 7 8 X 14 FT 3 IN 14 7 2 6.71 sq ft

Volume SF: 5 FT 2 IN 3 IN 8 IN 1 2 0.91 cu ft

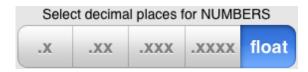
# **SETTING FRACTION DENOMINATORS**

Info Page: Touch the denominator you want inputs/outputs to be rounded to and displayed.



#### **SETTING DECIMAL PLACES**

Info Page: Select the number of decimal places that you want inputs & outputs to be displayed in by touching it.



### **AREA & VOLUME FORMULAS**

Info Page: Touch this button to display common formulas and other information.

AREA & VOLUME FORMULAS

# information below applies only to inch**calc**+

#### **RIGHT TRIANGLE FUNCTIONS**

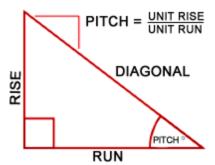
The following 4 keys work together to solve right triangle problems. Enter any 2 values & the other 2 are automatically calculated & displayed when their key is touched.

The angle between a horizontal line & a sloping line expressed in decimal degrees

rise The vertical leg of a right triangle

The horizontal leg of a right triangle

diag The sloping leg of a right triangle



# **CONVERSIONS**

Any dimensional value in the display can be converted to any of the following units by pressing the desired conversion unit key with the exception of FIF & IF, which only can be converted to other linear units.

FIF Feet Inches Fractions

Inches Franctions

dec in Decimal Inches, Sq Dec In, Cu Dec In

dec ft Decimal Feet, Sq Dec Feet, Cubic Dec Ft

mm Millimeters, Sq Millimeters, Cu Millimeters

cm Centimeters, Sq Centimeters, Cu Centimeters

Meters, Sq Meters, Cu Meters

acres Decimal Sq Acres

yards Decimal Yards, Sq Yards, Cubic Yards

miles Decimal Sq Miles, Cu Miles

# **COMMON BUILT IN FUNCTIONS**

- Returns the square root of any Number value in the display.
- Squares any Number or Length in the display.
- $=\pi$  Put the constant pi (3.141593) in the display.
- Returns a given percent of any Number, Length, Area or Volume in the display.
- Changes the sign of any Number or Length in the display.

#### **KEYBOARD SETUP**



User can select preferred keyboard set by either pressing the Lefty or Righty key or holding the iPhone/iPod Touch in the vertical position & rotating clockwise for Lefty or counterclockwise for Righty.

### **CLEARING FUNCTIONS**

These keys give you 3 choices to clear the display & make it easy to continue a chain calculation without starting over if a mistake is made:

- Backs out the last single keystroke or resets to zero if the last keystroke was
- Clears the entire entry that is is progress or the pending operation.
- Resets the display to zero.

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