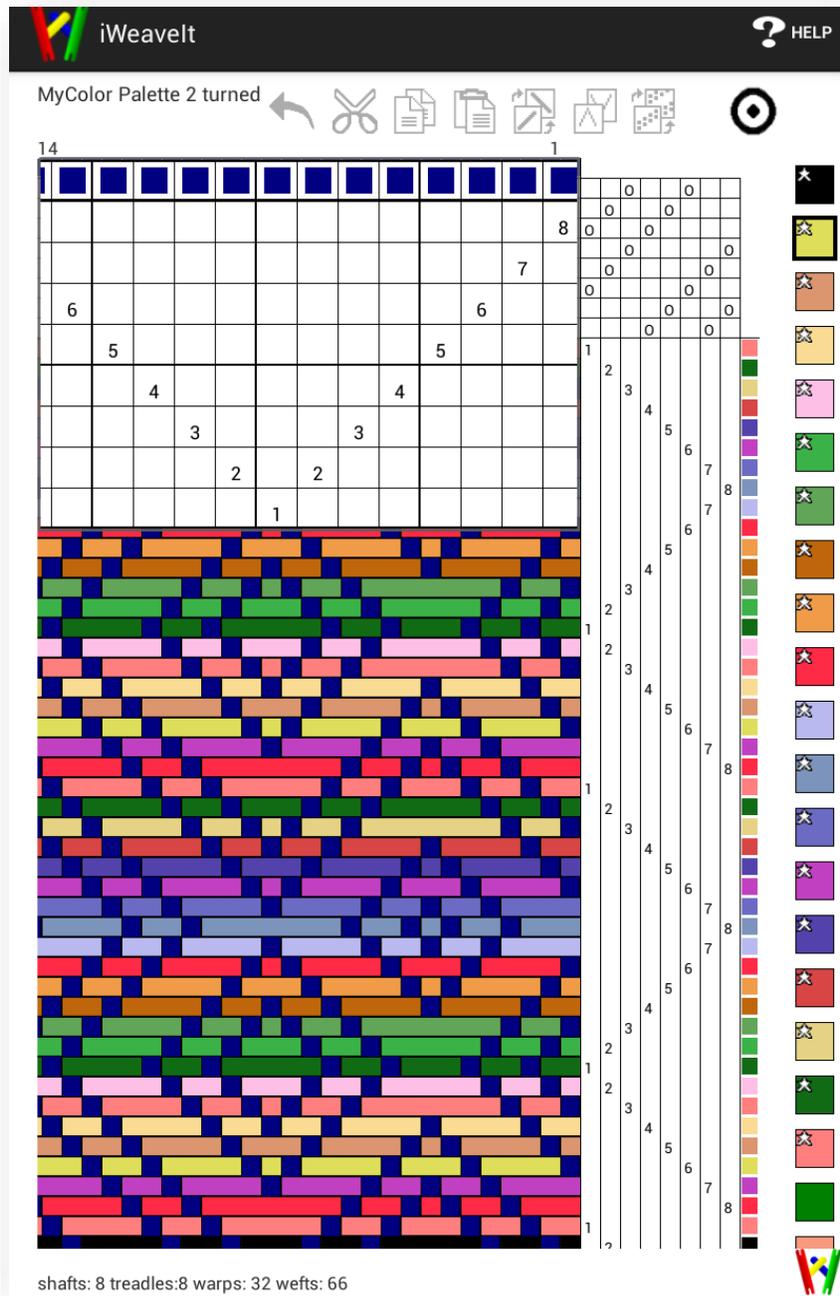


iWEAVEIT FOR ANDROID USER GUIDE



Version 1.4

CANYON ART, LLC

Sally Breckenridge

www.weaveit.com

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iWeaveIt for Android User Guide

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INTRODUCTION

iWeaveIt for Android is a weaving draft design app for tablets and phones that use the Android operating system. It was created by Sally Breckenridge. Sally is an experienced weaver and has been programming and selling WeaveIt Products since the early '90s. She has a long experience with weaving software and what users want and like.

iWeaveIt was originally written for the iPad and iPhone. That version has become very popular so a version of the same app is now available for Android devices. This initial version of the app has the same features that the original version of iWeaveIt for iPad had in its initial release. More functionality will be added in future versions.

Many of these features are standard and becoming common place on phones and tablets.

- Every change is saved so that if the phone rang or you were interrupted, information will not be lost. This happens in the background.
- **Gestures** – iWeaveIt uses many of the standard gestures.
 - A swipe is used for scrolling when scrolling is available
 - A two finger motion by bringing the fingers together in a pinching motion will zoom in.
 - A two finger motion by moving the fingers out will zoom out.
 - A tap is equivalent to a mouse click in Windows. Since you are using your fingers instead of a mouse, it takes a larger area to make click than it does with a mouse. If you have difficulty hitting the correct square or icon, a “stylus” really makes it easier. These are available in the computer department of most electronics stores (e.g., Target, Best Buy, etc.)
- Saving and loading files – In addition to saving all changes in the background, iWeaveIt patterns are saved and loaded using the WIF (Weaving Interchange Format) format for the files. They can be opened on other computers and weaving software.
- Zooming on the drawdown is done with a two finger pinch or stretch.
 - Double click in drawdown to zoom in one step.
 - Zoom slider bar was added in version 1.2.

ACTION MENU

The action menu presents a list of actions that can be performed:

- New -- Create a new pattern.
- Pattern Setup – Setup the number of shafts and treadles. Set the draft to use lift plan or treadles.
- Open –an existing pattern or delete one.
- Save – Save a pattern as WIF file.
- Email – Email the current pattern file.
- Color Setup – Edit the color palette to add colors.
- Print -- Printing requires a wireless printer. In some cases it is necessary to download a driver app from Google Play. If you own a wireless printer and don't see it in the printer list, then check Google play for a driver app.

The details of these will be found in other sections of this document.

SHOW ONE REPEAT ICON TOGGLE



Toggle the button to change from viewing the drawdown between one repeat of the draft and a full view of the fabric by repeating the threading/treading to full screen.

The scroll bars on the bottom and left side show the relative relationship between the screen and size of the pattern. Scrolling is done in the normal Android way by swiping on the drawdown.

For large patterns, setting the display to one repeat will allow faster response when editing the threading, treading or tie-up. Editing response time is improved if the zoom setting is larger. If you are trying to edit near the end of your draft, then scroll the drawdown to that area.

TRACKER FOR TREADING AND THREADING



If you have purchased the Tracking Add-on Module, the tracker icon will be seen in the upper-right corner. To learn about this module and/or purchase it, pick the iWeaveIt icon in the lower right corner of the screen. The purchase is done through the app store for your device (either Google Play or Amazon Kindle), using the app store's secure hosting so it is safe to purchase. Your device must be connected to the internet to make the purchase.

DESIGNER ONE



If you have purchased Designer One Add-on Module, the designer tools icon will be seen in the upper-right corner. To learn about this module and/or purchase it, tap on the WeaveIt icon in the lower right. The purchase is done through the App store, using secure hosting so it is safe to purchase. Your device must be connected to the internet to make the purchase; however if not connected, learn about this add-on by selecting details.

The Designer One Add-on provides the basic tools for designing your pattern. These tools include: Treadle as Drawn In, Turn the Draft, Add Tabby, Color N Weave and Find Floats. This module is described in more detail in a later section.

PROJECT AND YARN CALCULATOR



If you have purchased the Project and Yarn Calculation Add-on Module the yarn calculator icon will be seen in the upper-right corner. To learn about this module and/or purchase it, tap on the WeaveIt icon in the lower right. The purchase is done through the App store, using secure hosting so it is safe to purchase. Your device must be connected to the internet to make the purchase; however if not connected, learn about this add-on by selecting details.

WEAVEIT ICON



Even the WeaveIt icon is a button. Click on it to see the version number, send feedback or purchase add-on features. Send feedback for any problems you encountered. Ratings in the app store are appreciated. Order the treadle tracker add-on in this window. It will take you to appropriate app store to do the purchase. You can also restore your add-ons if the icon disappears from the main screen.

ZOOMING

Using a two finger pinch or extend gesture will zoom the drawdown to a larger or smaller size. Double click in drawdown to zoom in one step.

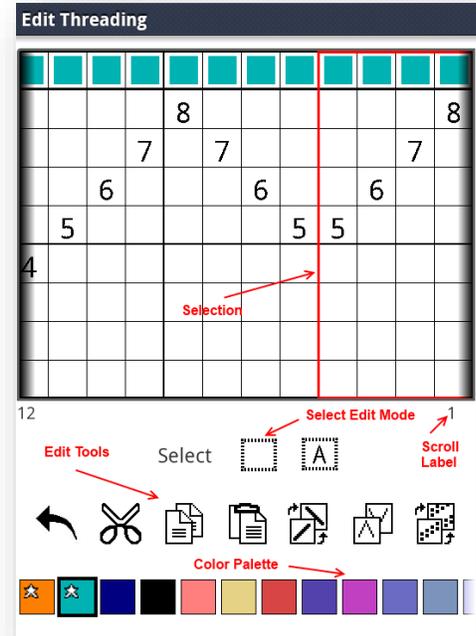
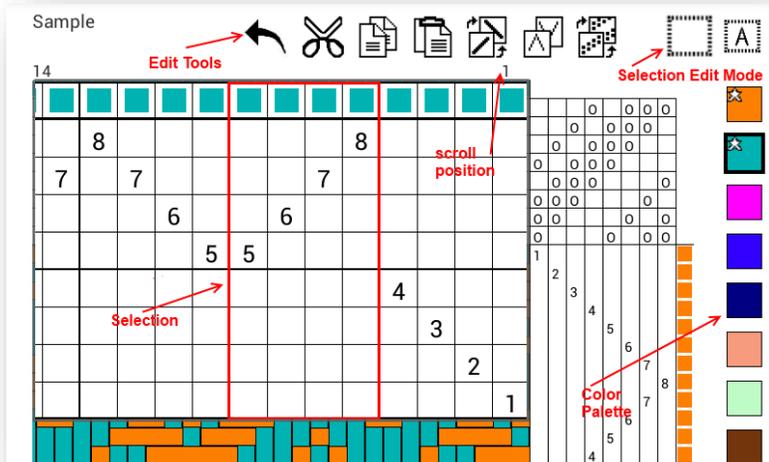
Small squares will display in the threading and treadling when the zoom size is too small to display text.

Slide the dot to the right to zoom in and to the left to zoom out. As the cells get smaller, the re-draw is slower so be patient at small sizes.

EDITING THREADING, TREADLING AND TIE-UP

HOW TO START AND STOP EDITING

Initially iWeaveIt starts with a sample



pattern. Use this pattern to practice using the editing tools.

iWeaveIt supports up to 8 shafts and 10 treadles on the small screens and 24 shafts and treadles on the large screens. The limit is due to the screen size and the size of your finger used for editing. Editing may be easier with a stylus. A stylus is especially useful when editing more than 16 shafts or treadles, since the square size is reduced even further to fit on the screen.

To start editing of the threading, treadling or tie-up, tap on that area.

To stop editing of any of those areas, tap outside the edit popups. On phones, tap the “back” button to return to the pattern.

EDITING TOOLS

EDITING MODES

The mode tool bar has a button that toggles between Mark and Select editing modes.



Mark Mode -- In Mark mode, tap on cells of the threading or treadling to mark the single shaft/treadle in that cell. The color will be the selected color from the palette. The edit tools are not available in mark mode.

When editing a lift plan, tapping on a cell will toggle the cell from on or off but will not affect the other cells of that pick.



Select Mode -- In select mode, make a selection and then select the action from the edit tools.

- To make a selection. Tap on a cell and HOLD for about a half second till the red selection rectangle appears, then drag to select the cells. If you don't hold for a half second before dragging, the view will scroll instead of selecting. There is a subtle difference between scrolling and selecting. For selecting think, **"Hold then drag"**.
- After making the selection, select the action in the edit tools. These actions are described below.
- The select all button is visible in select mode. Tapping it will select all the warps or wefts in the pattern.



SCROLLING

If there are too many warps to fill the viewing area, the edit view will be scrollable. Use the normal swipe gesture to scroll the threading horizontally or the treading vertically. The current scroll position will be shown by the small boxes at each end of the view. See screen shot at beginning of this section.



COLOR PALETTE

The color palette displays along the bottom of the phone screen and along the right side of the tablet screen. If it doesn't fit for all the colors then it will be scrollable.

The yarns used in the pattern are marked with the star icon . This will help choose the current yarn in the pattern instead of one that looks the same but really isn't.

To select a color, tap on the color cell. A black border outlines the selected color.

In mark mode, tap on a threading cell, the color change to the color selected in the palette.

In select mode, selecting a new color in the color palette will change all the thread colors in the current selection to the new color.

EDITING TOOLS



The edit toolbar shows along the top of the main screen of large tables when editing the threading or the treading. It sits below the threading view on the smaller phones.

The edit toolbar is only used in select mode. The buttons will highlight if that action is available. The button will be grayed when the action is not available.



Undo – The undo button will undo the last action. It is also available in mark mode to undo the last entry.



Cut – The selected threads are cut and put in the program’s clipboard. They can be pasted into another location.



Copy – The selected threads are copied to the program’s clipboard. They can be pasted into another location.



Paste – The contents of the clipboard will be pasted into the front of the selected location. The selection will change to select the newly pasted threads.



Flip H – The selected cells will be flipped horizontally for the threading and vertically for the treadingling.



Flip V – Flips the selected cells vertically for the threading and horizontally for the treadingling.



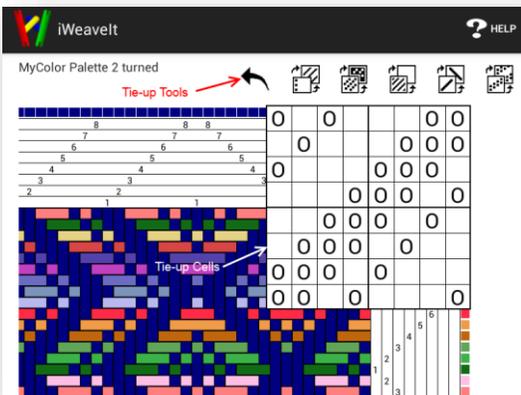
Wrap – Wraps the selected cells vertically one cell for threading and horizontally one cell for treadingling.

TIP: How to insert threads. You may notice that there is no insert action when editing as there is in Windows version of WeaveIt. This is because there isn’t room on the screen for another button on smaller phones and tablets. My work-around for this is to copy a couple of threads and then paste them at the place where I want to insert. Then just change the shaft and color. Once getting used to this, the lack of an insert won’t be won’t missed.

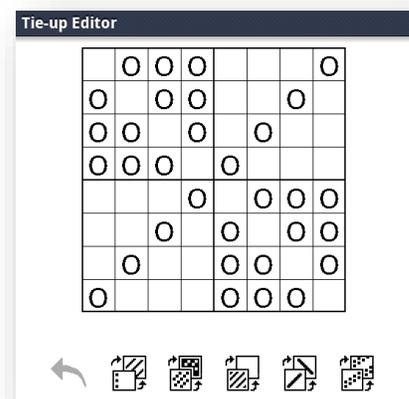
TIP: For Better Performance when editing a large pattern. Before editing a large pattern, set the drawdown to one repeat. Then scroll to the section you wish to change. Keep zoom setting as large as possible. Use the scroll labels for the one repeat the edit window to line up the threading with the drawdown.

TIP: How to correct an error in large draft. When I view a large draft and notice an error, I will change a color of a thread to a noticeable color as close as possible to the error to mark the location. This may take several tries. Once corrected, I can change the colors back to the correct color.

TIE-UP EDITING TOOLS



The following screen shots show tie-up popup when in editing mode.



Lift Plans cannot edit the tie-up.

TIE-UP EDITING MODE

Clicking on a single cell in the tie-up will toggle the cell mark on and off.

The tie-up editing tools work on the entire tie-up. It is not possible to select a part of it.

TIE-UP EDITING TOOLS



Undo – The undo button will undo the last action.



Twill It – Tap on the cells in the first column of the tie-up. Then click on the ‘Twill it’ action button to generate a twill.



Invert – Invert the tie-up. All the cell markings are reversed.



Clear – Clears the tie-up to a clean slate.



Flip – The tie-up will be flipped horizontally.



Wrap – Wraps tie-up vertically one cell.

PATTERN MANAGEMENT - OPEN, SAVE AND EMAIL

DOCUMENT STORAGE ON THE DEVICE

In the Android system, data can be saved in private local space or in public shared space. The local space is private to the application and can only be accessed by that application. Public space is shared by all applications and historically was handled by putting a micro SD card in the phone. Now most devices have a separate data partition for public space.

If the pattern is saved in public space then it can be accessed using a File explorer¹ on your device. The files will typically be located in path: /mnt/sdcard/Android/data/com.canyonart.iweaveit/files/My Patterns. The top file folders “/mnt/sdcard” may differ depending on the device. It may be just “/sdcard”

¹ I found ES File Explorer works well. It is a free app in Google Play store.

In order to handle email or printing, your device must have a public space. If there is no public space, then you will not see email or printing on iWeaveIt's menu. If you add a micro SD card at a later time, you must stop iWeaveIt from running and restart it so that it finds the public storage.

Many of the file management operations are dependent on the device manufacturer and the app (email, browser, file explorer) being used. Some are easier than others.

HOW TO SAVE A PATTERN

The current pattern being edited is always saved in the background so changes are not lost. However when a different pattern is opened or a new one is created, the current pattern needs to be saved as a WIF file.

Save a pattern by selecting Save on the action menu. On some devices the menu is located as a button on the device frame, and in some cases its located in the top right corner.



- **All files are saved in WIF format.** This format can be written by most other weaving programs so the files are interchangeable using a different computers and different software.
- **Enter the file name.** The extension is not needed. The program will add it.
- **Pick Local or Public to choose where the pattern will be saved.** These are different locations. Local files can only be accessed by the iWeaveIt application. Public files have shared access and can be viewed by file browsers.
- **Pick Save to save the file.**
-

SENDING FILE OR PRINTING VIA EMAIL

Often the easiest way to save a file to a different computer is just to email it to yourself. Select the email button in the menu. It will use your email system to send the file. Then go to the other computer and open the attached file and save to a folder on your Windows PC or Macintosh.

There is also a choice to email and html file version of the pattern. If you are unable to print on your device, then email the html version to yourself to open on a computer connected to at printer. On the other computer, save both the html file and drawdown image to a distinct folder. Double click on the file to open in your browser. As long as the image is in the same folder, the browser will display the full page. Then use the browser to print the page.

This will only work if your device is connected to the internet for emailing.

HOW TO USE 'SAVE AS' TO RENAME A PATTERN

The easiest way to rename is to save the pattern with a different name. Then delete the pattern in the original location. This is also the best way to move a file from local storage to public storage and vice versa.

PATTERN FILE MANAGEMENT – OPEN

Patterns can be loaded into iWeaveIt using email or by downloading files from the internet from www.handweaving.net

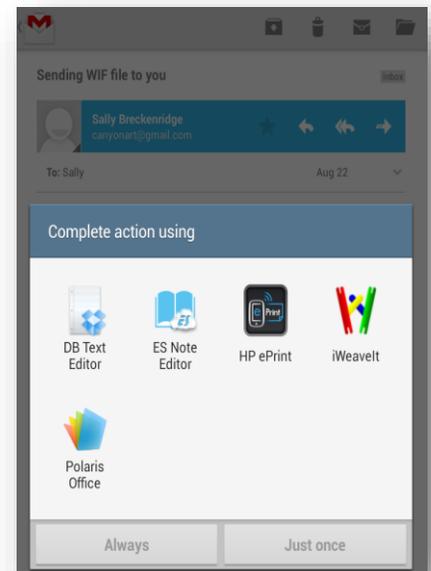
WIF FORMAT IN IWEAVEIT

The patterns will be loaded in WIF file format. If the file is from an external weaving program, iWeaveIt may not support all the features currently available in the more complex weaving programs.

IMPORT FROM AN EMAIL

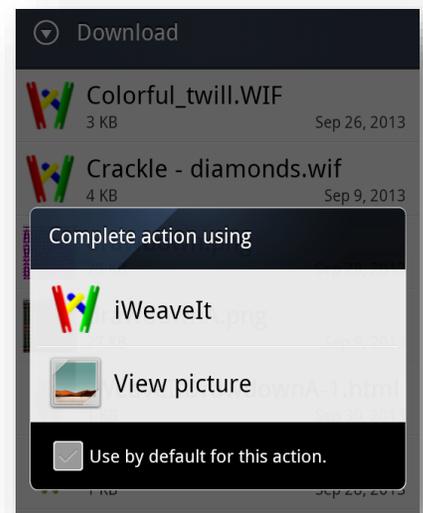
Using email to transfer files can be easy. The current version of Gmail on Android will not open a Wif file. There are several other email apps available for free in Google Play that will open alternative files such as WIF.

- On another computer, save the file in WIF format. Use any weaving program that currently supports the WIF format.
- Attach the WIF file to an email and mail it yourself to open on your Android device.
- Opening and loading the on the Android depends on your mail application. They seem to do it differently. The screen at right show Gmail on Samsung tablet. A choice of apps is displayed. Only iWeaveIt will open the file. The other apps will only display the text.
- A different email app may show the list of attachments. Click on it and pick preview on your pattern. Sometimes it is necessary to save the file first in order to download it from your mail server.
- If it doesn't actually open in iWeaveIt, then it may be necessary to locate it on the file system. Using your file explorer, look for where the mail application stores the file. I found mine in either "messaging" folder or the "download" folder. When you locate the file, hold your finger on the file name until you see a menu and pick open. Hopefully you get a choice of iWeaveIt. This is show at right.



IMPORT/OPEN FROM THE INTERNET

Downloading files from the internet is also possible. Visit site <http://handweaving.net> to see thousands of WIF file patterns. Chrome Browser will not correctly open the files. Firefox seems to work better.



After downloading the file draft, you may get a notification of the download. Clicking on the notification should allow you to choose the app to open with. If that doesn't happen, in Firefox pick the ... menu for Tools/Downloads and then you should be able to choose the app to open the wif file. Double click may work, but if not try pressing a long while on the file to open the app sharing dialog. Pick iWeaveIt.

MANAGING PATTERNS

Open the Pattern manager by picking Open on the menu.

HOW TO RESTORE THUMBNAIL IMAGE OF DRAWDOWN



A small image with the drawdown will display with the pattern. That thumbnail image is stored in a second file. It is created when the pattern is saved. If the thumbnail doesn't exist, then the iWeaveIt Icon will display. To re-create the thumbnail, make a small change in the pattern and save. A new thumbnail is

generated each time you save the pattern.

OPEN PATTERNS

The open screen shows two tabs at the top.

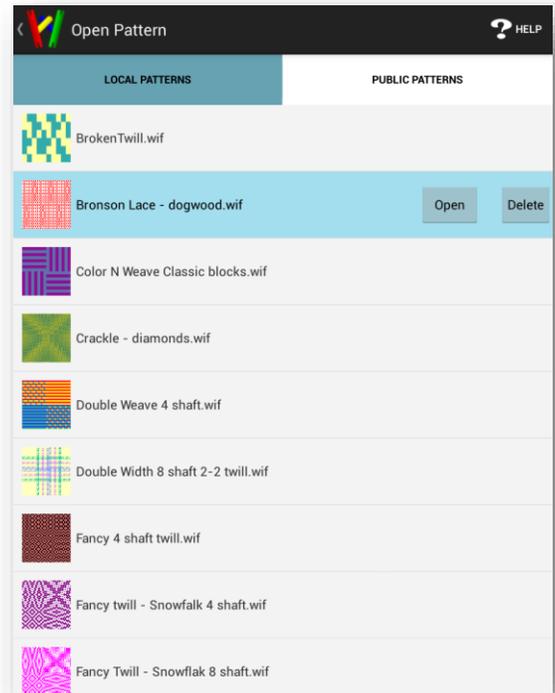
- Local Patterns are stored in the applications local folder. Only iWeaveIt has access to this folder.
- Public Patterns are stored in shared memory. This will either be located on your device or in an external SD card. The public files

When a file is selected, the open and delete buttons will show.

- Click on the open button to open the pattern
- Click on the delete button to delete the pattern.

SAMPLE FILES

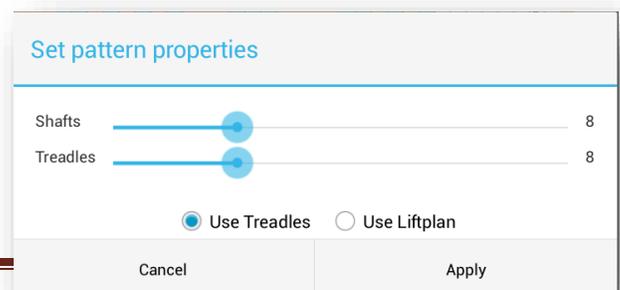
Sample patterns are stored in the local folder. It is recommended that you can modify these and then save to the public folder. That way the sample will remain unchanged.



PATTERN SETUP

Pick Pattern Setup on the menu to set the number of shafts and treadles for the pattern.

Use the sliders to select the number of shafts for the new pattern. Pattern Setup can also be used to change the number of shafts/treadles in the current pattern. If the



number of shafts or treadles in the pattern is reduced, warp or weft threads will be placed on an available shaft.

iWeaveIt supports lift plans. When the lift plan is selected, the tie-up cannot be edited. Editing the treadling will allow each cell to be toggled individually.

Small screen phones are limited to 8 shafts and 10 treadles, and large screen tablets are limited to 24 shafts and treadles. This limitation is due to the screen size and the size of the edit cell needed for your finger.

TIP: Patterns can be converted from treadles to lift plans and vice versa. However if changing from treadles to a lift plan and then back, the treadles will most likely be different. It's better to pick undo on the main screen to get back to what you originally had.

EDITING YARN COLORS

Select Color Setup on the Action menu.

The yarn color palette displays at the bottom of the window. The color palette contains 21 colors.

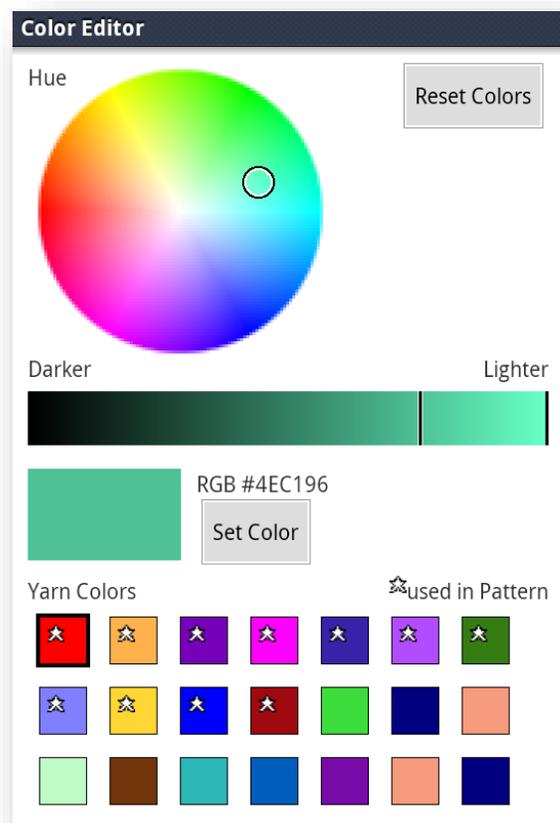
The yarns used in the pattern are marked with the star icon . If one of these colors is changed, then it will change the color in the pattern to the new color. This is an easy way to adjust the colors to try different shades.

Do the following to change one of the colors in the color palette

- Select the color in the color palette to change. That color will show in the result box in the middle of the screen.
- Drag the circle on the hue/saturation wheel at the top. The new color shows in the result box in the middle of the screen.
- Drag the light bar in the center square. See how this changes the color.
- Tap on Set Color to set the color in the color list.

Reset Colors will reset the list to the default list of colors but it will not remove the colors used in the pattern.

TIP: How to save a custom color palette. Create a 20 thread draft contain each of the colors in your palette. Then save the draft. When its reloaded, the palette will contain these colors to use in your next pattern.



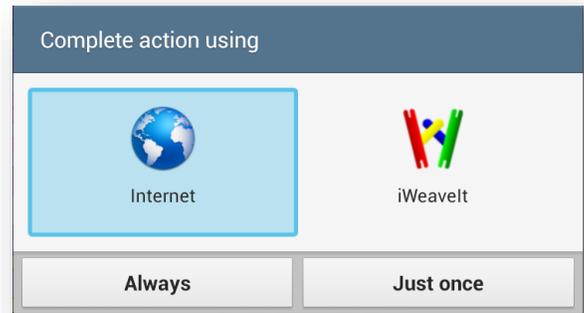
PRINTING

Android does not provide easy printing capabilities. My Samsung device has good printing using the internet browser. Some devices provide this and some do not.

iWeaveIt will create an HTML file of the pattern information and drawdown. If a browser is available that will view HTML files from a local source, then print on the menu will be available. When print is selected, a small choice of apps is provided. Choose the browser app. Hopefully it has a print feature.

If there are no apps that will display a local HTML file, then the print item will not be on the menu.

If none of the apps provided handle printing or you don't have a wireless printer that you can use, then use email to send the HTML file to a computer that is connected to a printer. See email for more discussion of this.



DESIGNER ONE – ADD-ON MODULE

OBTAINING THE DESIGNER ONE TOOLS

 If you have purchased Designer One Add-on Module you will see tools icon in the upper-right corner. To learn about this module and/or purchase it, pick WeaveIt icon in the lower right. The purchase is done through the app store using a secure website. You must be connected to the internet to make the purchase. Even if you are not connected, you can still learn about the Designer by picking details.

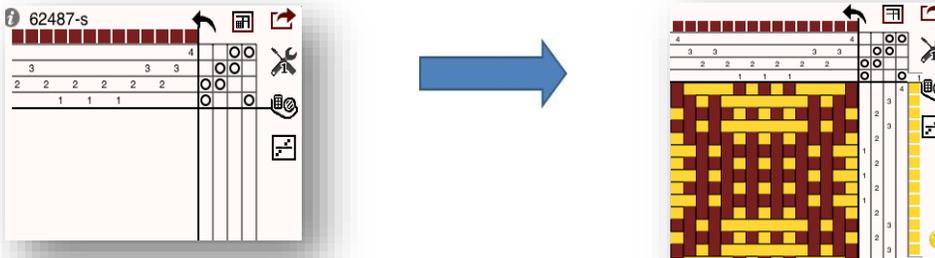
DESIGNER ONE TOOLS

This module has a basic set of tools that are essential to designing patterns.

TROMP AS WRIT

“Tromp as Writ” is also means for “Treadle as Drawn in”.

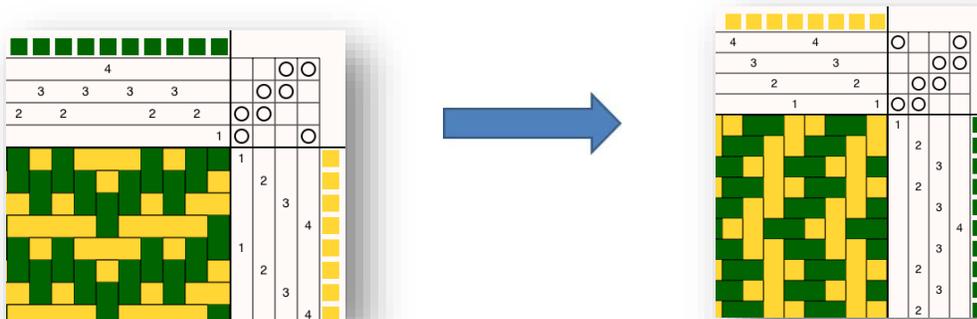
This tool will copy the threading to the treadling. It is one of the most frequently used pattern design tools. It saves time creating treadling. After picking Tromp as Writ, try flipping or wrapping the treadling to see even more designs.



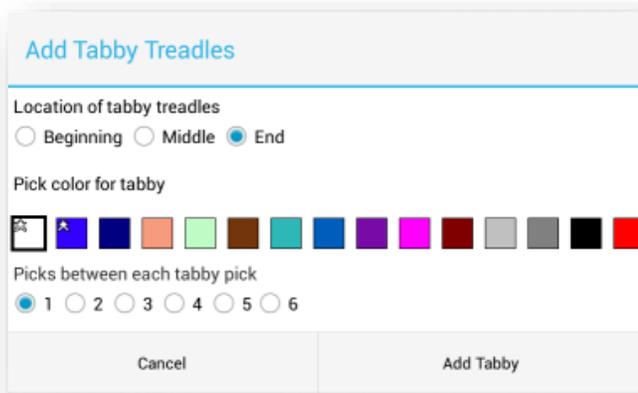
TURN DRAFT

Many times it is useful to change the treadling to threading and vice versa.

Sometimes this makes sense because it is easier to thread, or to treadle the pattern. Without the ability to automatically turn the draft, one must manually re-enter the threading, tie-up and treadling.



ADD TABBY



It's usually easier to design the draft without regard to treading tie-downs called "tabby". Tabby is plain weave applied to the treading.

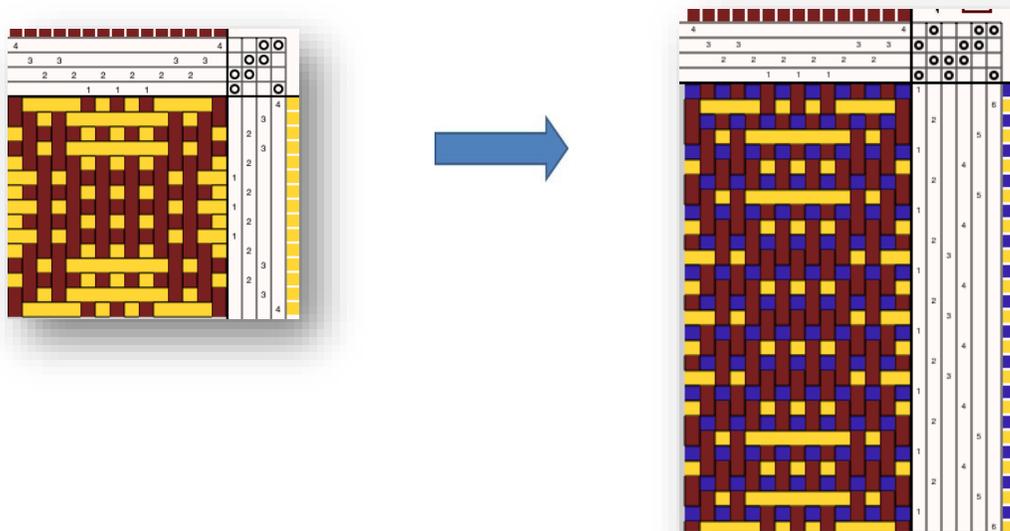
One example is found in designing an overshot design. Create the threading, then pick "Tromp as Writ" to create the treading and finally pick "Add tabby" to add the plain weave tie-downs needed to anchor the fabric. Adding tabby makes designing faster and more convenient.

Add the tabby treadles to the front, in the middle or at the end of the treadles.

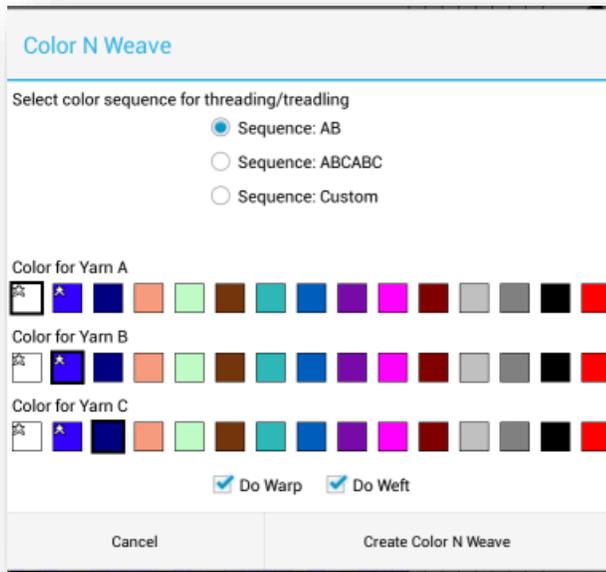
Pick the color for the tabby.

Set the ratio between pattern picks and the tabby picks. Usually it is one to one but sometimes more pattern picks are wanted between each tabby pick.

Two extra treadles are required for inserting tabby. For lift plans, the tabby picks are inserted in the correct place.



COLOR N WEAVE

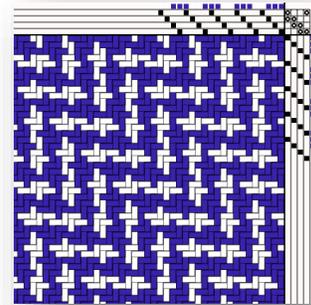
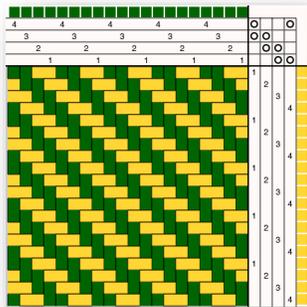


This design tool, colors the warp or weft with a selected color sequence without changing the structure.

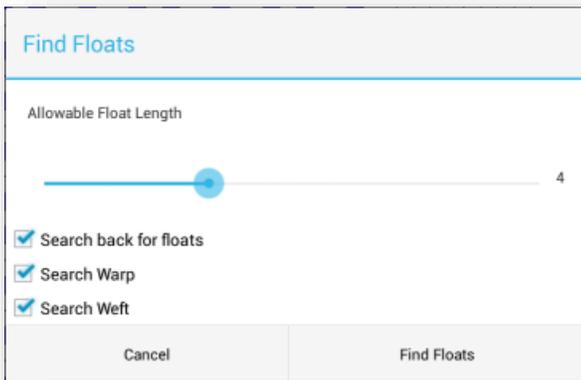
Sequence ABAB will alternate the color chosen for Yarn A and Yarn B in the warp, weft or both.

Sequence ABCABC with alternate the three chosen colors.

Define your own sequence for two or three colors by picking custom and entering the letters for the yarn colors. Upper case or lower case is allowed. Other letters are ignored. The example below uses the custom sequence AAABB.



FIND FLOATS

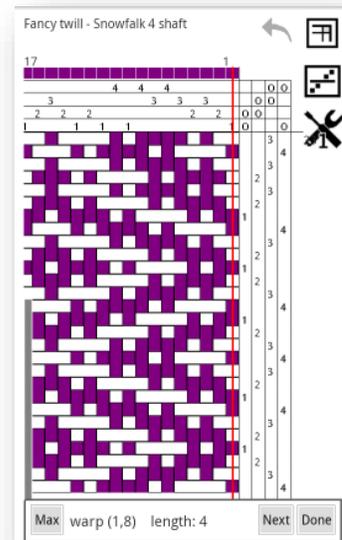


A "float" is defined as "how many threads a warp or weft cross before it is anchored by the crossing thread". The usage of the fabric often determines the length of an allowable float. For clothing, you don't want long floats as it will catch. For table runner or a pillow, a longer float might be acceptable. The sett (warps per inch/cm) will also impact the allowable float length.

With this in mind, even designs taken directly from magazines or books may have floats that are too long for your usage and yarn choice.

- Pick the allowable float length
- Select the search criteria for the floats.
- Pick Find Floats

The main pattern screen of the phone will show the float marked in red lines. At the bottom of the screen the float position (warp,weft) and the length of the float are shown. Navigate through the list with the Next button or the Max button.



Tap on the threading, tie-up or treadling to edit the pattern. The float will be selected when you move to the edit screen.

On a tablet see the entire list of floats will show in the bottom left corner. Each float will be marked on the drawdown with red lines. Pick next to navigate through the list, or scroll and select the float that interests you. Pick Max float to show the longest float in the pattern.

Pick Done when you are finished looking at the floats. The list does not update as the structure is edited. So after correcting several floats, do the search again.

The action menus are disabled while the float list is visible. Pick Done to re-enable them.

When the threading or treadling is tapped, the marked thread will be selected in the editor.

The length of floats should always be checked. The design can look fine on the screen but there may be a hidden float. It is very sad to discover this after you have warped and begin weaving. Thus all patterns should be checked for floats making the float finder an essential tool.

PROJECT AND YARN CALCULATIONS – ADD-ON MODULE

OBTAINING THE PROJECT AND YARN CALCULATOR



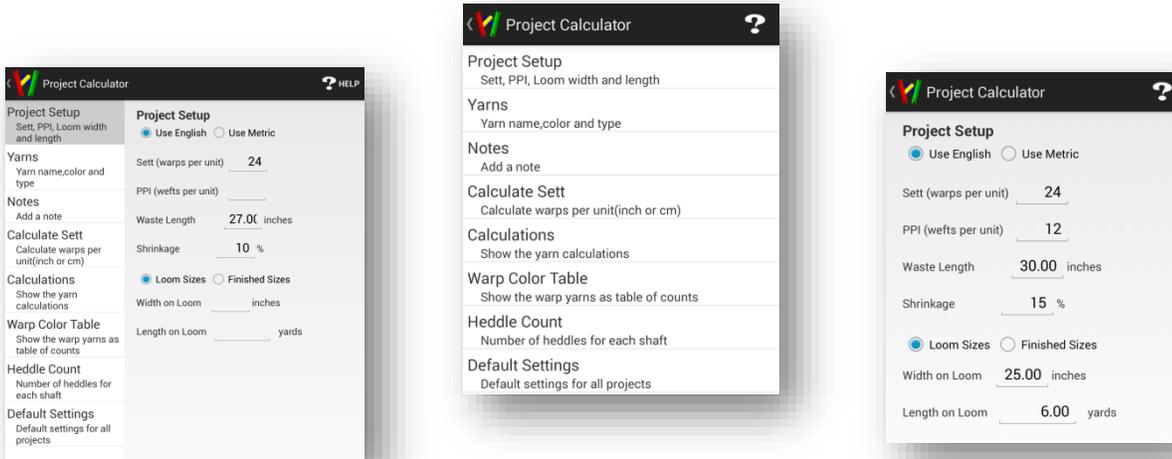
If you have purchased the Project and Yarn Calculation Add-on Module you will see the yarn calculator icon in the upper-right corner. To learn about this module and/or purchase it, tap on the iWeaveIt icon in the lower right. The purchase is done through the App store, using secure hosting so it is safe to purchase. Your device must be connected to the internet to make the purchase; however if not connected, learn about this add-on by selecting details.

PROJECT AND YARN CALCULATOR



Click on the Yarn Calculator icon in the upper-right corner display the Project and Yarn Calculator menus and window.

The left figure shows the calculator tablet. The two figures on the right show the menu on the phone and the calculations screen. On the phone, navigate to the pages using the menu.



PROJECT SETUP



Enter the project information on the Project Setup tab. Enter as little or as much as wanted.

To calculate heddle count, enter the sett and the width on the loom.

To do yarn calculations, enter all the project information.

To calculate in metric units, turn on the Use Metric switch. Set this as a default in the Default Settings tab. Since it is also on this tab, use English for some projects and metric for other projects

When using metric, the sett is calculated as warps per centimeter and the ppi is calculated as wefts per centimeter.

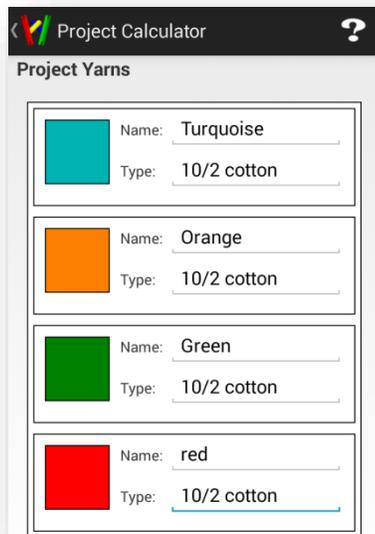
The waste length and shrinkage can be set as Default settings. When new

pattern is created, the defaults are set. This is useful when working in the same units and with the same loom and typically the same type of yarn.

Choose to enter the warp width and length using either the loom dimension or the desired finished dimensions. Use the switch to toggle between entering the loom or the finished dimension. The opposite dimension will be calculated.

NOTE: Do yarn calculations even when a pattern is not entered. Enter the above information and the warp and weft yarn calculations will be done. This is useful when shopping for yarns.

YARNS



The Yarns tab will display all the yarn colors in the weaving draft.

Tap on each yarn to enter the Name and Type of yarn. This is for your information only and anything can be entered that is meaningful to you.²

You could enter the vendor name and color number if that is something you would like to keep track of.

If there are more yarns than will fit on the screen, the view will scroll. Use a swipe gesture to scroll to see all the yarns.

NOTES



Enter extra information about the project on the Notes tab.

This is a good place to add weaving instructions or finishing instructions.

Notes may be added at any time, so after completing project add notes on how it went. In future projects, this can help with making design decisions.

² I typically enter the color as the name and the yarn type for the type.

CALCULATE SETT

Two methods of computing the sett are provided. Use one or both. If both methods are used, then the recommended sett will be the average of the two. How a weaver weaves as well as the type and variance in yarns influence the correct sett to use. Thus the numbers given are guidelines not absolute. The best determination of the sett to use is to sample and use your experience with the given yarn.

WRAPPING METHOD

If using the wrapping method, then warp the yarn around a ruler for one inch. Use one centimeter for metric. The wraps should be placed next to the previous wrap without overlapping. Do not pack the wraps too tightly but gently next to each other without spaces. Since the density of the wrap is a subjective measure, the results computed by this technique are also subjective.

CLOTH TYPE

The cloth type choice is also subjective. For upholstery the sett will be tighter than for light lacy clothing. Use the roller to select your best guess.

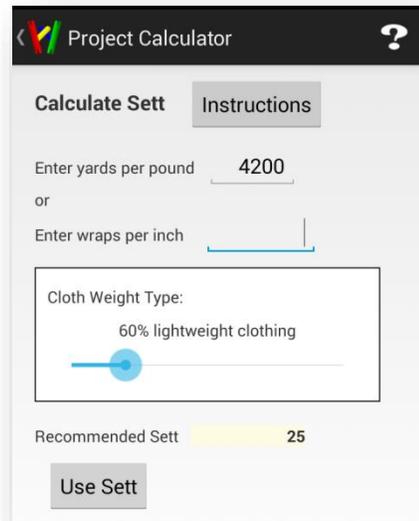
ASHENHURST METHOD

The Ashenhurst method of calculating the sett uses the yards per pound (or meters per kilogram). If the measurement is supplied by the manufacturer then it should be a fairly reliable measure. So this method will give the best results.

If you have an unknown yarn then use a McMorran yarn balance to calculate the weight. Look at your yarn supplier for this tool. It works fairly well and I have used it many times for my mystery yarns. In addition to calculating sett it is useful to see if you have enough yarn available to do the pattern.

The following chart can help with some of the more common yarns. Each manufacturer's yarn may be a little different but this will give a good idea.

Yarn Type	Sett Range inches	Sett Range cm	yds/lb	m/kilo
cotton 8/4	15 - 18,	6 - 8	1600	3230
cotton 3/2	10 - 12	4 - 6	1260	2545
cotton 5/2	15 - 20	6 - 8	2100	4235
cotton 8/2	16 - 20	6 - 8	3360	6775
cotton, 10/2	24 - 30	10 - 12	4200	8470
cotton, 20/2	36 - 40	14 - 16	8400	16935
tencel, 8/2	16 - 20	6 - 8	3360	6775
tencel, 10/2	24 - 28	10 - 11	4200	8470
tencel, 20/2	36 - 40	14 - 16	8400	16935



Shetland wool	12 - 15	5 - 6	1800	3630
rayon chenille	16 - 18	6 - 8	1450	2925
linen 10/2	20 - 24	8 - 10	1650	3330
linen 20/2	24 - 30	10 - 12	3300	6655
linen 40/2	36	16	3300	6655
linen 16/2	24 - 30	10 - 12	3300	6655
linen 8/2	8	4	1650	3330

CALCULATIONS

colorful scarf

Shafts: 8
 Warps in one repeat 18
 Treadles: 8
 Wefts in one repeat 18
 sett 24 warps/inches
 ppi 12 picks/inches
 warp waste 30 inches
 shrinkage 15 percent
 loom length 6.00 yards
 loom width 25.00 inches
 finished length 4.39 yards
 finished width 21.25 inches

Notes:

I am weaving this pattern as a gift for my daughter.

Yarn	warp	weft	total
 Turquoise 10/2 cotton	301 1806 yds	0 0 yds	1806 yds
 Orange 10/2 cotton	300 1800 yds	744 517 yds	2317 yds
 Green 10/2 cotton	0 0 yds	745 517 yds	517 yds
 red 10/2 cotton	0 0 yds	744 517 yds	517 yds

warp count 601
 pick count 2233
 Total warp yards 3606
 Total weft yards 1551

The calculation tab will display all the information entered.

In addition, see the calculations for

- Warps in one repeat of the draft
- Wefts in one repeat of the draft
- Finished width of fabric
- Finished length of the fabric

For each yarn see

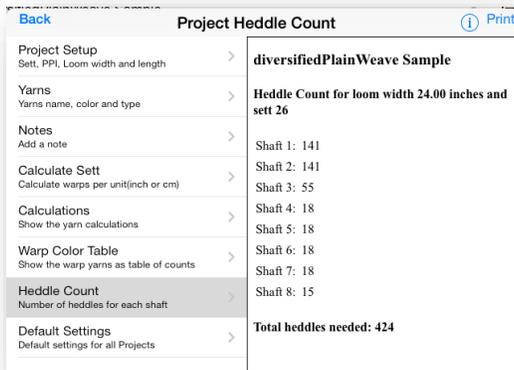
- Name and type information entered.
- Number of warps and wefts(picks) using the yarn
- Quantity of yarn needed for each yarn

Finally see the totals

- Total number of warps
- Total number of picks. This is very subjective and depends on how you actually weave.
- Total quantity of yarn needed for the warp.
- Total quantity of yarn need for the weft.

Because there can many contributing factors to the correct yarn quantities, treat the yarn totals as estimates. Allow extra for broken threads and mishaps. Allow extra for differences in how a weaver winds a warp or how the weaver throws a shuttle and how tightly the fabric is beaten.

HEDDLE COUNT

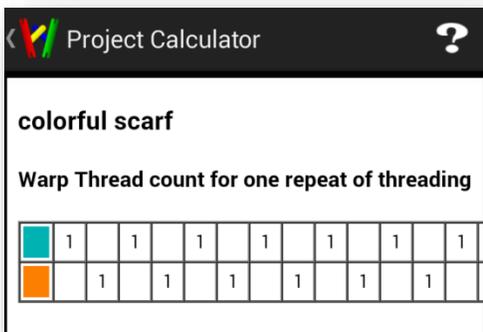


The heddle count tab will display the number of heddles needed for each shaft of the project.

Enter the sett and the loom width in order to calculate the number of heddles.

If printing is available on your device the Print button will be seen on the top bar. The count can be printed to take to your loom to prepare for threading.

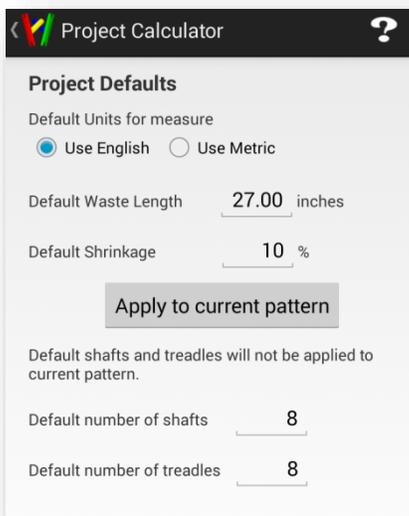
WARP COLORS



Display a list of the warp colors used for one repeat of the pattern.

Read the list from left to right to show how many warps to wind of each color.

DEFAULT SETTINGS



Set the defaults for all your projects.

Set the units to English or metric.

The waste length is the amount of yarn that is at the end of the warp and does not get woven. This value is typically the same for most projects as it depends mostly on your loom and the way you warp it.

The shrinkage is the amount expected for both draw-in and shrinking when finished. This number is typically the same type of yarn is often used.

The default number of shafts and treadles are the typical size pattern that you make. This is not necessarily the number of shafts and treadles on your loom.

The defaults are used when a new pattern is created. They save time from having to re-enter the same information.

Pick 'Apply to Current Pattern' to apply the changed settings on the current pattern. The default number of shafts and treadles will not be applied.

TRACKER TREADLING AND THREADING ADD-ON

OBTAINING THE TREADLE AND THREAD TRACKER



If you have purchased the Tracker for Treadling and Threading Add-on Module you will see the tracker icon in the upper-right corner. To purchase this module, pick the iWeaveIt icon in the lower right corner of the screen. The purchase is done through the app store (Google Play or Amazon Kindle). You must be connected to the internet to make the purchase.

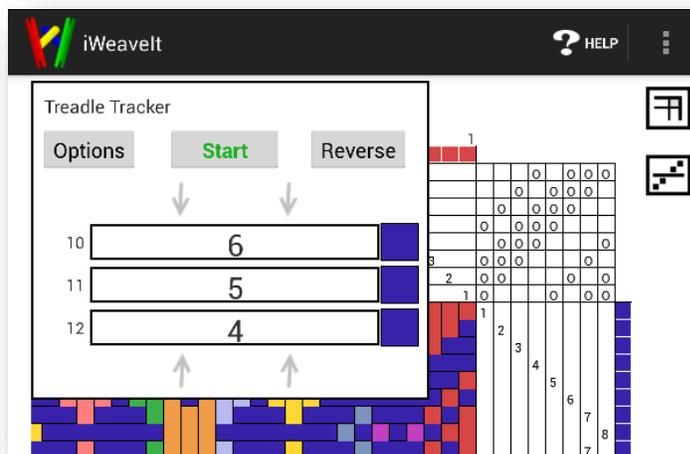
START THE TRACKER



Tap on the tracker icon in the upper-right corner of the screen to display a small menu to choose *Track Treadling* or *Track Threading*.

TREADLE TRACKING

The figures below show the treadling tracker in action. On a tablet the popover sits in the upper left corner so that it doesn't cover the drawdown. It shows the current pick in the large white box. The yarn color is shown next to the pick. The location in the drawdown is marked as you weave so you can see what your weaving should look like. On the phone the drawdown will not show.



The tracker can show either the shafts to lift for the pick or the treadle to lift. See options below to choose.

- Place the device near your loom where you can see the screen and touch lightly.
- Another tip is to adjust sleep time in the settings to change the “go to sleep” time to allow more time to weave your pick.
- Open the dialog by tapping on the tracker icon and choosing *Track Treadling*. dialog will appear. Tap the green ‘*Start Tracking*’ button. The screens should look similar to the figures above.
- To advance to the next pick, tap the screen anywhere except the red ‘*Stop Tracking*’ button. This will make it easy to advance the screen while weaving and will speed the weaving process.

- When finished weaving for that session, choose the *'Stop Tracking'* button. This will dismiss the transparent touch screen and will allow dismissal of the dialog in the normal way by touching outside the dialog.
- The current pick is saved with each tap so the current position is always available at the start of the next session.
- On a tablet, the current pick will show on the drawdown so it can easily be visualized.

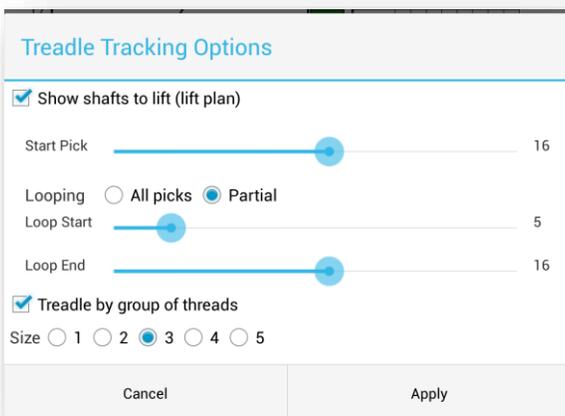
REVERSE TRACKING

To reverse directions and unweave, stop the tracking. Tap the *'Reverse'* button and then tap the *'Start Tracking'* button again. A red "Reversing..." label will show when it is in reverse mode.

To go forward again, stop the tracking. Tap the *'Forward'* button and then tap the *'Start Tracking'* button again.

TREADLING OPTIONS

When the tracker is stopped, the options button will show. Choose Options.



Turn the *'shafts to lift'* check box on to track using the lift plan. This is handy for table looms.

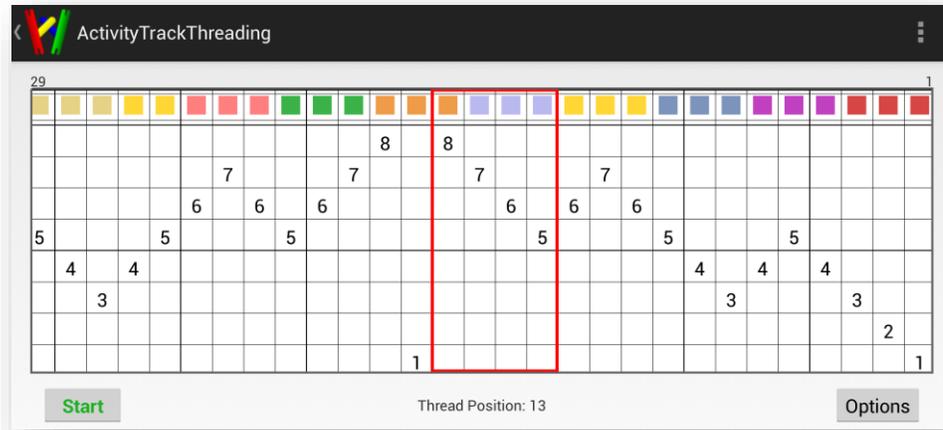
The slider is used to set the starting position. The current position will be changed to the one selected.

Weave over a partial section of the pattern. Select *'Partial'* for this looping. Then set the sliders to the loop start and stop.

The third choice is treadling by groups. Many users feel that they can recall a sequence of number and do not want to tap the screen with every stroke. Turn on the treadle by group and select the number of picks to sequence over. Each tap of the screen will advance the group by that number. The group will display in the tracker. The screen shot above shows tracking with a group of 3.

THREADING TRACKER

The Threading Tracker will aide in keeping track of threading the loom. It is not necessary to print the pattern anymore. The figures below show the threading tracker screen for a tablet or phone.



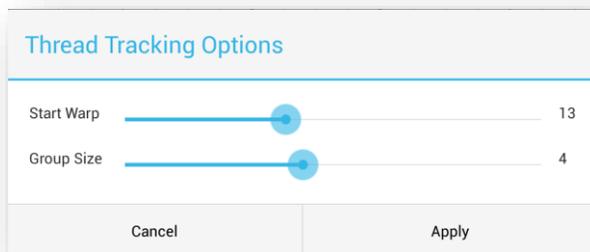
Thread the loom with single threads or by a group of threads. Using a 4 thread group allows you to easily place the threads between your fingers for efficient threading. The size of the group can be changed in the options

- Place the device near your loom in a position that you can easily see it and reach it.
- Adjust the sleep time in your Android settings for the device to change the “go to sleep” time to allow you more time to weave your pick.
- Tap the ‘*Start Tracking*’ button to start the tracking.
- Tap anywhere on the screen to advance the red box to the next group of threads.
- When finished weaving for that session, choose the ‘*Stop Tracking*’ button. Tap the back button to return to the main drawdown screen.
- The current position is saved with every advance. Your current position will be available for the next threading session.

The thread tracker now allows Reverse.

THREADING OPTIONS

To changes the current position or the thread group size, select ‘*Options*’ button on the threading tracking popover/screen.



The default group size is 4 as that number of threads fits nicely in your finger to thread.

Set it for 1 if you like to thread one thread at a time.

Depending on the pattern other groups might make better sense. For example, a huck lace block is 5 threads so threading 5 threads at a time keeps you in sync with your pattern.

GLOSSARY OF WEAVING TERMS

draft	In weaving, the draft is the term used to describe the pattern for the design. The terms draft and pattern are equivalent here.
heddle	The wire (or string) with a small hole in center that spans the shaft on a loom. The warps are threaded through the heddles.
pick	The wefts are often called picks. The shuttle being is thrown across the warp to add a weft thread is called a pick.
ppi	Number of wefts in a single unit of measure. This can be wefts per inch or wefts per centimeter. The ppi determines how dense the cloth will be. In a balanced weave, the sett and ppi are the same number.
sett	Number of warps in a single unit of measure. This can be warps per inch or warps per cm. The sett determines how dense the cloth will be.
threading	The plan for threading the warp threads through the heddles.
treadling	The sequence for pressing treadles to lift a group of shafts.
tie-up	The plan for how the shafts are tied to the treadles of the loom.
'tromp as writ'	Treadle the pattern the same as the threading.
warp	The threads that are threaded in the loom. They wrap around the front and back beams and through the heddles.
weft	The threads that are on the shuttle and are interlaced with the warp to create the cloth.