QuickDraw iPad App

The iPad App is not necessary to operate the QuickDraw in the field, but it does provide many convenience features, and *the QuickDraw is intended to be used with an iPad*. The iPad App is also the method necessary to download the Historical Data from the QuickDraw controller.

With the iPad App, new recipes can be created, existing recipes can be edited, and products can be entered and set up. These recipes and product information can then be downloaded to the QuickDraw controller via WIFI. Farm and field information can be set up in the iPad and transferred to the QuickDraw controller. Information that has been set up in the QuickDraw controller can be transferred to the iPad during the sync process.

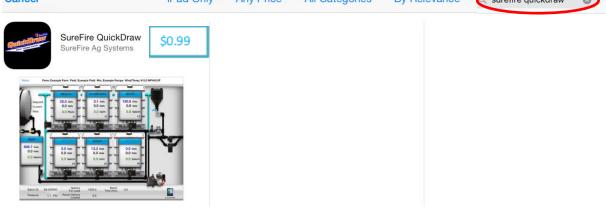
The QuickDraw controller keeps a historical log of each batch that is run. This information is stored in the controller with a unique Batch-id for each batch. The controller can store up to 100 batches in the controller memory. If this memory becomes full, each new batch will overwrite the oldest batch in memory. Typically, the user would download the Historical Data to the iPad before this memory becomes full. When the Historical Data is downloaded to the iPad, it is erased from the QuickDraw controller. Once the Historical Data has been transferred to the iPad, it can be sent by email as a CSV file which can be opened in Excel, or as a PDF document.

iPad App Install

Click on App Store on your iPad.

After you have the QuickDraw app, check back periodically for updates.

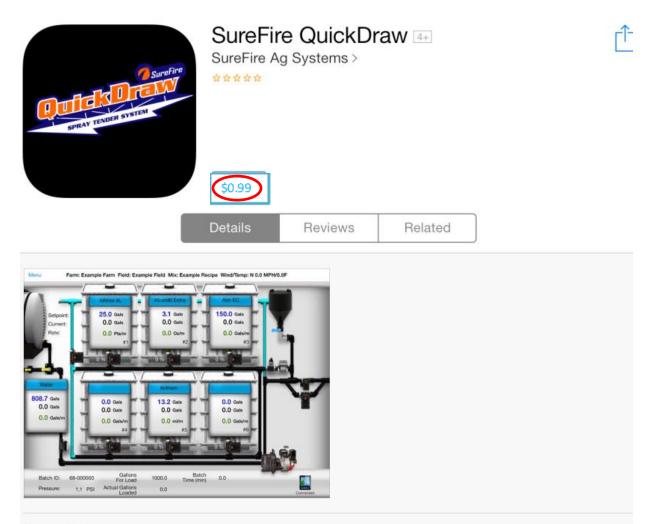




Click on the App.



Click on the \$0.99 and follow the Apple instructions to download the App

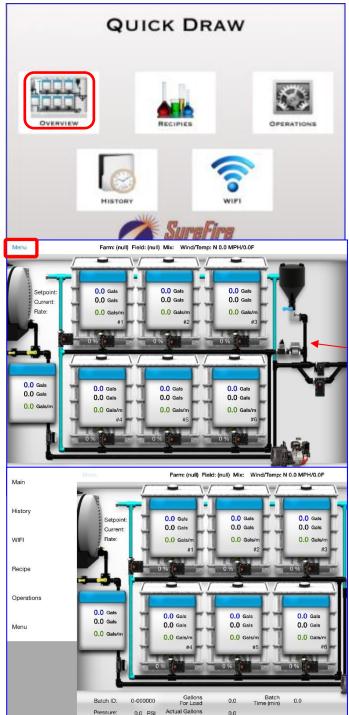


Description

The SureFire QuickDraw App works in conjunction with the QuickDraw Automated Spray Tender System from SureFire Ag Systems. The App allows the sprayer operator to create spray recipes and move them to the Spray Tender System via wireless connection. The App accesses spray batch logged data from the QuickDraw including volumes loaded, environment conditions, field and farm identification.

iPad App Main Menu

Overview QuickDraw iPad Main Menu.



OVERVIEW opens a screen that shows the QuickDraw controller RUN SCREEN. If connected by WIFI to the QuickDraw controller, this screen will show what is happening as a batch is running.

RECIPES gives the option to EDIT or create a NEW recipe on the iPad.

OPERATIONS opens a screen where you can manage Farms, Fields, Products, and Recipes. These items can be added, edited, synced, or exported from the Operations screen.

HISTORY gives you access to the historical batch records. You can search the historical data that is on the iPad, get new historical data from the controller, and email historical data from this screen.

WIFI shows what your iPad WIFI is connected to.

The **OVERVIEW** screen shows the controller Run Screen when the iPad and controller are WIFI connected.

The screen will update as a batch is running.

If the recipe contains a Manual Product, the Manual Product Add screen will show on the iPad and the Manual Product addition can be verified on the iPad.

Pressing **MENU** in the upper left corner will show the Menu choices along the left side.

Recipes



Save the recipe when finished. **Sync Recipes** to controller when connected with WIFI.

Pressing **RECIPES** from the main menu of from one of the side menus will give you a choice to make a **New** recipe or to **Edit** an existing recipe.

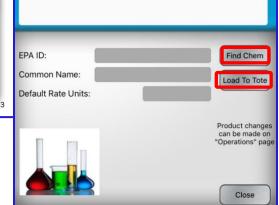
When creating a **New** Recipe, fill in the **Recipe Name** and **Carrier Name**. The bulk products in shuttles or totes are set up on the first screen. To add a manual product or a product with less than 1 gallon for a batch, select **Man. Prods** in the upper right corner.

The other items at the top of the first screen (Total, Gals, Gals/Ac, Carrier Rate, Calc Mode, Total Acres, and Carrier Preload) can be set now or can be edited later when running an individual batch.

Click on the blue box at the top of each tote to add a new product to the recipe. This brings up the following box.

Click on Find Chem.

This opens the Product List to select a product. After selecting the product, click on **Load To Tote**.



<u>Recipes</u>

Tremor EPA ID: 33270-12 Find Chem Common Name: Tremor Load To Tote Default Rate Units: Qts Product changes can be made on 'Operations" page fo Close NO LADEI INFO AAtrex 4L 4.00 Rate: Pts/Ac Rate Unit: Order: 2 3 Delay: Total: 0.0 Gals Tote 1 Man. Prods Carrier Name: 0.0 Gals/Ac Carrier Rate: Carrier Preload: 0.0 Gals NO PRODUCT New 0.00 Rate: Save Rate Unit: Gals/Ac Duplicate Order: 0 0 Delay: Total: 0.0 Gals Tote 3

Here, the product Tremor has been selected. It will be added to the recipe by pressing **Load To Tote**.

After a product has been added to the recipe, the **Rate**, **Order**, and Delay can be entered. Any of these items may be edited later from the iPad or from the controller (after the recipe has been synced to the controller). **Order** is the order in which the products will be added to the batch. There must be one sequential set of numbers beginning with 1 and including all the products in totes plus any manually added products. The **Delay** is no longer used. This will be set for each batch in the **Prod Rinse** box on the Job Screen.

Press New to start a new recipe.

Press **Save** to save a recipe that has been entered.

Press **Duplicate** if you would like to make minor changes to an existing recipe and still save both recipes. Pressing **Duplicate** will bring up a screen where you select an existing recipe. When that recipe comes to the screen, change the name to the name for the new recipe, make any changes to the recipe, and press **Save**. The original recipe and the new changed recipe will now both be in the recipe list. This saves time by not having to add and set up every product for the new recipe when much of it is similar to an existing recipe.

Operations

Menu Operations	
Controller Version 1.04.08 IPad Version: 1.1	
Manage Farms:	or from one of the left-side menus will
Add/Edit Farm Sync Farms Export Farms Delete IP	bring up the screen to manage farms,
Manage Fields:	fields, products, and recipes. Here, Farms,
Add/Edit Field Sync Fields Export Fields Delete IP	Fields, Products, and Recipes can be
Manage Products:	added, edited, synced with the controller,
Add/Edit Products Export Products Delete IP	or exported and emailed.
Manage Recipes:	
Add/Edit Recipe Sync Recipe Export Recipes	d Recipes
Default Email(s):	
mark.wolters@surefireag.co Sav	e Emails
Default Units: English	Instalizing
	To Add/Edit a product use this pop-up
	screen. Find Chem brings up the list of
EPA ID: Find C	hem products that are on the iPad.
Common Name:	Create New if the product is not in the
Default Rate Units:	Product List.
Create	New
Sav	e
Dele	te
Clos	ie j
	Tapping in a white box by Default Email(s)
Manage Products:	will bring up the keyboard to enter email
Add/Edit Product Sync Products Export Products	addresses where you want to send
	exported data. The data is exported in a
	.qdd file which can be emailed to another
Default Email(s):	iPad and imported into the QuickDraw
	App on that iPad. To import the data on a
Disable Sleep While App in Use	second iPad, tap the QDD file in the email
Q W E R T Y U I O P	
A S D F G H J K L	the QDD file icon to bring up the screen
	that will have the option to Open in
C V B N M ! ! !	QuickDraw. Press this to complete the
.2123 Q .2123	import process.

Import/Export File

The .qdd file extension is just a comma separated value file (csv) with a different extension name. It is changed so when the file is selected in an email, the QuickDraw app is one of the options brought up to open the file, which then prompts the user about importing. At this point, a person could the open the file and alter it in Excel or a text editor but importing an altered file could have serious consequences on the user's database unless everything is formatted properly.

Products

The QuickDraw controller can hold 255 products. If a sync is attempted when the iPad has more than 255 products, it will import 255 and then signal that the controller is full. Products that only exist in the iPad will appear blue when searching through the product list. If during a sync process a product key gets changed in the iPad, the program will search mixes and adjust it, so the proper product key is used in the mix.

On a product import (QDD file import into iPad):

-If a product with that EPAID exists in iPad, any changes in the imported product will overwrite iPad product (if a default unit is changed, that will not disturb any units in recipes where it is used). IT WILL NOT CREATE A SECOND VERSION.

-If the EPAID is blank, it will search if product name exists and will do the same as above.

-New products will be stored for syncing to controller.

On a product sync:

-Duplicate names can be created in the iPad and Controller, but the iPad will not allow the creation of a product that has the same EPAID as an already existing product.

-If existing product has changed in both controller and iPad, the user will be prompted which to use.

-If a product is deleted in the iPad, but not the controller (or vice versa), the user will be prompted if they wish to delete it in the other. If answer is no, it will be restored in the unit that had it deleted. Products can only be deleted if they are not used in mixes.

-New products in the controller or iPad will automatically be transferred to the one that doesn't have it.

Recipes

The QuickDraw controller can hold 255 recipes. If a sync is attempted when the iPad has more than 255 recipes, it will import 255 and then signal that the controller is full. Recipes that only exist in the iPad will appear blue when searching through the product list.

On a recipe import (QDD file import into iPad):

-If a recipe with that name exists in iPad, any changes in the imported recipe will overwrite iPad recipe. IT WILL NOT CREATE A SECOND VERSION.

-New recipes will be stored for syncing to controller

-If a single recipe is exported using the iPad, it will also generate a Prod.qdd file containing all the products in that single recipe. The product file needs to be imported before the recipe file.

-If for some reason a recipe gets imported with a product that doesn't exist in the iPad, it will be assigned with a key of 65535 which will prompt the user to select a valid product when the recipe is opened for edit. The recipe will not be synced with the controller until a valid product is entered.

On a recipe sync:

-To maintain data integrity, a product sync is done first.

-Duplicate names can be created in the Controller, but not in the iPad.

-If existing recipe has changed in both controller and iPad, the user will be prompted which to use.

-If a recipe is deleted in the iPad, but not the controller (or vice versa), the user will be prompted if they wish to delete it in the other. If answer is no, it will be restored in the unit that had it deleted.

-New recipes in the controller or iPad will automatically be transferred to the one that doesn't have it.

Farm/Field

The QuickDraw controller can hold 1,000 farms and 1,000 fields. If a sync is attempted when the iPad has more than 1,000 farms/fields, it will import 1,000 and then signal that the controller is full. Farms/fields that only exist in the iPad will appear blue when searching through the product list.

On a farm/field import (QDD file import into iPad):

-If a farm/field with that name exists in iPad, the farms/field will remain in the iPad. IT WILL NOT CREATE A SECOND VERSION.

On a sync Farm/Field:

-Duplicate names cannot be created in the iPad, but they can in the controller.

-If existing farm/field has changed in both controller and iPad, the user will be prompted which to use. -If a farm/field is deleted in the iPad, but not the controller (or vice versa), the user will be prompted if they wish to delete it in the other. If answer is no, it will be restored in the unit that had it deleted. -New farms/fields in the controller or iPad will automatically be transferred to the one that doesn't have it.