

Foto Timer 2.4 Example

Example of Chaining - Developing Black and White Film

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Here's an example of chaining. I use Foto Timer to help me time 4 sequential steps when developing Black and White film. Foto Timer provides this timing by means of chaining processes together.

For my example I will use the times and processes I use to develop Kodak 100TMAX film. The 4 processes I use are:

Step	Time
Developer	7m 9s
Stop Bath	45s
Fixer	6m 15s
Wash	6m 20s

Foto Timer provides an easy way to:

- Time each event
- Go on to the next event
- Provide intermediate timing for when chemical agitation is needed (every 30 seconds a 5 second inversion of chemicals is needed)
- Provide a 5 second warning prior to when agitation is needed, freeing the darkroom enthusiast from having to look at a watch all the time.

Step 1 - Create a Folder

Set up a folder for your type of film.

I used 100-TMAX for the various developing times I use (more about that later). Use "Edit Categories" in the categories drop down menu.

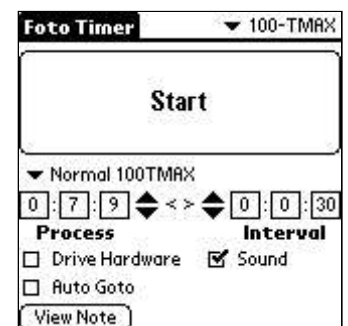


Step 2 - Create the Processes

Setup Developer

In this example it is called "Normal 100TMAX". Use 'Edit List' to create this developer, in the ['Process Selector' dropdown](#) just below the ['Start'](#) button.

- Use Notes to remind you details of the processing. Use the ['Record/Add Note to Process'](#) menu. This is important! I use it to tell me the Developer (XTOL 1:1), temperature 75° F (24° C), and how the time was derived.
- Note I use a development time of 7m 9s. This can be found under Process. I set the Interval to 30 sec, which means each 30 seconds I'm reminded to agitate chemicals. I've already preset the ['prebeeps'](#) to be 5 seconds, so that an audio countdown alerts me to get ready for the agitation. This preset can be found under ['Audio Preferences'](#). This sound is helpful, because developing tends to get boring and the mind often wanders....



Set up Stop Bath

Which is for 45s (I need 15 seconds to pour out the developer, and pour in the stop bath the Process the same time as the Interval, because I start agitating immediately. This is the one step I do not need a reminder, because I'll only agitate once in 45 seconds. Note that I set 100-TMAX

Set up the Fixer

Which is for 6m 15s (I need an additional 15 second to pour out the stop bath and pour in the fixer).

Setup Wash

Which is for 6m 20s (Extra time for pouring out the fixer, and for pouring in the water, which for me takes longer, because I use running water).

Step 3 - Create the Chain

Chain the events together

This is the easiest step, and all it takes is a check box and designating which process follows.

- From the Developer screen, chain ('[x] [Auto Goto](#)') to Stop Bath (Select it using the '[Select Process](#)' trigger. By setting up Stop Bath above, it is automatically put into this drop down list)
- From the Stop Bath screen, chain ('[x] [Auto Goto](#)') to Fixer
- From the Fixer Screen, chain ('[x] [Auto Goto](#)') to Wash
- Since Wash is my last step, I do not chain to any other step.

Some Hints

More than one time for film/developer combination

Usually darkroom enthusiasts have more than one developing time for a film/developer combination.

For example those using the Zone System will have a "Normal +1", "Normal +1.5", or "Normal -1" time. But the Stop Bath, Fixer and Wash times all remain the same.

All you need to do is establish another developer, like I did for Normal +1 100TMAX. Then go directly to Step 3 above and start the chain from Normal +1 100TMAX ('[x] [Auto Goto](#)') to Stop Bath.

Since Stop Bath and Fixer are already chained, that's all you need to do. The chaining at this point is automatic, unless you have another Stop Bath or Fixer time for this Developer (I don't).

Accidentally hit Stop?

At times you may mistakenly hit the Stop button if you're in the middle of a processing step.

You have 2 options:

1. The best situation is that you can figure out at what time you did the mistake and manually count the time from that point on by redoing the step, stopping manually and then manually starting the next step.
2. If not, and you're not in the development cycle, you can either re-do the step, go on to the next step (prolonging the stop bath, fixer or wash, while not recommended, can be done).

If you're in the middle of the development cycle and just don't know what time the mistake happened, you're on your own.

Use Categories!

As you can see, I've set up folders for other film, including Kodak 400-TMAX and Ilford 400 Delta.

Test!

Obviously you should test the timing prior to actually developing film. I did, and when I developed my film, using different combinations of developers for different rolls, Foto Timer worked like a charm!

Questions? Rants? Suggestions?

Wei Chong wrote this example document to help explaining how Foto Timer works. Thanks to him for the great work!

Drop me an email if you have any questions, suggestions, bug reports or nice ideas, or if you just want to tell me what you think about Foto Timer. The address is Jan.Exner@gmx.net.

Thank you for using Foto Timer!
Jan