
FinishLynx Release Notes Version 8.0



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+ Improved Camera Boot Failure Messages. There is now a unique error code displayed for each failure point in the camera boot process.

+ You can now double click on a camera line in the hardware control window to bring up the camera dialog. This also works in the event window for the camera and other lines with dialogs

+ You can now customize the main menu bar and the image selection pop-up menu by blanking out the text of unwanted items. To remove an entire menu(or submenu) you need only blank out the title of that menu (the text of the sub-items doesn't need to be blank). In the case of the image selection pop-up if you remove all of the items then the menu doesn't appear at all.

For example, adding this to the end of your language file:

```
Strings\MenuBar\File\QuickOpen:String=
```

```
Strings\MenuBar>Edit\Title:String=
```

```
Strings\MenuBar\LapTime\Clear:String=
```

will get rid of the Quick Open item, the entire Edit menu, and the LapTime Clear submenu.

+ You can now customize the Options and Camera dialogs by blanking out the text of unwanted items. For an item that is labelled by static text you generally can remove the item by blanking the label. For checkboxes you blank the text that follows the checkbox. To remove an entire tab you blank the tab's text. Some items cannot be removed, either because they didn't have some convenient text to blank or because the functionality of the dialog would be too compromised. It may be possible to remove certain items and leave certain other items that will result in odd or incorrect behavior with regard to what is grayed out or not. (Some items rely on other items to know whether they are active or not.)

+ You can now set a status for a participant in the .evt file. When setting a status the first character of the participant line must be a backslash. This is necessary so that FinishLynx knows that the line is a participant line with a status rather than the first line of a new event block.

For example:

```
E1,R1,H1,Test
```

```
,11,1,Smith,Joe
```

```
\DNS,22,2,Jones,Bob
```

```
,33,3,Murphy,Steve
```

```
\DQ,44,4,Johnson,Mike
```

+ You can now "undo" (delete) the last image overlay that was added. This is done with the newly added Edit|Undo command.

+ You can now "tweak" the last image overlay that was added using the arrow keys. As long as there is no hashline up and no selection box up (which is the case immediately after adding an overlay) then the arrow keys control the last overlay added.

+ There is a new LapTime device "Chronelec No Ack". This works the same as "Chronelec" except that nothing is ever sent to the decoder (no ACKs and no Resends). This should be used if another device (like the Chronelec software) is doing the ACKing.

+ The IPICO LapTime device suffix now defaults to blank.

+ There is a new scoreboard code (\11\04) for sending time with ten thousandth precision.

+ A new scoreboard script to support the TagHeuer HL985 is included.

+ The Nevco .lss scripts are updated.

+ There are 2 new Adaptive scoreboard scripts.

Adaptive32x128 3line.lss

Adaptive32x128 4line.lss

+ There is a new External Sync plug-in available (FinishLynx-ES.exe installer). When installed this allows you to attach an external timer to a current generation camera (5L300, 5L400, or 5L420) through the "Photoeye A" input. The external timer must make a closure on these inputs exactly once per minute in order for FinishLynx to follow the external timer's clock.

The TagHeuer CP540 only does once per minute, so there is nothing to set there. The MicroGate MicroSync has several options, one of which is once per minute.

Setting up and using an external sync device is pretty simple. You should first turn on the device and make sure its timer is set how you want it. If you want the external sync device to itself be synced to GPS time make sure that happens before you sync FinishLynx to it.

Once the external sync device is running how you want it you can select the camera in the hardware control window, pull up the camera dialog, go to the "Inputs" tab, and select "Photo Eye A" for the External Sync setting.

Leave the Max Error at its default of 100 microseconds unless you really know you want something different. The lowest allowed is 50, the maximum is 1,000,000.

You should now see that camera's background color turn yellow and the "Ext. Sync" field say "Waiting (0)". When the first "top of minute" event is received the state will turn to "Waiting (1)". When the second "top of minute" event is received the state will turn to "Ready (2)". The camera must have at least 2 events in its list before you can sync the camera to the external timer. You can now do the "Sync TOD..." function and enter the actual time (as reported by the external timer) of the most recent "top of minute" event. The yellow background should now go away and the status should say "Synced". At this point as long as the state doesn't change from "Synced" (as long as the background doesn't turn yellow) you are synced and good to go. Similar to a "red lined" camera, the camera line of a capturing event will also turn yellow if external sync has failed. (The event's camera line does not list the Ext. Sync field, it just shows yellow if something is wrong.)

Once the state is "Synced" you can "drop back" to the "Waiting" state if an event is received at the wrong time or not received at all. If an event is eventually received at the expected time and the error doesn't exceed Max Error then the state will automatically change back to the "Synced" state. If regular events are received again but the error exceeds Max Error then the state will go to "Ready" and you'll have to manually sync again (using the "Sync TOD..." function).

For example, you might disconnect the external timer for a little while (events missing) or accidentally short the wires (events at the wrong time) and when properly connected again the state would likely go back to "Synced" automatically. Or if you change the time on the external timer then the "top of minute" events will most likely be off by more than Max Error and you'll have to do "Sync TOD..." again.

The "Sync TOD..." dialog has a new option to "Make current event capturable". This will be enabled when using external sync and when the current event (if there is one) is compatible with the current camera setup. To be "compatible" all the cameras in the event must be present in the current camera setup and they must be in the same order. In other words, you should have all of the same cameras booted and in the same order as when the event was created. I realize that this is a rather strict requirement, but there is so much going on that depends on exact camera model and exact boot order that I decided that this requirement was the easiest way to ensure that everything would work properly.

The purpose of this feature is to allow you to sync the cameras to an external timer, create an event (and receive a start, say), save the event and turn off all cameras, set up the cameras somewhere else, sync to the same external timer

(which has been on the whole time or syncs again to GPS time), and then capture into the saved event (because it has been made capturable again).

Similar to the WLAN settings, you can only make changes to a camera's External Sync settings from the hardware control window. You can also only have 1 camera set to use external sync at one time. Before turning external sync on for another camera you have to turn it off for the current camera.

+ It is now possible to enter arbitrary text into the time field in the Results area. If the result's status is Valid then the result will be sorted (and assigned a place number) based on this text (all "text" results come after "time" results). If the result has a code (DQ, DNS, DNF, etc) then this text will be used to sort those results with the same code.

Anything entered into the time field that does not scan as a valid time is considered "arbitrary text". Note that a string that starts off looking like a time will be scanned as a time, not text. So "-1LAP" will be interpreted as a manually entered time of -1 seconds. "LAP-1" will be interpreted as text.

There are some hidden settings that affect this:

\Event\Results\TimeString\Enabled:

0=Off, 1=On Enables text input. Default 1.

\Event\Results\TimeString\SortTimes:

0=None, 1=Ascending, 2=Descending How valid results are sorted. Default 1.

\Event\Results\TimeString\SortCodes:

0=None, 1=Ascending, 2=Descending How coded results are sorted. Default 1.

The initial motivation for this is cycling where riders can be lapped and then don't finish the race but still are considered to have a "finish place" in the race based on when they were lapped. Also in these races it seems that riders can drop out (marked DNF) and they would like to order the riders by when they dropped out. Both of these things can be accomplished with this new feature.

For instance, you can set SortTimes to 1 and SortCodes to 2 and use the convention "LAP-n" to indicate how many laps behind someone is that should be ranked and the convention "DNFn" to indicate on which lap

someone dropped out for someone who is marked DNF. You could then generate a results list that looks like this:

Place	Time
1	15:12.34
2	15:14.56
3	LAP-1
4	LAP-2
4	LAP-2
6	LAP-3
DNF	DNF3
DNF	DNF1

+ The ru_RU.lng file is updated.

+ The LIF file "WindManual" string is now blank in the fr_FR.lng file.

+ There is a new "Min Time" parameter for Object Detection (Capture Tab of the Camera Settings Dialog). This setting forces the "width" of the detected object to be at least the specified time. The leader and trailer frames are added in addition to this time.

So, for instance, if Min Time is set to 1 second and something passes by the camera very briefly you should see 1 second of capture plus the leader and trailer frames. Setting it to zero (the default) disables the option and should behave as before. The maximum supported value is 1 minute. This setting affects Find Object and Auto Crop in FinishLynx as well as Automatic Capture Mode in the camera.

+ There is a new hidden setting (\\Event\\Image\\FullScreen\\TitleOffset) that controls how far down from the top the event title is in full screen mode. The default is 10 (pixels).

+ You now get a warning if you try to arm an event that already has a start and already has at least one result with a time entered.

+ There is now support for the Black and White EtherLynx 2000+ Camera.