

# LaserKatjie Quick Start Guide

LaserKatjie 4.0 Quick Start Guide  
V1.1; B.Novak (5/20/2014)  
V374 | March 2018

## Introduction

This guide will help the technicians quickly begin using the LaserKatjie 4.0 software to engrave core sections.



Figure 1. LazerKatjie 4.0 Main Screen.

## Glossary of LazerKatjie 4.0 Settings

Prior to a core on deck, the user should check the laser settings to ensure they are set appropriately. The following is a glossary of the available settings.

1. LazerKatjie operating screen (Figure 1) includes four columns on the left of the screen to allow the user to select the Expedition, Site, Hole, and Core they are going to engrave.
2. The user can select if they wish to have LazerKatjie automatically update or you can manually select Refresh. These buttons are in the left bottom corner of the main screen. (Figure 1)
  - i. The **REFRESH** button will update the LazerKatjie lists. By pressing the Refresh button the new core should appear in the list once it has been uploaded by the driller and curator/ALO.
  - ii. The **CHECK FOR UPDATES EVERY** button allows the user to select a frequency of automatic updates (Figure 2) Be aware that if the user is inputting a specific/unique order of sections or engravings, the automatic update will refresh the section positions. The refresh will cause the engraving selections to be reset which may lead to mistakes if the user does not begin the laser process before the update occurs.

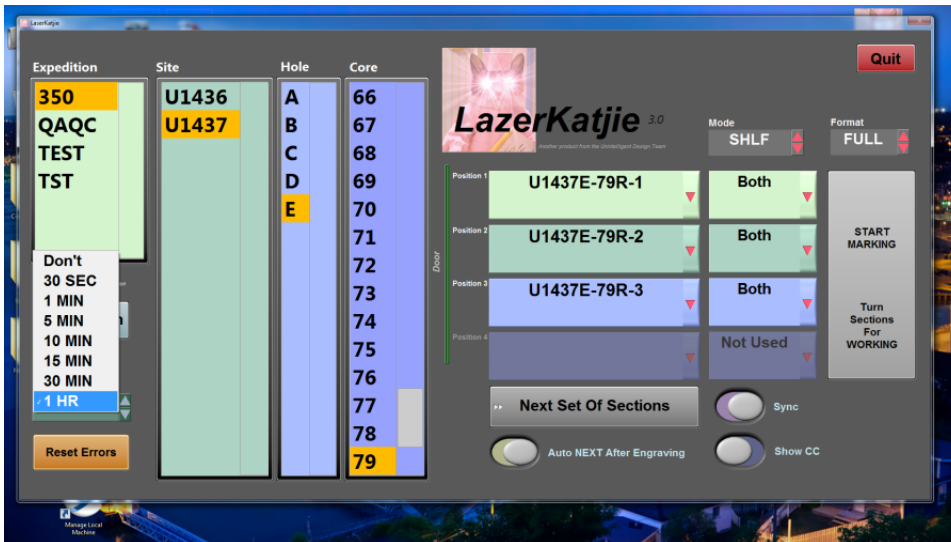


Figure 2. Automatic Update Options (red box in lower left corner).

3. On the right side of the main window the user has the option to select the position of each section in the engraver, designate what is to be engraved on the section (archive, working, both, or not used), the mode of engraving, and the format which they wish to engrave.
  - i. LazerKatjie will engrave **working half first** unless otherwise specified.
  - ii. Utilize the drop down menus to specify the position of each section inside the laser (Figure 3) and to specify whether you want to engrave both working and archive, archive only, working only, or if the position is not used (Figure 4)
  - iii. **Mode** options are Section Half (SHLF) and Whole Round (WRND).
    1. Whole Round format will allow the user to engrave whole rounds (MBIO, IW, physical property samples, etc) with the sample identifier. In this mode, only the whole rounds will be visible.
  - iv. **Format** options are **Full** and **Small**
    1. Full format will engrave the section information in regular/optimum size, length wise on the section (Figures 5 & 6) and includes an arrow pointing to the top of the section.
    2. Small format will engrave a small label across the diameter of the core (Figure 7a & 7b). This option works well for small core catchers when the Full engraving format will not fit. NOTE: There is no ARROW pointing up when using the small engraving format.

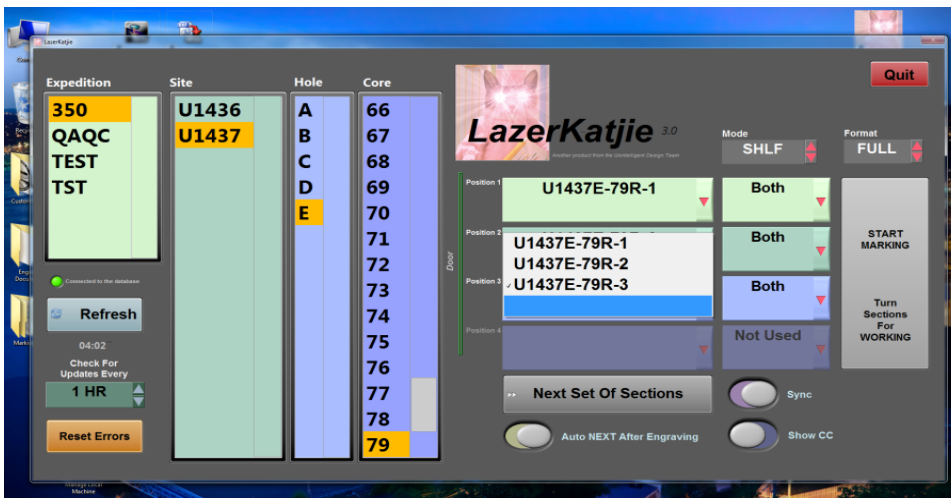


Figure 3. Specifying section position in the engraver from drop down menu.



Figure 4. Specifying Mode: Archive, Working, Both or if the position is Not Used from drop down menu.



Figure 5. Full format engraving for a section half.



Figure 6. Full format engraving for an interstitial water whole round sample.



a)

b)

Figure 7. Small Format Engraving when Mode is set to a) Section Half or b) Whole Round. Note that Small format is only used for sections that are too small for the Full format or whole round samples.

- On the bottom right of the main screen a few other specific settings are available. The default settings are shown in Figure 8. The other options are shown in Figure 9.

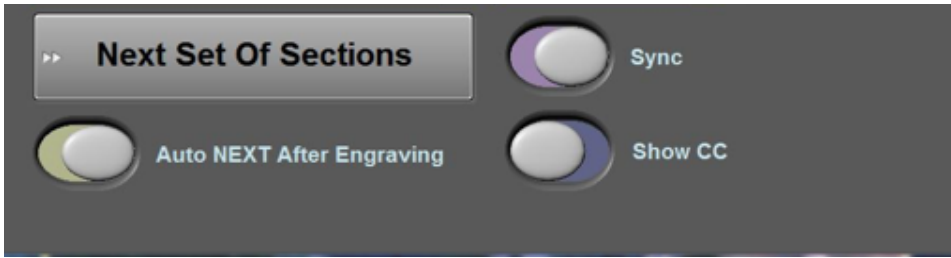


Figure 8. Default settings for quick automatic engraving on section halves.

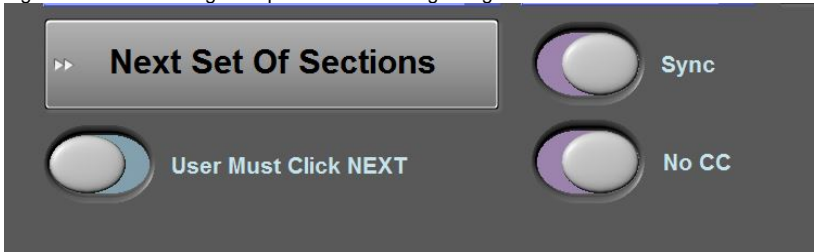


Figure 9. Optional settings for specific cases.

- a. **Auto NEXT After Engraving** or **User Must Click NEXT**
  - i. **Auto Next After Engraving** will automatically input the next set of sections for a particular core into positions one through four once the first four have been engraved.
  - ii. **User Must Click NEXT** will require that the user select the **NEXT Set of Sections** button to cycle to the next set of four sections.
- b. **Sync or Not Sync**
  - i. When the button reads **Not Sync**, the user may set the type (archive, working, both, or not used) of engraving separately for each section.
  - ii. When the button reads **Sync**, the type of engraving will change for all sections if the user changes one.
    1. For example, if the user wishes to specify one position as not used and the **Sync** option is selected, all of the positions will be "not used".
- c. **Show CC or No CC**
  - i. When button reads **Show CC**, the core catcher will be included in the list of sections and may be engraved.
  - ii. When button reads **No CC**, the core catcher will not appear in the section list and the user will not be able to engrave the core catcher with the other sections.

## Operating LaserKatjie 4.0 STEP GUIDE

1. Open LaserKatjie 4.0 (Figure 1).
2. Place cores inside laser with working half facing up and close the door. There is an interlock on the door – when the laser is engaged you cannot open the door until the interlock releases and the button above the right side of the door illuminates.
3. Select the appropriate settings.
4. Select the **Start Marking** button to begin engraving the Working half of each section.
5. While marking the abort button will appear (with the laser lit) as seen in Figure 10.



Figure 10. Marking Liner: Working Half Abort window.

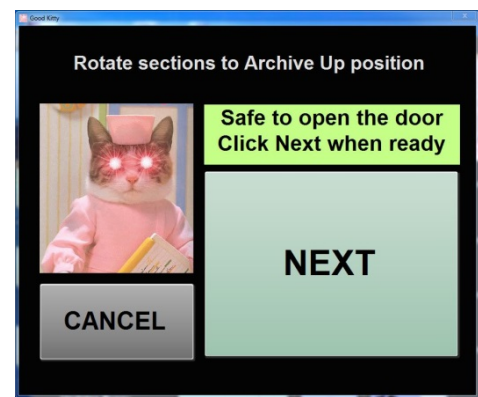


Figure 11. Next button for beginning the engraving of the Archive half.

6. When marking is complete the door will unlock and a NEXT button will appear (Figure 11). Do not select next!
7. Open the laser door once the interlock releases. Press and hold the illuminated button (top right of door) and open the door at the same time.
8. Rotate the sections so the archive half is facing up.
9. Close the door.
10. Press the **NEXT** button (Figure 11). Laser will begin to engrave Archive Half and a new abort button will appear (Figure 12).
11. When finished the door will unlock and engraving should be finished. If the laser is set to automatically advance the next set of sections for the core should appear and the user may continue engraving.

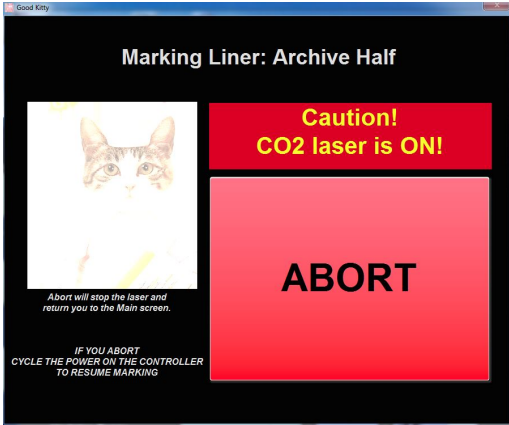


Figure 12. Marking Liner: Archive Half Abort button