

# 4titude® TubeMarker™

## Software Project



# Current TubeMarker™ Software

Java

## PROS

- Simple functionality – data input, print functionality, tube set-up
- “Infinite” job/batch data input
- Easy import of excel files .xls, .xlsx &.csv
- Create/save & open optimised tube settings
- Error management

## CONS

- Unstable – glitches, freezes, crashes
- Limited to 8 lines of text per tube
- If error occurs, potential loss of data/position in print job
- No log management system
- Inflexible label creator – horizontal/vertical
- Restricted to one barcode and one graphic per label
- Complex installation process
- Low throughput

# Customer Feedback

## Pain Points

- Unreliable/Unstable — crashing and freezing a big issue, unexpected downtime, loss of data
- Installer — manual process (32-bit), time consuming, 3-4 part installation, wrong platform often downloaded
- Low throughput — manual tube feeding, one tube at a time

## Would be nice if...

- Label creator — flexibility needed
- LIMS compatible — cannot integrate into LIMS
- Remote Communication — undefined/unwritten

# New TubeMarker™ Software

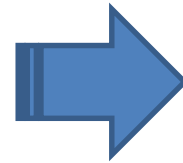
Windows Based - New Look User Interface!

## New Features

- **Flexible Label Designer** – dedicated designer window, intuitive, fully customisable label control & FUN!
- **Job/batch control** – Print ALL/SELECTED/SINGLE data, no loss of data in case of unexplained error
- **Custom Column Headers** – excel files imported with headers!
- **Print Settings** – offline optimisation, tube and ribbon profiles saved to drop down menus for easy access
- **Printer Management System** – multiple printer control, increased throughput, reduced downtime, improved handling, simplified firmware updates!
- **Rapid Installation** – fast, pain free and simple
- **Re-designed Ribbon Calibration** – more frequent and smarter tensioning

# Java Installer vs Windows Installer

1. Software transferred from USB stick (provided) to PC – also found on website
2. Detect Windows OS – 32-bit/64-bit?  
Determines which Java environment to download (must be offline)
3. Execute TubeMarker installer – follow on screen instructions
4. Installer recognises Java isn't installed on PC – pop up takes you to java download page
5. Run applicable Java installer – follow onscreen instructions
6. Execute software and print!
7. *Note! If software installed on 32-bit PC, manual installation of drivers is needed.*



1. Software transferred from USB stick (provided) to PC
2. Execute TubeMarker installer – follow short on screen instructions
3. Execute software and print! – shortcut to app auto placed on desktop!



# How it looks!

4 Tubemarker2™ -Label L3 11.5mm PP.4tl

File View Instrument Print Debug


Data

	1D BARCODE	2D DATAMATRIX	COMPANY INFO	PRINTER INFO	PARAMETERS	DATE	LABEL
1	1234567812	20180501133012345678123456123456	4titude Ltd	TubeMarker 2	Code 128 250 um Datamatrix 250um	20-Jun 2018 12:42	L3
2	12345678123456123456	20180501133012345678123456123456	4titude Ltd	TubeMarker 2	Code 128 250 um Datamatrix 250um	20-Jun 2018 12:42	L3
3	12345678123456123456	20180501133012345678123456123456	4titude Ltd	TubeMarker 2	Code 128 250 um Datamatrix 250um	20-Jun 2018 12:42	L3
4	12345678123456123456	20180501133012345678123456123456	4titude Ltd	TubeMarker 2	Code 128 250 um Datamatrix 250um	20-Jun 2018 12:42	L3
5	12345678123456123456	20180501133012345678123456123456	4titude Ltd	TubeMarker 2	Code 128 250 um Datamatrix 250um	20-Jun 2018 12:43	L3

label data

Device Manager

TubeMarker



Enable OK

Settings Firmware Sled

Name TubeMarker

Tube Lift  Enable

Preset 4ti-0689-1 PF 35 Heat0

Designer

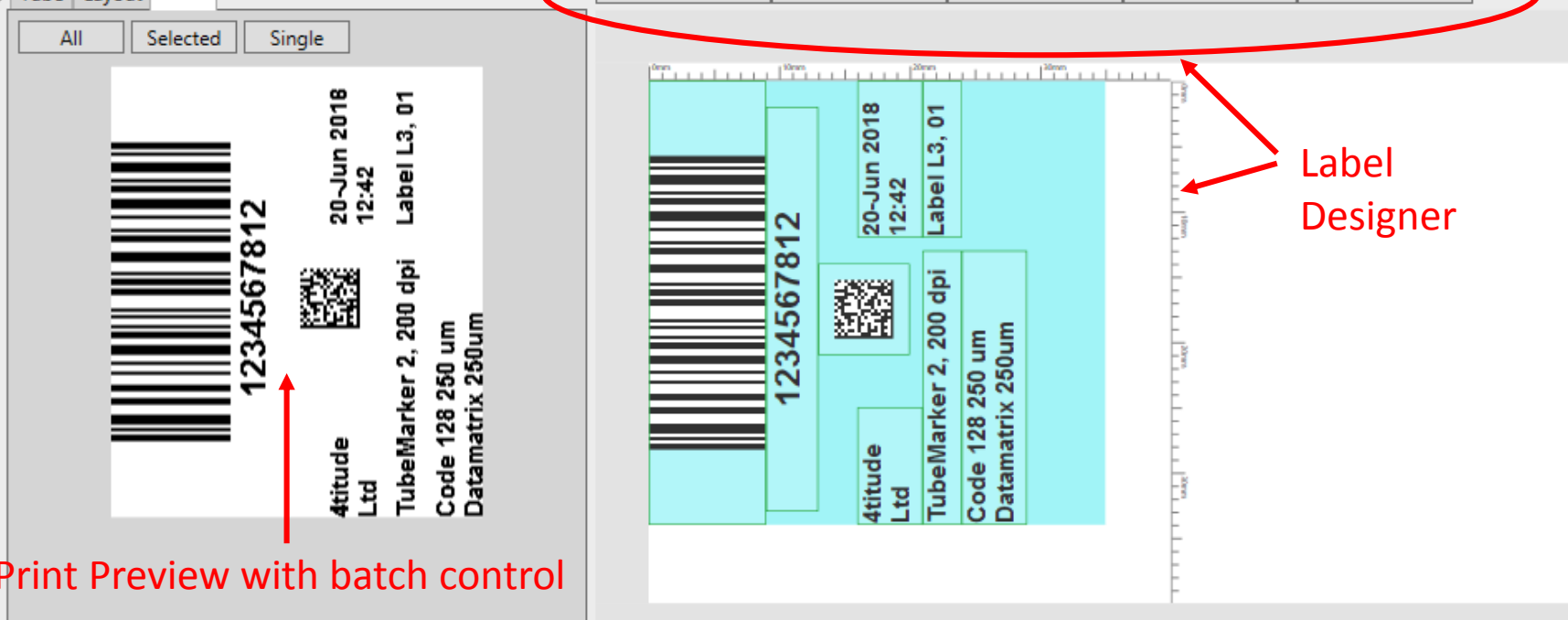
Tube Layout Print

All Selected Single

AddText AddDataMatrix AddLbc AddGfx Delete  Snap

Print Preview with batch control

Label Designer

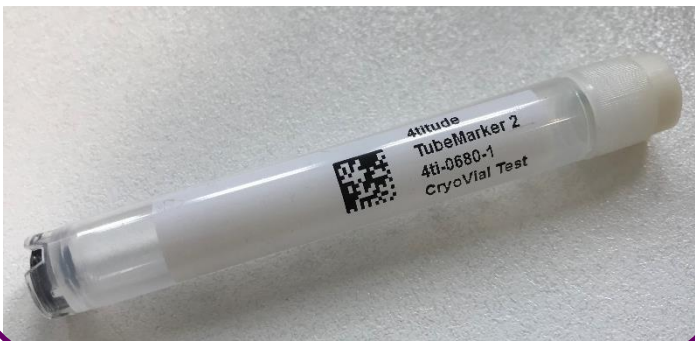


0.2.0

# Print Examples



4titude  
TubeMarker 2  
4ti-0680-1  
CryoVial Test



1234567812

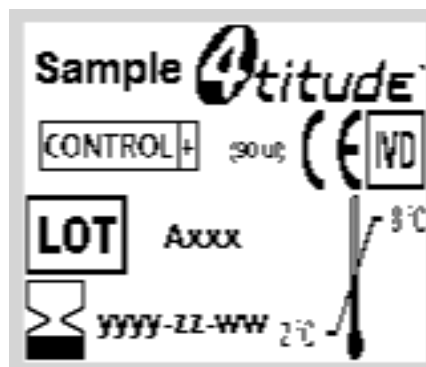
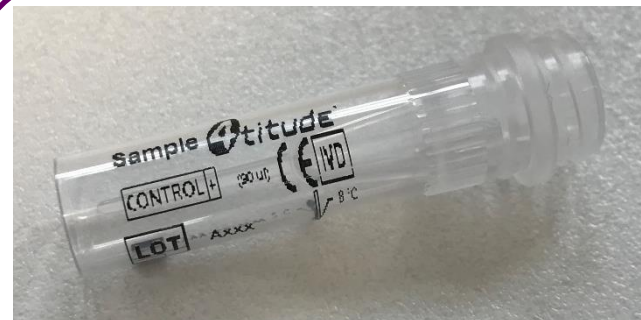
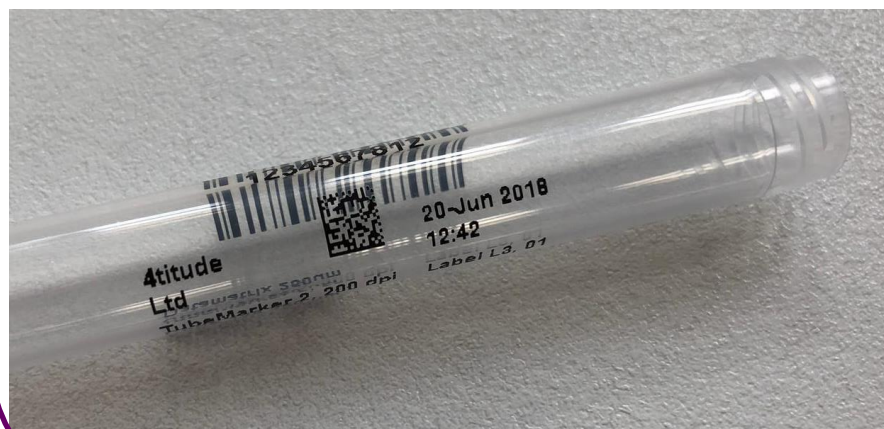
4titude  
Ltd



20-Jun 2018  
12:42

TubeMarker 2, 200 dpi    Label L3, 01

Code 128 250 um  
Datamatrix 250um



Sample 4titude

CONTROL+ 90us (E)VD

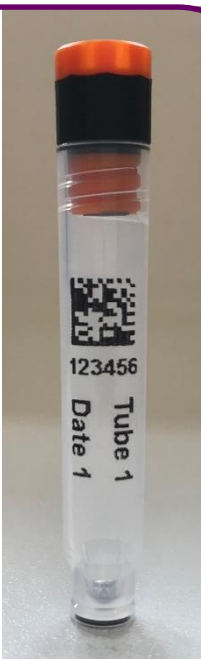
LOT Axxx 8°C

yyy-yy-zz-ww 2°C



123456

Tube 1  
Date 1



123456  
Tube 1  
Date 1

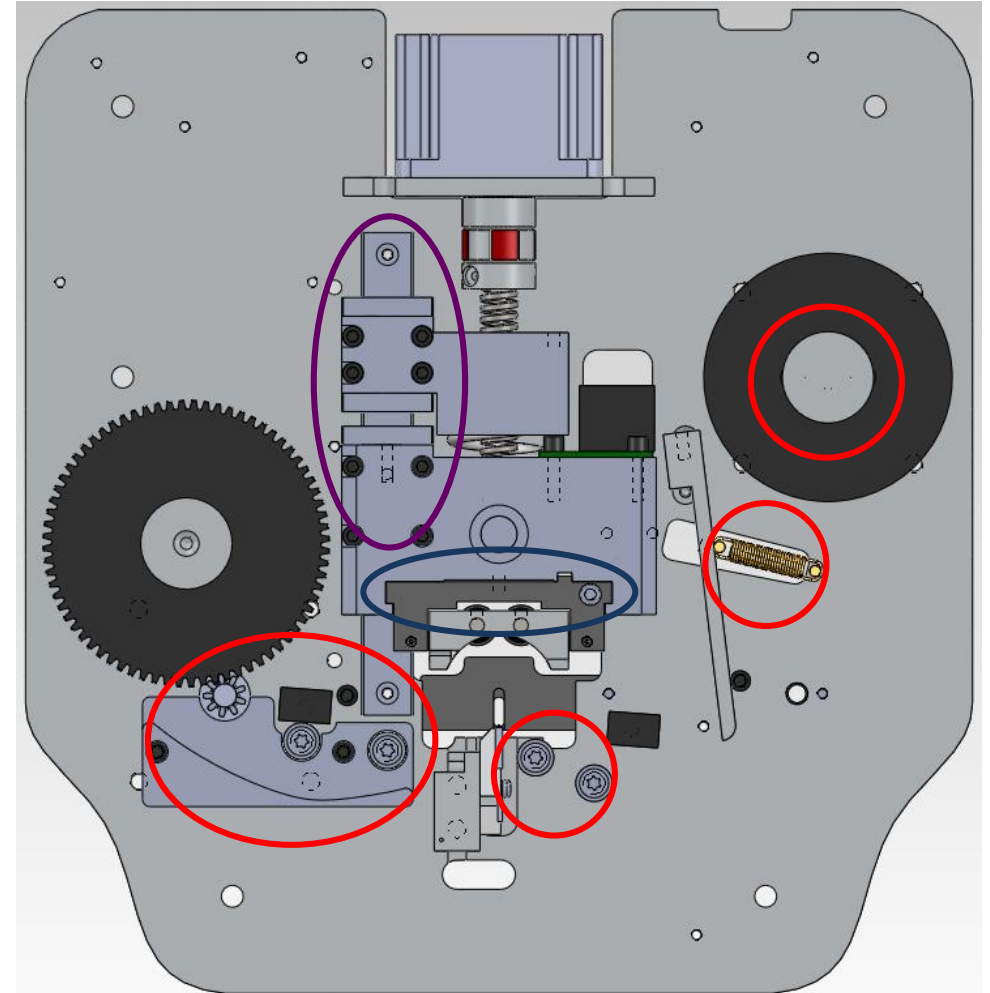
# Still to Come?

- **LIMS compatibility** – linked to database for data entry
- **Remote communication** – ability to integrate into automated platforms



# Hardware Improvements

- **Ribbon Pathway Re-designed**
  - spring lowered into chassis
  - right hand driver shaft lowered
  - Chrome ribbon guide posts
  - Cog protection and ribbon guidance
- **Pivot Point Ruler** — a visual reference for optimised pressure point, increased print reproducibility
- **Re-designed Sled** — mounted to linear guide bearing, reduces friction, increases accuracy and performance



# New Black Ribbon!

4ti-0689-1

- Recommended as our “go to” black ribbon
- Prints perfectly on our 4ti-0797 & 4ti-0798 Micro-centrifuge tubes
- Added to the range as alternative **NOT** a replacement to 4ti-0689
- Testing still required to ascertain best ribbon type

<b>New Black (4ti-0689-1)</b>	<b>Old Black (4ti-0689)</b>
<b>Compatible on a wider range of consumables tested by 4titude</b>	<b>Alternative to the 4ti-0689-1 in cases where it does not provide an optimum print. No guarantee it will improve results.</b>
<b>Superior Adhesion to white tampo printed labels (commonly found on 15 and 50ml centrifuge tubes)</b>	<b>100% DMSO resistant</b>
<b>Recommended on 4titude 1.5 and 2ml micro tubes. Superior and more consistent marking compared to 4ti-0689</b>	<b>Resulting print is “Blacker”/”bolder” than 4ti-0689-1</b>
<b>Superior adhesion on PET plastic</b>	

