command line interface

Pamgene Support 6/19/2019

Introduction

A user requirement for a pamservice tool to be used with

- exising ps12 instruments
- new ps12 instruments

The requirements cover the command line.

differences with the pamstation types

- new ps12 has one control board less (no wash board)
- new ps12 has an integrated barcode reader
- new ps12 has one dispense needle

command line

A command line interface to the pamstation 12

stage commands

```
home x y
load x y
x +20
x -20
home
x home
y home
enable all boards
read xy parameters
home
load
read
aspirate
dispense
frontpanel
incubate
get and set xyparameters
get all xyparameters
```

camera commands

```
go read
get image
look at image
change xy positon
flash( set )
...repeat
```

valves commands

```
open all valves
close all valves
close valve 1 2 3 4
read all values
pump up
pump down
pump valve 1 2 3 4 ( all other valves should be closed )
underpressure ( pump ) -0.2
overpressure ( pump ) 0.2
```

aspirate commands

```
aspirate ( value next to it )
needle up / down
```

disposable commands

```
temp position 1 / 2 / 3
temp overall
temp cover 1 2 3
temp bottom 1 2 3
```

dispense commands

```
Dispense 20ul default pos 2
```

service tasks (use cases)

The field engineer performs the following service task

- check valve leaks
- \bullet check chip leaks
- check dispensing system
- $\bullet\,$ check as piration system
- check temperature system

- check optics
- focussing the camera
- replace sensor

check valve leaks

check chip leaks

 ${\bf check\ dispensing\ system}$

 ${\bf check\ aspiration\ system}$

 ${\bf check\ temperature\ system}$

check optics

focussing the camera

replace sensor