

1. Perform an Initialization

Initializing the kiosk homes the X and Y position, which will reset the slot data to 0.

The screenshot displays the HAL Tester application window, which is divided into several functional panels:

- Output:** Displays inventory statistics (UNKNOWN slots: 0, EMPTY slots: 3), hardware status (ok), and boot logs. It includes buttons for 'Clear Output', 'Read Positions', and 'Open Error Logs'.
- Init:** Contains buttons for 'Init', 'Exit' (highlighted with a red arrow), 'Test Proteus Comm', 'Home X', 'Home Y', and 'Reset Proteus'.
- Boards:** Features buttons for 'Read Picker Controller Inputs', 'Read Aux Inputs', 'Close Serial Port', 'Turn Off Xchg Fan', 'Board Test', and 'Reset'.
- Vend Door:** Includes buttons for 'Rent', 'Close', and 'Check Status'.
- Other:** Contains buttons for 'Put In bin', 'Sync Unknowns', 'Hardware Check', 'Vertical Slot Test', 'Show Timeouts', and 'Read Controller Limits'.
- Sensors:** Shows six sensor status indicators (1-6) with corresponding 'Read', 'On', and 'Off' buttons.
- Rollers:** Includes buttons for 'In', 'Out', 'Stop', 'Roll To Sensor', and a 'Roll To Timeout(ms)' input field.
- Gripper:** Features buttons for 'Check for DVD In Slot', 'Extend', 'Retract', 'Rent', 'Sell', and 'Close'.
- Track:** Includes buttons for 'Open', 'Close', and 'Status'.
- Door sensors and others:** Contains buttons for 'Query Door Sensors' and 'Test deck 8'.
- Camera:** Includes buttons for 'Snap', 'Camera Settings and Preview', 'Get and Read', 'Turn Ringlight On', 'Reset CCF Counter', and 'Read Disk In Picker'.
- Movements:** A complex panel for controlling movements, including 'Source' (Deck/Slot), 'Transfer Destination' (Deck/Slot), and various action buttons like 'Go To', 'Put', 'Get', 'Sync Slot', 'Move to Vend', 'Transfer', 'Push DVD In Slot', 'Vend DVD in Picker', 'Pull DVD into Picker', and 'Put in Empty Slot'.
- X/Y Moves:** Includes directional buttons (Up, Down, Left, Right, Clockwise, Counter-clockwise) and a 'Without Sensor Check' checkbox.
- Configuration:** Includes buttons for 'Update Configuration', 'Deck Configuration', 'Unknown Count', and 'Configure Devices'.
- Status:** Displays the 'Tester Version' (1.12.1.64) and 'Kiosk ID' (56177).

2. Enter Deck Configuration

HAL Tester

Output

Inventory Stats:
UNKNOWN slots: 0
EMPTY slots: 3
Hardware status ok.
The kiosk is configured for door sensors.
The kiosk is configured for a VMZ.
WARNING: jobs are currently running or pending.
Boot init ended with status: COMPLETED
Checking for bootstrap init.

Clear OutputRead PositionsOpen Error Logs

Init

InitExitTest Proteus Comm

Home XHome YReset Proteus

Boards

Read Picker Controller InputsRead Aux InputsClose Serial Port

Turn Off Xchgr FanBoard TestReset

Vend Door

RentCloseCheck Status

Other

Put In binSync UnknownsHardware Check

Vertical Slot TestShow TimeoutsRead Controller Limits

Sensors

123456

ReadOnOff

Rollers

InOutRoll To Timeout(ms)

StopRoll To Sensor

Gripper

Check for DVD In SlotExtendRetract

RentSellClose

Track

OpenCloseStatus

Door sensors and others.

Query Door SensorsTest deck 8.

Camera

SnapCamera Settings and PreviewGet and Read

Turn Ringlight OnReset CCF CounterRead Disk In Picker

Movements

SourceDeckSlot

Transfer DestinationDeckSlot

Go ToPut

GetSync Slot

Move to VendTransfer

Push DVD In SlotVend DVD in Picker

Pull DVD Into PickerPut in Empty Slot

X/Y Moves

ClockwiseUpCounter-clockwise

LeftRight

Down

☐ Without Sensor Check
☒ X
☐ Y

Get With Offset

UpdateDeck Configuration

Unknown CountConfigure Devices

Tester Version:1.12.1.64

Kiosk ID:56177

3. Enter Fix Slot Alignment

The screenshot shows the HAL Tester application interface. The main window contains several sections: Output, Sensors, Movements, Boards, Vend Door, Other, and Camera. A modal dialog box titled "Deck Configuration Editor" is open in the center, displaying a table of deck configurations. A red arrow points to the "Fix Slot Alignment" button at the bottom of the dialog box.

Deck Configuration Editor Table:

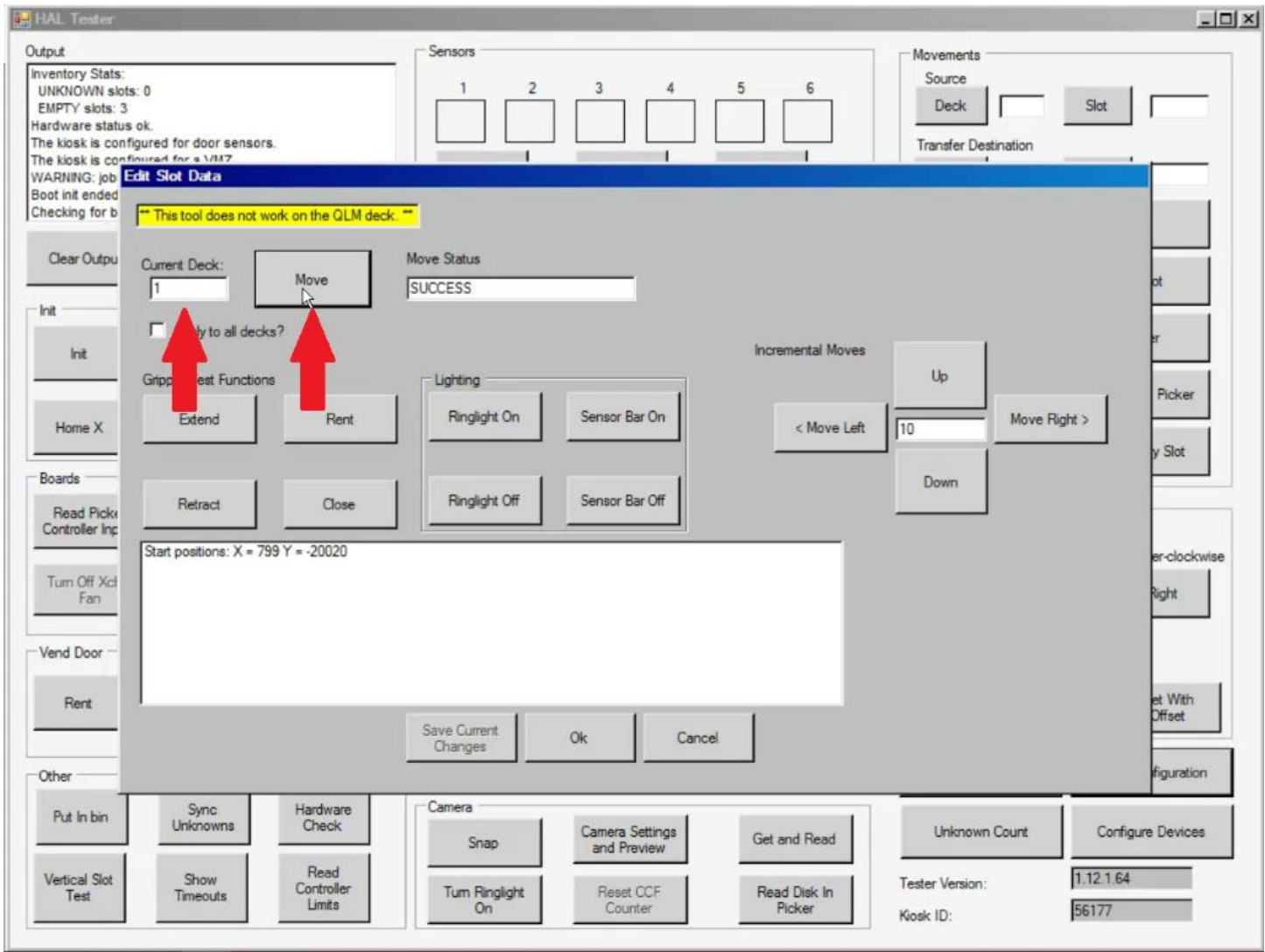
Deck #	Y Axis Offset	Slot Width	# Slots	QLM Deck?
1	-20020	166.6667	90	False
2	-64320	166.6667	90	False
3	-108680	166.6667	90	False
4	-153040	166.6667	90	False
5	-197360	166.6667	90	False
6	-241720	166.6667	90	False
7	-286120	166.6667	90	False
8	-377380	166.6667	90	False

Other Interface Elements:

- Output:** Inventory Stats: UNKNOWN slots: 0, EMPTY slots: 3. Hardware status ok. The kiosk is configured for door sensors. The kiosk is configured for a VMZ. WARNING: jobs are currently running or pending. Boot init ended with status: COMPLETED. Checking for bootstrap init.
- Sensors:** 1, 2, 3, 4, 5, 6. Read, On, Off buttons.
- Movements:** Source Deck, Transfer Destination Deck, Slot, Go To, Put, Get, Sync Slot, Transfer, DVD In Slot, Vend DVD in Picker, DVD Into Picker, Put in Empty Slot.
- Boards:** Read Picker Controller Inputs, Read Aux Inputs, Turn Off Xchgr Fan, Board Test.
- Vend Door:** Rent, Close, Status.
- Other:** Put In bin, Sync Unknowns, Hardware Check, Vertical Slot Test, Show Timeouts, Read Controller Limits.
- Camera:** Snap, Camera Settings and Preview, Get and Read, Turn Ringlight On, Reset CCF Counter, Read Disk In Picker.
- Buttons:** Clear Output, Read Positions, Init, Exit, Home X, Home Y, Read Picker Controller Inputs, Read Aux Inputs, Turn Off Xchgr Fan, Board Test, Rent, Close, Status, Sensors, Update Configuration, Deck Configuration, Unknown Count, Configure Devices.
- Tester Version:** 1.12.1.64
- Kiosk ID:** 56177

4. Check Slot Alignment

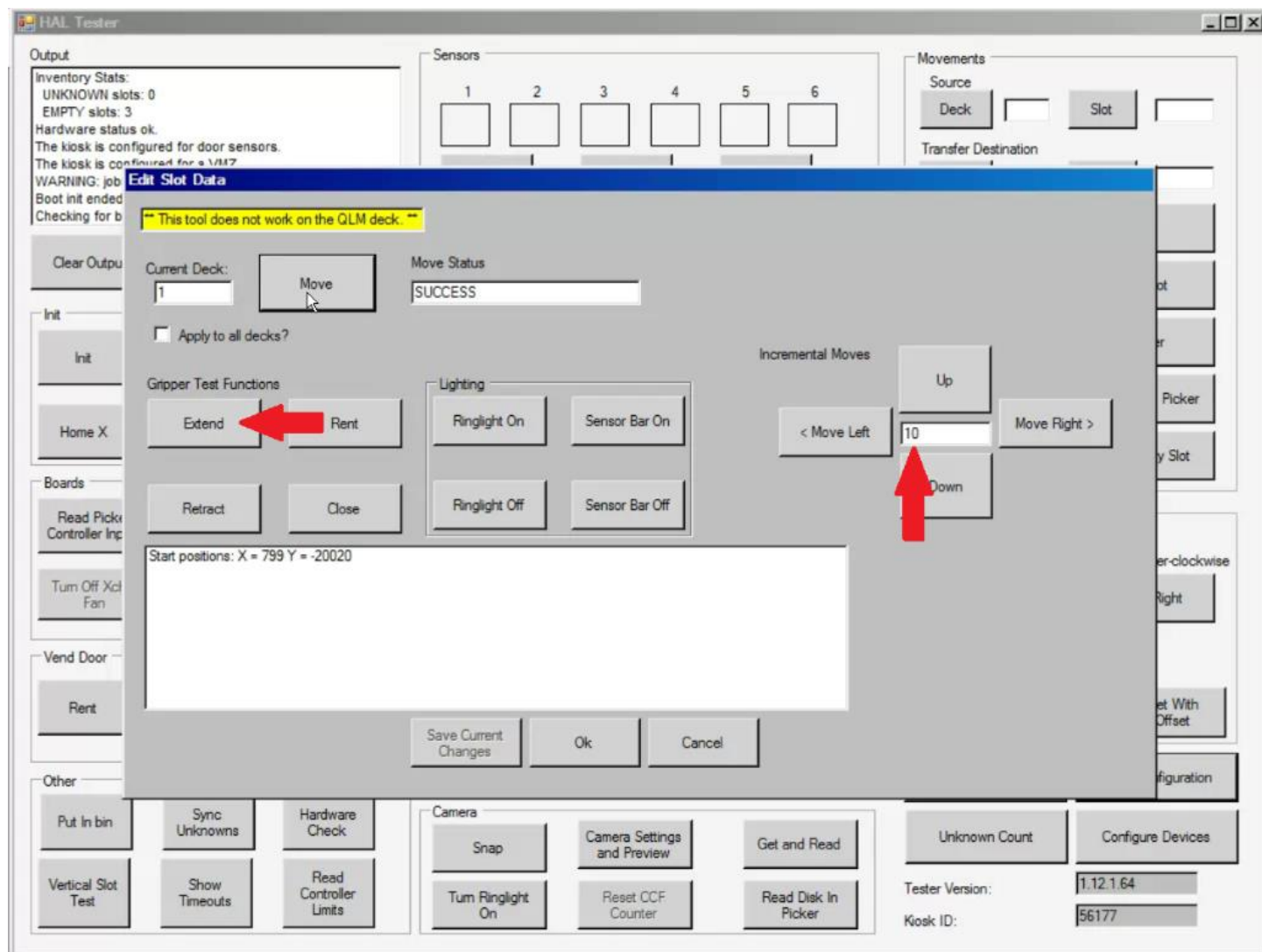
Here we can adjust slot data. Enter the deck you need to go to and click 'move'.



5. Adjust Slot Alignment

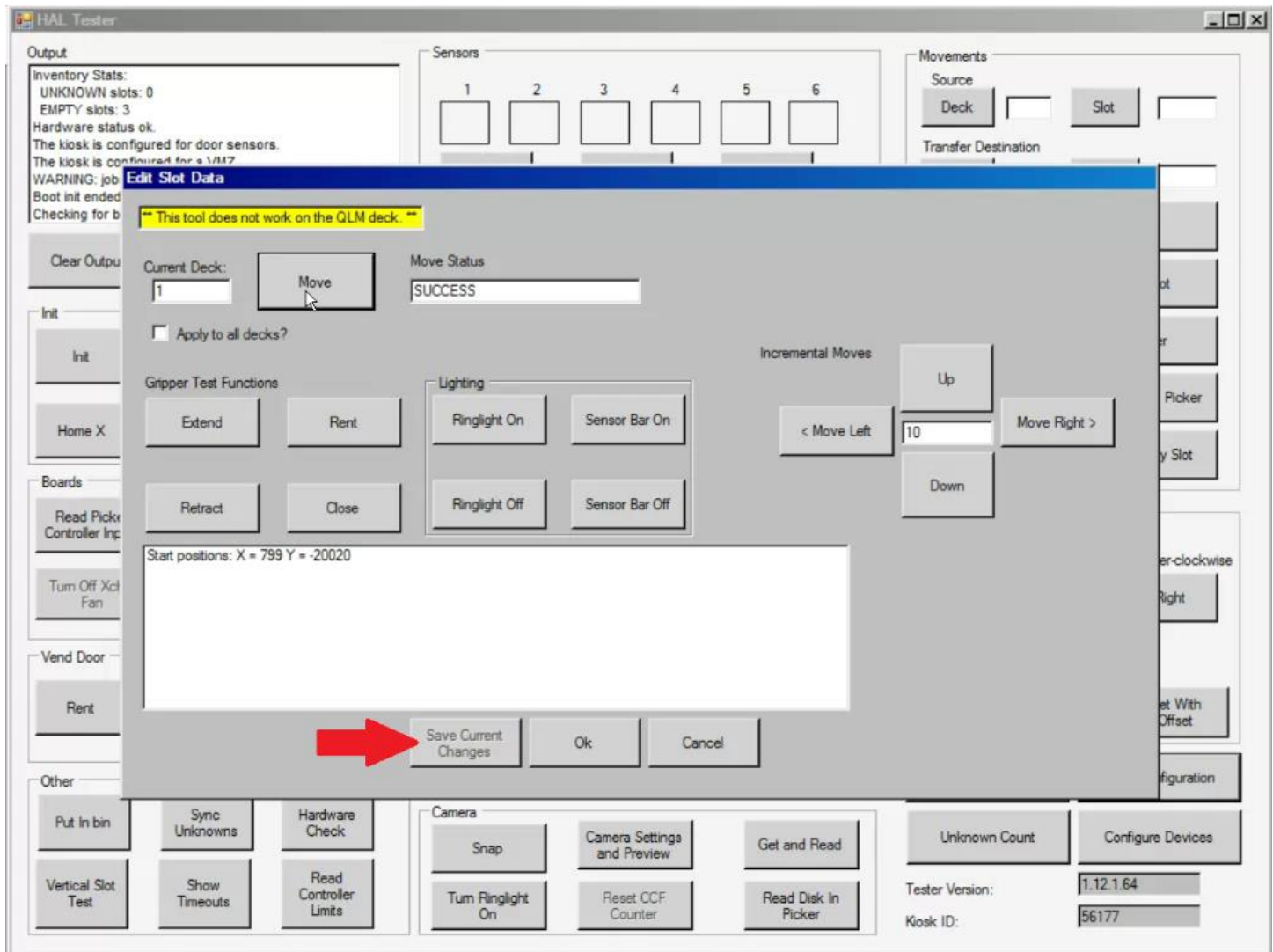
Once arriving at the slot, extend the grippers and look down the picker and decide which way and how much the drum needs to be moved. Type that number into the 'incremental moves' box, click 'move left' or 'move right' depending.

NOTE: Deck 8 will default to slot 2, all other decks are slot 1



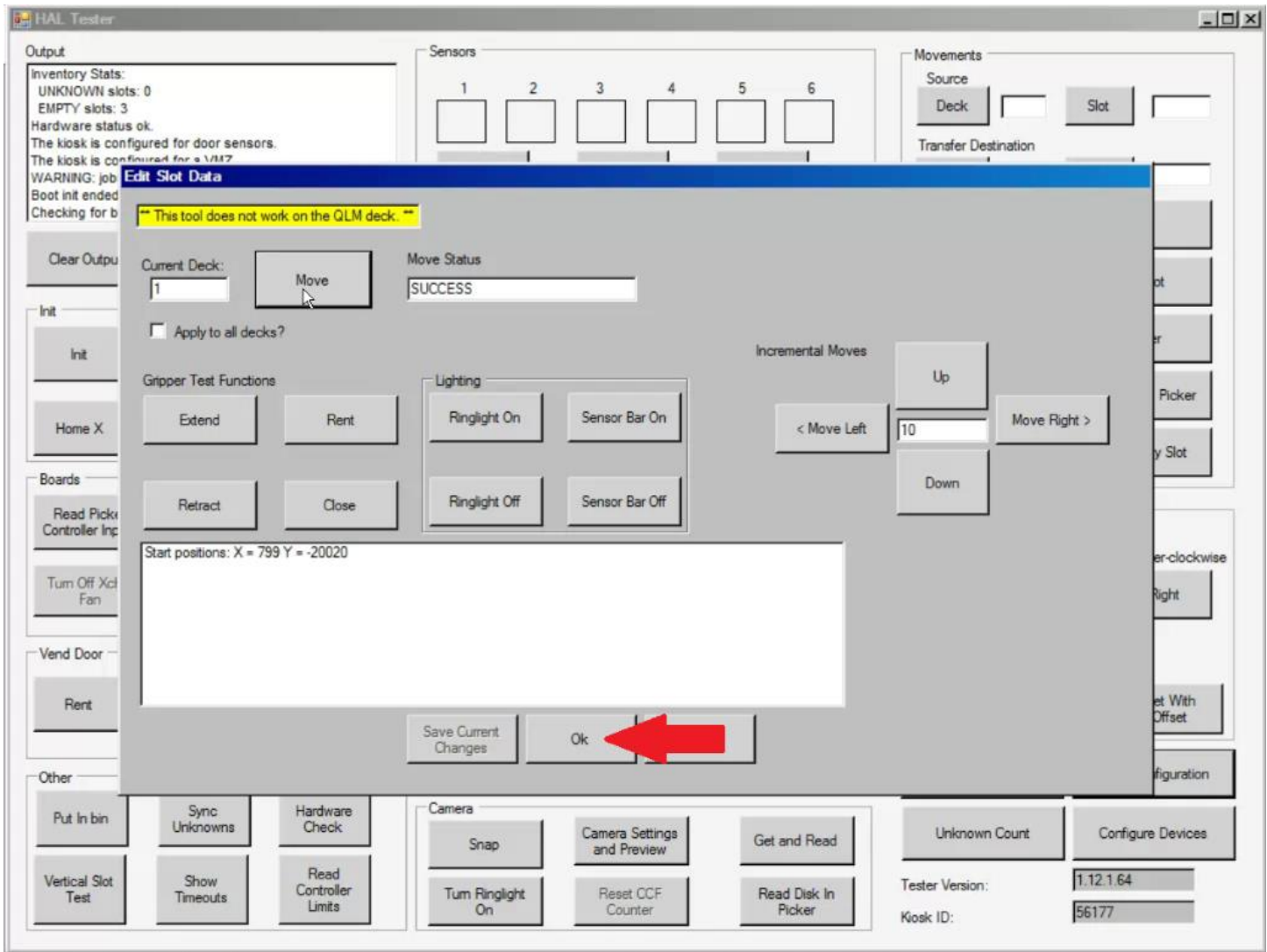
6. Check and Confirm Slot Data

Confirm the slot data is correct with the FST, make further adjustments if needed. Once finished, click 'save current changes'.



7. Repeat Steps 4 – 7 for all Decks that need Adjusting (Note: Deck 8 will default to Slot 2, all other slots default to Slot 1)

8. Exit Slot Data Tool



9. Perform Vertical Slot Test

Repeat process if necessary