Q-Logic 3 Advancements: A Drive Control Evolution
0.3 CEU/3.0 CEC

Q·LOGIC 3
Advanced Drive Control System

Satisfactory Completion Requirements
As a learner….

1) Sign-in.
2) 100% Attendance requirement
3) Sign-out
4) Required to complete an evaluation form on the day of the event.

- Failure to abide by any of these will result in no credit.
- A learner must sign-in, sign-out, and complete an evaluation form to get a Certification of Completion.
- *If one item is missing, it will be treated as if the learner was never in attendance.*

No partial credit will be awarded.

Course Learning Objectives

- The participant will be able to name three clinical benefits the Qlogic 3 system offers to consumers.

- The participant will be able to name three new programming features that will benefit specialty control users.

- The participant will be able to list two the benefits that the iAccess module offers to consumers
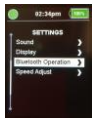
How to Connect Bluetooth to Q-Logic 3 the First Time
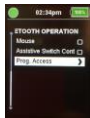

Connecting Bluetooth the First Time

- Follow these steps to make Bluetooth visible before pairing your computer or tablet for programming access.
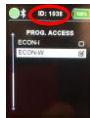

Give a left input command with the input device

Give a right input command with the input device once Bluetooth Operation is highlighted.

Give a right input command with the input device once Prog. Access is highlighted.

Give a right input command with the input device once The Econ you are using is highlighted.

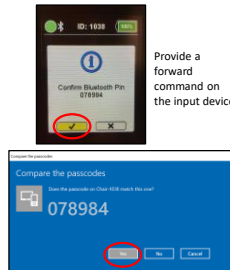## Connecting Bluetooth the First Time

Connecting Bluetooth the First Time

• Find the correct number for the chair (the number is listed on the display of the chair at the top of the display screen). Click on the correct device and provide a left mouse click on the pair button
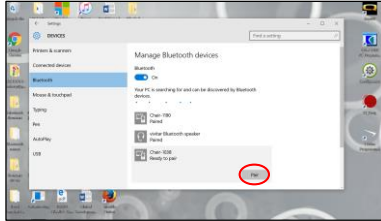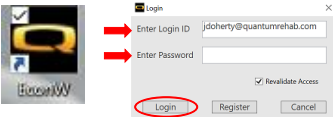
Connecting Bluetooth the First Time

• Next always click yes that the passcode matches the chair.

• Then in a few seconds the display on the chair will show Confirm Bluetooth Pin and the number. Provide a forward command to accept.

• The Chair is now paired and will remain paired until you delete the Bluetooth connection from your computer.

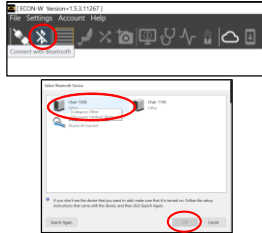Provide a forward command on the input device

Connecting Bluetooth the First Time

• Double click on the Econ-W Icon on your desktop to open the program.

• The user must have registered with the cloud in order to login.

• When the login window appears type in your Login ID and Enter the password.

• Then click Login

Connecting Bluetooth the First Time

- Next Click on the Bluetooth icon at the top of the programming station.

- When the select Bluetooth device screen appears single click on the correct device number (it should match the chairs device number).
- Then click ok at the bottom of the screen.

Connecting Bluetooth the First Time

- Click Yes on the computer when the compare device passcode window appears.
- Then in a few seconds the display screen will show the screen on the right. Provide a forward command on the input device and the Econ is paired.
- If the System was already paired these steps will not be necessary

Provide a forward command on the input device

So What Specialty Control is Correct for My Client?

- Proportional input with hand
- Proportional with other body part (arm, foot, chin, etc.)
- Switches with hands
- Switches with head (head array or other device)
- Switches with multiple body parts
- Pneumatic switches
- Single switch scanning

Proportional Drive Control

Speed is proportional to the input given to the control system (Gas pedal)

- Variable speed
- 360 degrees of control
- Greater fine tuning for course correction
- Increased coordination
- Optimal control
– Traditional Joysticks
– Chin Controls
– Mini-Joysticks
– Touch pads

Proportional Hand Control

- Misconceptions:
  - Can only use the hand control as a standard joystick.
  - Options that are available with Q-Logic 3
    - 3 Direction profile
    - Center Deadband
    - Tremor Suppression
    - Re-assign direction
    - Throw
  - All of these parameters plus programming the speed parameters will provide a very customized outcome for the wheelchair user.

Clinical Scenario

- The individual you are working with has lost the ability to deflect the joystick forward. They can still pull the joystick knob rearward, and can achieve a right and left deflection of the joystick as well. They would like to continue to use the standard joystick to drive the power wheelchair.

- What Q-Logic 3 programming features are available to resolve this issue?

Proportional Hand Control

- **3 Direction profile:**
- Turns the joystick into a 3 direction joystick. This takes away forward and reverse command on the joystick to control forward and reverse with a toggle arrow. The direction of the toggle arrow is controlled with a quick reverse command and release.
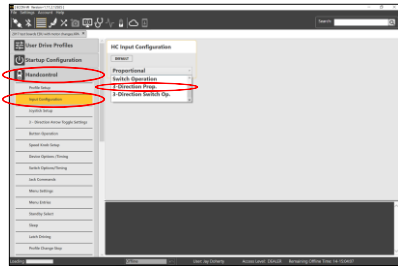
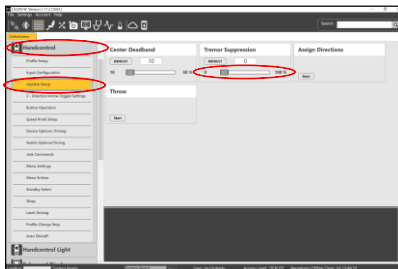## Proportional Hand Control

- **Center Deadband:**
- Increases the neutral zone of the joystick.
- This area starts out at about the size of a dime and increases to the size of about a half dollar.
- Useful for people who have difficulty getting stabilized on the joystick without accidentally hitting the joystick.
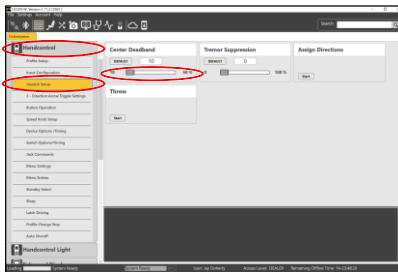
Proportional Hand Control

- **Tremor Suppression:**
- Increases the time that must pass (in fractions of a second) before the wheelchair will respond to a turn command while driving forward.
- This is helpful for people with upper extremity weakness. When they are driving over rough terrain.
- Decreases how quickly the wheelchair responds to a turn command.
- Useful for people with higher SCI's, ALS, MS, MD, Etc...
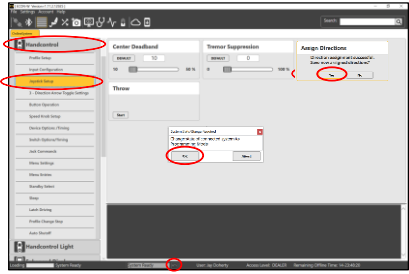
Proportional Hand Control

- **Re-assign Direction:**
- Allows the person programming to assign what deflection of the joystick will perform what wheelchair movement.
- This is helpful when someone starts to weaken or has weakness which impacts their ability to drive the wheelchair in a certain direction.
- The system will only ask you for reverse and left because forward must always be opposite reverse and right must always be opposite left.
- Useful for people with higher SCI's, ALS, MS, MD, Etc...

Proportional Hand Control

- **Joystick Throw:**
- Allows the person programming to assign how far the joystick must move to provide a maximum speed input into the wheelchair.
- The maximum you can reduce throw to is 30% of throw.
- This can allow a wheelchair user to use the joystick for a longer time.
- A good rule to follow is when a person reaches 60% of maximum throw, you should start evaluating for an alternative input device.
- You will need to type in the parameter value once you see what it is in actual throw.
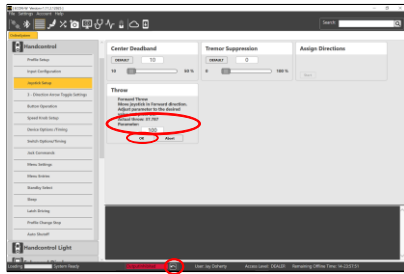
Utilizing the Programming Available to Fine Tune a Proportional Control

Tim
- Muscular Dystrophy
- Tim reported that he was having problems going reverse and right.
- The joystick position in the picture is exactly where the joystick must be located for the functional movement Tim has available.
- Tim also requires a very subtle forward and back motion of his trunk to drive his power wheelchair.
- The joystick being utilized is a stand alone Q-Logic hand control.

Tim After Programming Adjustments were Made

- Adjustments to the electronics made:
  - Reduced the right joystick throw to 30%
  - Reduced the reverse joystick throw to 30%
  - Note: *30% is the smallest throw available in the Q-Logic system*
  - Increased the turn acceleration from 30% to 45% to allow the chair to react to a turn command faster from a stopped position.
  - Increased the turn speed rate to 40% to allow the wheelchair to react to a turn command faster while driving.
  - Also had a discussion that it is time to think about moving to an alternative joystick or to a mini-proportional joystick.
  - Timmy felt that was giving up, I told him I thought he needed to view it as saving his independence.

Outcome for Tim

- After a few weeks of driving Tim found he is still having problems driving with the stand alone proportional joystick later in the day.

- The team is reassessing other proportional options. The team tried a Stealth mini proportional and the Switch-It Micro-guide. The Micro-guide worked well for driving but his hand came off the joystick when he used tilt.

- The team has another appointment to assess further use of tilt with the micro-guide or to look at other input methods as an option.

- Possible future options are fiber optic linked driving or single switch driving but Tim must be involved in this decision and come to terms with the changes in order for the team to proceed.
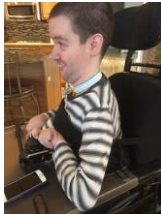

Scenario

- The individual you are working with does not like going to the seat profile to change their position and utilize their tilt and recline system. They are requesting another way to change their position.

- What is available in the Q-Logic 3 system to allow this individual to control their tilt and recline system?

Handcontrol Options

- Key I and Key II buttons custom setup:
  - Click on Handcontrol
  - Then click on Button Operation
  - **Key I and Key II:** Can be set to: Disabled, Drive 1, Seat, Aux Menu and Custom MIO
  - To customize the I and II keys follow these steps.
    - Click on the drop down menu for Key I
    - Click custom MIO from the list.
    - Do the same for the Key II button as well.
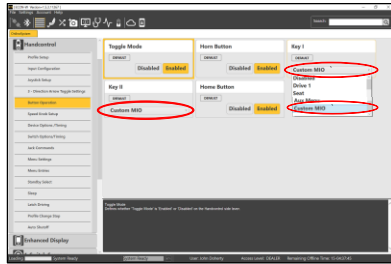
Handcontrol Options

- Key I and Key II buttons custom setup:
  - Click the MIO button
  - Click the Plus Button
  - Then click the drop down under Device to choose a device.
  - Click the drop down under input choose input to use.
  - Click the drop down under Output. Choose function to assign.
  - If you desire to program another custom feature into Key II then click on the plus button.
 - When done click the save icon.
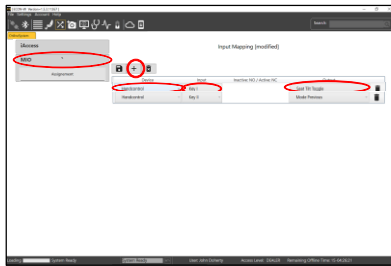
System Benefits – iAccess

- The iAccess module can be programmed with 1 to 19 different functions, ranging from

  - Seating
  - Lighting (if full LED light kit is on chair)
 - Bluetooth mouse clicks, home function, mode function, etc…

iAccess Programming

- To customize the iAccess function in Q-Logic 3.
  - Click on the Mapped Mio support icon on the tool bar.
  - Next click on The iAccess button.
  - The screen will change to what you see to the right.
  - With iAccess you have a choice of having just four features to control or as many as 19 features.
  - Leave the drop down box set to single page mode for 4 features and to have more features available click on the drop down menu box and choose
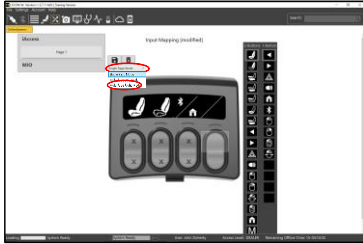
iAccess Programming

- To customize the iAccess function in Q-Logic 3.
  - Since you have the chosen either multi page right mode or multi page left mode the screen will change to what you see to the right.
  - First click on the page 1 button to make changes to this page.
  - Choose whether you want one function for both buttons or one function per button.
  - Then click and drag the function you would like to assign to the button (not the screen) that you want to assign it too.
  - To program another page click on the desired page to program
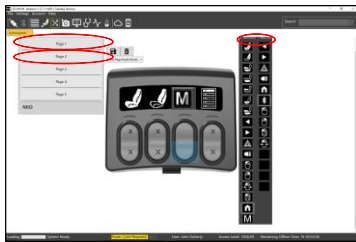
iAccess Programming

Programmed as a 2 button function

Programmed as a 1 button function

- Please program the iAccess on your boards to look like the two pages we have pictured above.

Clinical Scenario

• The person you are working with has progressive weakness during the daytime. About mid-day they find that they can no longer control their joystick (hand control) with their hand due to weakness and fatigue. They are adamant that they do not want to give up driving with a proportional input device.

• What specialty control will likely best meet this individuals needs and why?

Basics of Why Proportional or Why Non-Proportional?

• Proportional control is going to give the best total control if the person has strong enough active movements.
  • Some ways to use proportional
    • Hand (obvious one)
    • Minimal movement with the fingers or hand (placement is often critical)
    • Foot control
    • Forearm control
    • Head (chin and actual head control)
• Non-proportional is not going to give the same fine tuning of control but will give independence.
  • Non-proportional is going to require much more programming.
    • Speed parameters are critical for optimal control.
  • Mounting is very critical since switch location often dictates success.
  • Special features in the electronics often lead to greater level of independence.
    • More than one function for a single switch can often lead to greater independence.

Proportional Chin Control

• Proportional chin control allows the individual to continue to drive with proportional control over the power wheelchair.

• Proportional control optimizes driving by allowing the individual to modulate speed and direction of the power wheelchair optimally.

• With the many mini proportional joysticks on the market today you have many options available

• Think about how much force is needed to deflect the joystick.

• The mini joysticks small size prevents large movements being needed for control.

• Small size allows it to be easily mounted

Stealth Micro joystick
10 grams force


Stealth mo-Vis multi-joystick
50 grams force

Stealth mo-Vis All-Round Lite
130 grams force

Switch It MicroPilot 10 grams force

Mini Proportional Joystick Programming

- Plug the Mini Proportional Joystick into the Enhanced Display Module.
- Click on "Enhanced Display"
- Click on Input Configuration
- Select Mini Proportional from the drop down.
- Click on the little arrow next to "Programming Mode" to change the status back to "System Ready"
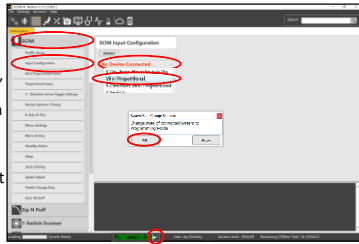
Scenario

- From day to day a consumer has a varying degree of weakness. Some days this individual can use a joystick(hand) and other days they need to use a chin control.

- How can you setup the power wheelchair to accommodate the day to day needs of this individual?
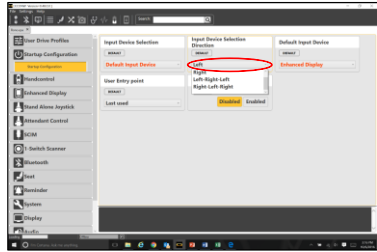
Startup Configuration

- Click on Start up Configuration
- Click on the pull down window under input device selection.
- Choices are:
  - Default Input Device
  - Last device used
 - Input Device Selection Screen
  - Power On Device
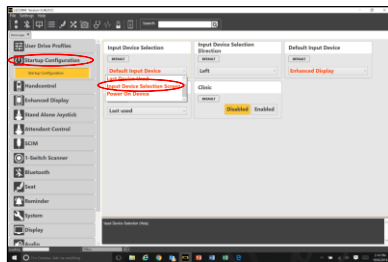
Startup Configuration

- Input Device Selection Direction: when input device selection screen is chosen for input device selection
  - Left
  - Right
  - Left-Right-Left
  - Right-Left Right
- Choose which directional command will be used to choose the device that will control the power chair.
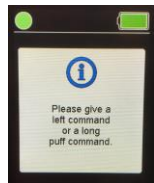

Startup Configuration

- If Input Device Selection is set as Last used then however **User Entry Point** is set is where drive screen that the system will start at. The choices are:
  - Home
  - Drive 1, 2, 3, or 4
 - Input Device Selection
 - Auxillary
  - Seat
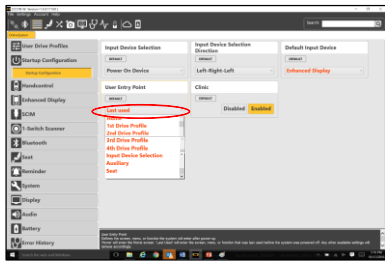
Startup Configuration

After powering the wheelchair on these screens will appear. The individual using the wheelchair will provide a left command on the input device they desire to utilize to control the power wheelchair.

Changing Input Device Programming

- Click Enhanced Display
- Click on Menu Entries
- Click Enabled on the Show Change Input Device.
  - This allows the user to go into their Auxilary menu and choose which input device they would like to use when they are fatigued.
 - Any devices that is programmed as an input device in the Q-Logic 3 system can be chosen from this menu
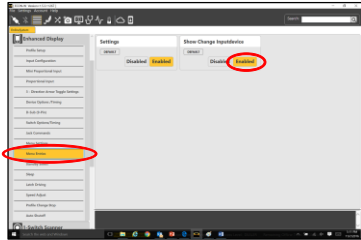
How to change input device without powering the wheelchair off
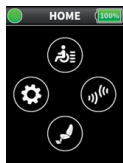
Provide **two Left** commands or a right command on the home screen or provide a mode command until you reach the Auxiliary screen.

Highlight the change input device function and provide a right input on the input device.
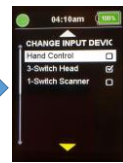
Highlight which device you desire to use and provide a right command on the input device.

The input device that is checked on the screen is now in charge of the system.

Scenario

- The individual you are working with is having difficulty with driving forward with their proportional chin control. The chin control keeps slipping while they are driving and they are getting frustrated. The individual can pull into reverse with no difficulty.

- What programming is available to resolve this situation for this individual?

Mini Proportional Joystick Programming

- **3 Direction profile:**
- Turns the joystick into a 3 direction joystick. This takes away forward and allows a reverse command on the joystick to control forward and reverse with a toggle arrow. The direction of the toggle arrow is controlled with a quick reverse command and release.
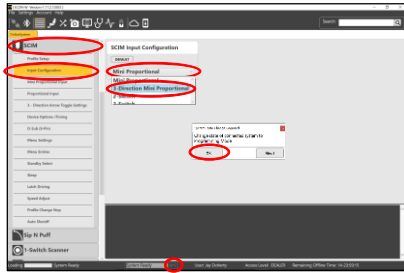
Case Study Zoe

- Diagnosis: Tetra-Amelia Syndrome (Congenital Lack of All Extremities)
- Age: 17 years old
- Secondary medical conditions: Chronic Lung disease, Ciliary Dyskinesia, Difficulty regulating temperature.
- Goals: To allow Zoe to be independent in as much of her daily life as possible including management of her medical conditions.
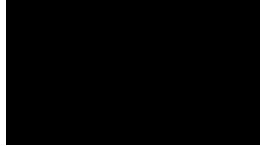

Case Study Zoe

- Technology Zoe requires for independence:
  - Chin control for control over the power wheelchair.
  - Power boom (chin control, mouth stick and Smart phone are mounted on boom).
  - Switch on headrest to control power booms movements.
  - Mouth stick for access to her phone.
  - Bluetooth for access to her tablet through her chin controls for her school work.
 - Infrared for access to television at home.

Case Study Zoe

- Zoe controls her main power boom through a switch mounted on her head rest.
  - This boom has her enhanced display, smart phone and proportional chin control mounted on it.
- Her wheelchair also has an ECU module which she uses to control:
  - Her power boom with her tablet which she uses for school work.
  - Her fan which she uses to regulate her body temperature.

Case Study Zoe

- Zoe driving her power wheelchair with her proportional chin control.
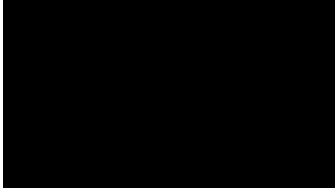
Scenario

- You are working with a consumer who has good head control but does not like using a chin control. He has no other consistent movement anywhere in his body.

- What is the best input device for this individual?

Head Array

- We are all familiar with head arrays.
- Some factors to think about are:
  - How programmable is a head array?
  - Can we fine tune the head array if the consumer changes?
  - Can we change the inputs in order to continue to meet the persons needs if they have a progressive condition which is going to change?
- What is available
  - Tri Arrays
  - Pro Series

Startup Configuration

- **Clinic Mode:** This allows a clinician or ATP to quickly setup a demo chair.
  - Hold the On switch in the forward position for 5+ seconds and the Q screen will come on.
  - Then the therapist or ATP will choose which device they want to access (for what is plugged into the system): Enhanced Display, Handcontrol, SCIM, Sip-n-Puff, 1-Switch Scanner, etc
  - Then the therapist or ATP choose what type of device they will be using.
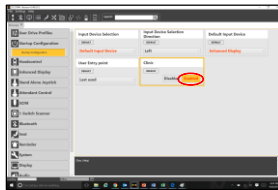
How to Access Clinic Mode

- Next follow the steps to choose the device you wan to use as the input device.
- The first screen you see will offer you to use whatever mode you wan to choose. Keep in mind 1-Switch Scanner is not a module it is a programmable feature.
- Then choose what type of device the input device is.
- Then choose how the device will be programmed.
- In the example on the right we chose 3-Switch Head which allows the wheelchair to be setup in a 3-switch head array configuration to start with.
- Clinic mode is a quick way to setup for an evaluation.

Head Array Programming

- To assign a Head array as your input device you first click Enhanced Display or if a SCIM is being used choose SCIM.
- Next Click on Input Configuration.
- Click on the drop down Menu on the ED Input Configuration box.
- Choose which input device is to be used on the Enhanced Display module.
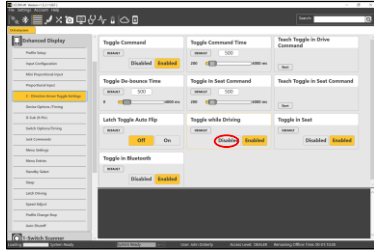

Scenario

- The person you are working with understands that they can change the directional arrow to control forward and reverse. They are having problems when driving with the directional arrow flipping unintentionally. This happens more frequently as the day goes on due to fatigue.

- What programming can be preformed in the Q-Logic 3 electronics to solve this issue?

Head Array Programming

- Setting up for a 3 switch Head Array input device.
- Click 3-Direction Arrow Toggle Settings.
- **Toggle Command:** Allows the directional arrow for forward and reverse to be changed with a short command on the rear head array pad.
- There are two ways to set the toggle time. It can be set manually or the consumer can teach it to the system.

Head Array Programming

- Setting up for a 3 switch Head Array input device.
- Click 3-Direction Arrow Toggle Settings.
- **Toggle While Driving**: If disabled then the directional arrow cannot be flipped until the wheelchair comes to a complete stop.
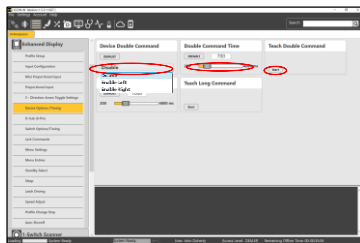

Scenario

- The person you are working with does not have any other input option other than the three pads on the 3-switch head array. An additional switch site is not an option. They need the ability to change drive profiles independently.

- What programming can be performed in the Q-Logic 3 system in order to provide this function to the consumer?

Head Array Programming

- Setting up for a 3 switch Head Array input device.
- To setup **Device Double command**:
  - Click on Device Options/Timing.
  - Click on how you want the consumer to change their drive profile.
    - Choices are enable left or right.
  - **Double Command Time**.
    - Allows us to set the length of time the consumer has to provide a double command.
    - To set this click and slide the bar in the Double Command Time box.
    - Second option is to use the teach Double Command.
    - Click on the start button and follow the direction provided.

Scenario

- A consumer you are working with is using a head array to drive the power wheelchair. They would like to be able to turn the wheelchair on and off and control toggling the directional arrow and mode all through a separate switch. They have only one additional switch site which they have consistent access too.

- What programming is available in Q-Logic 3 in order to meet this individuals needs?

Head Array Programming

- Setting up for a 3 switch Head Array functions.
- Mode Jack Configuration Type: You have two types of Configurations.
  - Jack Configuration: Allow the mode jack to use a short, double and long command for mode jack functions.
  - Mapped MIO: Allows other features to be programmed into the jack such as power seat functions, Light functions (when lights are available on the system), mouse clicks and shortcuts to mode, home and auxiliary functions.
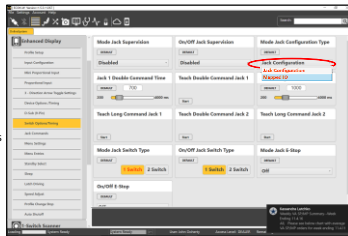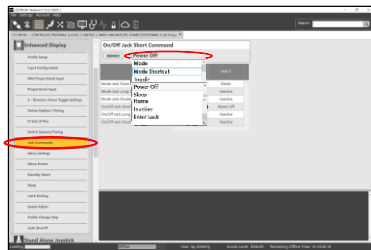

Head Array Programming

- Setting up for a 3 switch Head Array functions.
- Jack Commands: This is where you can custom chose what function is performed by what jack in the Enhanced Display and how it is achieved.
  - Click on Jack Commands
  - Click on the item under Jack 1 you would like to assign the function too.
  - Click on the drop down menu
  - Choose which function you want to assign.
  - Then click on each Command under Jack 1 to assign a function to a command. Follow the above instruction for each command.

Head Array Programming

- Please setup Jack Commands screen to look like what is pictured to the right.
- Then plug your single switch into the on/off jack of the display and try the different features.
- You can also plug a switch into the mode jack to try the home command as well.
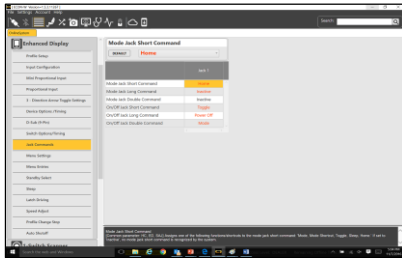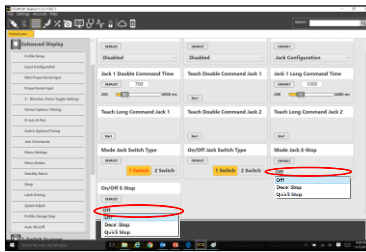
Scenario

- The consumer you are working with has an extra switch location on their body. They are using latch and have asked if there is an easier way to stop the latch function other than a reverse command.

- What programming is available in Q-Logic 3 in order to meet this individuals needs?

Head Array Programming

- Setting up for a 3 switch Head Array functions.
- Mode Jack E-Stop:
  - Options are:
    - Off: Which means the E-Stop will not function.
    - Decel Stop: The wheelchair will come to a gradual stop using the deceleration that is set in the profile.
    - Quick Stop: The wheelchair will come to an abrupt stop.
- On/Off E-Stop is the same but it is used with the on/off jack switch jack.
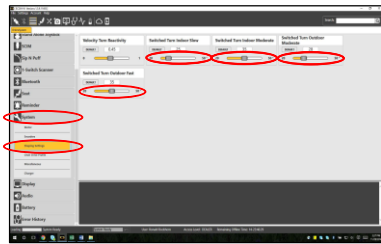
Scenario

- The consumer you are working with would like to be able to make tighter turns at slower speeds and wider turns at higher speeds.

- What programming can be performed in the Q-Logic 3 system in order to meet this need?

Switched Turning Adjustments

- Turning adjustments for Switched input devices.
  - Allows the speed and tightness of the turn to be adjusted for the individual you are working with.
  - Go to System
  - Shape Settings
  - Can adjust each parameter individually per profile setup.
  - Available upon Launch of Q-Logic 3.

Scenario

- The consumer you are working with is unable to consistently utilize any of the input devices you have tried. They only have one consistent movement in their body. You find you can mount a single switch at that location.

- What programming can be performed in the Q-Logic 3 system in order to meet the needs of this individual?

Switch Driving

- Client can utilize 5, 4, 3, 2, or 1 switch to control the direction of the power chair.
- **5 switches** provide the client with forward, left, right, reverse and mode.
- **4 switches** provide forward, Left, Right, Reverse, and the left switch provides mode changes with a double command.
- **3 switches** provides forward, Left, Right, Reverse with a quick tap of the forward switch to change the directional arrow on the display to reverse, and a double command on the left switch provide a mode change.
- **2 Switches** allows the user to drive right with a single hit/hold of the right switch, drive forward with a double hit and hold of the right switch, drive left with a single hit/hold of the left switch and drive reverse with a double hit and hold of the left switch.
- **1 Switch** allows the client to use a built in scanner in the enhanced display to drive in either 4 directions or 8 direction.

Switch Driving

- Switched/non-proportional are the other options available to continue to provide an individual with independence.
- What is available?
  - Switches placed at any body part.
  - Switches at multiple body parts where they have a consistent movement.
  - Switches at the head.
  - Pneumatic options (sip n puff).
  - Single switch scanning.
- Remember that driving parameters are even more important to fine tune when dealing with a non-proportional input. You will likely also setup the wheelchair with all 5 drive profiles.
  - Three profiles for driving indoors and outdoors, one for auxiliary functions and a fifth for seating controls.

When to Use Switches

- When a proportional control fails to provide adequate access, switches can be the next best access method for direct control of a power wheelchair.
  - Keep in mind that 2 switches can be pressed at the same time to create a veer command for the wheelchair.
- When evaluating for switch access you should always evaluate for 5 switches first (then down to 4,3,2, & 1) because it provides the most control options.
- Keep in mind that you can place switches anywhere on the body. If the individual has a consistent movement at an extremity then consider that extremity a possible switch access site.
- Think about the forces needed to activate the switch or switches.
  - Will the individual be able to sustain use of the switch all day long?
  - Will mechanical or electronic switches be needed?

Linked Driving

- The gentleman in the video has ALS.
- He drives his power wheelchair with knee external rotation and two pads at the outsides of his knees with proximity sensors built into the pads.
- The system is setup as a 3 switch input device even though he is only using two switches.
- The right switch turns right, the left switch turns left and when both pads are contacted the wheelchair drives forward.
- This can work very nicely as an alternative that can last much longer than a head array for individuals who have ALS.
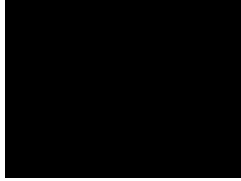
Andrew

Andrew at 5 years old driving his wheelchair and using the built-in Bluetooth mouse for computer use at home and at school.


Switch Programming

- 1-Switch Scanner
- The first thing to setup is the **single switch scan order** for each profile.
  - Click on the 1-Switch Scanner button.
  - Click on the 1-Switch Scanner Settings button.
  - Click on the Profile 1 Assign Scan Order Start button.
  - Click Okay on the Change State of connected system.
  - Click on the drop down menu. Then choose the scanning order desired for this profile.
  - There are 8 pre-setup scanners to choose from 4, 1-step scanners and 4, 2-step scanners
  - Once done Click the OK button
  - You can continue to program profile 2 the same way by clicking on the Profile 2 Assign Scan Order drop down menu and choosing the scanning order desired.
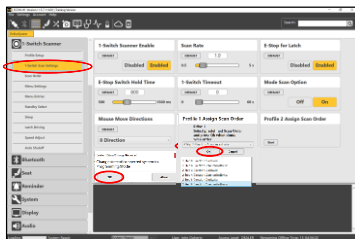
Switch Programming

- 1-Switch Scanner
- The first thing to setup is the **single switch scanner Enable** to function.
  - Click on 1-Switch Scanner
  - Click on 1-Switch Scan Settings
  - Click enabled in the 1-Switch Scanner Enable box.
- **Scan Rate Setting**: Allows you to control the speed the single switch scanner scans.
  - Click on the Scan Rate box slide bar and move it to the desired speed.
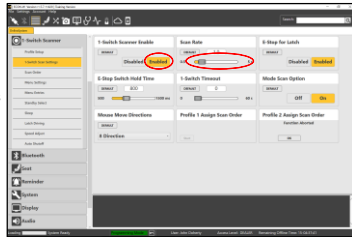

Scenario

- The consumer you are working with has been using one of the standard 1-Switch Scanner layouts that are already found in the Q-Logic 3 system. They find that there are directions on the scanner that they don't really use. You would like to provide a scanner that is more efficient with less stops on the scan pattern.

- What programming can be performed in the Q-Logic 3 system in order to meet the needs of this individual?

Switch Programming

- 1-Switch Scanner
  - **Scan Order**:
  - To set this up please duplicate what you see in the screen shot on the right.
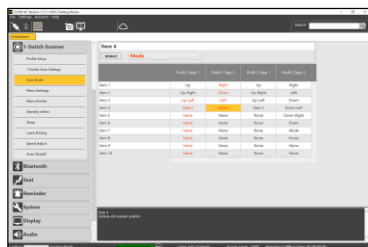
Seat Programming

Seat Programming

- Seat Configuration: All of the main power seating adjustments to the system are housed under this icon on the top tool bar.
- Click on the Seat configuration icon on the top tool bar.
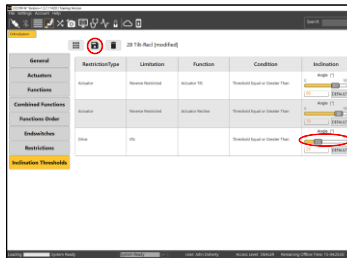

Scenario

- The consumer you are working with needs to drive into their vehicle in a certain amount of tilt in order for their head to clear to the top of the door. They also need to be able to tilt in order to safely navigate down ramps and grades in order to maintain adequate trunk control.

- What programming can be performed in the Q-Logic 3 system in order to meet the needs of this individual?

Seat Programming

- **Inclination Thresholds**: Allows the limits/angles on the power seat functions to be adjusted.
  - Click on and move the slide bar next to the title **Drive** to change the drive lockout angle of the system to the desired amount of tilt you want the individuals to drive in.
  - Click on the slide bar next to the title Actuator Recline to adjust the recline angle.
  - Click on the slide bar next to the title Actuator Tilt to adjust the Tilt angle.
  - Once you are happy with the settings click on the save icon in order to save the angles into the system
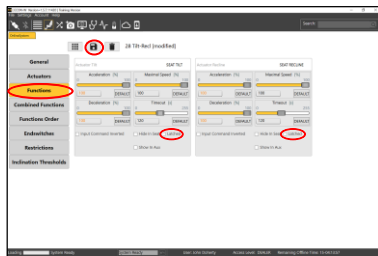

Scenario

- The consumer you are working with cannot continually provide an input throughout the entire arc of motion when the tilt function is being utilized. The individual has had the greatest success with this input device for driving the power wheelchair. The only issue has been while using tilt.

- What programming can be performed in the Q-Logic 3 system in order to meet the needs of this individual?

Seat Programming

- **Functions button:** Is under the Seat Configuration tab. A number of power seat functions can be customized further in this area of the seat settings.
  - The Acceleration, speed at which the actuator moves and deceleration of the seating system can all be adjusted here.
  - A Function that can be used here is latching each individual power seat function.
  - To turn latch on for tilt click the Functions button under the seat configuration section. Then click the box next to latch in order to latch the actuator on the power wheelchair.
  - Finally save the changes into the system by clicking on the save icon near the top of the screen.

Scenario

- A consumer, who just received a new power chair would like to be able to access their windows tablet and their android phone. They will also need a way to provide mouse clicks.

- What programming is available in the Q-Logic 3 system to meet the needs of this individual?

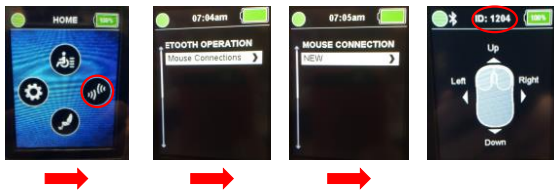

Bluetooth Pairing

Options, Options, Options

- Within the Q-Logic 3 Drive Control system, you have the ability to pair the following items:
  - Computer Mouse
  - Android Tablet
  - Android Phone
  - iPhone
  - iPad
- Please note that Click To Phone is no longer an option to program on the Q-Logic 3 programming stations.
- Bluetooth
  - Ability to connect multiple computers, android devices or IOS devices through Bluetooth.
  - Switching between devices can be done through menu selection and no longer requires disconnecting and reconnecting between devices.
  - The Q-Logic 3 has combined the ways to do mouse clicks. Before in Q-Logic 2, double left and right were only for specialty controls. Now you can program double left and right with the hand control as well.

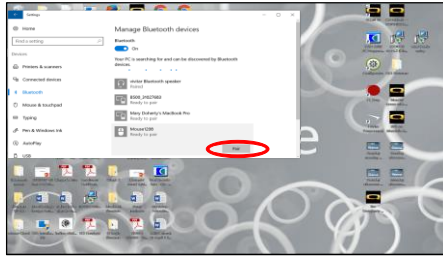## Bluetooth Mouse Pairing with a Computer – Using the Handcontrol
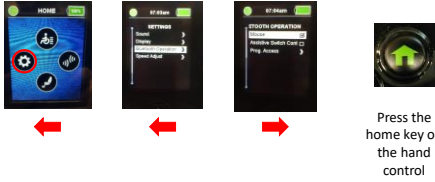
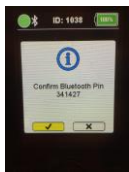Press the home key on the hand control

Bluetooth Mouse Pairing with a Computer – Using the Handcontrol

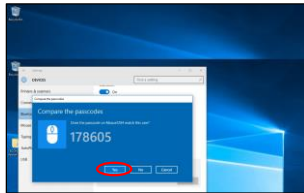## Bluetooth Mouse Pairing with a Computer – Using the Handcontrol

Bluetooth Mouse Pairing with a Computer – Using the Handcontrol

Bluetooth Mouse Pairing with a Computer – Using the Handcontrol

Provide a forward command on the input device when this screen appears on the display

Click Yes on your computer for the passcode. The code should always be correct.

Bluetooth Mouse Pairing with a Computer – Using the Handcontrol

The mouse picture and the top bar on the display will turn blue which signifies that the mouse is paired. Mouse movements are now available with the input device.
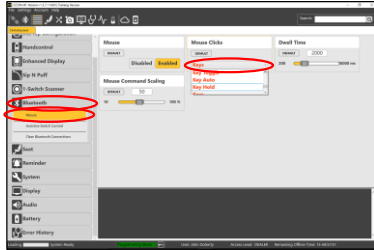
Move Mouse to icon and make a mouse click command with input device, iAccess or Key I or II

Signifies that Mouse Clicks are available with the input device.

Bluetooth Mouse Pairing with a Computer – Using the Handcontrol

Conclusion

- Remember that change in a direction of greater consumer independence is positive.
- Take away from this course the ability to know what is available within the Q-Logic 3 system.
- If you have questions, please call you rep or technical support. We want to be there to support your success.
- Your consumers success and independence is always the ultimate goal. Let us help them achieve it.

Questions?

Thank you for Attending!

Quantum Rehab
Clinical Education Department
E: education@pridemobility.com