



TITIN◀**M**®
BIOMEDICAL

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Instructions For Use -Humero Tech C1-

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Company Information

Titin KM Biomedical Corporation is headquartered in Bozeman, MT.

Mission Statement: To provide cutting edge, reliable equipment for the betterment of global health outcomes.

Contact Information

Titin KM Biomedical Corporation

703 Bridger Dr. Unit B-3
Bozeman, MT 59715

+1 (406) 404-6333

info@titinkmbiomedical.com

www.titinkmbiomedical.com

Customer Service:

Email: support@titinkmbiomedical.com

Sales:

Email: sales@titinkmbiomedical.com

Humero Tech C1 Purpose

Intended Use:

- The Humero Tech C1 (C1) is a medical device that can assist with improving the strength, active range of motion, and motor control of the shoulder complex.

Indications for Use:

- The C1 can be utilized by any individual suffering from a shoulder pathology, including postoperative status, or when a deficit in power is noted.

Scientific Technology/Operating Principal

- The C1 combines a multitude of traditional technologies to offer an advanced shoulder rehabilitation and strengthening device.

Claims

- The primary claims for the C1 come from the intended use statement:
 - The device may help improve:
 - Active range of motion of the shoulder.
 - Strength of the shoulder complex.
 - Motor control of the shoulder complex.
- The secondary claims include, but are not limited to, the following:
 - Tracking of patient recorded data.
 - The ability to determine dynamic strength of shoulder motions.
 - The ability to determine the excursion with which a shoulder movement or exercise was completed.

Device Information

Device Description:

- The Humero Tech C1 is a Class I Medical Device listed under product code BXB with the FDA.
- The C1 is a seated exercise device designed primarily to provide users with a better way to strengthen the important musculature of the shoulder complex. By completing strengthening exercises, users will also be working on active range of motion and motor control of the shoulder complex. The device has been designed to be used bilaterally, with the seat and headrest being adjustable to achieve ideal positioning. There are two different resistance mechanisms within the device that provide resistance to the user depending upon which axis the movement is occurring. The resistance of each axis is controlled through the custom software application running on the included tablet.
- The C1 is run by an application with many functionalities and features. From controlling the resistance present with exercise completion to providing recorded data, our software plays a vital role in the function of the C1.
- The C1 consists of numerous components including:
 - The Chair
 - The physical location for the user to sit and properly utilize the device.
 - Elbow Rest
 - An adjustable feature that allows for an increased amount of external support, in multiple positions, during exercise completion.
 - Resistance Mechanism (aka “Universal Joint” or “U-Joint”)
 - The component(s) that provide resistance to a user’s motion during an exercise session.
 - Telescoping Shaft
 - The telescoping shaft is a movable component that allows for increased range of motion during exercise completion.
 - Wrist Ring
 - The wrist ring serves as the primary attachment between the user and the device.
 - Wrist Brace
 - The wrist brace is to be donned by the user and serves as the connection point between the user and the wrist ring.

- Monitor Arm
 - The tablet arm extends from the back of the device to the front, allowing for easy viewing and control of the tablet during exercise completion.
- Monitor
 - The monitor is included with your subscription/purchase of the C1 and is responsible for displaying and allowing interaction with the Titin KM Biomedical application.
- USB-C Cable
 - The USB-C cable is responsible for the connection between the monitor and the main control board located in the enclosure on the back of the chair.
- Power Cable/Adaptor
 - The cable is plugged into an appropriate outlet and is used to power the chair.

Contraindications and Precautions to Use

The following list is not intended to be all-inclusive. Always consult with your healthcare provider prior to using the C1.

Contraindications for Use:

- Undiagnosed injury
- Presence of an acute fracture
- Presence of an unstable fracture
- Any mechanical or electrical failure of the C1 that has not been appropriately addressed by Titin KM Biomedical
- Any user with sensitivity to materials used in construction of the device

Precautions for Use:

- Acute Injury
- Osteopenia
- Osteoporosis
- Muscle strains
- Soft tissue sprains
- Pregnancy
- Cancer
- Conditions involving spasticity
- Conditions resulting in decreased volitional control of the upper extremity
- Cognitive deficits that do not allow for proper use of the device
- Any user with sensitivities to materials used for construction of the device

Risks and Benefits:

There are potential risks and benefits that come with utilization of any equipment used during a rehabilitation and/or strengthening program. Regarding the C1, there are a number of benefits that exist when compared to the equipment commonly used for shoulder rehabilitation programs. The following list includes a few of the potential associated benefits with utilizing the C1:

- Improved shoulder function
 - Use of the C1 has the potential to increase the strength and range of motion of the shoulder complex
 - Improved method of resistance delivery
 - The C1 contains technology that delivers resistance to the user in a unique manner that addresses many of the limitations seen with equipment currently utilized during shoulder rehabilitation and strengthening
- Recorded data
 - The C1 can gather a large volume of data points that will provide information to medical providers regarding certain metrics of the shoulder complex's function
- Monitoring Status
 - The C1 makes it easy to reference, review and gather data which allows for easy monitoring of a patient's status
- The C1 has been developed to target the tissues and musculature primarily involved in the proper function of the shoulder complex. While this list is not all-inclusive, The C1 has the potential to positively affect the following tissue(s) and pathologies:
 - Soft tissues that may benefit from use of the C1:
 - All segments of the deltoid muscle
 - Biceps brachii
 - Triceps brachii
 - All segments of the trapezius muscle
 - Rhomboids, Serratus Anterior and additional scapular stabilizers
 - Supraspinatus
 - Infraspinatus
 - Teres Minor
 - Subscapularis
 - Teres Major
 - Latisimus Dorsi
 - Pectoralis Major and Minor

- Some of the shoulder pathologies which may benefit from use of the C1 include, but are not limited to, the following:
 - Shoulder instability
 - Shoulder dislocations and subluxations
 - Surgical recovery
 - Muscle strains
 - Joint sprains
 - Soft tissue injuries
 - Tendinopathies
 - Generalized weakness

NOTE: Use of the C1 to rehabilitate or train any musculoskeletal structure, either acute or chronic, should not be performed without prior consultation with the appropriate medical professional or active medical professional guidance.

Use of the C1 for shoulder rehabilitation and performance does not come without risk. The following list includes potential risks:

- Injury exacerbation/aggravation
 - If using this device with either a pathology or an injury, there is the risk of exacerbation/aggravation to the injury and/or symptoms.
- Injury
 - As with participation in any exercise routine or rehabilitative plan of care, there is risk for injury to occur. On the C1, these risks primarily include injuries to the upper extremity and/or shoulder complex. Secondary sites at which injuries may occur include, but are not limited to, the following: cervical spine, thoracic spine, pectoral region, and elbow region.

Expectations with The C1

Participating in an Exercise Session:

- All movement performed on the C1 will be under the control of the user including, but not limited to, the speed of movement as well as the total excursion
- Users will be able to see their movements, in real time, on the tablet screen
- Easily adjustable resistance in both the x/y plane (toward/away from the user and forward/back) and the z plane (telescoping up/down)
- The device will record a plethora of data during exercise completion

Following the Exercise Session:

- Users and medical providers will be able to review the data from the completed exercise session in the user's profile under the date which the session was completed. *Note: Units referenced in the device are normalized and not calibrated for local conditions thus should be viewed as approximate.*

User Size

NOTE: This expectation focuses on linear measurements of the body, not weight. To see the max allowable weight, please refer to the "General Specifications" section.

When determining if a user can complete all exercises to the fullest extent, some body measurements may need to be taken. Due to the user being in a seated position, and the wide range of body size/proportion, height alone is not the determining factor to whether a person can complete all exercises to their fullest extent. The measurement that will determine this is a modification of the sitting vertical reach height. This measurement should be taken from the surface from which the person is sitting to their wrist joint when the arm is positioned vertically, and their shoulders are kept flat.

Anyone with a measurement at or below **approximately 49 inches** can expect to be able to complete all possible exercises to the fullest extent.

This is not to say that a person with a measurement greater than 49 inches cannot use, and benefit from, the device. There are multiple exercises and routines that can still be completed to their full extent; however, some overhead exercises may need to be modified. As always, consult with the appropriate medical personnel to determine the appropriate course of action in this scenario.

General Warnings and Precautions


Customer safety is at the forefront of what is important to us here at Titin KM Biomedical. While our devices are developed to be safe and effective, this device does have electronic components and moveable parts. Power cords/adaptors, and other components of the device can create potential safety risks that may result in physical injury or device damage, especially if misused. To reduce these risks, follow the instructions contained within this manual, observe all warnings on the product and in the operating instructions, and review the information included in this document carefully. This will help to minimize the risk to yourself, and those using the device, from hazards while creating a safer environment.


The following are General Warnings and Precautions.

Precautions:

- Ensure all fasteners are secure and in place before each use.
- Prevent the device, and especially its electrical components, from getting unnecessarily wet.
- Ensure the general area around the device is free and clear of any obstructions and debris.
- Take care when plugging/unplugging any cords into/out of the device.
- When a session is complete, or when the device is not being used, ensure all components are moved out of walking paths.
- Units referenced in the device are normalized and not calibrated for local conditions thus should be viewed as approximate.
- Users under the age of 18 years old without the appropriate medical, fitness, or coaching supervision.
- Extension cords and related devices
 - Ensure that extension cords, surge protectors, uninterruptible power supplies, and power strips that you use are rated to handle the electrical requirements of the product. Never overload these devices. If power strips are used, the load should not exceed the power strip input rating. Consult an electrician for more information if you have questions about power loads, power requirements, and input ratings.

General Warnings:

-  **Power cords and power adapters**
 - Use only the power cords and power adapters supplied by the product manufacturer.
 - The power cords shall be safety approved for the country it is being used in.
 - Never wrap a power cord around a power adapter or other object. Doing so can stress the cord in ways that can cause the cord to fray, crack, or crimp. This can present a safety hazard.
 - Always route power cords so that they will not be walked on, tripped over, or pinched by objects.
 - Protect power cords and power adapters from liquids. For instance, do not leave your power cord or power adapter near sinks, tubs, toilets, or on floors that are cleaned with liquid cleansers. Liquids can cause a short circuit, particularly if the power cord or power adapter has been stressed by misuse. Liquids also can cause gradual corrosion of power cord terminals and/or the connector terminals on a power adapter, which can eventually result in overheating.
 - Ensure that all power cord connectors are securely and completely plugged into receptacles.
 - Do not use any power adapter that shows corrosion at the ac input pins or shows signs of overheating (such as deformed plastic) at the ac input pins, or anywhere, on the power adapter.
 - Do not use any power cords where the electrical contacts on either end show signs of corrosion or overheating or where the power cord appears to have been damaged in any way.
 - To prevent possible overheating, do not cover the power adapter with clothing or other objects when the power adapter is plugged into an electrical outlet.

-  **Plugs and Outlets**
 - If a receptacle (power outlet) that you intend to use with the C1 appears to be damaged or corroded, do not use the outlet until it is replaced by a qualified electrician.
 - Do not bend or modify the plug. If the plug is damaged, contact Titin KM Biomedical to obtain a replacement.

- Do not share an electrical outlet with other home or commercial appliances that draw large amounts of electricity; otherwise, unstable voltage might damage your device or attached devices.
- Some devices are equipped with a three-pronged plug. This plug fits only into a grounded electrical outlet. This is a safety feature. Do not defeat this safety feature by trying to insert it into a non-grounded outlet. If you cannot insert the plug into the outlet, contact an electrician for an approved outlet adapter or replace the outlet with one that enables this safety feature.
- Never overload an electrical outlet. The overall system load should not exceed 80 percent of the branch circuit rating. Consult an electrician for more information if you have questions about power loads and branch circuit ratings.
- Be sure that the power outlet you are using is properly wired, easily accessible, and located close to the equipment.
- Do not fully extend power cords in a way that will stress the cords.
- Be sure that the power outlet provides the correct voltage and current for the product you are installing.
- Carefully connect and disconnect the equipment from the electrical outlet.
- **Injury Due To Use**
 - There are risks associated with utilization of the C1. To minimize the chance of sustaining a new injury or worsening of a current injury, always consult the appropriate medical provider and use the C1 in accordance with what is described in this User Manual.
 - Using the C1 involves the user moving against a selected amount of resistance. Because of this, the possibility exists for the user to suffer from a strain, or worse injury, from improper use. Increased caution must be taken if using the C1 in the rehabilitation process following an injury. To decrease the risk of new or worsened injuries, users should always consult with the appropriate medical personnel prior to use.
- **Pinch points**
 - The C1 contains a number of moving parts to allow for bilateral use and proper positioning. There are various components that must be either fastened or released to allow, or not allow, adjustments. When manipulating some of these components, the possibility exists for a pinch to occur which could result in an injury to the user. To avoid this type of injury, avoid hasty adjustments and always use caution when adjusting the device.
- **Tripping hazard**
 - There are components of the C1, such as the legs, resistance mechanism, and various cords that are located close to the ground. If not careful, these

components could pose a tripping hazard and result in injury to an individual. To lessen the risk of tripping over these components, always be alert and cautious when moving around the device.

- **Skin Irritation**

- Because the user may don a wrist brace to connect into the device, there is the potential for skin irritation to occur. This risk may be further increased as the user sweats during exercise completion. To lessen the risk of skin irritation, users should ensure they do not have any sensitivities to materials contained within the wrist brace. To further lessen the risk of skin irritation, do not wear the wrist brace for prolonged periods of time, and use a stockinette over the hand/wrist.
- Skin irritation may also be caused if the user has any sensitivity to materials on the device that they may come into contact with. Users should consult the list of contained materials to ensure they do not have any sensitivity to the materials used in device construction. The list of contained materials can be found in the “General Specifications” section.

- **Accessories**

- The only accessories to be utilized with the C1 are those provided by Titin KM Biomedical. The use of additional accessories not provided by Titin KM Biomedical may lead to injury, malfunction of the device, and voiding of warranty.

Terms Used in This Manual

As you are reading through this manual, it will be beneficial to know and understand the terms listed below.

Recorded Data: Information provided by the device in which numerical values provide information as to what is being analyzed.

Dynamic Strength: The term used to describe the strength metric derived from the device and shown to the user.

Contraindication: A condition or circumstance that suggests or indicates that a particular technique or treatment should not be used in the case in question.

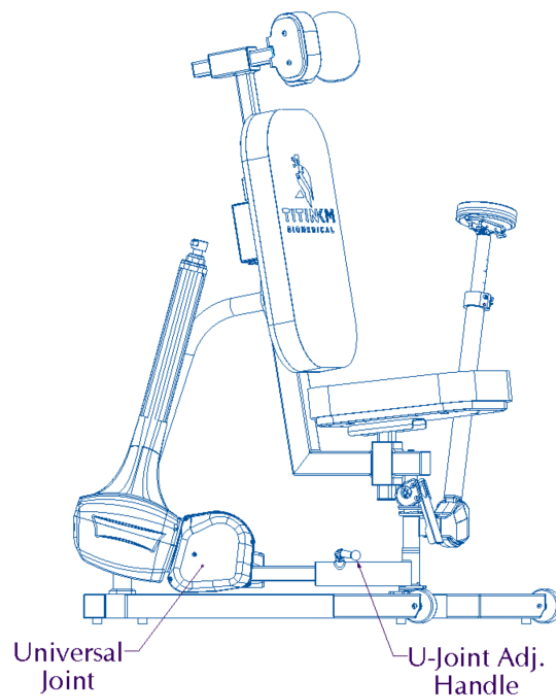
Instructions for Setup

Mechanical Setup

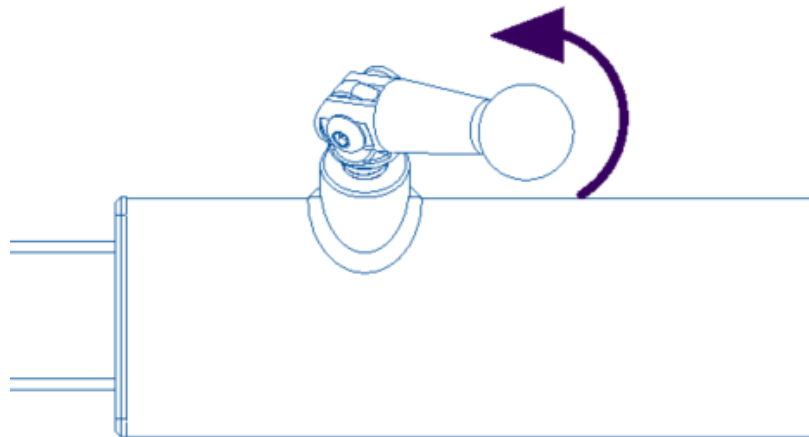
There is little mechanical setup before the device is ready to use. This section will describe, in detail, how to properly set up the mechanical components of the device prior to a session.

- Attach and plug in all relevant components, if not already done.
 - Secure tablet to the end of the monitor arm.
 - 3 D-SUB cables and a power supply cable into the bottom of the power box on the backside of the backrest.
- Plug the device into a power source.
 - USB-C cable plugged into the power box on the backside of the backrest and into the tablet.
- Pull out the U-joint to its operating position.
- Attach the wrist ring, or another approved attachment, to the telescoping shaft.

The procedure to place the U-Joint into its operating position is as follows:

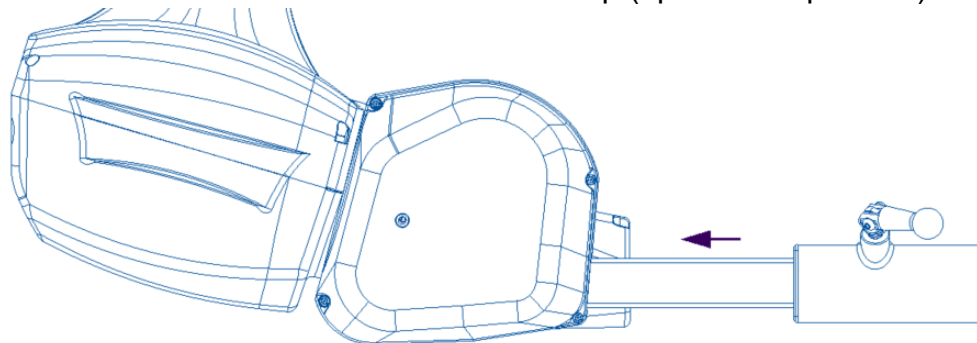


1. Twist the Handle counterclockwise to loosen.

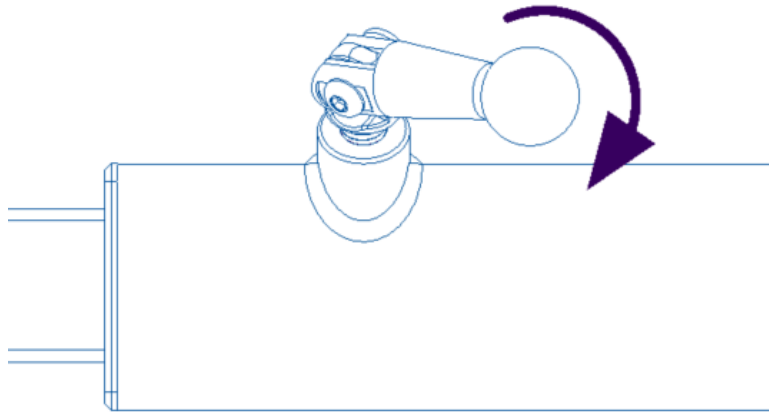


NOTE: Do not twist the handle all the way out, only loosen enough for the Universal Joint to be movable.

2. Pull the Universal Joint out until it hits a stop (operational position).



3. Tighten the Handle by twisting clockwise to lock the horizontal position in place.



Tablet Setup

- Turn on the tablet.
- Create a security pin for the tablet.
- Connect the tablet to Wi-Fi.

Application Setup

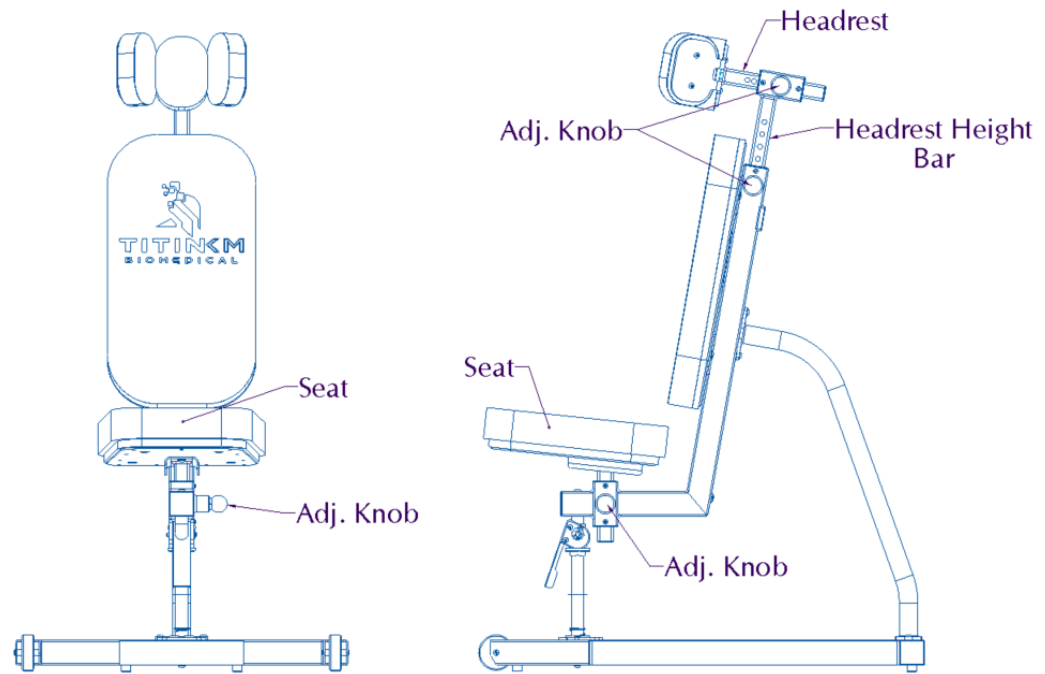
- Log into your company's account.
- Choose a user.

Mechanical Operation and User Adjustment

The C1 can be adjusted to comfortably accommodate a wide range of individuals for exercise completion. To ensure the most effective results while using the device, it is recommended that it be adjusted for each individual user at the start of a session. These adjustments are detailed below:

- **Seat Height and Headrest**

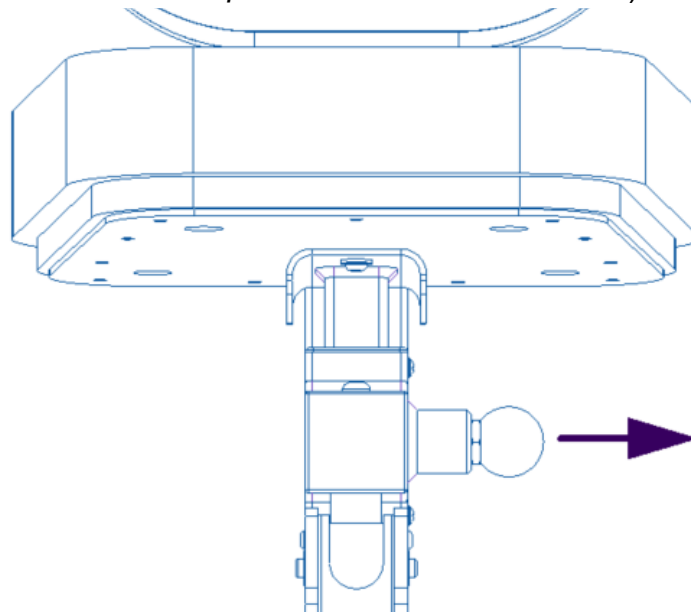
The seat height, headrest height, and headrest horizontal position can all be adjusted in order to optimize the ergonomics of the user during exercise completion. Device positioning should be checked and adjusted before each session. The process for adjustment is the same for the seat height, as well as the headrest height and horizontal position. The figure below shows the main chair assembly and location of the various knobs needed to adjust the seat height, headrest height, and headrest horizontal position.



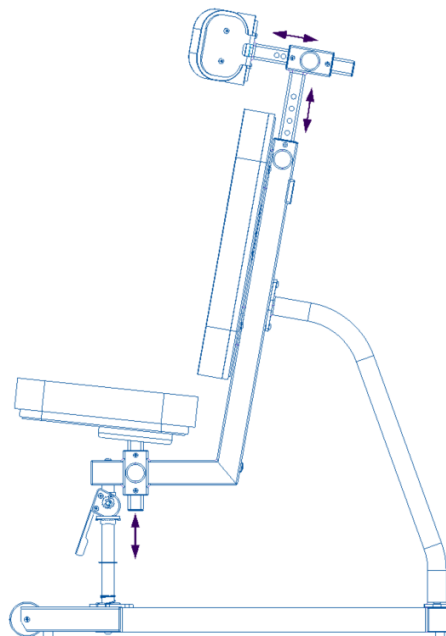
Adjustment knobs shown in their locked position.

The process for adjustment is as follows:

1. Pull the adjustment knob for the component to be adjusted (seat or headrest) all the way out and hold. (*Seat adjustment knob shown below. The adjustment knobs for the headrest are operated in the same manner.*)



2. Adjust seat height, headrest height, and headrest horizontal placement to the desired positions.



3. Once the seat height, headrest height and horizontal position have been set, release the adjustment knob. **Make sure the adjustment knob has moved all**

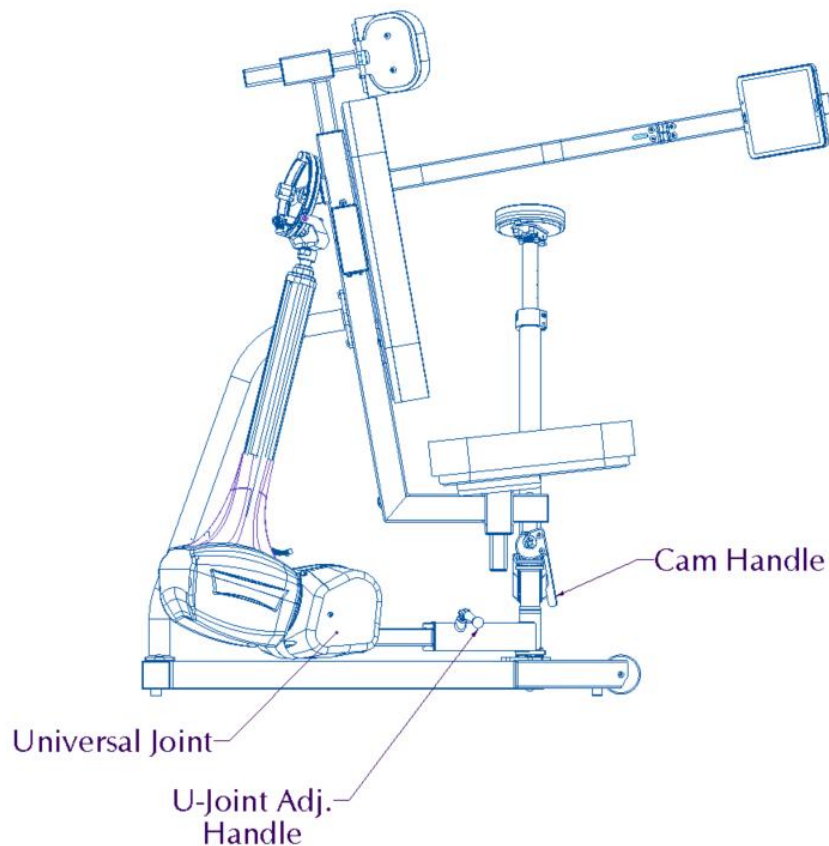
the way back into the locked position by attempting to move the position of the component adjusted.

- **Universal Joint Adjustment**

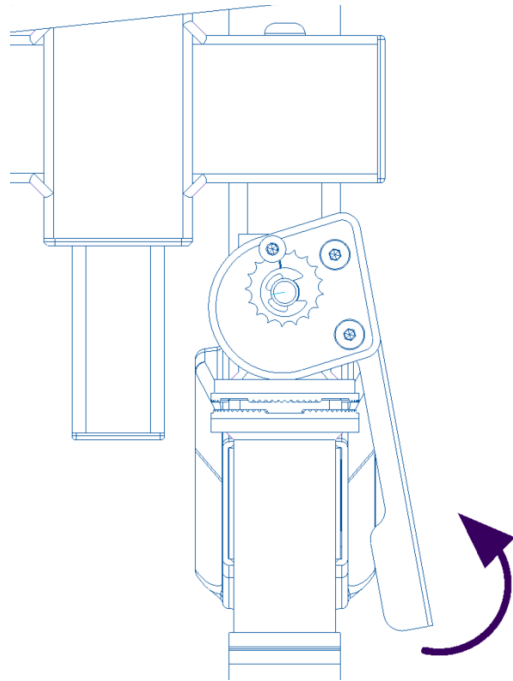
The Universal Joint can be adjusted rotationally for better performance during exercise completion as well as to accommodate a wide range of users. It can also be adjusted horizontally for use or storage. *During use, the Resistance Mechanism should be pulled all the way out horizontally (refer to the “Mechanical Setup” section, Pg. 13).*

The procedure to adjust the Universal Joint rotationally around the chair is as follows:

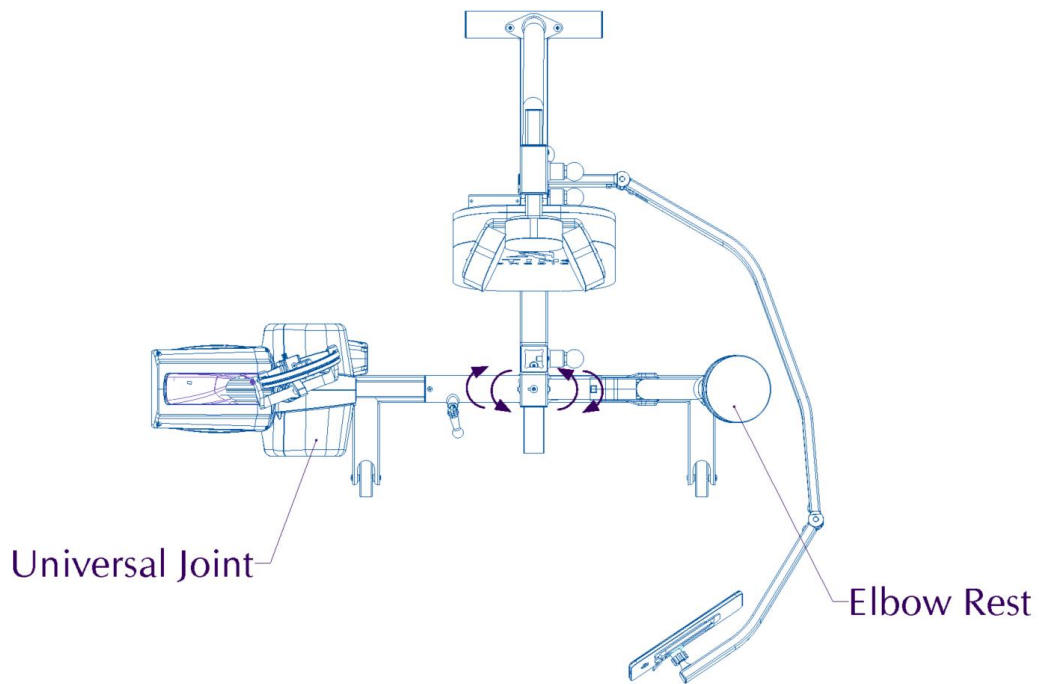
NOTE: this is the same procedure for the Elbow Rest rotational adjustment



1. Pull the cam handle, located underneath the seat, all the way up.



2. Rotate the Universal Joint (or Elbow Rest) to the desired position. *There is a clock plate around the pivot center to ensure the desired position is correct and corresponds with what the app directs (if applicable).*

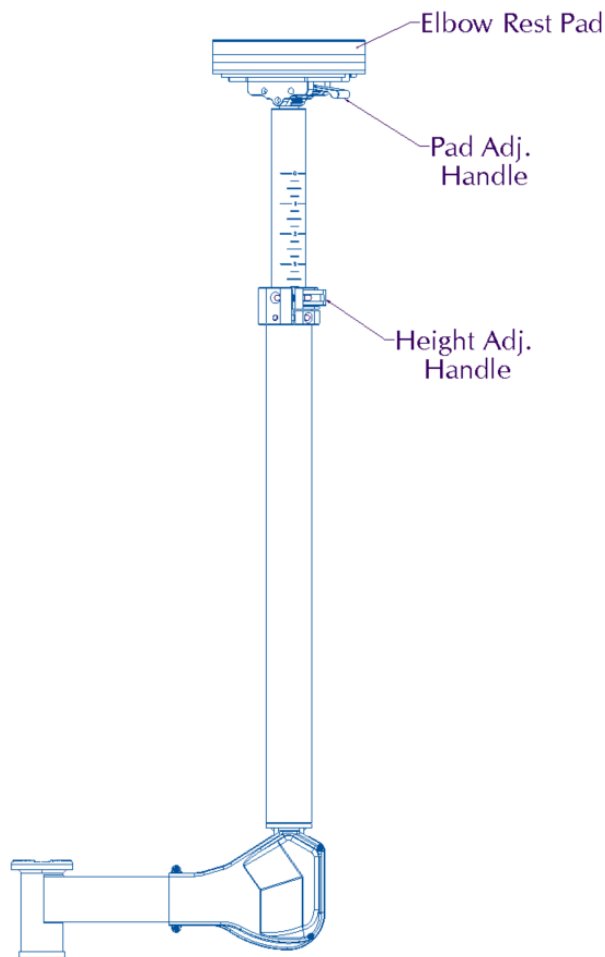


3. Once the Universal Joint (and/or Elbow Rest) are in the desired position, push the cam handle all the way down to lock them into position.
Note: If the cam handle seems harder to close than usual, check to see that

the gear teeth have meshed together. If they have not, lift the cam handle slightly and wiggle the elbow rest and/or U-Joint to ensure the teeth are meshed before reclosing.

- **Elbow Rest Adjustment**

- The Elbow Rest can be adjusted rotationally (see the Resistance Mechanism Adjustment section), vertically (height), and angularly (distance from the user). Additionally, there are position indicator numbers for the height position of the elbow rest to ensure repeatable positioning. The angle of the Elbow Rest Pad can be adjusted individually as well.



Elbow Rest height adjustment:

1. Pull the Height Adjustment Handle out

CAUTION: *The Elbow Rest is spring loaded. When pulling the height adjustment handle out make sure to keep a hand on the pad to resist it extending unintentionally and **DO NOT** keep your face directly over the pad*

2. Once the Height Adjustment Handle has been pulled out, allow the Elbow Rest to rise to the desired height, or press down on the pad to lower its position. You can use the position indicator numbers to determine the correct position if needed.

NOTE: *Do not force the elbow rest to extend out, allow the internal spring to extend the arm at its own speed*

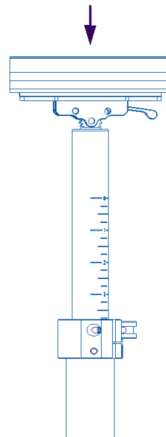
3. While holding the elbow pad in the desired position, push the Height Adjustment Handle closed to lock the Elbow Rest height

Elbow Rest distance or angle adjustment:

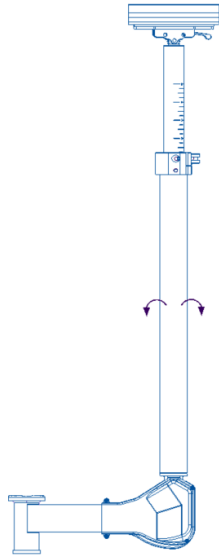
1. Pull the Height Adjustment Handle Out

CAUTION: *The Elbow Rest is spring loaded. When pulling the height adjustment handle out make sure to keep a hand on the pad to resist it extending unintentionally and **DO NOT** keep your face directly over the pad.*

2. Firmly push and hold the Elbow Rest as far down as it will go to unlock the elbow rest angular position.



3. Adjust the angle of the Elbow Rest to the desired position by tilting it in or out



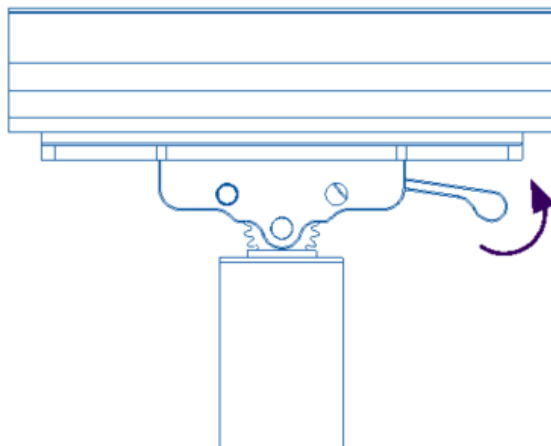
4. Upon raising the Elbow Rest Pad, the Lock Pin should retract into position, locking the Elbow Rest angle.

NOTE: Make sure the Elbow rest is locked in place by attempting to change the angle and ensuring it does not move.

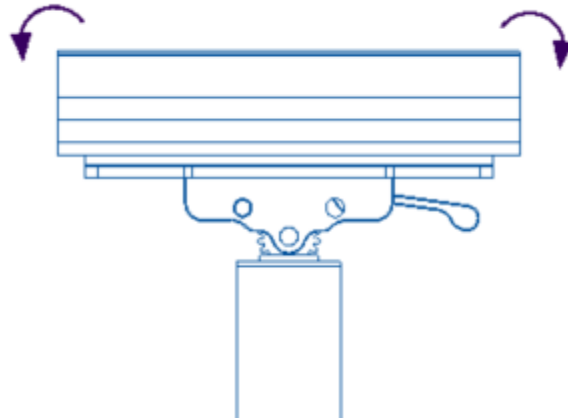
5. Reposition the Elbow Rest Pad to the desired height.
6. Push the Height Adjustment Handle closed to lock the Elbow Rest Height into place.

Elbow Rest Pad angle adjustment:

1. Using your fingers, pull the Pad Adjustment Handle up and hold.



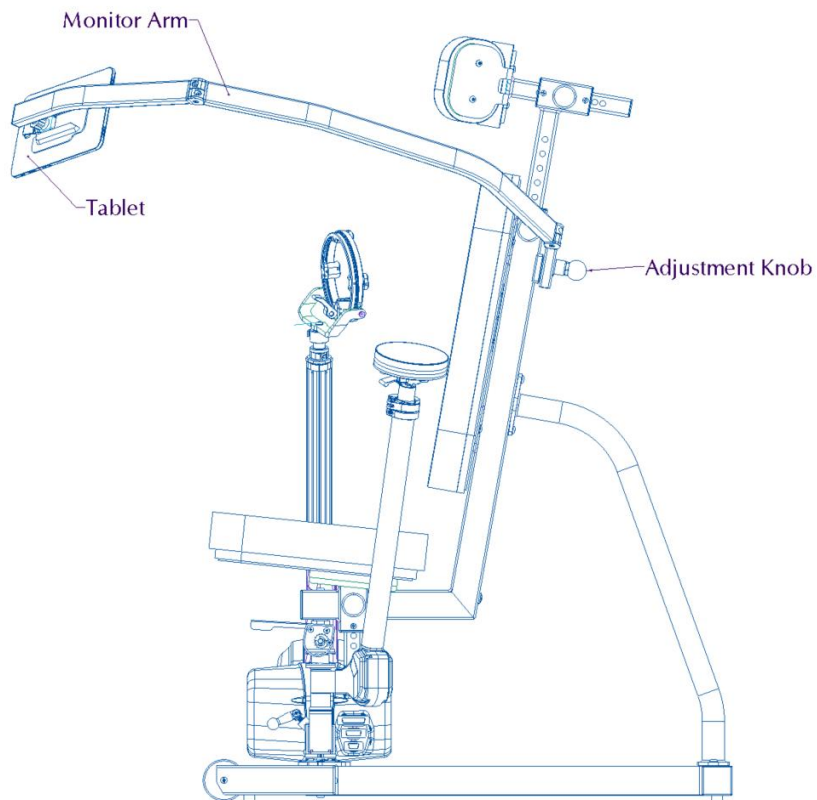
2. Tilt the Elbow Rest Pad to the desired position.



3. Release the Pad Adjustment Handle from your fingers. The angle of the Elbow Rest Pad is now locked in place.

- **Monitor Arm and Tablet Adjustment**

The Monitor Arm has the ability to be moved to either side of the C1 as well as have its height adjusted on either side. The arm can be moved to various positions to best accommodate the user. The tablet can also be disconnected from the monitor arm.

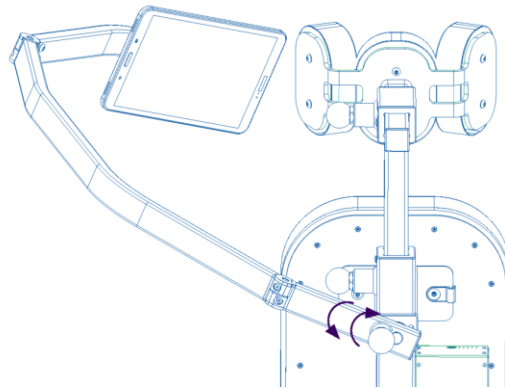


The procedure to move the Monitor Arm to one side or the other of the C1, or adjust the height of the Monitor Arm, is as follows:

1. Pull the Adjustment Knob all the way out and hold.

NOTE: This is the same type of adjustment knob as shown in the Seat Height and Headrest Adjustment section.

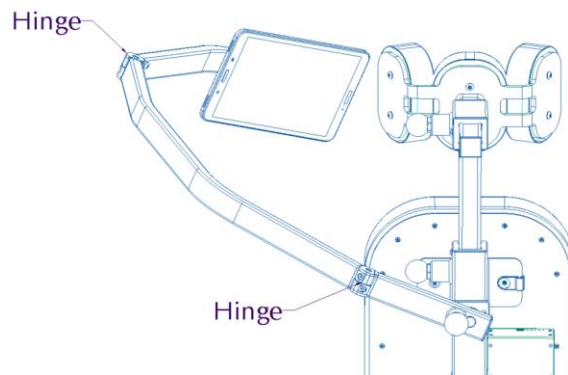
2. Rotate the Monitor Arm to the desired side, or to a different notch for height adjustments.



NOTE: The Headrest may need to be adjusted to a higher and/or more forward position (Referenced in the Seat Height and Headrest Section) and the Monitor Arm will need to be hinged back in order to rotate the Monitor Arm to the opposite side of the C1.

3. Once the Monitor Arm is in the desired position, release the Adjustment Knob to lock the position of the arm. **Make sure the Adjustment Knob has moved all the way back into the locked position.** Once the side and height of the Monitor Arm have been set, the arm can be adjusted into the best position for you, it will swivel around the two (2)

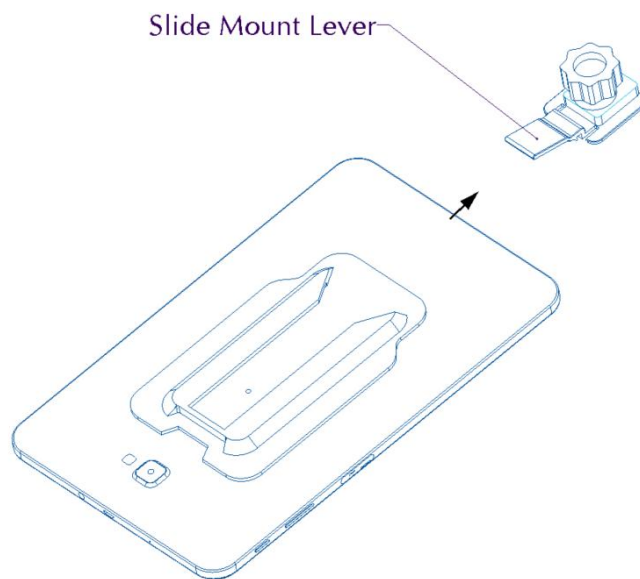
hinge locations. The tablet can also be swiveled about its joint.



Note: When not in use, fold the monitor arm so that it is not likely to be caught or hit by anyone walking by or near the device.

The procedure to connect or disconnect the tablet from the monitor arm is as follows:

1. Orient the tablet towards the slide mount so that the slide mount lever is sliding into the tablet receiver first, as shown below.



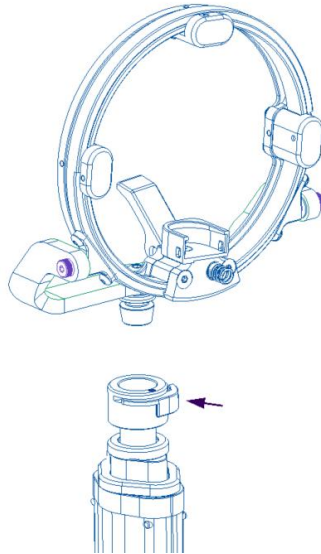
Note: The slide mount will be attached to the Monitor Arm.

2. Slide the tablet onto the slide mount. Ensure that the slide mount lever clicks over the locking ridge and is fully engaged. The slide mount lever can be pulled up to ease this process if needed.
3. Plug the USB-C cable into the tablet. The angle of the tablet can be adjusted while attached to the slide mount for best user visibility.
4. To remove the tablet from the monitor arm, first disconnect the USB-C cable from the tablet.
5. Lift the slide mount lever to disengage and slide the tablet off the mount.

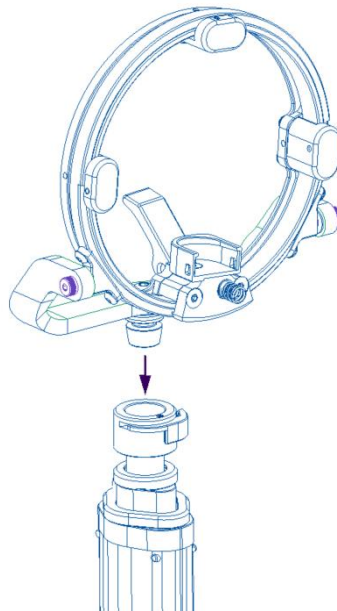
**Note: When switching the side the monitor arm is on, it is necessary to unplug the usb-c cable, flip (180 rotation) the monitor and re-plug in the cable on the opposite side. There is a known bug in the digital screen rotation, it is not fully functioning. A fix is in process.*

- **Connecting an Attachment to the Telescoping Arm**

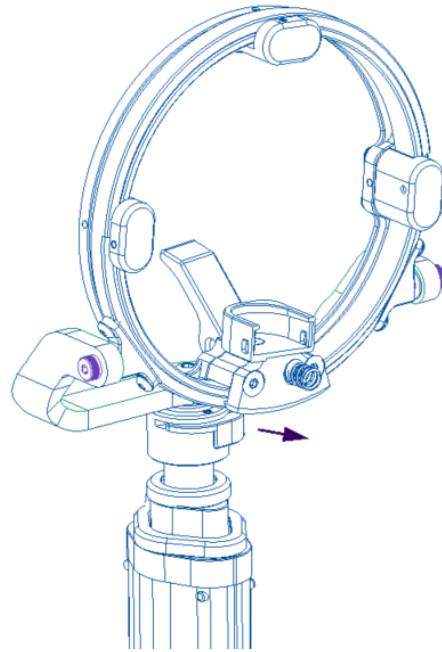
1. *A wrist ring is used in this illustration.* Using one hand, depress and hold the release lever on top of the telescoping shaft.



2. Insert the attachment piece of the attachment using, into the top of the telescope.



3. Release the Lever on top of the telescoping assembly.



4. Ensure the attachment is seated before use by pulling up on the wrist ring and ensure it stays connected to the telescoping assembly.
- **Disconnecting the wrist ring from the telescoping arm**
Removal of the wrist ring is the opposite of attachment.

Operating Instructions

Note: The C1 should not be used for any purpose other than its intended use and as is stated throughout this User Manual.

Initial Setup for Exercise Session:

- A process must be followed prior to beginning an exercise session on the C1:
 - Adjust the seat and headrest height to the user
 - Decision of whether to use the elbow rest
 - If used, it will need to be positioned appropriately (See “Elbow Rest Adjustment”).
 - If not using the elbow rest for exercise completion, it can be positioned to the opposite side of the u-joint and raised under the Monitor Arm to provide stabilization for the Monitor Arm.
 - The user and/or medical provider will need to navigate to the user’s profile page within the Titin KM application.
 - Exercises/Programs to be completed during the session will need to be selected.
 - The user will need to put on the appropriate (right or left) wrist brace or use another approved attachment/grip.
 - The U-Joint will need to be positioned appropriately for the first exercise (and adjusted for each additional exercise as needed)
 - The correct attachment will need to be connected to the telescoping arm. **See the “Included Accessories and Proper Use” section on pg. xxx for instructions on using attachments.**
 - The wrist brace will need to be connected to the wrist ring

Software Operation

Initial Set Up

Connecting to the Device

- Prior to plugging the device into a wall outlet, ensure that the telescoping shaft is fully depressed to its most collapsed position.
- Plug the power supply for the device into the underside of the control box on the right side of the seat back and then plug the power supply into a standard wall outlet.
- Insert the USB-C plug from the end of the device monitor arm into the monitor.

Software Overview

Account Types

- Provider Account
 - Will have access to all client data stored under this account type as well as access to all exercise and program banks.
- Client Account
 - A single person login with access to only his/her individual data, the exercise bank, and program banks.
 - This is the account type that patients will use when not working directly with their overseeing provider.

Creating a New Provider Account

With delivery of the C1, all provider accounts for a single location will be created by the Titin KM Biomedical team. The creation of a provider account will generate a temporary password that will be sent to the email associated with the provider account. If new provider accounts are needed in the future, contact the support team at Titin KM Biomedical.

Upon initial login with the temporary password, the provider will be prompted to create a new password, a PIN code, and asked to accept the Private Health Information Disclaimer and End User License Agreement to proceed. Without accepting the agreements, the provider will not be able to continue.

To create a new client account, see “**Creating a New Client**” (pg.37).

Logging In

1. Input the email into the appropriate field.
2. Input password into the appropriate field.
 - The eye icon, at the end of the password field, gives the ability to view or hide the password.
 - A “\” through the eye will result in the password being hidden.
 - If there is not a “\” through the eye, the password will be viewable.
 - To alternate between viewable or hidden, tap the eye icon.
3. Press “Sign In”.
4. Immediately following login, a popup screen will present the option to start a session or not.
 - Pressing “No” will navigate the user to the “Active Session” screen with no client selected, or as anonymous

NOTE: Any sessions ran as “anonymous” will not be savable for future review of the recorded data

- Pressing “Yes” will prompt the user to input a PIN code, if using a HIPAA compliant device, to access the client list from where a client can be selected and a session initiated. See “**Starting and Running a New Session**” (pg. 39).
5. By checking the “Remember Details” box, the application will remember the next full log in credentials used and save the user information.
 - When performed, the user will be prompted to create a 6-digit PIN for future access.
 - Saved user accounts will be listed above the credential boxes. Tapping a username prompts the user to input the established PIN for access instead of requiring the full input of the username and password.
 - Credentials are saved locally and not to a cloud, meaning each device a provider has access to will need to have credentials saved and a PIN created for access.
 - Credentials will only be saved for 30 days before requiring that the full username and password be used again.

Logging Off

It is good practice to log out of an account when not in use and upon completion of a session on the device, regardless of what type of account is logged in. The procedure for logging out is as follows:

1. Open the menu by pressing the Main Menu icon (three horizontal bars) located in the top left corner of the display.
2. Press the “Sign Out” button located at the bottom of the ensuing menu.

NOTE: After 10 minutes of inactivity, the application will automatically log out of the current account

Forgotten Password

Should a password be forgotten, select the “Need help?” button and follow these steps:

1. Press the “Need help?” button.
2. Press “Send Reset Code”.
3. Retrieve the verification code from the supplied email and return to the Titin KM Biomedical application.
4. Input the verification code along with a new password.
5. Confirm the new password
6. Press “Change Password” to reset the password and log in with the new credentials.

Software Navigation

The top display bar is present from every page in the application and can be used for easy navigation around the application.

Main Menu

The icon of three stacked lines, located in the top left corner of the display, is the main menu. Pressing this button will open a dropdown with the various pages of the application that may be visited.

- Active Session
 - All exercises, programs, and tests will be performed on this page.
 - Provides live tracking of movements being performed.
 - Displays real-time data with exercise completion.
- Clients
 - A list of all the clients registered under the currently logged in provider account.
- Exercises
 - A list of all exercises available to be performed.
- Programs
 - A list of all programs available to be performed.

NOTE: A Client Account will show “My Profile” instead of “Clients”

The gear icon, located at the top right corner of the Main Menu, will open a settings screen.

The button labeled “Sign Out” at the bottom of the Main Menu will log the user out of the application.

Creating a New Client

- Clients can be created from either the device software or the Titin Device Companion Website
- To create a new client from the device software, perform the following steps:
 1. Navigate to the client bank
 2. Press the “+” icon located in the top right corner of the clients page.
 3. Input the required information for the client’s profile.

NOTE: A client email is optional. If provided, the email of the client will be used to deliver a temporary password to the client by which they can set up his or her individual “Client Account”.

4. Identify the pivot points for the shoulder and elbow by performing the following steps:
 - Set pivot points with the U-Joint at either the 3 o’clock (for right arm) or 9 o’clock (for left arm) position.
 - Place the end of the telescoping arm, without an attachment connected, at the necessary pivot point of the identified side with the client in a seated and relaxed position.
 - Shoulder: place the end of the telescoping arm at the front of the shoulder
 - Elbow: place the end of the telescoping arm on the tip of the elbow
 - 45 Pivot Point: With the shoulder abducted 45 degrees, place the end of the telescoping arm on the tip of the elbow
 - 90/90 Pivot Point: With the shoulder abducted 90 degrees, place the end of the telescoping arm on the tip of the elbow

NOTE: Pivot points may be set while referencing either side of the body so long as the U-Joint is in the correct corresponding position: 3 o’clock for the right shoulder and 9 o’clock for the left shoulder

- Press the corresponding button “Shoulder Pivot Point”, “Elbow Pivot Point”, “90/90 Pivot Point”, and “45 Pivot Point” while maintaining the end of the telescope in the correct location.
 - After successfully setting the pivot points, the text in parenthesis will change from “Unset” to “Updated”.

NOTE: Pivot points only need to be set for one side of the body as the software will automatically place the contralateral pivot points when switching between right hand and left hand use.

5. Press “Save” to create the new client.

NOTE: Clients may initially be created without setting pivot points. Prior to the start of the first session for a given client, however, users will need to set the appropriate pivot points for accurate data metrics. This pattern is the same when a client is created from the Titin Device Companion Website. When performed in this manner, Pivot Points should be set from the designated U-Joint position of the loaded exercise.

- After creating a new client, an automated email will be sent to the email address associated with the new client account, if an email for the client was supplied. This email will contain a temporary password used for the initial login to the account with the client’s email address being the username.
- Upon logging in for the first time, clients will be prompted to change their password as well as accept all user and private health information disclaimers and agreements.

Pivot Points

Appropriately identified pivot points are necessary for correct calculation of many of the data points that are being generated by use of the device.

Physical pivot points for the shoulder and elbow, and elbow at varying degrees of shoulder abduction will be identified and saved for a client upon profile creation or prior to the first session run for a given client.

The corresponding pivot point for an exercise is identified upon exercise creation. All exercises require a pivot point:

- Shoulder: Exercises where the main axis of rotation is around the shoulder, these are generally long lever motions with the elbow extended.

- Elbow: Used for Internal and External Rotation from 0 degrees of shoulder abduction.
- 90/90 Elbow: Used for Internal and External Rotation performed with the shoulder in 90 degrees of abduction.
- 45 Elbow: Used for Internal and External Rotation performed at 45 degrees of shoulder abduction.

NOTE: See “Creating a New Exercise” (pg.46) for how to identify the pivot points for an exercise.

NOTE: The correct type and location of pivot point will automatically load with each new exercise.

NOTE: For accurate metric data, ensure that the correct pivot point is loaded for a selected exercise.

Starting and Running a New Session

Starting a new session is performed from the active session screen.

- To start a session from the Active Session screen, perform the following steps:
 1. Press the “Guided Session” button in the bottom right corner.
 2. Select one of the following on the ensuing “Session Options” popup:
 - a. “Choose New Client”: Identify the desired client after inputting the PIN code if using a HIPAA account.
 - i. After choosing a new client, you will be redirected to the “Session Options” pop-up
 - b. “Select Program”: Start a program with the already loaded client
 - c. “Select Exercises”: Start a session with the already loaded client
 - d. “Cancel” - To cancel starting a session and return to the active session screen
 - e. You may also choose which arm side will be performing the session by selecting “Left Hand” or “Right Hand”
 - f. After selecting either “Select Exercises” or “Select Program” you will be navigated to the “Exercise Setup” popup for the first exercise.
 3. On the Exercise Setup popup box, indicate the following:
 - a. Number of sets and reps for the user to complete on the first exercise

- i. The sets and reps scheme indicated for the first exercise will be carried forward to each new exercise, however can still be modified as needed
 - b. The “Work Goal” box will auto populate with a target work output for the upcoming session based on previous sessions performance and ratings of RPE and Pain. If there is not enough previous data to create a work goal estimate, this field will remain empty.
 - i. This goal is only a recommendation and users may adjust the amount of work performed during a session as they see fit.
 - c. Confirm that the physical positioning of the U-Joint matches the designated positioning for the exercise in the software by checking the box if they are aligned.
4. When ready, select “Start (exercise name)” at the bottom of the Exercise Setup box. This will transition the user to the active session screen with the first exercise loaded.
5. Press “Start” to begin the first exercise.
6. The User will be prompted to “Set Reference Motion” where he/she moves through the desired range for the selected exercise
7. After establishing the “Reference Motion” the next prompt “Start Exercise” will initiate the exercise.
 - a. Both of the two previous prompts will start themselves as the progress meter moves to the end or may be advanced by pressing the button.
8. After completing all exercises in a session, a “Session Analysis” pop-up will appear. Users may review general information and analytics on this screen. Additional users should rate their level of perceived exertion (RPE) from 0-10 as well as any pain they experience on a scale of 0-10. These ratings should be performed for each exercise performed in the session by using the arrows at the top to advance exercises.
9. After rating pain and RPE for each exercise, tap the “save” button to ensure the session is saved

NOTE: If you do not press save, the session will be lost and is not able to be retrieved.

Active Session Screen

The “Active Session” screen is the main screen of the application. From this screen, users will perform all exercises and programs.

Directly underneath the top bar display, the name of any loaded exercises or programs, as well as the currently loaded client, will be displayed.

Secondary Menu

The secondary menu resides at the right side of the Active Session screen and is represented by the three (3) vertical lines. Inside this menu are the following:

- Individual resistance adjustment for X/Y and Z planes of motion
- Target Size adjustment
- U-Joint position adjustment

You may open this menu by pressing and holding on the 3 lines and pulling towards the middle of the screen.

Adjusting Resistance

Adjusting resistance can be performed in one of two ways:

- Adjust linked resistance directly from the active session screen by pulling the resistance slider up or down
 - Linked resistance changes the resistance in both the X/Y planes and Z plane proportionally
- Resistance may also be adjusted independently by plane after opening the secondary menu
 - Choose desired resistance for each plane individually by moving the slider for the desired plane

Adjusting On-Screen U-Joint Position

- The U-Joint position is defined as positions around a clock face that is visible at the base of the seat shaft where the U-Joint connects to the device.
- The on-screen U-joint position is adjusted by performing the following:
 - Open the secondary menu and select the desired U-Joint position on the indicator
 - The U-Joint presents as a clock at the bottom of this menu.

- Selecting any position around the clock will reflect a change in the U-Joint position on the screen. The selected position should match the U-Joint's physical location.
- Exercises will automatically load with the on-screen U-Joint position at the setting identified when the exercise was initially created. You only need to manually change the U-Joint if performing the exercise in a position different than what was confirmed during exercise setup

NOTE: It is critical to ensure that the on-screen U-Joint position matches the physical U-Joint position for accurate metrics and presentation of live tracking.

NOTE: For accurate comparison of exercises and metrics across sessions, it is critical to ensure that both the on-screen and physical position of the U-Joint is in the same position for exercises that are to be compared. You may reference the position of the U-Joint from previous sessions within the "Client" profile to ensure accurate positioning. See "Reviewing Session or Tests Data" (pg. 50).

Adjusting Target Size

Target size can be adjusted by opening the secondary menu and then position the slider labeled "Target Size" towards the right for a larger target or towards the left for a smaller target. This setting changes the size of the start and end points of a referenced motion requiring either more or less control when performing the movements.

On-Screen Data Display

- Force
 - The amount of force being applied by the user against the resistance mechanism, at any time, is displayed in the dial labeled "Force" near the top right corner of the screen.
 - The Force is displayed as a moment (torque) in foot-pounds (ft-Lbs) and constantly updates as a user moves.
 - If while at high resistance settings a user moves at a rate beyond the intended safe speed, the graph will display output in a "red zone". Prolonged use in this range is considered outside the intended function and may result in damage to the device.
- Running Work
 - The dial to the left of the field of view and labeled "work" shows accumulated work for the currently running exercise.
 - When multiple previous sessions of a given exercise have been run, this dial will display a target work goal based on the amount of work produced for that given exercise during previous sessions as well as the rated RPE

and Pain during those sessions. This work goal will reflect what was indicated on the exercise set-up screen earlier.

Setting Targets

- Below the field of view showing live movement there are two pin icons. The icon with a “+” attached to it will place a target circle on the live tracking field. The icon with a “-” attached to it will remove the last placed target circle on the live tracking field.
 - Target circles are placed at the point where the yellow box corresponding to the user's hand is positioned when the pin with a “+” is pressed.

On-Screen Buttons

- “Guided Session”
 - When an exercise is not actively loaded, a button labeled “Guided Session” is present in the bottom right of the screen. By pressing this button, the process to start a new session will begin.

NOTE: See “Starting and Running a New Session” (pg. 39) for more details on starting a session

- The following buttons are present when an exercise or program is loaded to be performed:
 - “Start”
 - Pressing this button will start the currently loaded exercise and must be pressed as each new exercise loads to begin tracking
 - During establishment of the reference motion you will see the following buttons
 - a. “Reset Start”: Sets the start point of the motion wherever the user's hand is when pressed.
 - b. “Set End”: Sets the end point of the motion wherever the user's hand is when pressed.
 - “Skip”
 - Pressing this button will skip the exercise that has been loaded.
 - Once this button is pressed, the user will either be transitioned to the next exercise in the program or, if no additional exercises remain, will open the “Session Analysis” pop-up and prompt the user to save the session.

- Data is not recorded for skipped exercises and will not be displayed when reviewing the session analysis.
 - “Stop”
 - Pressing this button will clear any loaded exercises or programs resulting in no data from the session being saved.
 - After pressing “Start” and establishing the reference motion the following buttons will appear.
 - “End Set”
 - Pressing this button will end the current set of a exercise, regardless of how many repetitions have been completed.
 - Once a set has ended, the next set will start.
 - If pressed on the last set of an exercise, the exercise will end and the “Exercise Set-Up” pop-up will load with the next exercise.
 - If pressed on the last set of the last exercise in a series, the “Session analysis” pop-up will open and prompt the user to save the session.
 - “End Exercise”
 - Pressing this button will end the current exercise, regardless of how many sets have been completed, and either load the next exercise to be performed or finish the session if already on the final exercise of the program.

Clients Bank

The “Clients” page displays a list of all the clients created under a specific provider account.

A search bar, located under the top display bar, helps users easily locate the desired client from the client bank.

- Using the drop down located on the right side of the search bar allows a user to filter searches based on selected criteria

Editing Client Information

- From within a client profile, press the pen button located in the top right of the screen.
 - Any information, aside from the email address, may be updated, including pivot points.
- Press “Save” to finalize edits made to a client profile.

Reviewing Client Data

- Users can review all data recorded for a client within the client's profile.
- The client profile page is divided into 2 main sections:
 - The section along the top of the screen displays information pertaining to the work and power output throughout the specific exercises performed in each session.
 - The top left dropdown provides the option to alternate between various recorded sessions.
 - The next adjacent drop down provides the option to switch between various exercises within the selected session.
 - Data pertaining to work for the chosen session and exercise is shown on the upper left of the screen while power over time is displayed in the graph on the right upper side of the screen.
 - The second section is composed of a large line graph on the bottom half of the screen.
 - This graph will plot longitudinal changes in the selected variable, session, or exercise and within the identified date range.
 - The first drop down in this section allows the selection of different variables to plot.
 - The second drop down allows the selection of reviewing all exercises completed within sessions or plotting by individual exercises.
 - Multiple exercises may be selected at once for comparison.
 - The two date range box will identify the period from which data is plotted.
 - Arm side selection for the displayed data may be changed with the "Left hand/Right Hand" toggle.
 - Selecting any plotted data point in the bottom graph will load that data point session into the upper area of the page for work and power.

Deleting Clients

- To delete a client:
 - Navigate to the desired client profile and press the red "Delete" button in the bottom left of the screen.
 - On the following pop-up, pressing "Delete" will confirm the deletion and pressing "No" will cancel the deletion and return the user to the client profile.

Exercises Bank

The exercise bank contains all the exercises created, and saved, under a provider account.

Creating a New Exercise

- Press the “+” button located in the top right corner of the exercises screen.
- Input the required information.
 - Select the hand side that is being identified and then identify the appropriate U-Joint position for exercise completion.
 - The best positioning of the U-Joint will be that in which the exercise can be completed with the least amount of restriction.
 - Of note, the position of the U-Joint may vary slightly with each user based on the user’s body habitus.

NOTE: Most exercises will likely be able to be performed from the same U-Joint position, regardless of user. However, if it is necessary to change the U-Joint position for a given user, it can be accomplished on a situation-by-situation basis.

- The designated U-Joint position may be changed from the active session screen prior to the start of the exercise, if needed.
 - The pivot point selected when creating an exercise will be the point that loads from the client’s profile when an exercise is programmed to be completed.
 - A user can add a “Tag” to created exercises for future searching.
 - Type the tag in the box with text “Type here...”
 - Once the tag has been input, press the “Enter” button on the keyboard
 - Repeat this process for all desired tags
 - The newly created tags will populate above the input box
- Once all information has been input, press “Save”

Searching the Exercise Bank

A search bar is present near the top of the exercise bank screen which provides users the ability to conveniently locate exercises by searching either the name of the exercise or by U-Joint positioning.

NOTE: When performing multiple exercises in sequence, it can be helpful to build the routine by U-joint positioning. Building routines this way can be more efficient for the user and client and limit the amount of U-Joint position changes between exercises.

Using tags

- Tags can be assigned to exercises in effort to group exercises together based on a commonality. These Tags provide another convenient method of searching.
 - When searching by a Tag, all exercises assigned that Tag will be displayed.
 - To use Tags as a filter in the exercise bank, press the bookmark icon located to the right of the search bar. Following this, a list of Tags will populate. Select the desired Tag(s) to filter by and locate the exercises.
- Creating tags
 - When creating an exercise, there is a box to the right that is open for free text. This box allows is the location in which a user will input any desired Tag.
 - See **“Creating a New Exercise”** on page 46.
- Editing tags
 - Tags may be deleted from, or added to, an exercise from the edit exercise button described in the following section.
 - Removing Tags
 - ii. Press the icon of two, overlapping tags to the right of the search bar
 - iii. This will populate a list of all the created Tags
 - iv. To remove a Tag, press the garbage can icon located to the right of the Tag
 - v. Select the appropriate response on the following pop-up to either confirm or cancel the deletion of the Tag

Editing An Exercise

- Press the icon of a pencil located at the far right of each exercise line.
- Edit the necessary information on the ensuing pop-up.
- Tags may be edited at this point as well.
- Press “Save”.

Deleting An Exercise

- Press the icon of a red trash can located at the far right of the exercise line
- Confirm or cancel the deletion of the exercise by selecting the appropriate response on the ensuing pop-up.
- Deleted exercises cannot be recovered and a new exercise will need to be created.

Programs Bank

The program bank contains all programs created under a provider account.

Programs are previously created groupings of exercises that will run in the identified sequence.

Users may utilize programs to create specific protocols or routines that are frequently used by their clients.

Creating a New Program

- Press the “+” located at the top right corner of the programs screen.
 - Name the program.
 - Start selecting exercises from the “Available Exercises” column to be placed into the program by adding a checkmark to the box in front of the exercise name.
 - Exercises may be located by using the search bar below the program name.
 - Users may filter searches for exercises by either name or U-Joint position as well as filter by tags by pressing the tag button located at the far right of the search bar and selecting the desired tags.
 - As exercises are selected, they will appear in the next column labeled “Selected Exercises”.

- Reordering exercises
 - Exercises in the “Selected Exercises” column may be reordered as desired by pressing and holding the stacked four lines to the right of the exercise name and dragging the exercise to the desired position in the program.
- Tags may be added to the program using the free text box located within the “Tags” section located at the top right corner of the “Create Program” pop-up.

NOTE: Be sure to press “Enter” after typing the desired tag to confirm the tag.

- Press “Save”.

Recorded Data

With the C1, there is a substantial amount of data that can be gathered, tracked, and analyzed. The term “data” is referring to the information provided by the device in which numerical values provide information as to what is being analyzed.

The C1 is capable of recording many data points including, but not limited to; dynamic strength, number of repetitions, and motion in each repetition.

The unique dynamic strength values for shoulder movements and during exercise completion are created using an algorithm contained within the Titin KM application.

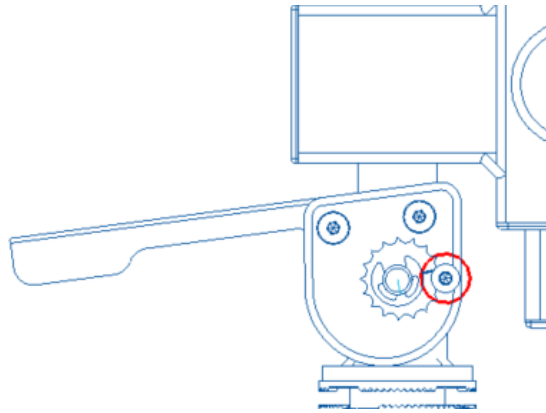
Device Maintenance

The device is designed so that maintenance should be rarely needed. Maintenance that may need to be and can be performed by the user/owner is outlined below. For any other concerns or issues please reference the troubleshooting section or contact Titin KM Biomedical.

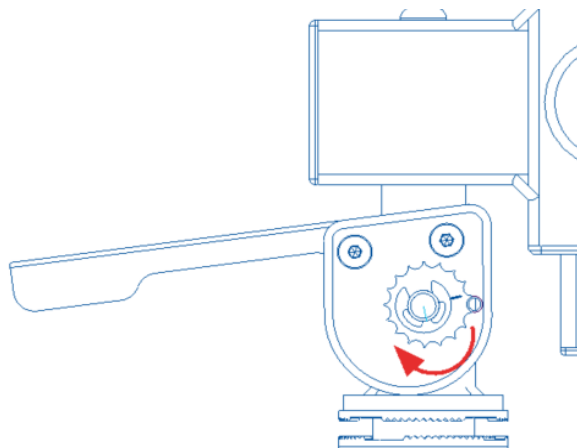
Adjusting the Cam Handle

If you notice the U-Joint is wobbly or moves during use it may be necessary to increase the clamping force of the cam handle.

1. Open the cam handle and remove the screw circled in red.



2. To increase the clamping force rotate the gear so the indicator mark is moved towards the front of the device as shown below. *Note: keep the indicator mark towards the bottom of the device.*



3. Put the screw back in and tighten.
4. Repeat steps 1-3 for the other side. Ensure the gear position indicators are in the same relative positions.

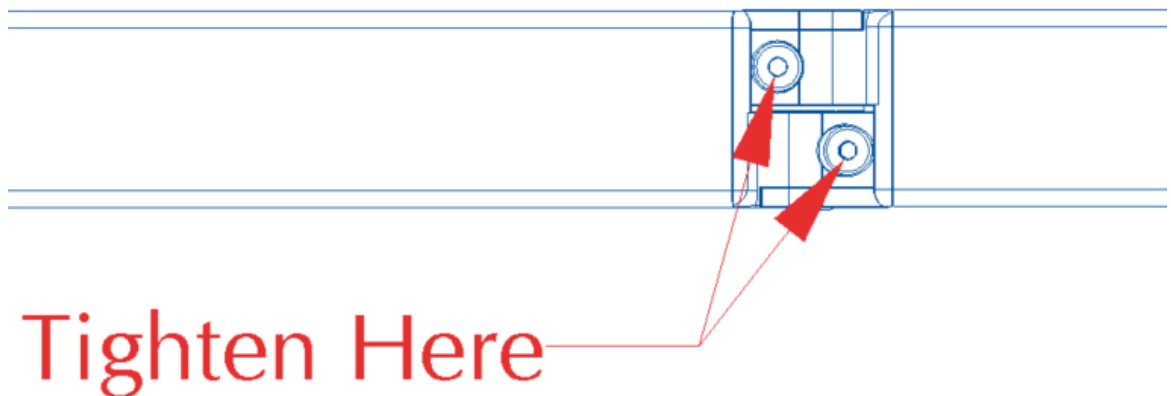
5. Close the cam handle. If the cam handle needs to be tightened further, repeat steps 1-4. If the cam Handle is too tight after adjustment go back to step 2 and rotate the gear so the indicator mark moves to the rear of the device.
6. Ensure both screws are reinstalled and tight.

Tightening the Monitor Arm

It is unlikely to happen, but in the case that the Monitor Arm begins to droop inward or will not hold its position when the tablet is connected to it you will need to tighten the hinges.

This procedure applies to both hinges on the Monitor Arm, though in most cases you will only need to tighten one.

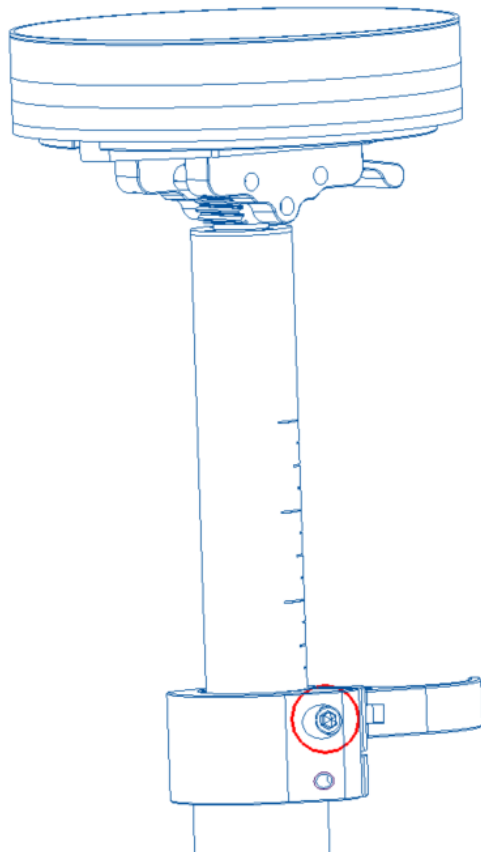
1. Locate the hinge that is drooping or rotating during use.
2. Locate the screws on the wide side of the hinge and rotate the monitor arm so that they are accessible.
3. Tighten both screws until the tension is high enough to hold the monitor arm in place during use.



Elbow Rest Clamp Tightening

In the case that the elbow rest extends while clamped or slides down during use you may need to tighten the clamping mechanism.

1. Open the clamp and allow the elbow rest to fully extend.
2. Locate the clamp adjusting screw.



3. Tighten the clamp adjusting screw. *Note: this should not need to be adjusted much.*
4. Close the clamp. Check to see that it is not too difficult to close and that it holds the elbow rest in place.
5. Repeat steps 1-4 if needed.

Proper Cleaning Procedures

It is good practice to wipe down any parts of the device that come into contact with the user after each use. (Headrest, Backrest, Elbow Rest, and Wrist Guard). More thorough cleaning procedures are outlined below.

Seat, Backrest, and Headrest

To clean the seat, backrest, headrest and elbow rest cover from debris or dust use a vacuum or light brush. For light stains use a soft cloth moistened with mild soap and water to rub them out. For more stubborn stains, rubbing alcohol is acceptable.

Note: avoid using rubbing alcohol on the Titan KM graphic on the backrest. To disinfect the seat, headrest, backrest, or elbow rest cover a bleach solution is best: use a bleach that contains 6% hypochlorite in a 20:1 water to bleach mix and allow it to thoroughly dry afterwards.

Wrist Brace

The wrist brace will need to be washed frequently depending on usage and user cleanliness. To wash the wrist brace: machine wash on a gentle cycle with cool water, air dry. *Note: The use of a stockinette over the hand and wrist should decrease the frequency at which the wrist brace will need to be cleaned.*

Mechanical/Electrical Components and Ports

Frame components and Covers should be wiped down with a soft cloth moistened with water and mild soap if necessary. Ports and connectors should only be cleaned out with gentle blasts from canned compressed air.

Tablet

For instructions on how to properly clean the tablet provided with the C1, please refer to the User Manual specific to the tablet.

Proper Storage

Tablet

When the tablet provided with the C1 is not being utilized, the tablet should be turned off. Removal from the C1 is not necessary.

Device

When the device is not being utilized, ensure the device is stable and in a safe location. If the device is not in use, appropriately remove the power cord from the power source. Fold the arm that holds the tablet in so it is close to the device and does not pose a risk of any sort.

Environment

The C1 should always be kept and stored in a temperature and humidity-controlled environment. The ideal setting for device storage would be within a clinical setting or athletic training facility. As the C1 contains electrical components, it should not be exposed to water or kept/stored in an area where water may come into contact with the device.

Device Disposal

Returning The C1

If, at any point in time, you feel you no longer would like to have the C1 in your facility, please contact Titin KM Biomedical via phone or email. With this communication, we will set up a date and time in which Titin KM personnel will come to your facility to retrieve the device.

Do not sell or throw away the device.

Troubleshooting

Malfunction	Solution
Application not opening	1. Restart the Tablet
Can't login to application	1. Ensure email and password are input and spelled correctly.
Unable to save patients/exercises/programs	1. Confirm that the tablet is connected to Wi-Fi.
Device loses resistance or movement tracking	<ol style="list-style-type: none"> 1. Follow the steps below: <ol style="list-style-type: none"> a. Set the device resistance to zero. b. Ensure the telescope shaft is fully depressed. c. Unplug the device from its power source for at least 30 seconds. d. Plug the device back into its power source. e. Wait till on-board computer re-boots and log back into the application. Attempt to use the device. f. If resistance or movement tracking is still lost repeat this process one more time before moving to solution 2. 2. If after two (2) attempts to follow solution 1, resistance is still incorrect or movement tracking is still lost please contact customer support.
Base arms (U-Joint, Elbow Rest) are loose or wiggle when the cam handle is closed.	Refer to "Device Maintenance" section (pg. 55).
Elbow Rest is lifting on its own	Refer to "Device Maintenance" section (pg. 55).
The monitor arm is falling or drooping when the device is	Refer to "Device Maintenance" section (pg. 55).

being used.	
If you use the digital screen rotation button (found under the three bar menu) and the pin access screen is entered, the application will get stuck.	<p>Please restart the on-board computer to fix the stuck condition. Then, physically rotate the screen rather than digitally flipping the display.</p> <p>To restart the computer power cycle the entire device or hold down the red power button on the top of the computer for 5 seconds.</p>

If any of these solutions do not correct the problem, or for any issue not discussed in the above table, please contact Titin KM Biomedical and we will work with you to provide a solution.

Approved Accessories

- Humero Tech Wrist Ring with Wrist Brace
- Humero Tech Grip Ring

Warranty Information

All new C1 devices are covered under a two (2) year warranty. Refurbished units are covered under a one (1) year period. This covers all mechanical and software aspects of the device as long as the device is used as stated in this User's Manual. Use of the C1 outside of designed intent will void the warranty or covered maintenance agreement (ref. Customers MSA). If an issue arises with your device, please contact Titin KM Biomedical Corporation to have the issue resolved.

For customers under a service contract this does not apply, see contract details for device service and repair agreements.

Titin KM Biomedical Corporation

703 Bridger Drive - Unit B-3, Bozeman, MT 59715

PHONE: +1 (406) 404-6333

EMAIL: support@titinkmbiomedical.com

General Specifications

Electrical Specifications: 100-240 Vac, 1.5-0.6 A, 50-60 Hz.

Minimum Broadband Bandwidth: 25 Mbps down / 3 Mbps Up

Device weight: 58 Lbs

Footprint: The device will need a minimum footprint of 4'x4' to operate.

Max user weight: 350 Lbs

Materials a User Could Come Into Contact With:

- ABS
- Acetal/Delrin
- Acrylic
- Aluminum
- Alloy Steel
- Brass
- Iglide R
- Neoprene
- Nylon
- Polycarbonate
- Polyester
- Polyethylene
- Polyurethane
- PVC
- SBR Rubber
- Spring Steel
- Stainless Steel
- TPE
- UHMW
- Zinc

CALIFORNIA PROPOSITION

⚠ 65 WARNING ⚠

WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

For more information: www.P65Warnings.ca.gov