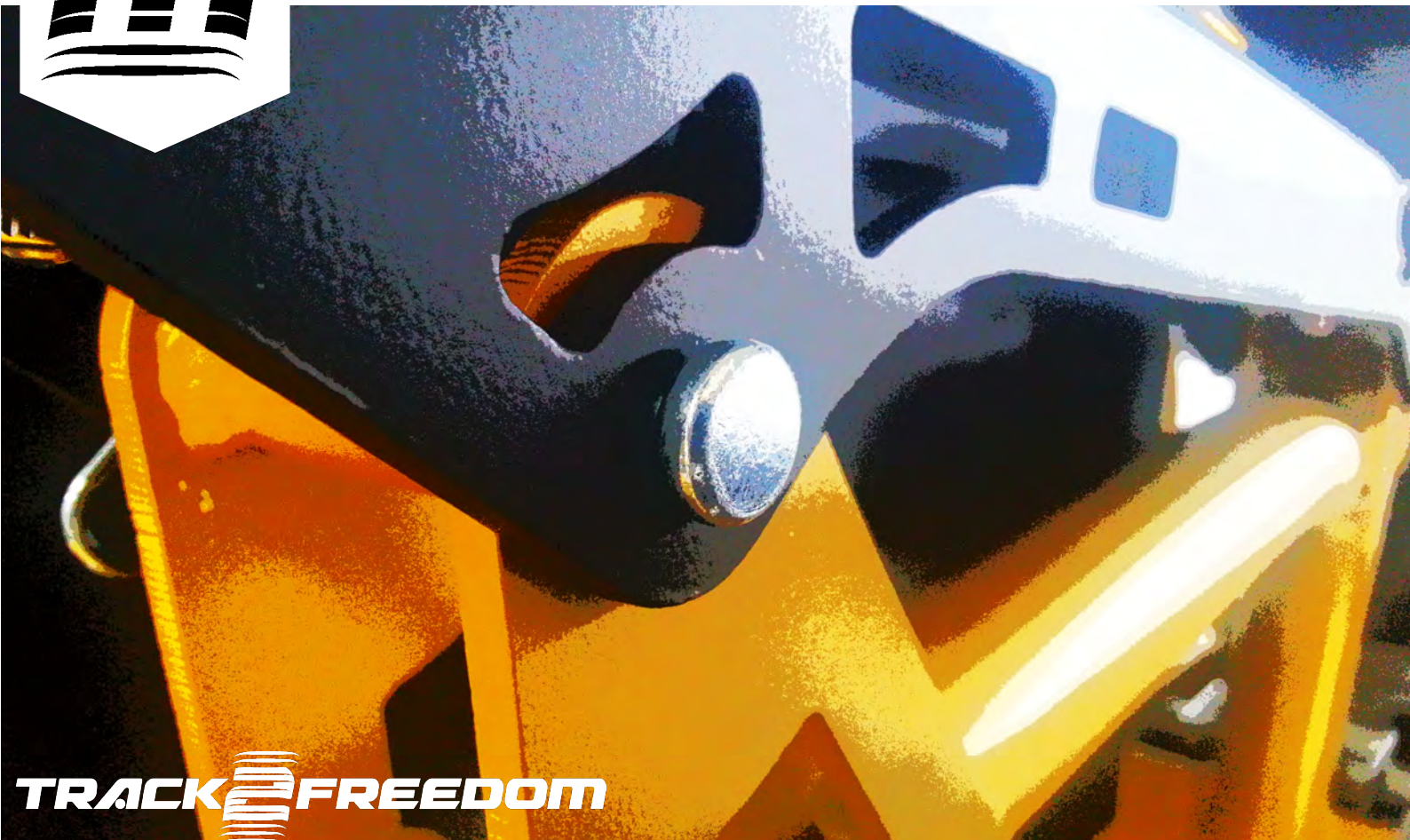


2017 MK-1 & MK-1X Owner's Manual



TRACK  FREEDOM

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A Message to the Owner

Welcome to the TrackMaster family. Our mission is to pioneer the development and deliver thoughtful support of creative mobility solutions, in search of greater freedom, independence, and quality of life for the spirited individual—that's you. The TrackMaster MK-1 & MK-1X were designed to further this mission, and we hope that you feel it has. This manual was designed to help you get the most out of your experience with the chair and the most enjoyment out of the many adventures to come. Inside you will find the necessary information to operate, personalize, and maintain your chair. Should any other questions arise, please don't hesitate to contact us at:

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Where will you go today?

Sincerely,
The TrackMaster Development Team



About This Manual

The symbols below are used throughout this owner's manual and on the power chair to identify warnings and important information. It is very important for you to read them and understand them completely.



WARNING: Indicates a potentially hazardous condition/situation. Failure to follow designated procedures can cause either personal injury, component damage, or malfunction. On the product, this icon is represented as a black symbol on a yellow triangle with a black border.



MANDATORY: These actions should be performed as specified. Failure to perform mandatory actions can cause personal injury and/or equipment damage. On the product, this icon is represented as a white symbol on a blue dot with a white border.



PROHIBITED: These actions are prohibited. These actions should not be performed at any time or in any circumstances. Performing a prohibited action can cause personal injury and/or equipment damage. On the product, this icon is represented as a black symbol with a red circle and red slash.

Note: *A general point for best practice*

T. G. Underwood LLC accepts no liability for any losses of any kind if these cautionary instructions are ignored.

WARNING

DO NOT PERFORM MAINTENANCE ON OR OPERATE THIS EQUIPMENT WITHOUT FIRST READING AND UNDERSTANDING THIS MANUAL. IF YOU ARE UNABLE TO UNDERSTAND THE WARNINGS, CAUTIONS, AND INSTRUCTIONS, CONTACT TRACKMASTER TECHNICAL SUPPORT BEFORE ATTEMPTING TO SERVICE OR OPERATE THIS EQUIPMENT – OTHERWISE INJURY OR DAMAGE MAY RESULT.

Special Notes

Special Notes

THE INFORMATION CONTAINED IN THIS DOCUMENT IS SUBJECT TO CHANGE WITHOUT NOTICE.

Trackchair User

As a manufacturer of trackchairs, TrackMaster endeavors to supply a trackchair with a variety of options and accessories to meet the many needs of the end user. However, the selection of this type of chair rests solely with the user and his/her healthcare professional capable of making such a selection.

Trackchair Tie-Down Restraints and Seat Positioning Straps

TrackMaster recommends that trackchair users NOT be transported in vehicles of any kind while in trackchairs. As of this date, the Department of Transportation has not approved any tie-down systems for transportation of a user while in a trackchair, in a moving vehicle of any type.

It is TrackMaster's position that users of trackchairs should be transferred into appropriate seating in vehicles for transportation and use be made of the restraints made available by the auto industry. TrackMaster cannot and does not recommend any trackchair transportation systems.

In regards to restraints (seat positioning straps) – it is the obligation of the TrackMaster dealer, therapists and other healthcare professionals to determine if a seating positioning strap is required to ensure the safe operation of this equipment by the user. Serious injury can occur in the event of a fall from a trackchair.

SAVE THESE INSTRUCTIONS

General Guidelines & Warnings

General Guidelines and Warnings

GENERAL WARNINGS

Repair or Service Information

Set up of the controller is to be performed **ONLY** by individuals certified by TrackMaster. The final tuning adjustments of the controller may affect other activities of the wheelchair. Damage to the equipment could occur under these circumstances. The warranty is void if non-certified individuals perform any work on these units.

Performance adjustments should only be made by professionals of the healthcare field or persons fully conversant with this process and the driver's capabilities. Incorrect settings could cause injury to the driver, bystanders, damage to the chair and to surrounding property.

After the trackchair has been set-up, check to make sure that the trackchair performs to the specifications entered during the set-up procedure. If the trackchair does **NOT** perform to specifications, turn the trackchair **OFF** immediately and contact your local TrackMaster dealership.

GENERAL WARNINGS



General Operating Information

DO NOT operate on roads, streets or highways

DO NOT climb, go up or down ramps or traverse sloped greater than 9°.

GENERAL WARNINGS (CONTINUED)

DO NOT attempt to move up or down an incline with water, ice, or oil film.

DO NOT attempt to drive curbs or obstacles larger than 6 inches tall. Doing so may cause your trackchair to turn over and cause bodily harm or damage to the chair.

DO NOT attempt to traverse obstacles without wheelie bars fully extended.

DO NOT use parts, accessories, or adapters other than those authorized by TrackMaster.

DO NOT leave the power button ON when entering or exiting the trackchair.

DO NOT stand on the frame of the trackchair.

DO NOT use the footplates as a platform to stand. When getting in or out of the trackchair, make sure that the footplate is in the upward position.

ALWAYS wear your seat positioning strap.

GENERAL WARNINGS (CONTINUED)**Track Tension**

DO NOT use your trackchair unless the tracks are tensioned properly (see *Track Tensioning* section).

Electrical*Grounding Instructions:*

DO NOT, under any circumstances, cut or remove the round grounding prong from any plug used with or for TrackMaster products. Some devices are equipped with three-prong (grounding) plugs for protection against possible shock hazards. Where a two-prong wall receptacle is encountered, it is your personal responsibility and obligation to contact a qualified electrician and have the two-prong receptacle replaced with a properly grounded three-prong wall receptacle in accordance with the National Electrical Code. If you must use an extension, use **ONLY** a three-wire extension cord having the same or higher electrical rating as the device being connected. In addition, TrackMaster has placed **RED/ORANGE WARNING TAGS** on some equipment. **DO NOT** remove these tags.

Batteries

The warranty and performance specifications contained in this manual are based on the use of deep cycle gel cell or sealed lead acid batteries. TrackMaster strongly recommends their use as the power source for this unit.

GENERAL WARNINGS (CONTINUED)

Carefully read battery/battery charger information prior to operating or charging your trackchair.

DO NOT leave your trackchair in a rain storm of any kind.

DO NOT use your trackchair in the shower

DO NOT leave your trackchair in a damp area for an extended period of time.

Direct exposure to rain or dampness will cause the chair to malfunction electrically and mechanically and may cause the chair to rust prematurely.

Check to ensure that the battery covers are secured in place, joystick boot is **NOT** torn or cracked where water can enter and that all electrical connections are secure at all times.

DO NOT use the joystick if the boot is torn or cracked. If the joystick boot becomes torn or cracked, replace **IMMEDIATELY**.

Weight Limitation

The weight limitation for the TrackMaster MK-1 & MK-1X trackchair is 300-lb.

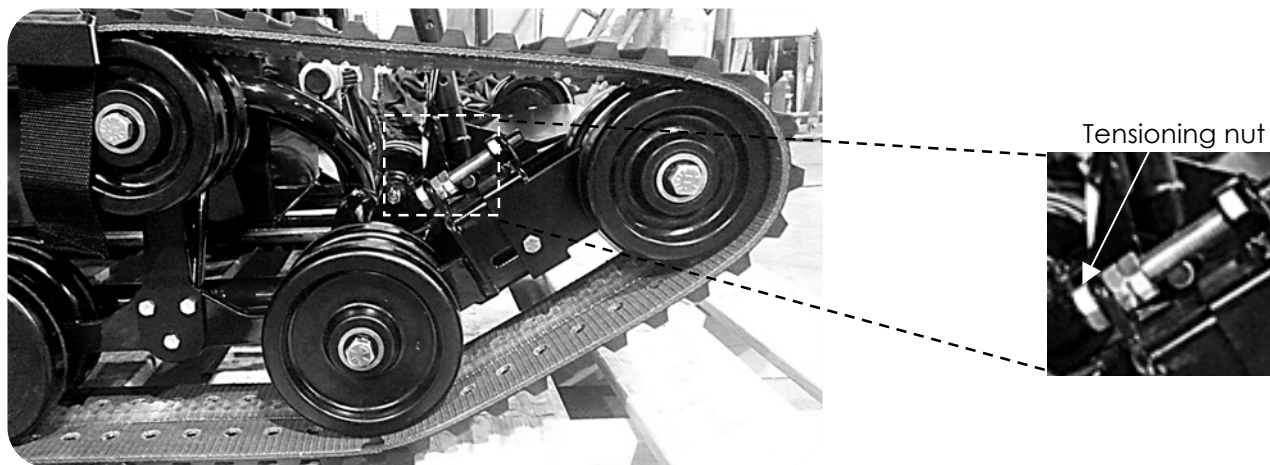
GENERAL WARNINGS (CONTINUED)***Weight Training***

TrackMaster **DOES NOT** recommend the use of its trackchairs as a weight training apparatus. TrackMaster trackchairs have **NOT** been designed or tested as a seat for any kind of weight training. If occupant uses said trackchair as a weight training apparatus, **TRACKMASTER SHALL NOT BE LIABLE FOR BODILY INJURY AND THE WARRANTY IS VOID.**

Operating the Chair

Tensioning the Tracks

To tension or loosen the tracks, use a $\frac{3}{4}$ " ratcheting wrench to turn the **tensioning nut** to the right or left, respectively.



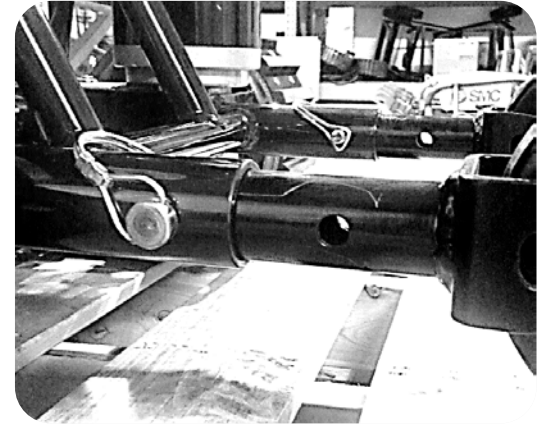
Appropriate tension is determined by deflection of the tracks. **With the push of a finger, appropriately tensioned tracks will deflect $\frac{1}{2}$ " to $\frac{3}{4}$ " at a location half way between the idler wheel and the drive wheel.**



WARNING: **DO NOT** operate the trackchair unless the tracks have been sufficiently tensioned. Failure to do so will not only cause damage to the chair, but could result in personal injury. TrackMaster does not accept any liability for damages or injuries caused due to improperly tensioned tracks.

Adjusting the Wheelie Bars

Wheelie bar adjustment is achieved simply by removing the pins from both telescoping wheelie bars and reinserting them into the desired adjustment hole. Remember, the longer the wheelie bars, the lesser the opportunity to roll directly backwards. The wheelie bars **CANNOT** help prevent a side roll over. Inclines should be approached head on whenever possible. This should be kept in mind whenever traveling up an incline. *Removal of the wheelie bars is advised for indoor use only.*



WARNING: Approaching inclines at an angle could result in a roll over. Approaching extreme inclines, whether at an angle or head on, could result in a roll over. Roll overs can result in serious injury or death. TrackMaster assumes no liability for roll overs of any kind.

Folding Down the Armrests

The armrests on your trackchair swing down and completely out of the way to allow for easy transfer. To accomplish this, only the **clevis pins** near your head need to be removed.



WARNING: Armrests should always remain in the upright position while the chair is in motion. Being thrown from the chair could result in serious injury or death. TrackMaster is not liable for accidents involving improper use of the armrests.

Parking Brakes (Manual)

Your chair comes equipped with both electronic and manual parking brakes. The electronic brakes engage whenever the joystick is not being pressed (e.g. whenever the chair is not in motion). For more information on this visit the *Joystick & Controller* section of this manual. To engage the manual brakes, each of the individual brake levers must be turned clockwise.



WARNING: It is advised that the manual parking brake be turned to the “ON” position whenever parking on an incline.



WARNING: The manual parking brakes can only be activated and deactivated by hand. Operating the chair with the parking brake in the “ON” position can be detrimental to the motor.

Headlights

The TrackMaster MK-1 & M-1X1 comes standard with dual, high performance, 900 lumen floodlights. To activate these, just flip the switch on the lower right hand side of the chair.

Adjusting the Air Ride Suspension

To adjust the air ride suspension units under your chair, just inflate or deflate them to a comfortable pressure. TrackMaster recommends somewhere between 35 and 55 in each unit. Each unit is inflated and deflated via a standard Schrader valve, just like you have on your car tires.



Schrader valve



WARNING: NEVER inflate any individual suspension unit with over 90 psi of air. Using an air compressor is NOT advised because this will cause the unit to rapidly inflate, making it easier to overfill and potentially explode.

Joystick & Controller

General

An R-net control system comprises a minimum of two modules – Joystick Module and Power Module. The following diagram shows the basic setup.

Handling

Avoid knocking your control system and especially the joystick.

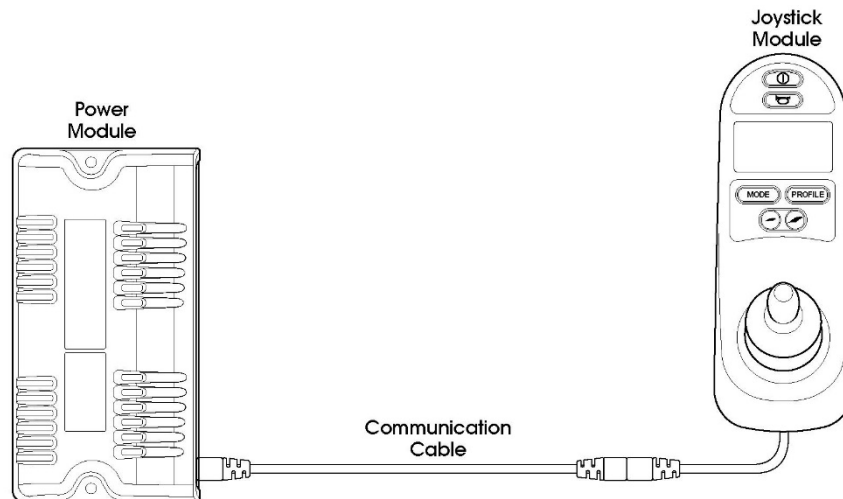
Be careful not to strike obstacles with the control system or joystick when you drive. Never drop the control system.

When transporting your chair, make sure that the control system is well protected. Avoid damage to cables.

Operating Conditions

Your control system uses industrial-grade components throughout, ensuring reliable operation in a wide range of conditions. However, you will improve the reliability of the control system if you keep exposure to extreme conditions to a minimum.

Do not expose your control system or its components to damp environments for prolonged periods. If the control system becomes contaminated with food or drink clean it off as soon as possible.





Cleaning

Clean the control system and the joystick with a cloth dampened with diluted detergent. Be careful when cleaning the joystick and screen.

Never use abrasive or spirit-based cleaners.

Mating Connectors

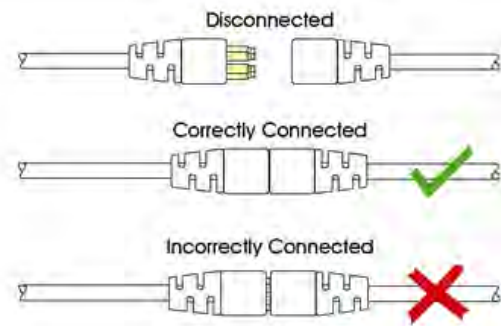
To connect the Communication Cables:

- Holding the connector housing, firmly push the connector into its mate until you can no longer see the yellow plastic.

The connectors are secured using a friction system.

To disconnect the Communication Cables:

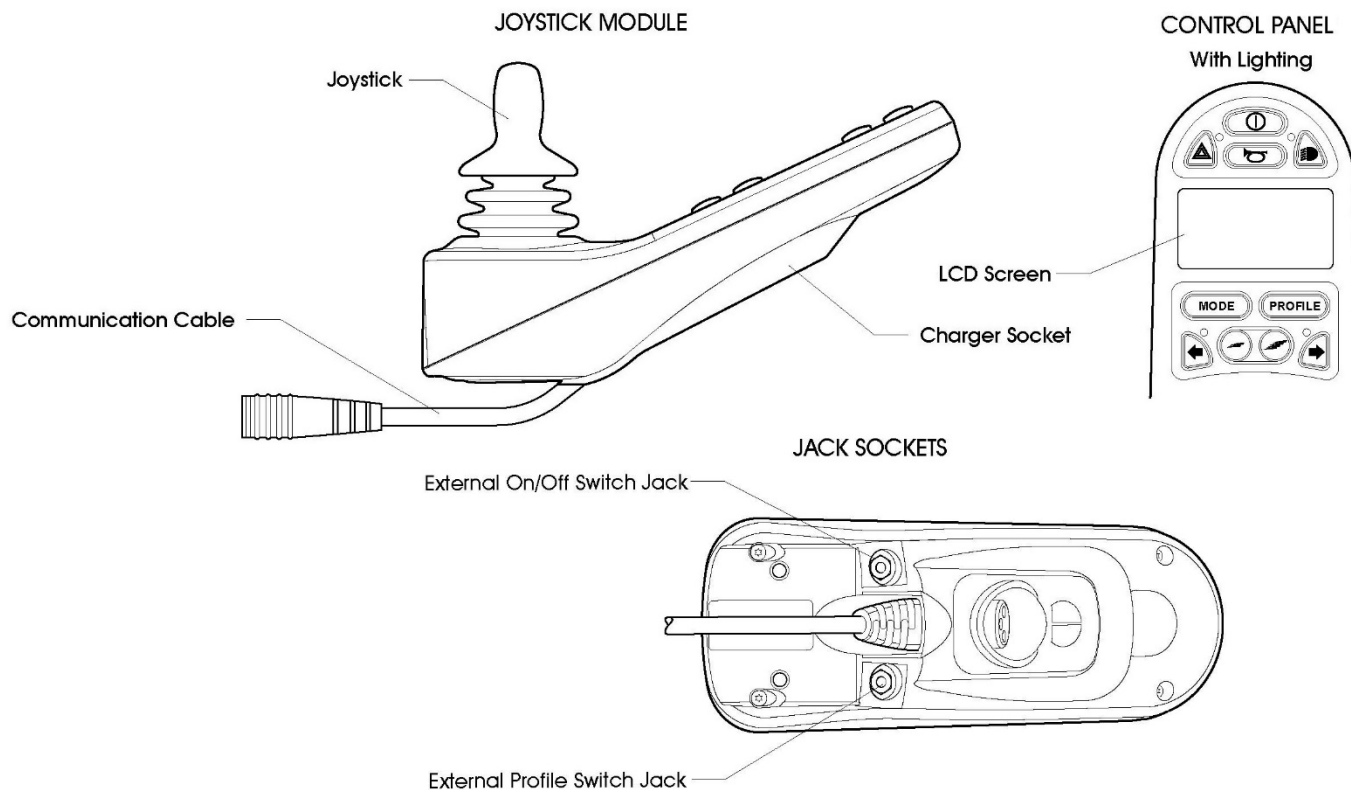
- Holding the connector housing firmly, pull the connectors apart.



WARNING: Do not hold or pull on the cable. Always grip the connector when connecting and disconnecting.

Note: When the control system is first switched on after a connection or system component change, the time Timer will be displayed whilst the system checks itself and then the Restart icon will be displayed. Switch the control system off and on again to operate.

Controls



Joystick

The primary function of the joystick is to control the speed and direction of the trackchair. The further you push the joystick from the center position the faster the trackchair will move. When you release the joystick the brakes are automatically applied.

Buttons

BUTTONS



On/Off Button



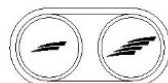
Mode Button



Hazard Button & LED



Left Indicator Button & LED



Speed Buttons
Decrease / Increase



Horn Button



Profile Button



Lights Button & LED



Right Indicator Button & LED

On/Off Button

The On/Off button applies power to the control system electronics, which in turn supply power to the trackchair's motors. Do not use the On/Off button to stop the trackchair unless there is an emergency. (If you do, you may shorten the life of the trackchair drive components).

Horn Button

The Horn will sound while this button is depressed.

Speed Decrease Button

This button decreases the maximum speed setting.

Depending on the way the control system has been programmed a momentary screen may be displayed when the button is pressed.

Speed Increase Button

This button increases the maximum speed setting.

Depending on the way the control system has been programmed a momentary screen may be displayed when the button is pressed.

Mode Button

The Mode button allows the user to navigate through the available operating Modes for the control system. The available modes are dependent on programming and the range of auxiliary output devices connected to the control system.

Profile Button

The Profile button allows the user to navigate through the available Profiles for the control system. The number of available Profiles is dependent on how the control system is programmed.

Depending on the way the control system has been programmed a momentary screen may be displayed when the button is pressed.

Hazard Warning Button and LED

This button activates and de-activates the trackchair's hazard lights. Depress the button to turn the hazards on and depress the button again to turn them off.

When activated the hazard LED and the indicator LEDs will flash in sync with the trackchair's indicators.

Lights Button and LED

This button activates and de-activates the trackchair's lights. Depress the button to turn the lights on and depress the button again to turn them off.

When the lights are activated the LED will illuminate.

Left Indicator Button and LED

This button activates and de-activates the trackchair's left indicator. Depress the button to turn the indicator on and depress the button again to turn it off.

When activated the left indicator LED will flash in sync with the trackchair's indicator(s).

Right Indicator Button and LED

This button activates and de-activates the trackchair's right indicator. Depress the button to turn the indicator on and depress the button again to turn it off.

When activated the right indicator LED will flash in sync with the trackchair's indicator(s).

External On/Off Switch Jack

This allows the user to turn the control system on and off using an external device, such as a buddy button.

External Profile Switch Jack

This allows the user to select Profiles using an external device, such as a buddy button.

To change the Profile whilst driving simply press the button.

If the control system is set to latched drive or actuator control operation, then the polarity of the jack input is reversed to effect a failsafe system; meaning this input will provide an External Profile Switch function and an Emergency Stop Switch function.

CAUTION: The Joystick Module is supplied with rubber bungs that must be inserted into the Jack Socket when no external device is connected.

LCD Screen

The status of the control system can be understood by observing the LCD screen. The control system is on when the screen is backlit.

Charger Socket

This socket should only be used for charging or locking the trackchair. Do not connect any type of programming cable into this socket.



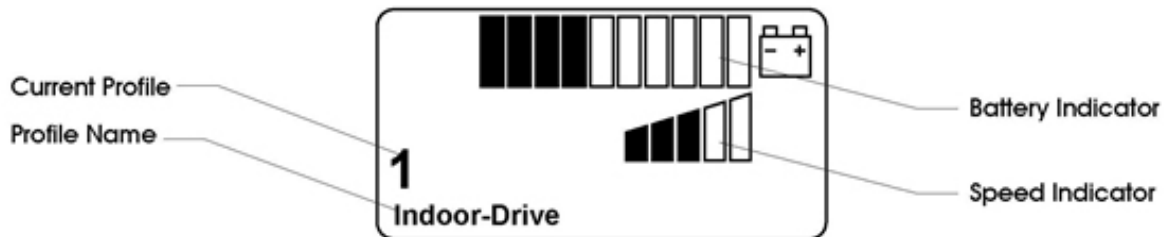
WARNING: This socket should not be used as a power supply for any other electrical device. Connection of other electrical devices may damage the control system or affect the E.M.C. performance of the trackchair. The control system's warranty will be voided if any device other than a battery charger supplied, with the trackchair, or the lock key is connected into this socket.

LCD Screen

The status of the control system can be understood by observing the LCD screen.

Screen Symbols

The Drive screen for the R-net has common components, which will always appear, and components that will only appear under certain conditions. Below is a view of a typical Drive screen in Profile 1.





Battery Indicator

This displays the charge available in the battery and can be used to alert the user to the status of the battery.

- **Steady**
This indicates that all is well.
- **Flashing Slowly**
The control system is functioning correctly, but you should charge the battery as soon as possible.
- **Stepping Up**
The trackchair batteries are being charged. You will not be able to drive the trackchair until the charger is disconnected and you have switched the control system off and on again.



Speed Indicator

This displays the current speed setting.
The speed setting is adjusted using the Speed Buttons.

1
Indoor-Drive

Current Profile

The Profile Number describes which Profile the control system is currently operating in.
The Profile Text is the name or description of the Profile the control system is currently operating in.

***In Focus***

When the control system contains more than one method of direct control, such as a secondary Joystick Module or a Dual Attendant Module, then the Module that has control of the trackchair will display the In Focus symbol.

***Speed Limit***

If the speed of the trackchair is being limited, for example by a raised seat, then this symbol will be displayed.

If the trackchair is being inhibited from driving, then the symbol will flash.

***Latched***

When the control system is operating in a latched condition this symbol will be displayed.

***Restart***

When the control system requires a reboot; for example, after a module re-configuration, this symbol will be flashed.

***Fault***

The control system can detect a wide variety of errors. When the system has detected an error that is not severe enough to cause the system to trip, then this symbol will be displayed.

***Motor Temperature***

This symbol is displayed when the control system has intentionally reduced the power to the motors, in order to protect them against heat damage.



Control System Temperature

This symbol is displayed when the control system has intentionally reduced its own power, in order to protect itself against heat damage.



Timer

This symbol is displayed when the control system is changing between different states. An example would be entering into Programming Mode. The symbol is animated to show the sands falling.



E-Stop

If the control system is programmed for latched drive or actuator operation, then it is normal for an Emergency Stop Switch to be connected into the External Profile Switch Jack.

If the Emergency Stop Switch is operated or disconnected, this symbol will be displayed.

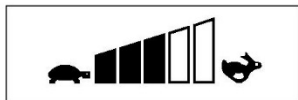


Bluetooth

When Bluetooth Mode is entered the screen will display the following icon.

Momentary Screens

If the momentary screens are programmed to be displayed then pressing the Speed or Profile Buttons will display screens such as below.



Speed Momentary Screen

Profile 2
Outdoor-Drive

Profile Momentary Screen

Diagnostic Screen

When the control system safety circuits have operated and the control system has been prevented from moving the trackchair a diagnostics screen will be displayed.

This indicates a system trip, i.e. the R-net has detected a problem somewhere in the wheelchair's electrical system.

If the error is in a non-active module, for example in the ISM but with a drive Profile is selected, then drive will still be possible, however, the diagnostic screen will appear intermittently.

- **Identified Module**

This identifies which module of the control system has registered the problem, such as:

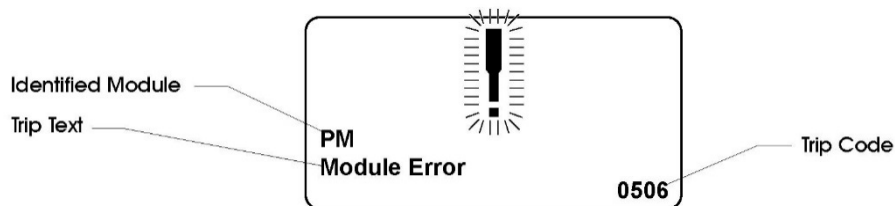
- PM Power Module
- JSM Joystick Module
- ISM Intelligent Seating/lighting Module

- **Trip Text**

The Trip Text gives a brief description of the trip type.

- **Trip Code**

The 4 digit code displayed gives the exact trip that has been recorded.



Diagnostic Procedure

Please follow this procedure:

- Read and note the Trip Text displayed, the identified Module and the Trip Code.
- Switch off the control system.
- Make sure that all connectors on the listed Module and the trackchair are mated securely.
- Check the condition of the battery.
- Note the Trip Text description, and take the required action.
- Switch on the control system again and try to drive the trackchair. If the safety circuits operate again, switch off and do not try to use the trackchair. Contact your service agent.

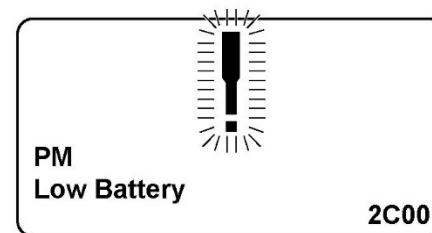
Example:

Identified Module Power Module.

Trip Text Low Battery

Trip Code 2C00

This means the battery needs charging or there is a bad connection to the battery.



- Check the connections to the battery. If the connections are good, try charging the battery.

Locking the Control System

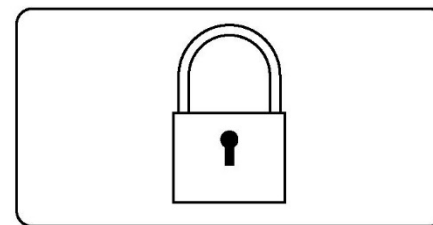
The Control System can be locked in one of two ways. Either using a button sequence on the keypad or with a physical Key.

Keypad Locking

To lock the trackchair using the keypad:

- While the control system is switched on, depress and hold the On/Off button.
- After 1 second the control system will beep. Now release the On/Off button
- Deflect the joystick forwards until the control system beeps.
- Deflect the joystick in reverse until the control system beeps.
- Release the joystick, there will be a long beep.
- The trackchair is now locked.

The screen to the right will be displayed the next time the Control System is switched on.



To unlock the trackchair:

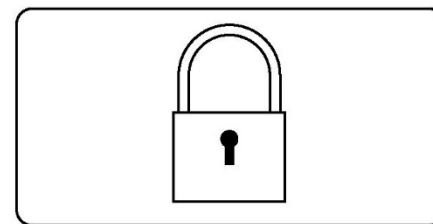
- If the control system has switched off, press the On/Off button.
- Deflect the joystick forwards until the control system beeps.
- Deflect the joystick in reverse until the control system beeps.
- Release the joystick, there will be a long beep.
- The trackchair is now unlocked.

Key Locking

To lock the trackchair with a key:

- With the Control System switched on, insert and remove a PGDT supplied key into the Charger Socket on the Joystick Module. A short beep will be heard.
- The wheelchair is now locked.

The screen to the right will be displayed the next time the Control System is switched on.

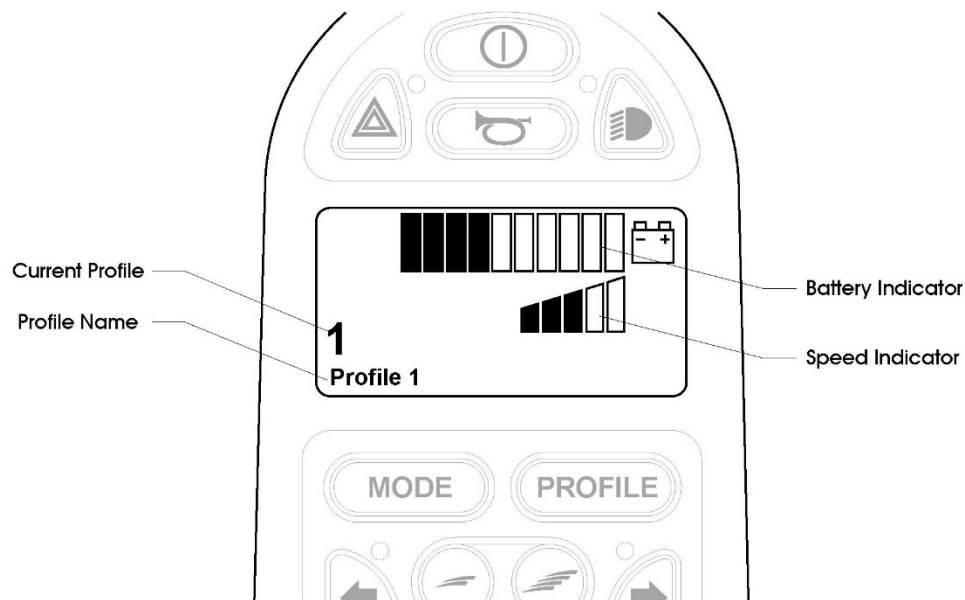


To unlock the trackchair:

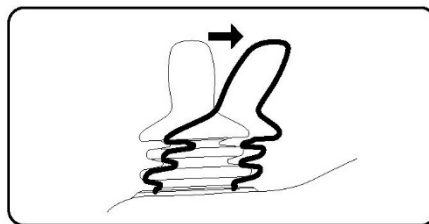
- If the control system has switched off, press the On/Off button.
- Insert and remove a PGDT supplied key into the Charger Socket on the Joystick Module. A short beep will be heard.
- The trackchair is now unlocked.

Getting Ready To Drive

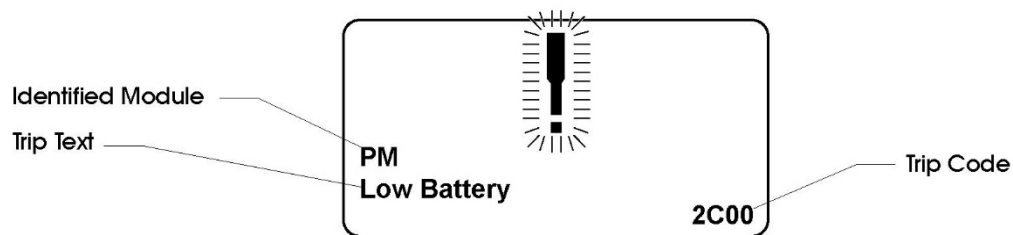
- Operate the On/Off switch. The screen will go through an initializing process then show the base screen as follows.
- Check that the Speed Setting is at a level that suits you.
- Push the joystick to control the speed and direction of the trackchair.



Note: If you push the joystick before or just after you switch the control system on, the screen will flash the joystick displaced screen. You must release and center the joystick to resume normal operation. If you do not release the joystick within five seconds the trackchair will not be able to move, even if you release the joystick and push it again. The screen will display the diagnostic screen at this time. You can reset this condition by switching the control system off and on again.



If you do not push the joystick as you switch the wheelchair on and the diagnostic screen is displayed, as in the following diagram, then the R-net has detected a problem somewhere in the trackchair's electrical system.



Settings Menu

The Settings Menu allows the user to adjust the CJSMD display in terms of clock adjustment and display format, the brightness of the backlight, and the behavior of the odometer. The menu is accessed by depressing the Speed Down and Speed Up buttons simultaneously.

Set Time

A right joystick deflection will enter a clock adjustment screen in which further joystick deflections are used to set the time.

Display Time

This sets the format of the time display or turns it off.

The options are 12hr, 24hr or Off. Left and right joystick deflections are used to change between the options.

Distance

This sets the functionality of the odometer.

- **Total Distance** This is a value held in the Power Module and relates to the total distance driven using that Power Module.
- **Trip Distance** This is a value held in the CJSMD and relates to the total distance driven since the last reset.
- **Display Distance** Sets whether Total Distance or Trip Distance appears as the odometer display on the CJSMD.

- **Clear Trip Distance** A right joystick deflection will clear the Trip Distance value.
- **Exit** A right joystick deflection will return to the Settings Menu.

Backlight

This sets the intensity of the LCD backlight.

The adjustable range is 0% to 100% in steps of 10%. Adjustments are made with left and right joystick deflections.

Tips for Using Your Control System

Driving - General

Make sure that the control system is mounted securely and that the joystick position is correct. The hand or limb you use to operate the joystick should be supported, for example by the trackchair arm pad. Do not use the joystick as the sole support for your hand or limb - trackchair movements and bumps could upset your control.

Driving Technique

The control system interprets your joystick movements and produces appropriate movements of your trackchair. You will need very little concentration to control the trackchair, which is especially useful if you are inexperienced. One popular technique is to simply point the joystick in the direction you want to go. The trackchair will "home-in" on the direction you push the joystick.

The further you push the joystick away from the rest position, the faster the trackchair will go. Releasing the joystick will stop the trackchair.

The intelligent speed control system minimizes the effects of slopes and different types of terrain.



WARNING: The wheelchair user must be capable of driving a trackchair safely. TrackMaster accepts no liability for losses of any kind arising from failure to comply with this condition.

Slow or sluggish movement

If the trackchair does not travel at full speed or does not respond quickly enough, and the battery condition is good, check the maximum speed setting. If adjusting the speed setting does not remedy the problem then there may be a non-hazardous fault. Contact your service agent.

Precautions for Use

Note: In the event of the trackchair moving in an unexpected way **RELEASE THE JOYSTICK**. This action will stop the wheelchair under any circumstances.



Hazards

Do not drive the trackchair:

- Beyond restrictions indicated in your wheelchair user manual, for example maximum inclines, curb height etc.
- In places or on surfaces where a loss of wheel grip could be hazardous, for example on wet grassy slopes.
- If you know that the control system or other crucial components require repair.



WARNING: Although your control system is designed to be extremely reliable and each unit is rigorously tested during manufacture, the possibility of a system malfunction always exists (however small the probability). Under some conditions of system malfunction the control system must (for safety reasons) stop the chair instantaneously. If there is any possibility of the user falling out of the chair as a result of a sudden braking action, it is imperative that a restraining device such as a seat belt is in use at all times when the trackchair is in motion. TrackMaster accepts no liability for losses of any kind arising from the unexpected stopping of the trackchair, or arising from the improper use of the trackchair or control system.



WARNING: Do not operate the control system if the chair behaves erratically, or shows abnormal signs of heating, sparks or smoke. Turn the control system off at once and consult your service agent. TrackMaster accepts no liability for losses of any kind arising from failure to comply with this condition.



WARNING: Electronic equipment can be affected by Electro Magnetic Interference (EMI). Such interference may be generated by radio stations, TV stations, other radio transmitters and cellular phones. If the chair exhibits erratic behavior due to EMI, turn the control system off immediately and consult your service agent. TrackMaster accepts no liability for losses of any kind arising from failure to comply with this condition.



WARNING: The trackchair user must comply with all wheelchair safety warnings. TrackMaster accepts no liability for losses of any kind arising from failure to comply with this condition.

Safety Checks

The electronic circuits in your control system have been designed to be extremely safe and reliable. The on-board microcomputer carries out safety checks at up to 100 times per second. To supplement this safety monitoring you should carry out the following periodic checks.

If the control system fails any of these checks, do not use the trackchair and contact your service agent.

Daily Checks

- ✓ **Joystick:** With the control system switched off, check that the joystick is not bent or damaged and that it returns to the center when you push and release it. If there is a problem do not continue with the safety checks and contact your service agent.

Weekly Checks

- ✓ **Parking brake:** This test should be carried out on a level floor with at least one meter clear space around the trackchair.
 - Switch on the control system.
 - Check that the screen remains on after initialization and that the battery gauge is displaying a reasonable amount of charge.
 - Push the joystick slowly forwards until you hear the parking brakes operate. The chair may start to move.
 - Immediately release the joystick. You must be able to hear each parking brake operate within a few seconds.
 - Repeat the test a further three times, pushing the joystick slowly backwards, left and right.
- ✓ **Connectors:** Make sure that all connectors are securely mated.
- ✓ **Cables:** Check the condition of all cables and connectors for damage.
- ✓ **Joystick gaiter:** Check the thin rubber gaiter or boot, around the base of the joystick shaft, for damage or splitting, check visually only, do not handle the gaiter.
- ✓ **Mounting:** Make sure that all the components of the control system are securely mounted. Do not over tighten any securing screws.

Servicing

To ensure continued satisfactory service, we suggest you have your trackchair and control system inspected by your service agent after a period of 1 year from commencement of service. Contact your service agent for details when the inspection is due.

Battery Gauge

The battery gauge is included to let you know how much charge is left in your batteries. The best way for you to use the gauge is to learn how it behaves as you drive the trackchair. Like the fuel gauge in a car, it is not completely accurate, but it will help you avoid running out of “fuel”.

The battery gauge works in the following way:

When you switch on the control system, the battery gauge shows an estimate of the remaining battery charge.

The battery gauge gives you a more accurate reading about a minute after you start driving the trackchair.

Note: When you replace worn out batteries, fit the type recommended for this model only. If you use another type the battery gauge may be inaccurate.

The amount of charge in your batteries depends on a number of factors, including the way you use your trackchair, the temperature of the batteries, their age and the way they are made. These factors will affect the distance you can travel in your trackchair. All trackchair batteries will gradually lose their capacity as they age.

The most important factor that reduces the life of your batteries is the amount of charge you take from the batteries before you recharge them. Battery life is also reduced by the number of times you charge and discharge the batteries.

To make your batteries last longer, do not allow them to become completely flat. Always recharge your batteries promptly after they are discharged.

If your battery gauge reading seems to fall more quickly than usual, your batteries may be worn out.

How to Read a Battery Gauge

- If the battery gauge shows red, yellow and green, the batteries are charged. (Bars 1 – 10)
- If the battery gauge shows just red and yellow, then you should charge the batteries as soon as you can. (Bars 1 – 7)
- If the battery gauge shows just red, either steady or flashing slowly, then you should charge the batteries immediately. (Bars 1 – 3)

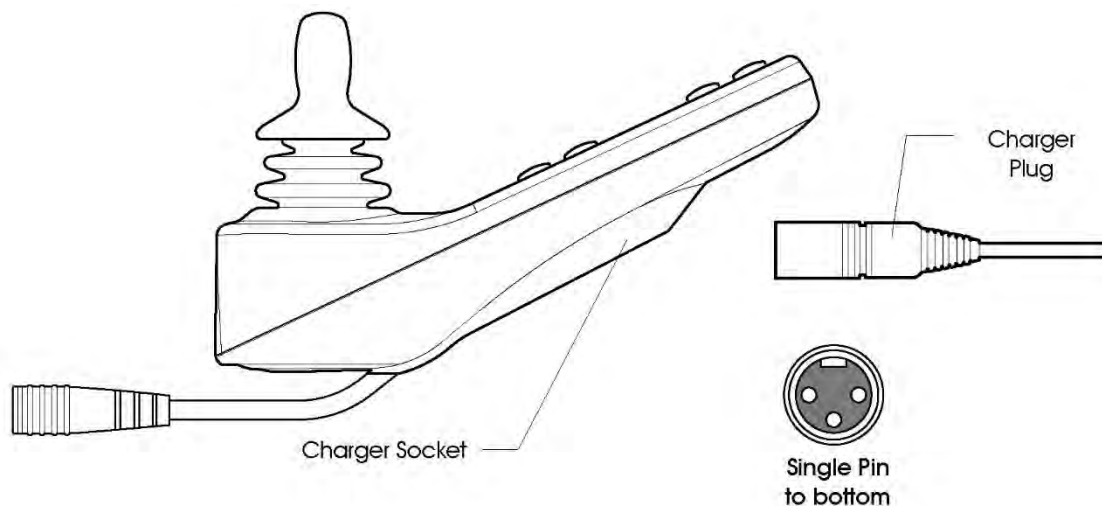


WARNING: Do not operate the control system if the battery is nearly discharged. Failure to comply with this condition may leave the user stranded in an unsafe position, such as in the middle of a road. TrackMaster accepts no liability for losses of any kind arising from failure to comply with this condition.

Battery Charging

To charge the wheelchair batteries connect the charger plug into the battery charger socket on the R-net JSM. You will not be able to drive the trackchair when the charger is connected.

To connect the charger plug, ensure the single pin is at the bottom, as shown in the following illustration, then offer the charger plug to the R-net in a horizontal orientation. The molded guide on the R-net will help you to locate the plug. Ensure the plug is pushed fully in position.





WARNING: Do not exceed the maximum charging current of 12 Amps. Always use an off-board charger fitted with a Neutrik NC3MX plug. Failure to observe these conditions could result in poor contact resistance in the charger connector resulting in overheating of the charger plugs. This presents a potential burn hazard for the user. TrackMaster accepts no liability for losses of any kind arising from failure to comply with this condition.



WARNING: Ensure that the charger plug pins are of the correct polarity to be compatible with the pin polarity shown on the control system's specific data sheet. Failure to observe this condition could result in a burn hazard or fire hazard. TrackMaster accepts no liability for losses of any kind arising from failure to comply with this condition.



WARNING: Do not disconnect batteries or open-circuit the circuit breaker while charging is in progress. Failure to observe this condition could result in a burns hazard or fire hazard. TrackMaster accepts no liability for losses of any kind arising from failure to comply with this condition.



WARNING: Only use the battery charger that has been supplied with your trackchair. The use of incorrect chargers could damage the batteries, trackchair, control system or charger itself, or may result in parts overheating creating the potential for burns or even fire. TrackMaster accepts no liability for losses of any kind if the charger is incompatible with the control system or any other part of the trackchair system.

Servicing

All repairs and servicing must be carried out by authorized service personnel. Opening or making any unauthorized adjustments or modifications to the control system or its components will invalidate any warranty and may result in hazards to yourself or other people, and is strictly forbidden.



WARNING: TrackMaster accepts no liability for losses of any kind arising from unauthorized opening, adjustment or modifications to the R-net control system.



WARNING: If the control system is damaged in any way, or if internal damage may have occurred through impact or dropping, have the product checked by qualified personnel before operating. TrackMaster accepts no liability for losses of any kind arising from failure to comply with this condition.

Warranty

The R-net control system is covered by a warranty period defined by TrackMaster. For details of the warranty period, please contact your service agent.

The warranty will be void if the R-net control system has:

- Not been used in accordance with the R-net control system Technical Manual, SK77981.
- Been subject to misuse or abuse.
- Been modified or repaired by non-authorized persons.



WARNING: The warranty will be void if the R-net has not been used in accordance with Technical Manual SK77981, the R-net has been subject to misuse or abuse, or if the R-net has been modified or repaired by unauthorized persons.

Batteries & Charging

General Safety Instructions

Note: TrackMaster will only install AGM batteries on the MK-1 & MK-1X.

Before connecting your batteries or applying AC power, read all instructions and cautionary markings on the battery charger, cables, and batteries.



WARNING: Use of attachments not recommended or sold by Professional Mariner, LLC may result in a risk of fire, electrical shock or personal injury.

EXTERNAL CONNECTIONS TO CHARGER SHALL COMPLY WITH THE UNITED STATES COAST GUARD ELECTRICAL REGULATIONS (33CFR183, SUB PART 1).

Do not operate the charger if it has received a sharp blow, direct hit of force, been dropped or otherwise damaged in any way. Do not use if any protective AC and DC cable insulations, DC fuse holders and/or terminals have been damaged or compromised.

Call your local TrackMaster dealership for repair service to avoid risk of fire, short circuits or electrical shock.

Do not disassemble the battery charger. If service or repair is required please contact your local TrackMaster service specialist. Incorrect reassembly or cable modifications may result in a risk of electrical shock, fire or explosion.

To reduce the risk of electrical shock, remove AC power from the charger prior to any maintenance or cleaning.

HOW TO AVOID SERIOUS INJURY OR DEATH FROM ELECTRICAL SHOCK

- Make your AC power connection in a secure manner that will avoid contact with water.

Personal Safety Precautions

- a) Someone should be within the range of your voice or close enough to come to your aid when working near a lead-acid battery.
- b) Wear complete eye protection and clothing protection. Avoid touching eyes while working near battery(s).
- c) Incorrect assembly or modification may result in risk of electrical shock.
- d) Be extra cautious to reduce risk of dropping a metal tool onto the battery. It might spark or short-circuit a battery or other electrical hardware which may cause an explosion or fire.
- e) Remove all personal metal items such as rings, bracelets, necklaces, watches, and jewelry when working near a battery. A battery can produce a short circuit high enough to weld a ring or any other metal, causing serious burns.



WARNING: NEVER use your battery to charge anything other than the trackchair system it was acquired with.

Safety Precautions Prior to Charging Batteries

Extension cords should be industrial grade / heavy duty UL approved and grounded. Check extension cord before use for damage, bent prongs, and cuts. Replace if damaged. Always make your extension cord connection on the charger side first. After connecting the extension cord to the charger proceed to plug the extension cord to a nearby 120 VAC GFCI protected (Ground Fault Circuit Interrupt) outlet.



Always remove the extension cord from the 120 VAC outlet first when charging is completed followed by unplugging the charger from the extension cord.

General Operation

Note: *TrackMaster will only install AGM batteries on the MK-1 & MK-1X.*

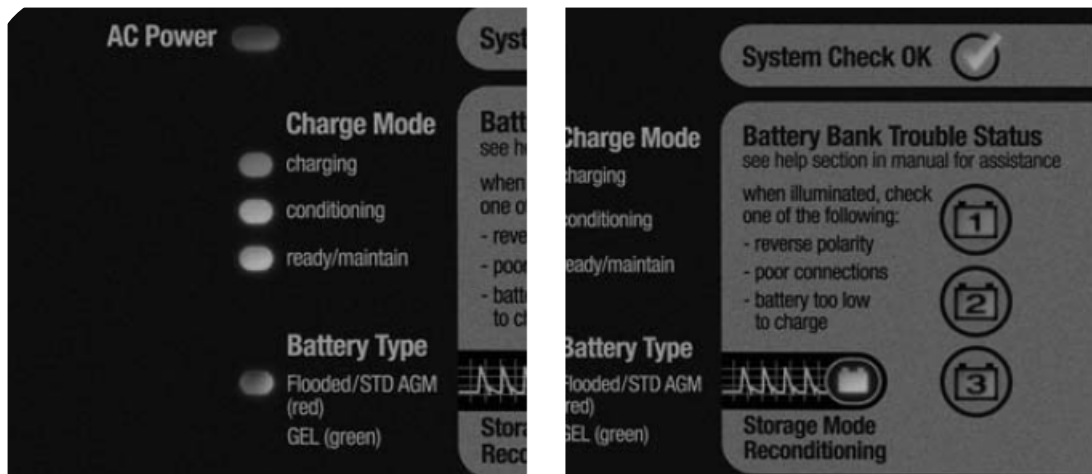
Make sure your charger and batteries are properly vented. Connect your extension cord with no AC power present to the ProSport and proceed to plug your extension in at a nearby 120 VAC GFI protected (Ground Fault Circuit Interrupt) outlet.

With your ProSport plugged in properly, it will automatically fully charge your batteries while it conditions and extends the life of your batteries. Always leave your charger plugged in to reduce sulfate build-up allowing your batteries to be fully charged and maintained for your next trip.

The ProSport design incorporates a new storage recondition mode that simulates and reconditions your batteries for 3 hours once a month and when completed will resume its normal auto maintain mode. During the storage recondition mode the ready/maintain LED will remain green and the storage recondition mode LED will fade-in fade-out pulse, indicating your batteries are being reconditioned and are fully charged during this process.

ProSport LED Status Center - Operation and Display

ProSport includes 7 LEDs for operation status and up to 3 battery bank trouble LEDs depending on the model.



AC Power LED

Illuminates **blue** when AC power is applied

Battery Type LED

Illuminates **red** for standard Flooded (lead-acid)/AGM and **green** for GEL

System Check OK LED

After applying AC power the ProSport will self-test and analyze all battery connections and batteries. If all checks are OK the **green** LED will illuminate. This can take up to 2 minutes.

Charge Mode LEDs

- Charging: **Red** LED will flash during the self-test and battery test mode (approximately 1 – 2 minutes) and will be solid **red** during charging
- Conditioning: **Amber** LED illuminates during reconditioning mode.
- Ready/Maintain: **Green** LED illuminates when batteries are fully charged and being automatically maintained until you are ready to use your chair
- Storage Recondition: **Green** LED fades in and out when performing a once a month storage recondition mode

Battery Bank Trouble Status LEDs

Red LEDs will illuminate indicating a wiring problem or fault at one of the batteries connected to the ProSport charger. Contact your local TrackMaster dealership for assistance.

Warranty

There is a **limited two-year factory warranty** with your ProSport charger. Each model is guaranteed against defects in material and workmanship to the original consumer in normal use for 2 years from the date of purchase. Professional Mariner, LLC will at its discretion repair or replace free of charge any defects in material or workmanship.

The following conditions apply:

- Warranty and repair adjustment calculated from manufacture date if not registered or proof of purchase within two weeks of sale.
- Warranty void if unauthorized repairs attempted.
- Deep water damage is not covered under warranty.
- Cosmetic repairs are done at the owner's request and expense.

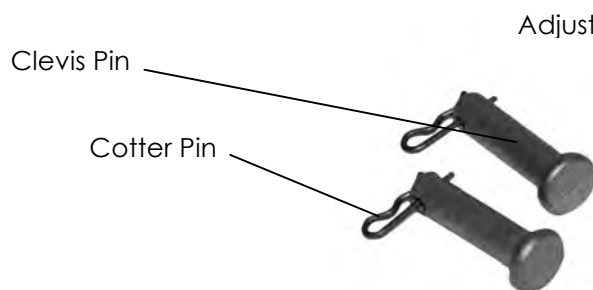
Comfort Adjustments

General Adjustments

Several of the comfort features on your chair are adjusted via telescopic tubing and pins and/or threaded rod ends.

Reclining the Seat

The entire seating frame pivots forward after the **clevis pin** and **cotter pin** on each side of the **adjustment bracket** are removed. The holes in the bracket indicate 3° changes in the seat position. The top hole gives **3°** of decline. The bottom hole gives **0°** of decline, or a flat seat.



Adjustment bracket

3°

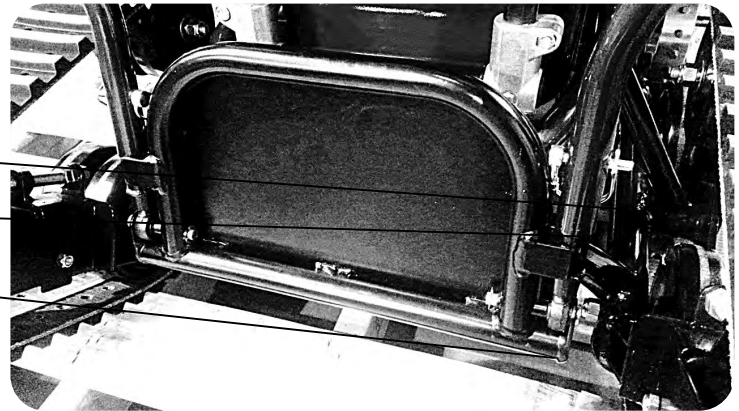
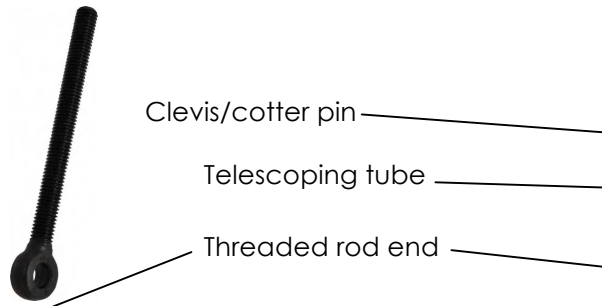
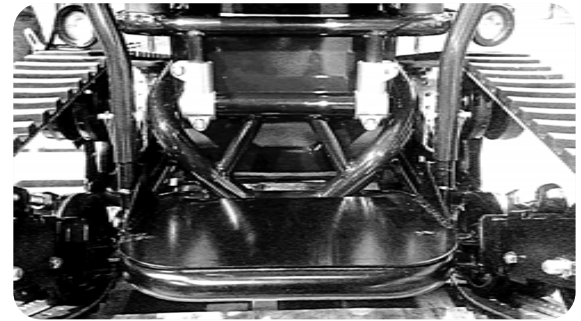
0°, flat



Adjusting the Footplate

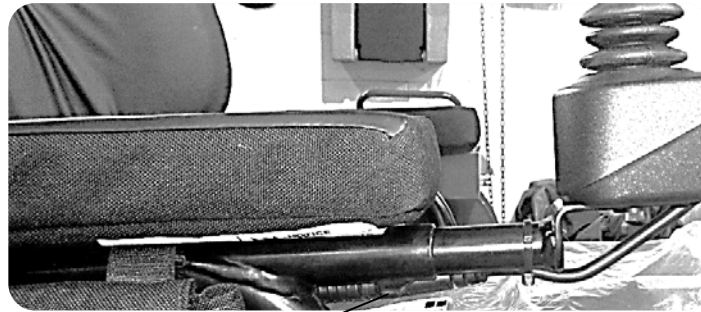
Not only does the footplate swing up and out of the way, but its height can be adjusted via telescopic tubing and pins as well as threaded rod ends for fine tuning.

Just remove the clevis pin and cotter pins and slide the tubing attached to the plate until it lines up with the major height adjustment holes that most closely fits your needs. After that, the foot plate can be detached and the threaded rod ends can be turned to fine tune the height of the footplate. Be sure that the same number of threads are showing on each rod end before reattaching the footplate.



Adjusting the Joystick Controller

The distance between your armrest and joystick can be controlled by adjusting the set screw on the underside of the controller bar.



Set screw

Comfort Company Seating

Your chair comes equipped with premium quality seat backs, bottoms, and armrest pads manufactured by The Comfort Company. While every chair comes standard with one of these seats, The Comfort Company offers a wide selection of non-standard options to meet your needs. These seats are readily available through your local TrackMaster dealership. A separate manual is included in this packet to aid in the adjustment of your specific Comfort Company seat.