



Cybex Trazer®
Owner's Manual
Cardiovascular Systems
Part Number LT-18568-4 Rev C

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About This Manual

A CD containing the Owner's Manual is shipped with each unit. To purchase additional copies of this manual or any other Cybex manual, please do one of the following:

- order online at www.cybexinternational.com
- fax your order to 508-533-5183
- contact Cybex Customer Service at 800-766-3211
- or contact Cybex Customer Service at 508-533-4300

To contact Cybex with comments about this manual you may send email to techpubs@cybexintl.com.

FCC Compliance Information

! WARNING: Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception (which can be determined by turning the equipment off and on) the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio TV technician for help.



DECLARATION OF CONFORMITY

August 17, 2005

This Declaration of Conformity is suitable to the European Standard EN 45014, "General criteria for supplier's declaration of conformity."

We,

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declare under our sole responsibility that the product(s):

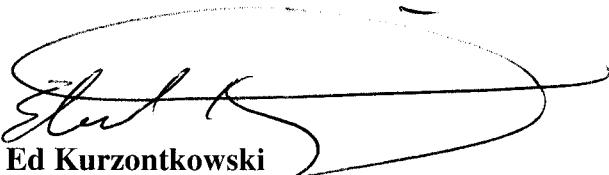
Cybex 760S Trazer[®] Interactive Exercise and Measurement Tool

to which this declaration relates is in conformity with the EEC directives listed herein below (including any and all relevant modifications):

73/23/EEC Low Voltage Directive (LVD)

89/336/EEC Electromagnetic Compatibility Directive (EMC)

EN-957-1 Stationary training Equipment - General Safety Requirements AND Test methods


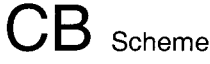



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As a result of test reports and their evaluation by accredited laboratories, we are in possession of the following certificates for products which carry this marking:

Canada, USA		CAN/CSA-C22.2 No.60950-1 1 st Ed. April 1, 2003. UL 60950-1:2003, First Ed., IEC 60950-1:2003, FCC Part 15 Class B, ASTM F1749-96
Worldwide		IEC 60950-1 (2001)
European Union		73/23/EEC, 89/336/EEC, EN957-1 SB

References of harmonized standards on which this declaration of conformity is based:

IEC/EN 60950-1 International Standard: Information Technology Equipment – Safety – General Requirements.

EN55022, Class B Radiated Emissions

EN61000-3-2 Harmonics

EN61000-3-3 Voltage Fluctuations / Flicker

EN55024 Immunity

EN 957-1 Class SB Stationary training equipment Part 1. General safety requirements and test methods

ASTM F 1749-96 Standard Specification for Fitness Equipment and Fitness Facility Signage and Labels.

Specific Standards

EN55022, Class B Radiated Disturbance Emissions – 30-1000MHz Electric Field

EN55022, Class B Conducted Disturbance Emissions – Voltage

EN55024 / IEC 61000-4-3:2002 Radiated Disturbance Immunity

EN55024 / IEC 61000-4-6:2001 Conducted Disturbance Immunity





EN55024 / IEC 61000-4-8 Power Frequency Magnetic Field Immunity

EN55024 / IEC 61000-4-11:2001 Voltage Dips and Sags Immunity

EN55024 / IEC 61000-4-4: 2001 Electrical Fast Transient/Bursts Immunity

EN55024 / IEC 61000-4-2:2001 Electrostatic Discharge Immunity

EN55024 / IEC 61000-4-5:2001 Surge Immunity

EN 61000-3-3 A1:2001 / EN 61000-3-3 A1:2001 Voltage Fluctuations / Flicker

EN 61000-3-2:2001 / EN 61000-3-2:2001 Harmonic Current Emissions



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1 - Safety

IMPORTANT: Read all instructions and warnings before using the unit.

Important Voltage Information

Before plugging the unit into an electrical outlet, verify that the voltage requirements for your area match the voltage of the unit that you have received. The power requirements for the unit include a grounded circuit rated for 115 VAC $\pm 5\%$, 60 Hz, 1.6 amps, 1-Phase or 230 VAC $\pm 5\%$, 50 Hz, 1.6 amps, 1-Phase.

Important Safety Instructions

(Save These Instructions)

! DANGER: To reduce the risk of electric shock, always unplug this unit from the electrical outlet immediately after using it and before cleaning it.

! WARNING: Serious injury could occur if these precautions are not observed. To reduce the risk of burns, fires, electric shock or injury:

! WARNING: Ensure that your ceiling height will accommodate the maximum jump height of each user.

NOTE: The data and statistics displayed on the unit (including heart rate) are not to be used to make a medical diagnosis from. Consult your physician.

User Safety Precautions

- Obtain a medical exam before beginning any exercise program.
- Stop exercising if you feel faint, dizzy, or experience pain and consult your physician.
- Obtain instruction before using. Lisez les instructions avant l'utilisation.
- Read and understand the Owner's Manual and all warnings posted on the unit before using.
- Persons under the age of 18 must be supervised. Ne laissez pas sans surveillance les personnes de moins de 18 ans.
- Use properly fitting athletic shoes during exercise.
- Flooring material should provide shock absorption and prevent slippage and/or falls.
- Ensure beacon belt is properly adjusted and secured.
- Ensure exercise area is free and clear of objects.
- Do not spill liquids on the unit.
- Report any malfunctions, damage or repairs to the facility.
- Replace any warning labels if damaged, worn or illegible.

Facility Safety Precautions

- Make sure all user and safety precautions are observed.
- Read the Owner's Manual carefully before assembling, servicing or using the equipment.
- Make sure that all users are properly trained on how to use the equipment.
- Make sure that each machine is set up and operated on a solid level surface. Do not install equipment on an uneven surface.
- Make sure there is enough room for safe access and operation of the equipment. See *Space Required* section at the end of this chapter.
- Make sure movement area is free of obstructions.
- Perform regular maintenance checks on the equipment.
- Immediately replace worn or damaged components. If unable to immediately replace worn or damaged components then remove from service until the repair is made.
- Do not attempt repairs, electrical or mechanical. Seek qualified repair personnel when servicing. If you live in the USA, contact Cybex Customer Service at 800-766-3211. If you live outside the USA, contact Cybex Customer Service at 508-533-4300.
- Disconnect all power before servicing the unit.
- Keep a repair log of all maintenance activities.
- Use only Cybex supplied components to maintain/repair the equipment.
- Do not use attachments for the unit unless recommended by Cybex.
- Do not operate the unit around or where aerosol (spray) or where oxygen products are being used.
- Do not use the unit outdoors.

NOTE: *It is the sole responsibility of the user/owner or facility operator to ensure that regular maintenance is performed.*

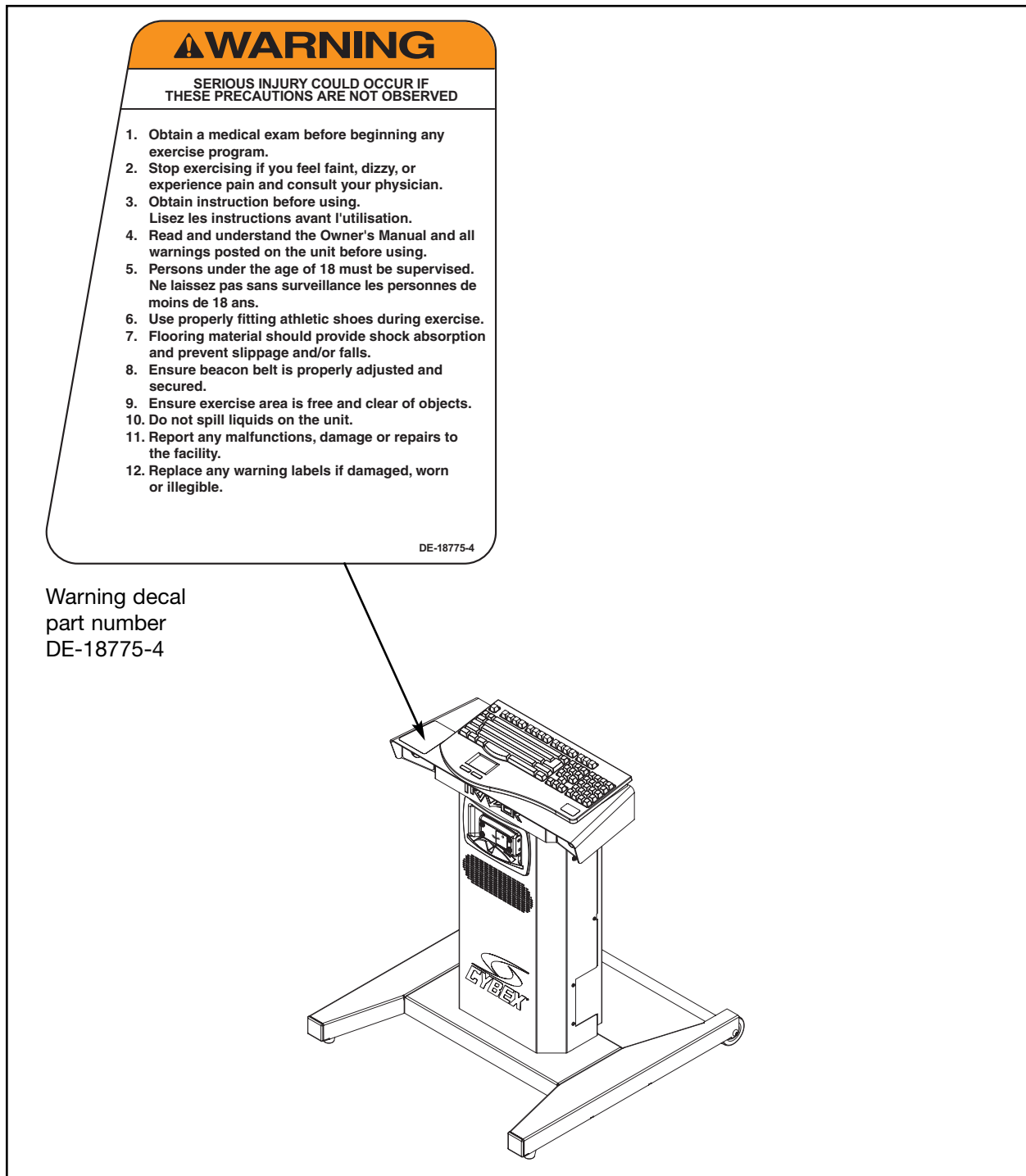
Warning Decals

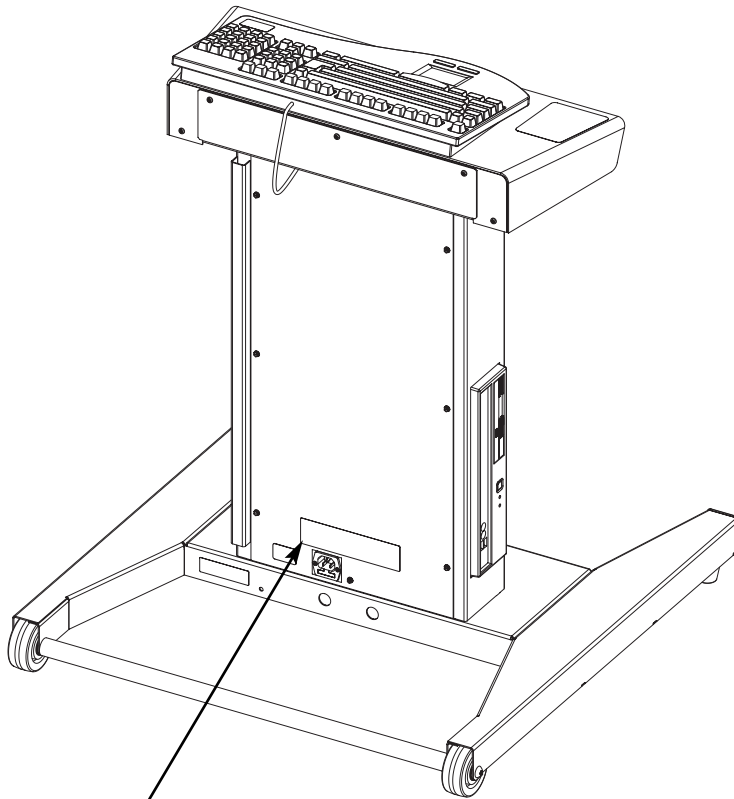
Carefully read and understand all warning decals before using the unit.


NOTE: To replace any worn or damaged decals do one of the following:

Visit www.cybexinternational.com to shop for parts online, fax your order to 508-533-5183 or contact Cybex Customer Service at 800-766-3211. If you live outside of the USA, call 508-533-4300.

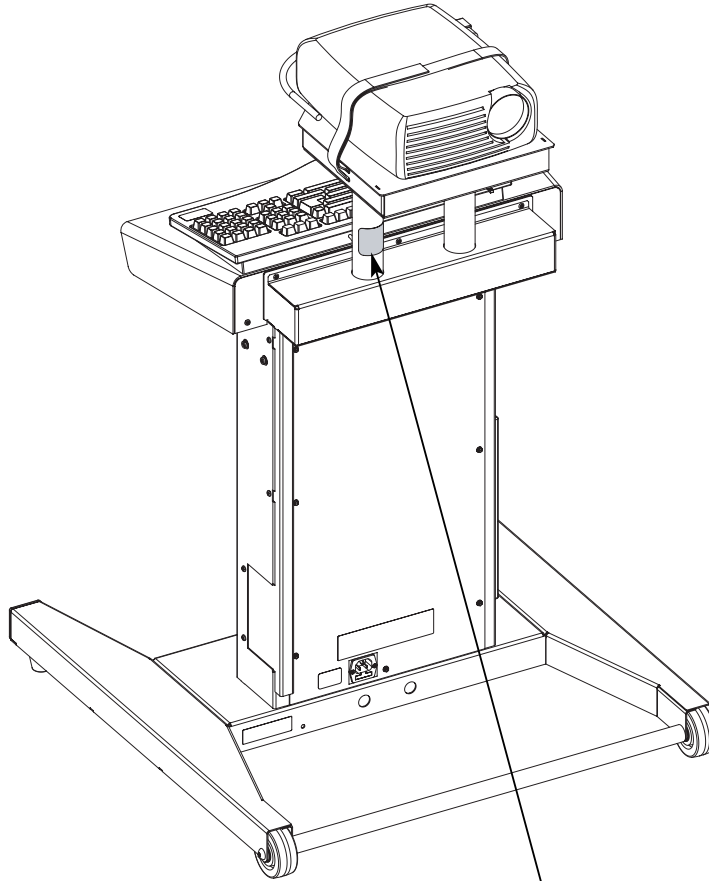
Warning decals indicate a potentially hazardous situation, which, if not avoided, could result in death or serious injury. The warning decals used on the unit are shown below.





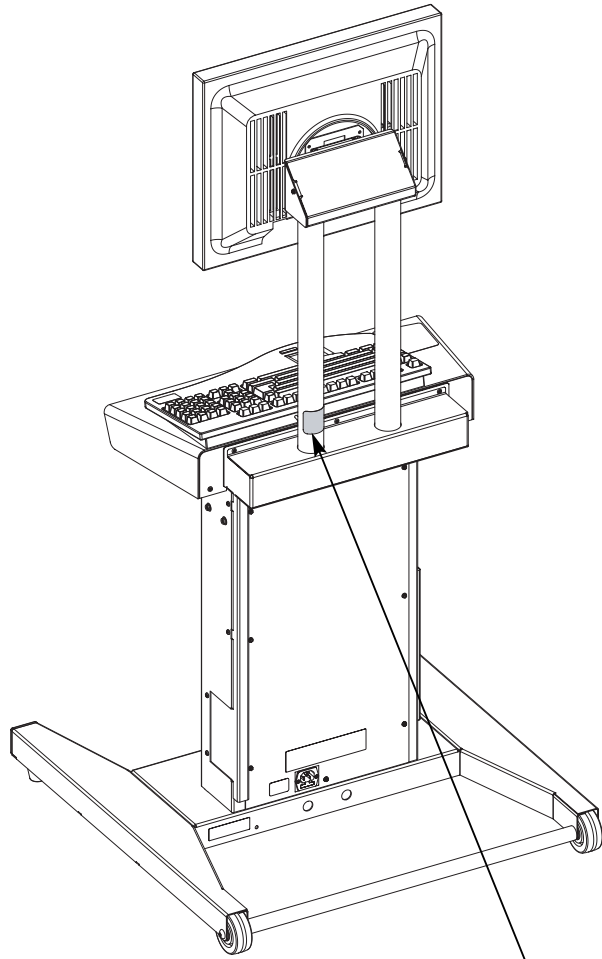
	WARNING AVERTISSEMENT	WARNUNG ADVERTENCIA	警告	VARNING
DISCONNECT POWER BEFORE SERVICING.	DÉBRANCHEZ L'ALIMENTATION AVANT DE FAIRE L'ENTRETIEN	VOR SERVICEAR- BEITEN NETZSTECKER ZIEHEN.	CORTE LA ENERGIA ELECTRICA ANTES DE REPARAR.	修理点検の前に 電源を 切ってください。 KOPPLA IFRÅN STRÖMMEN INNAN SERVICE UTFÖRS.
				DE-16928

Warning decal
part number
DE-16928



Warning decal
part number
DE-19004-4

NOTE: Shown with optional projector shelf.



⚠ WARNING

SERIOUS INJURY COULD OCCUR
IF THESE PRECAUTIONS
ARE NOT OBSERVED

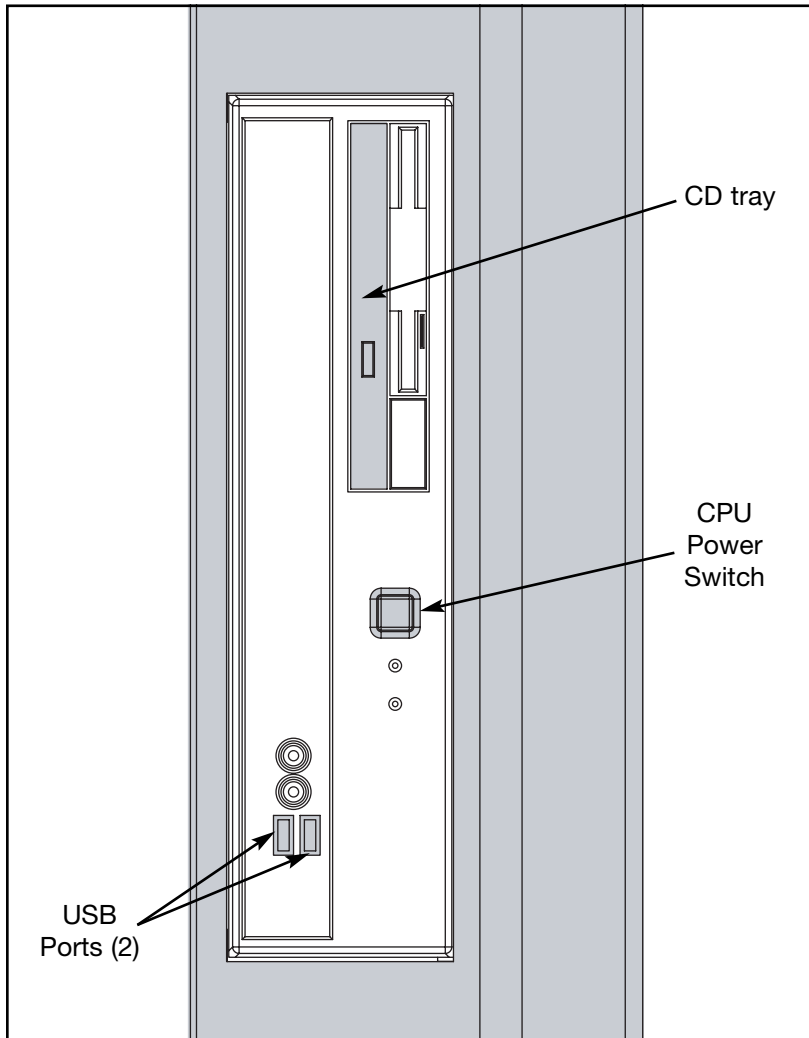
1. Do not exceed maximum monitor weight of 21 lbs./9.5 kg.
2. Do not exceed maximum monitor case width of 24"/61 cm.

DE-18844-4

Warning decal
part number
DE-18844-4

NOTE: Shown with optional monitor bracket.

Input Ports



Explanation of Symbols Used



CE - The CE (Conformité Européenne) mark is a European Union approval indicating that a product complies with a European Directive.



Electric Shock Hazard- Indicates warning of electric shock hazard.



Neutral Fuse - Indicates neutral line of power inlet is fused.

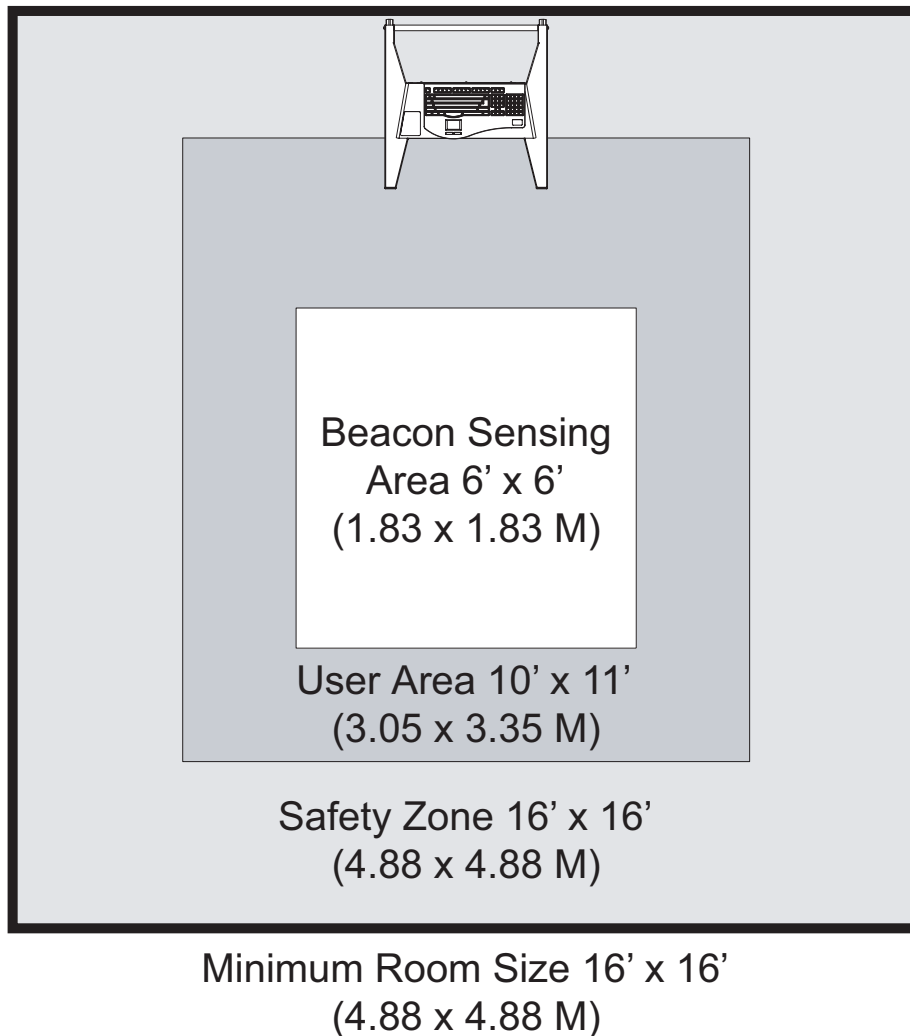
Space Required

The Trazer® beacon operates in an area six feet wide by six feet deep and six feet tall. The Trazer® requires a non-dedicated user area ten feet wide and eleven feet deep. Use Trazer® only on floor surface appropriate for rapid starts and stops and jumping movements.

A safety zone of three feet around the user area is required. The area inside the safety zone should not contain any other equipment, walls, windows, stairs, railings or other obstacles. The flooring within the safety zone should also be level.

The ceiling height must be a minimum of nine feet high and free of obstructions such as lights, pipes or other objects that may interfere during use.

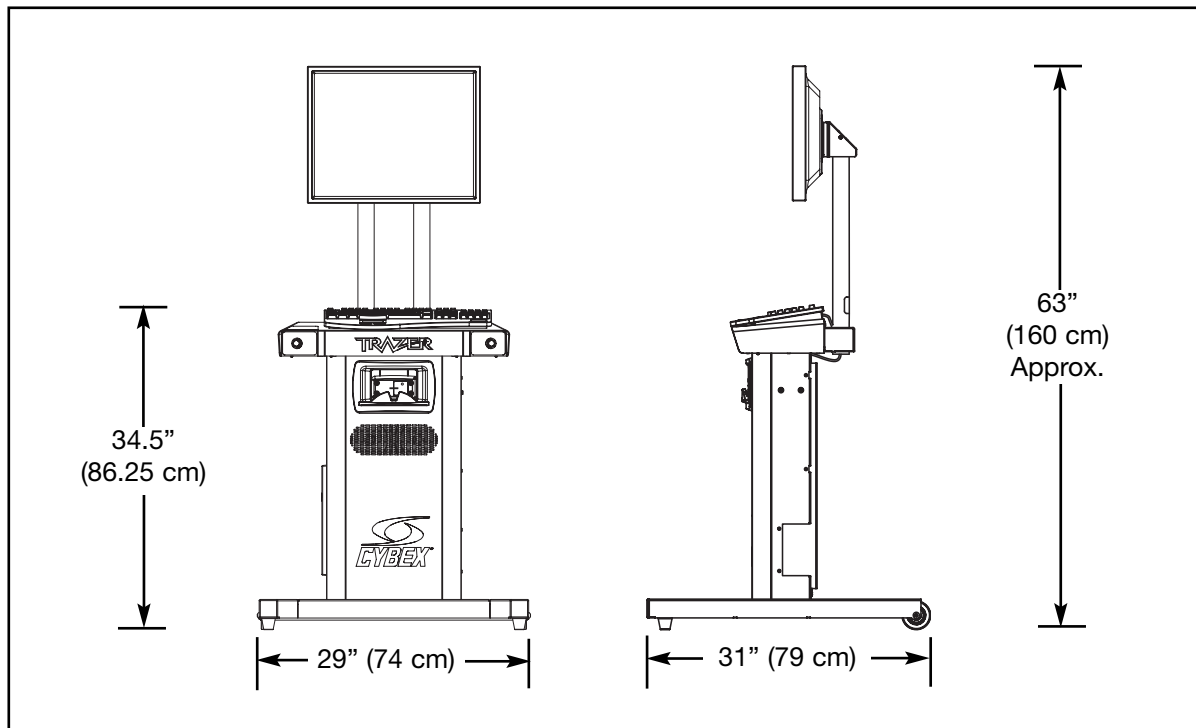
! WARNING: Ensure that your ceiling height will accommodate the maximum jump height of each user.



2 - Technical Specifications

Specifications

Width:	29" (74 cm).
Depth:	31" (79 cm).
Height:	Cabinet 34.5" (86.25 cm), Cabinet with monitor bracket 63" (160 cm) approx.
Weight of Product:	Base unit, 80 lbs. (36.5 kg). Monitor or projector shelf unit, 90 lbs. (41 kg).
Shipping Weight:	Base unit, 91 lbs. (42 kg). Monitor or projector shelf unit, 101 lbs. (46 kg).
Console Features:	Keyboard with built in Touchpad.
Heart Rate Features:	Built-in wireless Polar® heart rate receiver (transmitter belt not included).
Frame Colors:	Black chrome.
Connectivity:	Two USB ports.
Power Requirements:	115 VAC \pm 5%, 60 Hz, 1.6 amps and 1-Phase. 230 VAC \pm 5%, 50 Hz, 1.6 amps and 1-Phase.
Beacon	
Power Requirements:	One 1.2 V, 1800 mAh, NiMH battery (included).
Beacon Charger Power Requirements:	90-240 VAC, 600 mA for desktop IEC-320 unit. 90-240 VAC, 200 mA for wall type unit.
Other:	USB Memory Stick, Beacon, Small Waist Belt, Large Waist Belt, built-in Beacon charging station and external beacon charger.
Monitor, Projector:	Not included.
Options:	Monitor bracket or Projector shelf.



Shown with optional monitor configuration

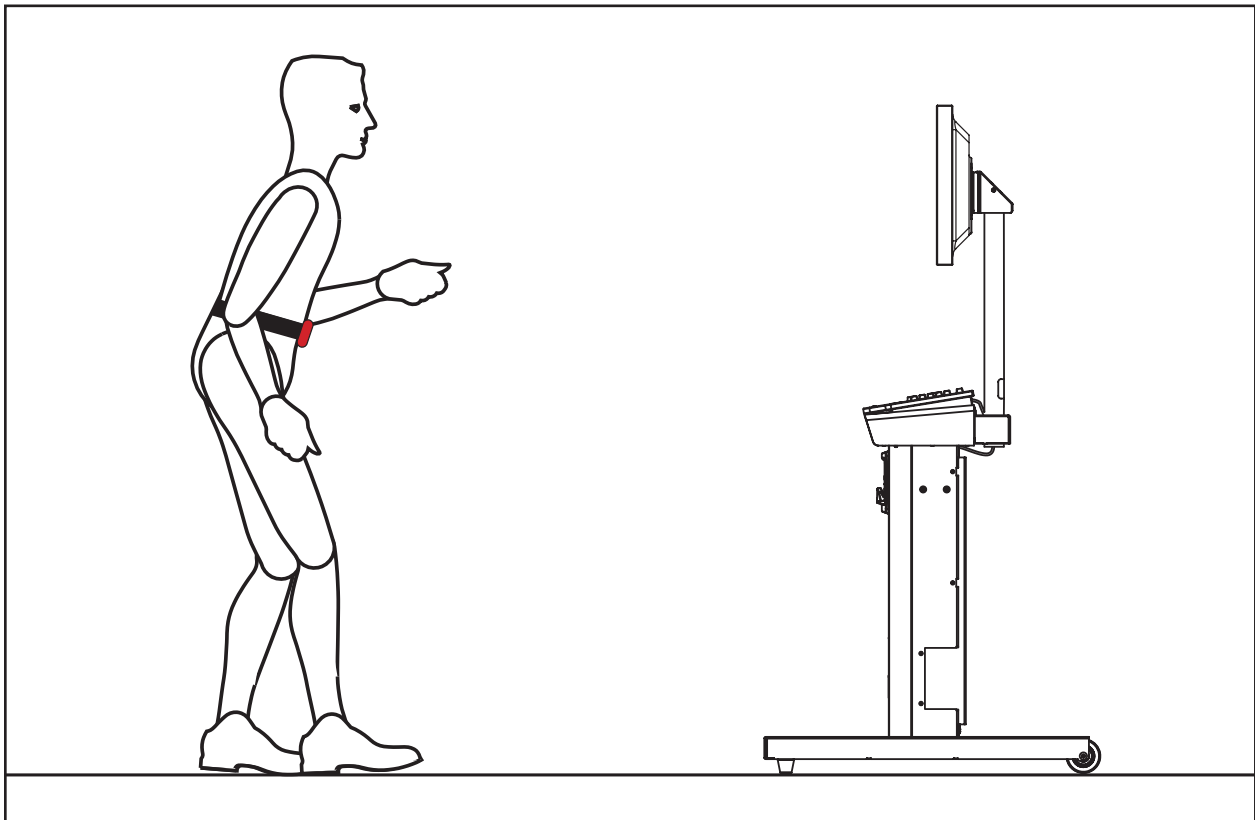
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3 - Operation

Read and understand all instructions and warnings prior to using the unit. See all of the safety related information located in Chapter 1.

Intended Use

The intended use of this exercise equipment is to aid or improve general physical fitness and exercise. For Household or Commercial use. **NOTE:** Unit shown below contains the optional monitor and bracket.



Using the Beacon

! WARNING: The Beacon emits invisible, infrared energy in the area of the yellow LED. Do not look directly at the yellow LED from a distance of less than eighteen inches for extended periods of time.

1. Remove beacon from charger dock. See Figure 1.

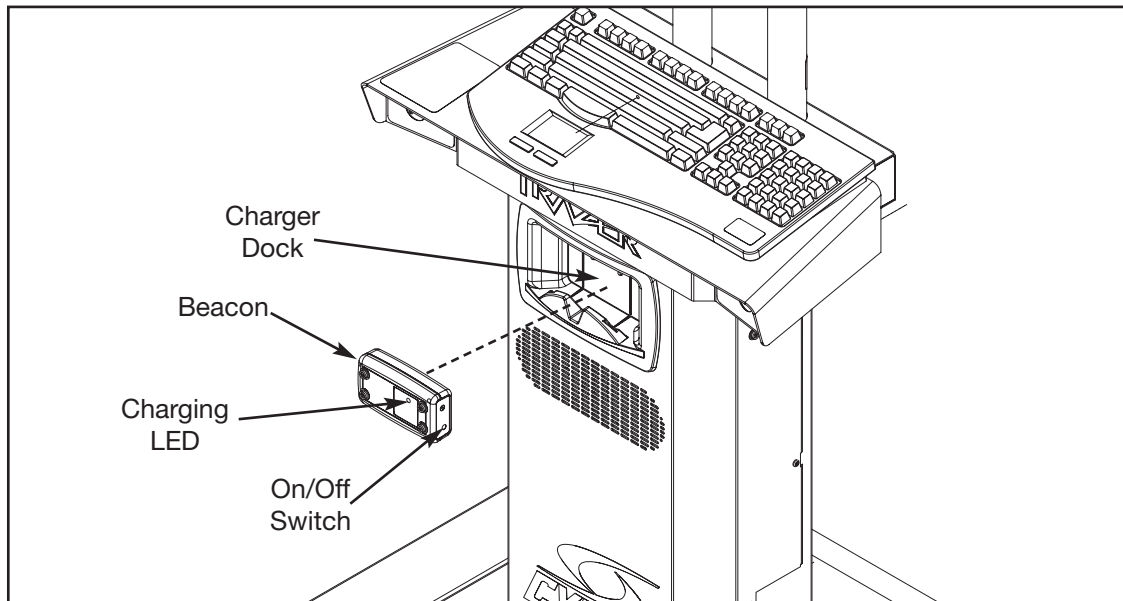


Figure 1

2. Securely place beacon onto belt. **NOTE:** The On/Off switch must be located on the right hand side as shown in Figure 2.

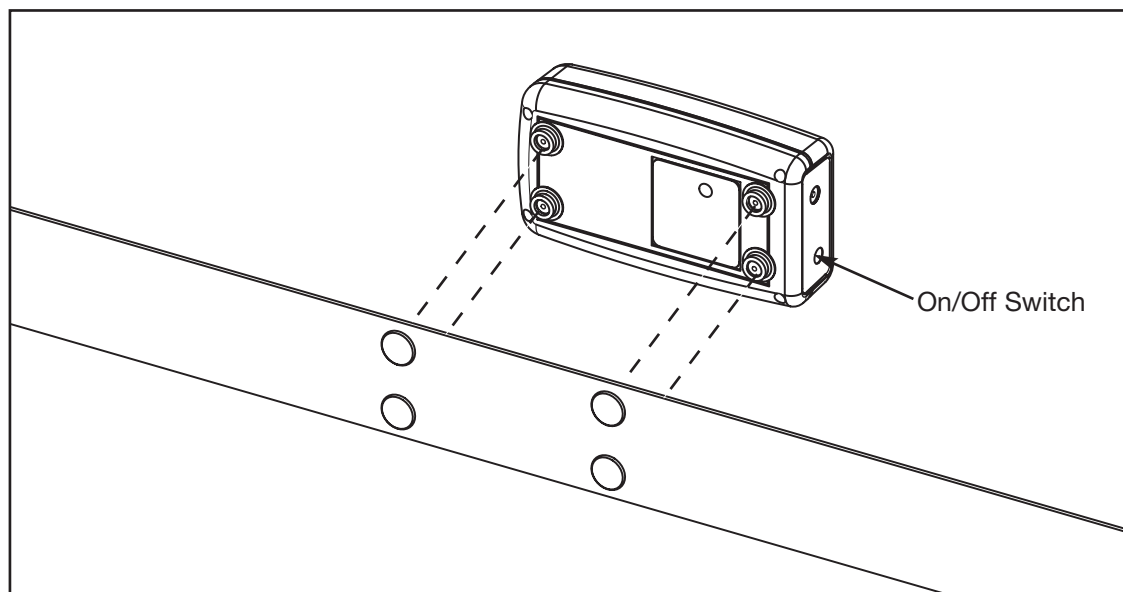


Figure 2

3. Fasten the belt around your waist. Adjust the strap as tight as possible without affecting your comfort or breathing.
4. Verify the on/off button for the beacon is located on your right. See Figure 3.

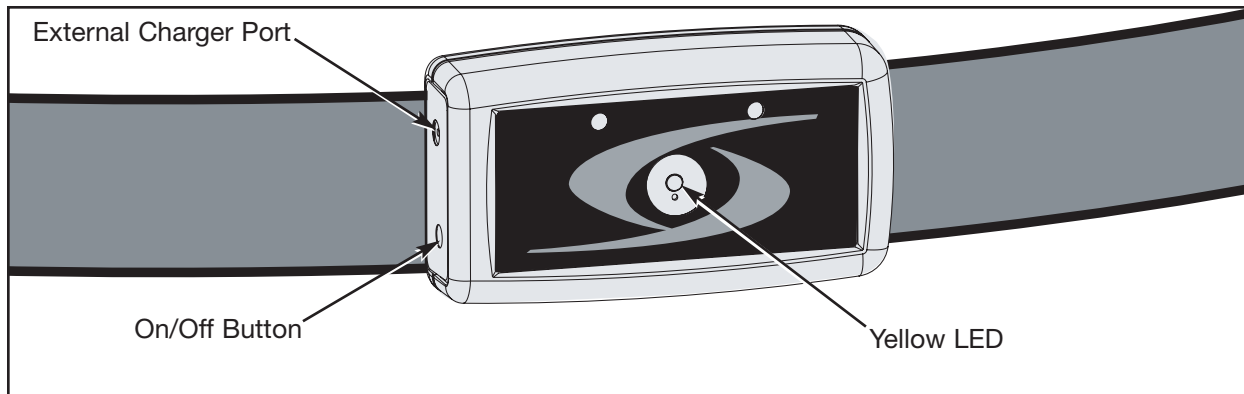


Figure 3

5. Make sure that the beacon points toward the video screen at all times. Keep hips square to the unit, facing the video screen. **NOTE:** Turning your waist so that the beacon no longer points at the screen will cause loss of tracking.
6. Keep the signal path from the beacon to the unit clear. For example, wearing a baggy shirt that covers the beacon will cause loss of signal. Placing your hand in front of the beacon will also cause loss of signal.

NOTE: Tracking is restored when condition is corrected.

7. When finished remove beacon from belt and snap belt onto belt mounts on right side of cabinet. See Figure 4.
8. Place beacon in the charger dock with the On/Off switch on the right side. See Figure 1. **NOTE:** It is very important that the beacon be placed in the charger dock correctly. It takes about 12 hours to obtain a full charge. A fully charged beacon should provide about ten hours of use.

NOTE: The beacon will charge only when the unit is plugged in and turned on. The charging LED will be on when charging.

NOTE: The beacon can be charged externally using the power adapter supplied with the unit. See the Recharging Battery Beacon section in Chapter 4.

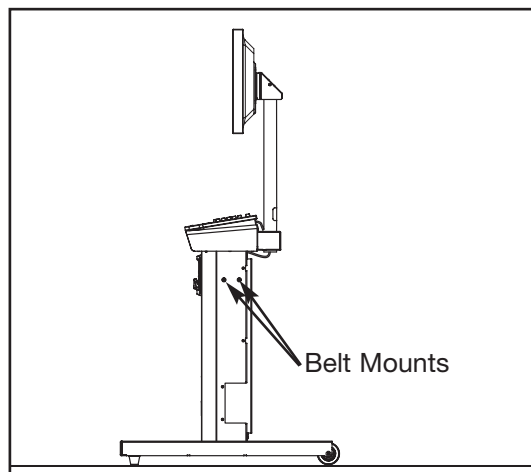


Figure 4

Basic Movements

! WARNING: Review safety information in Chapter 1 before using the unit.

NOTE: Make all movements with your knees slightly bent and hips square to the unit.

NOTE: Make all movements within the user area.

NOTE: Make all movements to contact target (disc, ball, ring, etc.).

NOTE: Maintain balance and control at all times.

Left or Right - Use a sideways shuffling motion to move left or right.

Forward or Backward - Use quick steps to move forward or backwards.

Diagonal - Use quick steps to move diagonally.

Jump - Bend at the knees and jump upward.

Squat - Bend at the knees to squat.

Lunge - Step towards target while bending knees then return to starting position.

Operation Guide

NOTE: Read “Using the Beacon” and “Basic Movements” sections before reading the “Operation Guide”.

NOTE: Cybex recommends that the unit be unplugged when not in use for extended periods of time.

1. Plug the power cord into a power outlet rated for the following: 115 VAC \pm 5%, 60 Hz and 15 amps. **NOTE:** Coil up the remainder of the power cord and place it out of the way.
2. Locate the on/off power switch for your video display. Make sure the power cord is plugged into a power outlet and turn on as recommended by the manufacturer.
3. Locate the on/off power switch on the left side of the cabinet. Press it once to the on position. The green light on the power switch will indicate the power is on.
4. The screen will illuminate and after approximately 10 seconds the main screen will be displayed.
5. Locate beacon and install on the belt using the four metal snaps.
6. Fasten the belt around your waist with the on/off button located on the right. Adjust the strap as tight as possible without affecting the user’s comfort or breathing.
7. Turn beacon on by pressing the on/off button once. **NOTE:** To turn beacon off, press and hold the on/off button for three seconds.

NOTE: The beacon will remain on for sixty minutes then turn off automatically.

8. Locate the touchpad mounted in the keyboard. Using one finger touch the pad and move your finger to guide the pointer on the screen.
9. Log in. **NOTE:** *Each client must LOG IN to have to have individual performance scores and measurements saved on the system. See Administration and Reports.*
10. For Cardio Control activities, client must wear a Polar® compatible heart rate monitor.
11. Select desired category on the left side of video display then press the left key below the touchpad.
12. Select desired activity on the right side of video display then press the left key below the touchpad.

NOTE: *Most activities have an options setup screen that allows varying degrees of control or customization of the activity. Default settings for each activity remain until these options are changed. Changes made for every activity for each individual client are saved in that client's personal database.*

13. Select Show Reports & Save Data. **NOTE:** *To get a Performance Analysis Report (PAR) for any specific activity, you must select Show reports & Save data. This will also save the data from this specific activity in the client's database. Basic data such as game scores are saved for all activities performed. The reports function is always on automatically for activities in the Testing section.*
14. Click OK! in the lower right hand corner of the screen. Stand a few feet away from the front center of the Trazer® cabinet. Move in the direction of the on screen commands and towards the center of the bulls eye target. Remain still during the audible, three second countdown phase while facing the Trazer® cabinet.
15. After the countdown is complete, move toward your target. Observe that "Physbot" follows your movements.
16. When finished with program, your score screen will appear. Press *Enter* to continue and return to setup screen. **NOTE:** *To exit a program early, press the "Esc" (Escape) key twice to exit program and return to the main menu.*
17. Remove beacon belt and return it to charging station. The charging station is located at the front of the cabinet. Place beacon with front side facing the cabinet. See Figure 1.
18. If the unit is not in use for extended periods of time turn off and unplug from the wall.

NOTE: *To turn the unit off press and hold the power button for six seconds (or until the green power light turns off).*

Administration and Reports

Administration Log In

Each client must *LOG IN* to have individual performance scores and measurements saved on the system. Before logging in, each client must be registered by an authorized Administrator. See “Add Client”. Each client must use his or her name and *PIN* exactly as registered. **NOTE:** *Keep a separate record of client names and PIN's exactly as entered on system.* Use Trazer® *Client Log* form (shown at the end of this chapter) to record name and *PIN* exactly as entered on system. Refer to the *TrazerMan Software Manual* if you are managing the database and reports from a PC.

NOTE: *Client name cannot be changed once saved. Enter name carefully and double-check spelling before saving.*

1. Locate the touchpad mounted in the keyboard. Using one finger touch the pad and move your finger to guide the pointer on the screen.
2. Select *Administration & Reports* on the video display then press the left key below the touchpad.
3. Select *LOG IN*.

NOTE: *For initial LOG IN, use first name “Admin” and PIN “Trazer” (case sensitive). See Administration & Reports below to setup system with a secret Admin name and PIN if desired for functions and information that should be restricted to facility personnel.*

Add Client

1. From the main menu click the *Add Client* icon. See Figure 4.



Figure 4

2. Enter clients *First name*, *Middle initial* and *Last name*. Press the **TAB** key to enter the next field. See Figure 5.

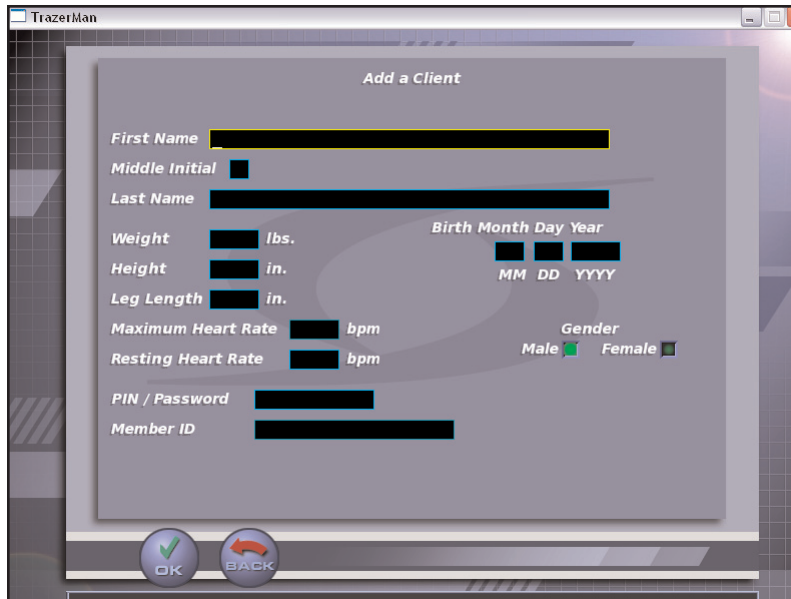


Figure 5

3. Enter the clients Birth Month, Day and Year. Use two digits for Day and Month, use four digits for Year, Example: 01 09 1968. **NOTE:** The Maximum Heart Rate value will be incorrect if the birth date is entered incorrectly.

NOTE: When entering Weight, Height and Leg length use English units (Pounds and Inches).

4. Enter Weight, Height and Leg Length (Leg Length is measured from floor to center of hip).
5. Enter Resting Heart Rate and Pin/Password.
6. Select Gender.
7. Click the **OK** button and client will be entered in system. **NOTE:** Member ID will be generated by the software.

Edit Client

To edit a client record, for example to change bodyweight, enter their full name and PIN exactly as originally registered. Then proceed as above making sure to click on Save Client Data and click “OK” to store new information.

Top Ten

Top Ten scores are retained for registered users who are logged in. To see current Top Ten scores, click on each game.

Reports

To view all saved activity data for any specific client, LOG IN as administrator. Click the Trazer Setup icon and then select Admin Database, a new window will open. Select a client from the list of names and then select Reports. Refer to the TrazerMan Software Manual for more details. Select Quit to return to the Trazer program.

Reports

This procedure will explain the reports available when logged in as an administrator. See *Administration Log In*.

NOTE: Reports are only available for existing clients that have performed at least one activity.

1. From the main menu select the client whose reports you would like to view. **NOTE:** If the client has completed at least one activity the **Reports** icon will be active.



Figure 6

2. From the main menu click the *Reports* icon. The first column will display the activities the client has performed. See Figure 6.

3. Select an activity in the left column. The start date column will display the dates and times of when that activity was performed.

Score Card

The Score Card is automatically displayed at the end of all *Performance Training Games*. The *Score Card* is also automatically displayed for all *Drill* and *Testing* activities unless "Show reports and save data" is selected on the set up options screen. In this case, the more detailed *Performance Analysis Report* will be displayed after the activity is completed. See *Performance Analysis Report* section.

NOTE: Data cannot be saved unless a client logs in before starting an activity.

Score Card data can be accessed when logged in as an administrator, or by using the TrazerMan PC program which allows you to transfer the TRAZER database and administrative functions to a PC. This allows you to create a Progress Report for Score Card data saved from previously performed activities.

To view the *Score Card* for the selected activity select the date/time and click the **OK** button. To print the *Score Card* click on the **Print** icon in the lower left corner. To return to reports page click on the **Back** icon in the lower right corner. See Figure 7.



Performance Analysis

The *Performance Analysis Report* is automatically displayed at the end of all *Drill* and *Testing* activities if "Show reports and save data" is selected on the set up options screen. If "Show reports and save data" is not selected on the set up options screen for a drill, only the Score Card will be displayed.

NOTE: Data cannot be saved unless a client logs in before starting an activity.

Performance Analysis data can be accessed when logged in as an administrator, or by using the TrazerMan PC program which allows you to transfer the TRAZER database and administrative functions to a PC. This allows you to create a Progress Report for Score Card data saved from previously performed activities.

To view the *Performance Analysis* for the selected activity select the date/time and click the **OK** button. To print the *Performance Analysis* click on the **Print** icon in the lower left corner. To return to reports page click on the **Back** icon in the lower right corner. See Figure 8.

Client Name: John Doe		Enter Your Facility Name Here			
Activity: Jump		Date/Time: 3/17/06 - 8:02 AM			
Movement Vector	Reaction Time seconds	Power watts/BW	Speed feet/second	CG Height inches	
Left	--	--	--	--	
Right	--	3.32	--	--	
Forward	--	--	--	--	
Backward	--	--	--	--	
Up	--	3.58	--	--	
Down	--	--	--	--	
L/R Deficit	--	--	--	--	
Overall Average	--	3.45	--	--	
Calories Burned	Total Time	Total Distance	Watts / BW	Jump Maximum/Average	Heart Rate Maximum/Average
1	0:21	4.36	193@123	11.03 / 7.70	-- / --

Figure 8

Generate Progress Report

After you have selected a client and clicked the *Reports* button, select **Generate Progress Report** at the bottom of the page. Click on an activity that has been performed on more than one date. Select a date and time in the second column. Select a different date and time in the third column and click the **OK** button. **NOTE:** Do not select the same date and time between the second and third columns, the progress report needs to look at data from different sessions. See Figure 9.

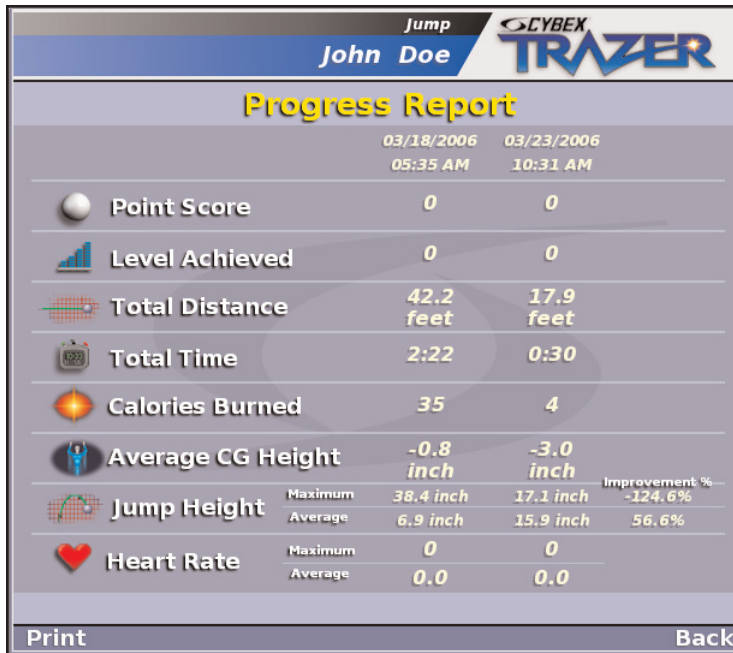


Figure 9

Meter Setup

The full-scale values of the real-time speed and CG height meters can be altered for special populations like kids or professional athletes. Default settings are scaled for typical population. Meters can also be clicked off if desired.

Trazer® Setup

After using Administrative *LOG IN* set by factory (first name “Admin” and *PIN* “Trazer”), you can change administrative access name and *PIN* if desired to restrict access to administrative functions and information to authorized personnel. Make sure to keep a separate record of exact first name and *PIN* changes you make to administrative log in. Enter your facility name as you wish it to appear on displayed reports. **NOTE:** *On this screen you can set Trazer to require LOG IN so that only registered clients will be able to access games and activities.*

Terms Used

This section lists some of the common terms used in this chapter.

Average CG Height – Overall Average CG Height (exclusive of jumping movements) for each movement vector is shown as + or - from calibrated height.

Average Power – This value is power in watts averaged over the entire activity set taking bodyweight into account.

Best & Average Jump Height - Reported as overall values for complete activity.

CG - Center of gravity. Proper location of the beacon positions the clients approximate center of gravity.

CG Height - Real time CG height is shown on the feedback bar during activities. CG is shown as + or - from calibrated height when standing straight as required at start of each activity. This data and the CG height control function that is available on setup screens can be used to identify and train optimal CG height for power speed and stability.

L/R MV Deficit % – (Left/Right Movement Vector Deficit Percent) These values are the comparisons of each major measurement to determine performance differences between movements to the left and right. Calculation assumes the better side is 100% and shows the percentage deficit with the direction of deficit indicated by an arrow. If the arrow points left, movements to the left were lower in overall performance by the indicated percentage.

Max/Avg. Heart rate – Reported for overall activity set.

Movement - This can begin after selecting the **OK!** icon on the screen. Upon entering a program the user will be instructed to move to the center of the field.

Power – In watts per kg of bodyweight. Multiply by bodyweight for your power in watts (1 kg = 2.2 lbs). In a sports block, check, or collision more power keeps moving, less power is moved aside. Note that it is important to associate correct body weight at time of test with this measurement. Weight of clients on weight loss or weight gain programs should be checked approximately every 30 days and updated by using the “Edit Client” function. Bodyweight in kg at time of test is shown in parentheses next to Overall Average Watts value in bottom row of Performance Analysis Report.

Reaction Time - Thousandths of seconds from instant target cue appears until acceleration in correct direction occurs. This measures how quickly an individual perceives, interprets and develops muscle forces required to respond to objects, obstacles and sports situations.

Reports - Reports for all programs can be selected from the Administration & Reports page.

Scoring - Upon completion of a program the user score will be posted. This information will be stored if the user has logged in. One point times difficulty level for each disc or ball contact, or goal. Minus one point times difficulty level for each game specific “fault”.

Speed – Average feet or meters per second over all movements in each specified vector (right, left, forward, back, up, down). Rapid acceleration and deceleration while controlling body center of gravity are the keys to achieving higher speeds while reacting, cutting and dodging.

Total Calories – Reported for overall activity set.

Total Distance - This is reported as an overall value for the entire activity set.

Total Time - Total time from start to end of activity set.

% Rank – This indicates percentile rank of individual client in the specific activity as compared to everyone else who has performed the same activity on the same unit.

Symbols Used



Physbot - Animated character that represents your location on the screen.



HELP

Help - When Help is selected information will be available for that particular screen.



LOG IN

Log In - Logs in a current client.



LOG OUT

Log Out - Logs a client out of the system.



Back - Goes back to the previous screen when selected.



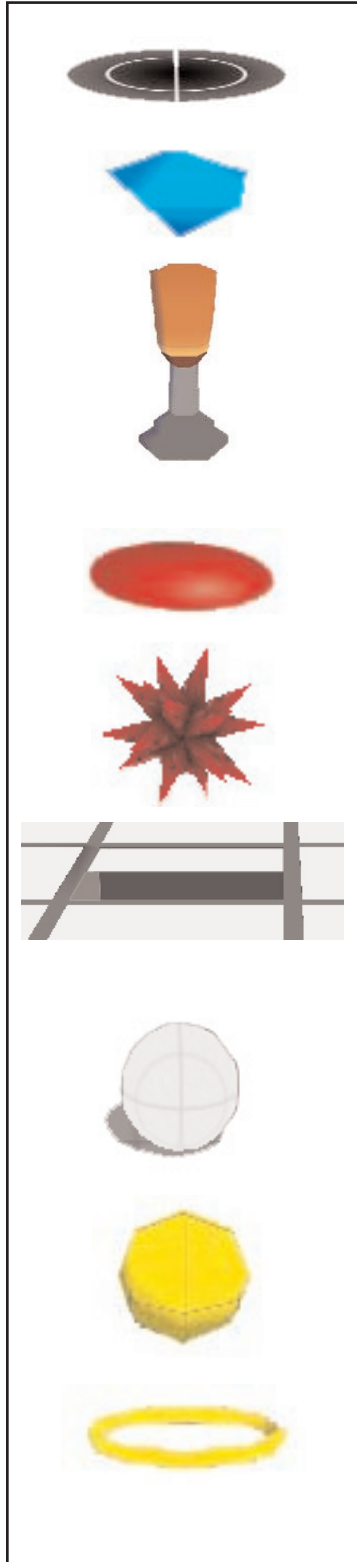
OK - Starts the current program.



Scroll Bar Arrows ▲▼ - Scroll up or down through the current list.

Targets

Targets include (not limited to):



Black Center Ring - Calibration position. Move to this starting position and stand straight at full height for 3-2-1 countdown.

Blue Diamond - Lunge, take a step towards target while bending at the knees, then return to starting position.

Orange Bumper - React and move quickly to “bump” the orange bumper.

Red Disc - React and move quickly to “step” on the red disc.

Red Spike- Avoid red spikes by moving away from them.

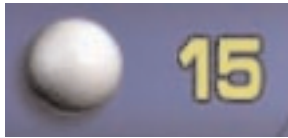
Trap Door - Avoid trap door by jumping over or stepping around.

White Ball - Contact white balls by moving in front of or under them as they come towards you. To contact white balls resting on the ground use a lunging motion towards them.

Yellow Ball - Heel raise or jump to strike yellow ball.

Yellow ring - Position yourself over target and bend at the knees to squat above yellow ring.

On Screen Feedback



Score - During a program the user score will be posted. This information will be stored if the user has logged in. One point times difficulty level for each disc or ball contact, or goal. Minus one point times difficulty level for each game specific “fault”.



Time - Displays time remaining.



Level - Displays level intensity selected in setup screen.



Calories - Displays total calories burned.



Speed Meter - The speed of each movement is displayed as feet per second. Located in the lower left corner of screen.



CG Height and Range meter - High and low body center of gravity during each movement direction. Practice getting lower to find your optimal CG height for power, speed and stability. Located in the lower right corner of screen.

SCORE CARD

Point Score	<input type="text"/>
Facility Rank	<input type="text"/>
Level Achieved	<input type="text"/>
Total Distance	<input type="text"/>
Total Time	<input type="text"/>
Calories Burned	<input type="text"/>
Average CG Height	<input type="text"/>
Jump Height Max/Avg.	<input type="text"/>
Heart Rate Max/Avg.	<input type="text"/>

Performance Analysis Report

Overall % Rank Facility database	Point Score
-------------------------------------	-------------

Client:

Activity:		Date/Time:			
Movement Vector	Reaction Time seconds	Watts/kg BW	Speed feet/second	CG Ht - Hi/Lo inches	
Right					
Left					
Forward					
Back					
Up					
Down					
L/R Δ					
Overall Avg.					
Rank					
Calories Burned	Total Time	Total Distance	Avg. Power watts/BW	Jump max/avg.	Heart Rate max/avg.

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4 - Preventive Maintenance

Warnings

All warnings listed in this chapter are as follows:

! WARNING: All maintenance activities shall be performed by qualified personnel. Failure to do so could result in serious injury.

! WARNING: To prevent electrical shock, be sure that the unit is unplugged from the electrical outlet before performing any cleaning or maintenance procedures.

! WARNING: DO NOT open battery, dispose of in fire, put in backwards, mix with other battery types or short circuit. Battery may ignite, explode, leak or get hot causing injury.

! WARNING: Use only NiMH batteries. Use of any other kind of battery may cause it to leak, rupture or explode, resulting in personal injury and property damage.

Regular Maintenance Activities

! WARNING: All maintenance activities shall be performed by qualified personnel. Failure to do so could result in serious injury.

Preventive maintenance activities must be performed to maintain normal operation of your unit. Keeping a log of all maintenance actions will assist you in staying current with all preventive maintenance activities.

NOTE: Worn or damaged components shall be replaced immediately or the unit removed from service until the repair is made.

NOTE: Cybex is not responsible for performing regular inspection and maintenance actions for your unit. Instruct all personnel in equipment inspection and maintenance actions and also in accident reporting/recording.

NOTE: DO NOT open CPU cover, Warranty is void if label is tampered with, No user serviceable parts inside.

Cleaning Your Trazer®

! WARNING: To prevent electrical shock, be sure that the unit is unplugged from the electrical outlet before performing any cleaning or maintenance procedures.

The optical tracker, beacon, cabinet and video monitor require minimal cleaning when used in the manner prescribed in this guide. It is recommended to keep these free from dust accumulation by occasionally wiping with a slightly damp, cotton cloth. Although the beacon is designed to prevent moisture from entering the case, do not use an excessively wet cloth or immerse in water. Avoid using paper towels, which may scratch the plastic lens. Avoid using harsh chemical cleaners on the cabinet. Follow the manufacturer's recommendations for cleaning the video monitor.

NOTE: Do not spray cleaning solution directly on the unit. Direct spraying could cause damage to the electronics and will void the warranty.

NOTE: Do not apply pressure on the Optical Tracker Lenses during cleaning.

Recharging Beacon Battery

The beacon is powered from a rechargeable NiMH battery, similar to those used in cell phones. Typically, you can expect approximately 10 hours of operation from a fully charged battery.

It is highly recommended that a regular recharging schedule be followed. The beacon should be recharged overnight by simply placing the beacon into the recharging dock. Observe correct orientation so the metal contacts on the front side of the beacon align with the pins protruding from the charger dock. If properly positioned, the beacon's green status light (charging LED) glows solid during charging. Once fully charged, the green light turns off.

When charging the beacon, follow the instructions listed in step #8 under *Using the Beacon*, located in Chapter 3. The beacon can also be charged externally using the power adapter supplied with the unit.

NOTE: Use Cybex supplied adapter only, Wall mount NEMA plug 90-240VAC 50/60Hz (TR-19025) or Desk top unit IEC-320, 90-240VAC 50/60Hz (TR-19060, requires additional country specific IEC-320 power cord).

Replacing Beacon Battery

! WARNING: DO NOT open battery, dispose of in fire, put in backwards, mix with other battery types or short circuit. Battery may ignite, explode, leak or get hot causing injury.

Replace battery with AA NiMH battery only. **DO NOT** use Alkaline, Carbon Zinc, Lithium Ion, Nickel Cadmium (NiCd) or any other kind of battery.

! WARNING: Use only NiMH batteries. Use of any other kind of battery may cause it to leak, rupture or explode, resulting in personal injury and property damage.

Dispose of used batteries appropriately.

Remove the battery if storing the unit for periods in excess of six months. The battery is located in the beacon.

1. Using a Phillips head screwdriver remove the four Phillips head screws from the back cover. See Figure 1.
2. Remove the rubber o-ring from the battery mounts.
3. Remove the battery.
4. Install new battery with the correct orientation. The positive (+) end of the battery faces down. See Figure 2.
5. Install rubber o-ring by hooking onto one battery mount. Make one half twist and hook onto other battery mount. See Figure 2.
6. Install back cover with four screws removed in step 1.

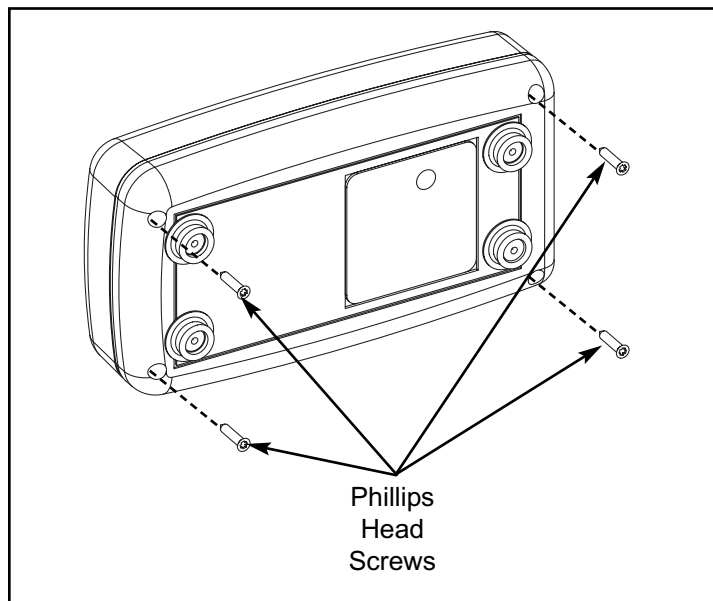


Figure 1

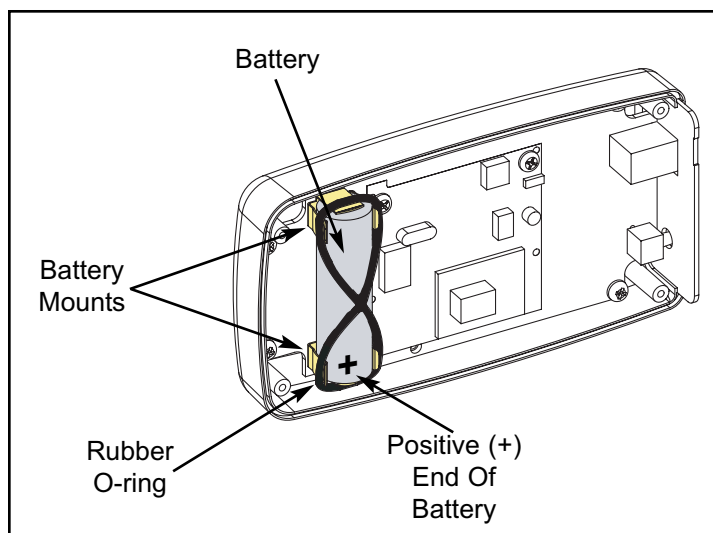


Figure 2

Environment

Reflective Surfaces - Do not place unit in areas with reflective surfaces that will interfere with operation. Reflective surfaces can cause loss of tracking, jittery Physbot or a significant variation between actual and expected beacon operation.

Static Electricity - Depending upon where you live, you may experience dry air, causing a common experience of static electricity. This may be especially true during the winter season. You may notice a static build-up just by walking across a carpet and then touching a metal object. The same can hold true while working out on your unit. You may experience a shock due to the build-up of static electricity on your body and the discharge path of the unit. If you experience this type of situation, you may want to increase the humidity to a comfortable level through the use of a humidifier.

Humidity - The unit is designed to function normally in an environment with a relative humidity range of 30% to 75%.

NOTE: *Do not install or use the unit in an area of high humidity, such as in the vicinity of a steam room, sauna, indoor pool or outdoors. Exposure to extensive water vapor, chlorine and/or bromine could adversely affect the electronics as well as other parts of the machine.*

Temperature - The unit is designed to function normally in an environment with an ambient temperature range of 50° F (10° C) to 104° F (40° C) degrees.

Storage

Humidity - The unit can be shipped and stored in an environment with a relative humidity range of 10% to 90%.

NOTE: *Do not store the unit in an area of high humidity, such as in the vicinity of a steam room, sauna, indoor pool or outdoors. Exposure to extensive water vapor, chlorine and/or bromine could adversely affect the electronics as well as other parts of the machine.*

Temperature - The unit can be shipped and stored in an environment with an ambient temperature range of 32° F (0° C) and 140° F (60° C) degrees.

Batteries - If storing the unit for periods in excess of six months, remove the batteries. See *Rechargeable Batteries* section for location of batteries.

5 - Setup and Assembly

Warnings

All warnings listed in this chapter are as follows:

- ! WARNING:** *Use extreme caution when assembling the unit. Failure to do so could result in injury.*
- ! WARNING:** *Always use proper lifting methods when moving heavy items.*
- ! WARNING:** *Do not exceed maximum monitor weight of 21 lbs./9.5 kg. Do not exceed maximum monitor case width of 24"/61 cm.*
- ! WARNING:** *Do not install monitor or television on projector shelf.*
- ! WARNING:** *Be sure that all electrical requirements are met as indicated in the specifications at the front of the manual and at the beginning of this chapter prior to proceeding.*

Choosing and Preparing a Site

Before assembling the unit you must select a suitable site and have the proper electrical outlet power available for optimum operation and safety. See the *Electrical Power Requirements* section (located on the next page) for direction in locating your voltage requirements.

The area you select for the unit should be well lit and well ventilated. Locate the unit on a structurally sound and level surface. Use Trazer® only on floor surface appropriate for rapid starts and stops and jumping movements. Allow enough clearance for safe access and passage during use of the unit. See the *Space Required* section in Chapter 1 for additional information.

Reflective Surfaces - Do not place unit in areas with reflective surfaces that will interfere with operation. Reflective surfaces can cause loss of tracking, jittery Physbot or a significant variation between actual and expected beacon operation. Reflective surfaces include (but not limited to): mirrors, glass, windows, low ceilings and shiny floor surfaces.

Humidity - The unit is designed to function normally in an environment with a relative humidity range of 30% to 75%.

NOTE: *Do not install or use the unit in an area of high humidity, such as in the vicinity of a steam room, sauna, indoor pool or outdoors. Exposure to extensive water vapor, chlorine and/or bromine could adversely affect the electronics as well as other parts of the machine.*

Temperature - The unit is designed to function normally in an environment with an ambient temperature range of 50° F (10° C) to 104° F (40° C) degrees.

Lighting - Avoid using the unit in areas with high intensity lights or direct sunlight.

See Chapter 4 for information regarding storage of the unit.

Electrical Power Requirements

The power requirement for the unit is: 115 VAC +5%, 60 Hz, 1.6 amps and 1-Phase or 230 VAC +5%, 50 Hz, 1.6 amps and 1-Phase.

Additional wall outlets (or a grounded power strip) are required to plug in a monitor or projector.

NOTE: Consult an electrician if you have any questions.

Assembling the Trazer[®]

! WARNING: Use extreme caution when assembling the unit. Failure to do so could result in injury.

! WARNING: Always use proper lifting methods when moving heavy items.

NOTE: DO NOT open CPU cover, Warranty is void if label is tampered with, No user serviceable parts inside.

Tools Required (supplied)

- 7/32" Hex Key (Allen wrench)
- Adjustable wrench
- Phillips head screwdriver

NOTE: The words "left" and "right" denote the user's orientation.

1. Read and understand all instructions thoroughly before assembling the unit.

NOTE: Each step number in the assembly instructions tells you what you will be doing. The lettered steps following each step number describe the procedure required. Do not continue with step 2 until you have carefully read all of the assembly instructions.

2. Verify you have received the correct package.

- A. Read the sticker on the outside of the box and verify that the model number and language is what you ordered.

3. Unpack and verify the contents of the boxes.

- A. Lift up and remove the cardboard sleeve that surrounds the unit.
- B. Verify that you have the color that you ordered by looking at the paint.

C. Check to be sure that the following items are present. Check off (✓) each item as you find it. See Figure 1. If any of the parts are missing contact Cybex Customer Service.

Item	Qty	Part Number	Description
<input type="checkbox"/> 1	1	NA	Cabinet with covers attached
<input type="checkbox"/> 2	1	AX-18827	Cabinet Foot, Left
<input type="checkbox"/> 3	1	AX-18828	Cabinet Foot, Right
<input type="checkbox"/> 4	1	AF-19005	Pivot Bar
<input type="checkbox"/> 5	1	AX-18868	Keyboard
<input type="checkbox"/> 6	1	AW-14007	Power cord, 115 VAC, 60 Hz
<input type="checkbox"/> 6	1	AW-14012	Power cord, 230 VAC, 50 Hz
<input type="checkbox"/> 7	1	AX-18831	Beacon
<input type="checkbox"/> 8	1	BD-18841	Small beacon belt, 32", Blue
<input type="checkbox"/> 9	1	BD-18840	Large beacon belt, 48", Black
<input type="checkbox"/> 10	1	AX-18944	Monitor bracket (optional)
<input type="checkbox"/> 11	1	AX-18982	Projector shelf (optional)
<input type="checkbox"/> 12	1	AX-19028	Hardware pack (in box)
<input type="checkbox"/> 13	1	Varies	Assembly poster (in box)
<input type="checkbox"/> 14	1	LT-18891	Warranty sheet (in box)
<input type="checkbox"/> 15	1	LT-18568-4	CD, Owner's Manual
<input type="checkbox"/> 16	1	TR-19025	Beacon charger, 115 VAC, 60 Hz
<input type="checkbox"/> 16	1	TR-19060	Beacon charger, IEC-320, 230 VAC, 50 Hz
<input type="checkbox"/> 17	1	CP-18761	USB Memory Stick
<input type="checkbox"/> 18	1	AF-19334	Cover, cable access

NOTE: NA means not applicable

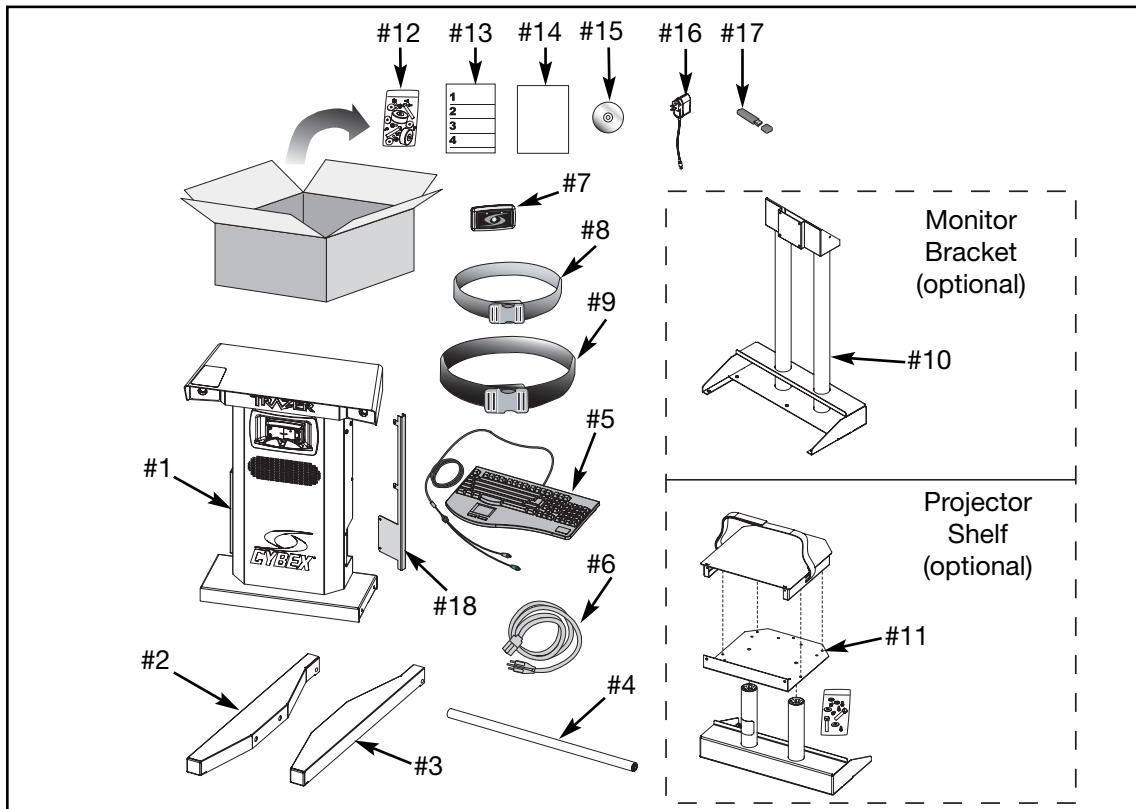


Figure 1

D. Check off () each item in the hardware pack as you find it. See Figure 2.

Item	Qty	Part Number	Description
<input type="checkbox"/> 12	1	AX-19028	Hardware pack (in box)
<input type="checkbox"/> 19	2	HX-19007	Foot, Leveling
<input type="checkbox"/> 20	2	HN-00164	Nut, Hex 5/16-18
<input type="checkbox"/> 21	4	HS-12083	Bolt Lock, 1/4-20 x .625
<input type="checkbox"/> 22	4	HW-19006	Washer, .281 ID x 1.25 OD x .13 THK
<input type="checkbox"/> 23	2	CW-16712	Wheel, 3" Dia x 1.25 W
<input type="checkbox"/> 24	2	HS-18834	Bolt, 3/8X2.25, BTHD CAP, BLK ZN, G5
<input type="checkbox"/> 25	4	HS-11977	Screw, SEMS, 8/32 X .38", Phillips
<input type="checkbox"/> 26	1	HX-00440	Hex Key, 7/32"
<input type="checkbox"/> 27	1	HT-19377	Wrench, Adjustable, 4"
<input type="checkbox"/> 28	1	HT-19378	Screwdriver, Phillips
<input type="checkbox"/> 29	2	HW-00165	Washer, Split Lock, 5/16" Projector Shelf Option
<input type="checkbox"/> 30	2	HW-00189	Washer, Flat, 5/16"
<input type="checkbox"/> 31	2	HS-00195	Bolt, 5/16-18 x 1.50"
<input type="checkbox"/> 32	2	EH-00472	Wire Tie
<input type="checkbox"/> 33	2	EH-10291	Base, Wire Tie

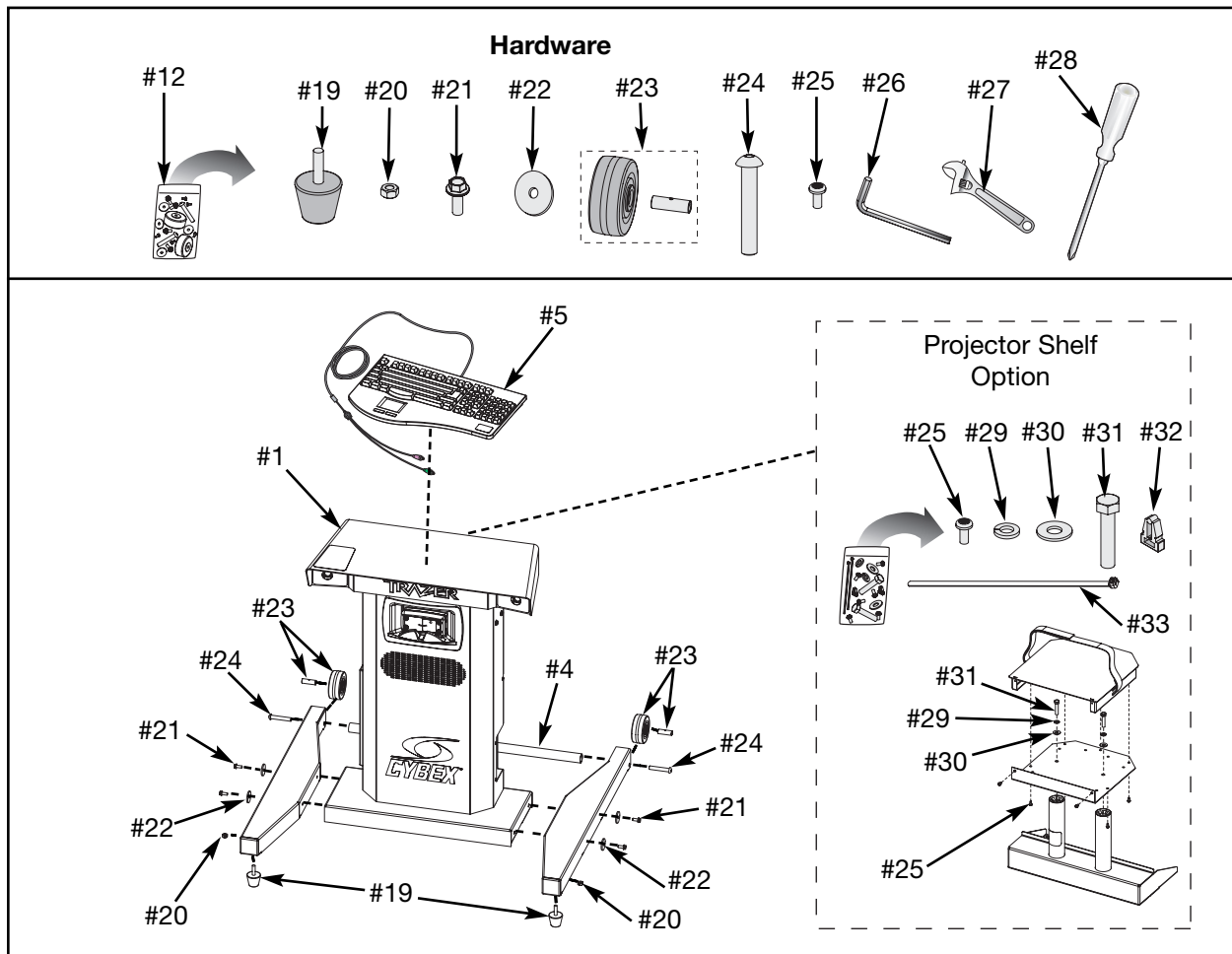


Figure 2

! WARNING: Always use proper lifting methods when moving heavy items.

4. Lift and move the unit.

- A. Carefully lift and move the unit to the location where you intend to leave it. Use proper lifting methods.
- B. Place a piece of cardboard or carpet on the floor.
- C. Carefully turn the cabinet (#1) over and position the top cover on the piece of cardboard or carpeted surface. See Figure 3.

5. Attach the left and right feet to the cabinet.

- A. Locate the left foot (#2), two screws 1/4-20 X .625 (#21) and two washers (#22). See Figure 3.
- B. Using the adjustable wrench (#27), secure the left foot (#2) to the cabinet using two screws 1/4-20 X .625 (#21) and two washers (#22).
- C. Locate the right foot (#3) and two screws 1/4-20 X .625 (#21) and two washers (#22). See Figure 4.
- D. Using the adjustable wrench (#27), secure the right foot (#3) to the cabinet using two screws 1/4-20 X .625 (#21) and two washers (#22).

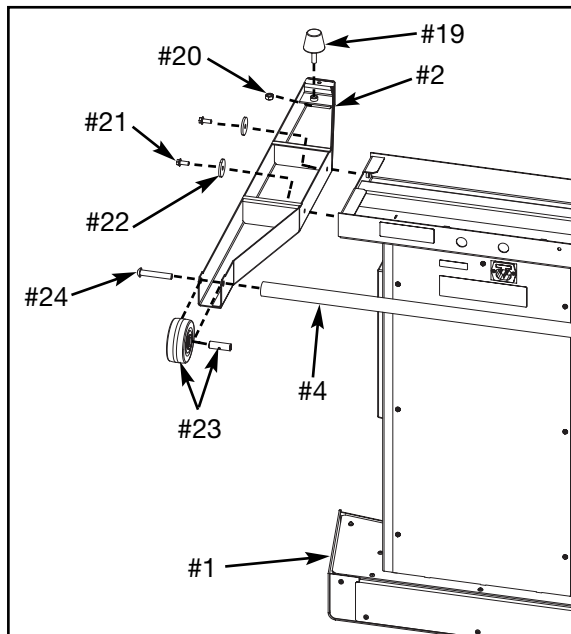


Figure 3

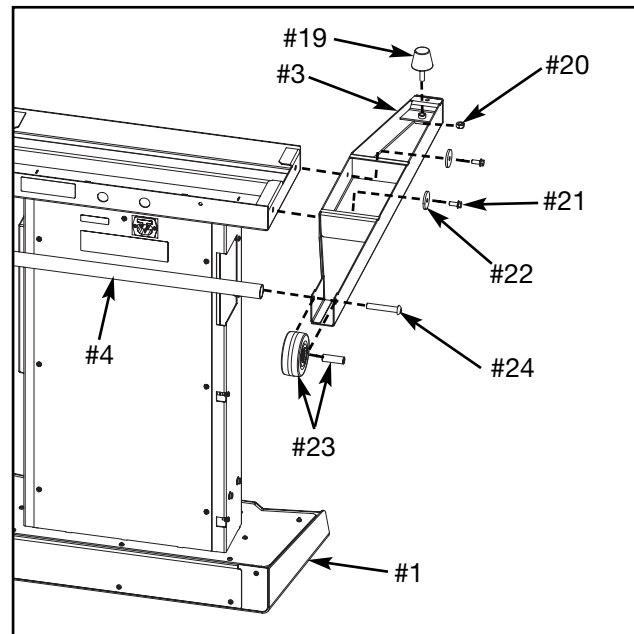


Figure 4

6. Attach the pivot bar and wheels to the cabinet.

- A. Locate the pivot bar (#4), transport wheel (#23) and bolt 3/8 X 2.25 (#24). See Figure 3.
- B. Place transport wheel (#23) inside the left foot (#2) and install bolt 3/8-16 X 2.25 (#24) through foot and into pivot bar (#4).

- C. Securely fasten the bolt 3/8-16 X 2.25 (#24) with the 7/32" allen wrench (#26).
- D. Locate wheel (#23) and bolt 3/8 X 2.25 (#24). See Figure 4.
- E. Place wheel (#23) inside the right foot (#3) and install bolt 3/8 X 2.25 (#24) through foot and into pivot bar (#4).
- F. Securely fasten the bolt 3/8 X 2.25 (#24) with the 7/32" allen wrench.

7. Install leveling feet.

- A. Locate leveling foot (#19) and nut 5/16-18 (#20). See Figure 3.
- B. Thread leveling foot (#19) into left cabinet foot (#2) until shaft is level with the top of the foot brace. Turn the leveling foot five half turns to expose threads on back of brace.
- C. Thread nut 5/16-18 (#20) onto exposed threads, do not tighten at this time.
- D. Thread leveling foot (#19) into right cabinet foot (#3) until shaft is level with the top of the foot brace. Turn the leveling foot five half turns to expose threads on back of brace.
- E. Thread nut 5/16-18 (#20) onto exposed threads, do not tighten at this time.
- F. Carefully turn cabinet over to rest on the leveling feet and transport wheels.

NOTE: *The unit is available with three video options, monitor bracket, projector shelf or external monitor. If your unit came with a monitor bracket follow Cybex Trazer® Assembly with monitor bracket. If you received a projector shelf follow Cybex Trazer® Assembly with projector shelf. If you are connecting an external monitor follow Cybex Trazer® Assembly with external monitor.*

Cyber Trazer® Assembly with monitor bracket.

1. Attach the monitor bracket to cabinet.

- A. Locate the monitor bracket (#10).
- B. Using the Phillips head screwdriver (#28) remove the six screws securing the blank cover to the cabinet. Set screws aside and discard the blank cover. See Figure 1.

NOTE: Do not damage the wires inside the cabinet when installing the monitor bracket.

- C. Place the monitor support bracket (#10) inside the cabinet and align holes. See Figure 2.
- D. Using the Phillips head screwdriver (#28) secure the monitor bracket (#10) to the cabinet using five of the six screws removed in step 1B.

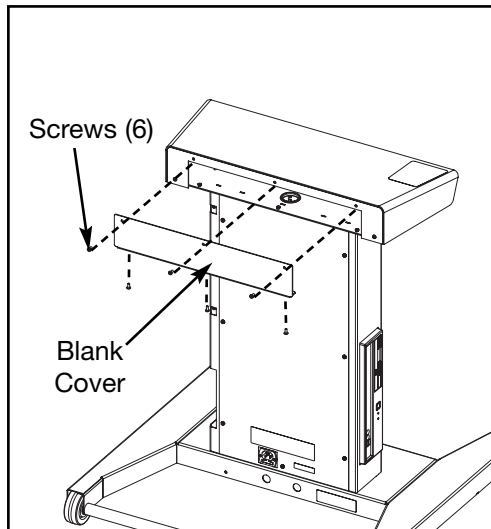


Figure 1

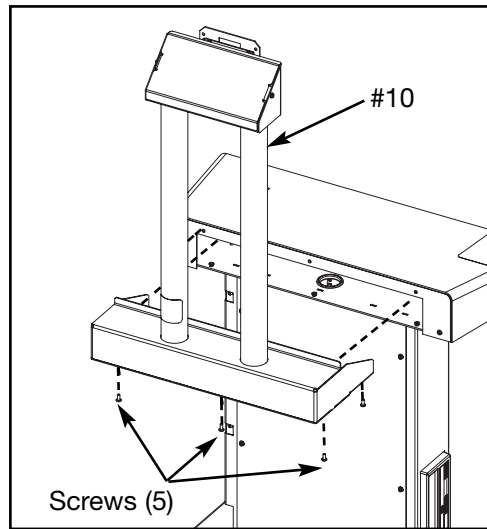


Figure 2

2. Install monitor.

NOTE: Monitor, VGA cable and monitor power cable are not supplied with the unit.

- A. Locate monitor, monitor VGA cable and monitor power cable.
- B. Using the Phillips head screwdriver (#28) remove the two screws securing the top cover in place. See Figure 3.

NOTE: Adapter plate is for VESA compatible monitors with 100 mm hole spacing. For VESA compatible monitors with 75 mm hole spacing use mounting holes in monitor bracket.

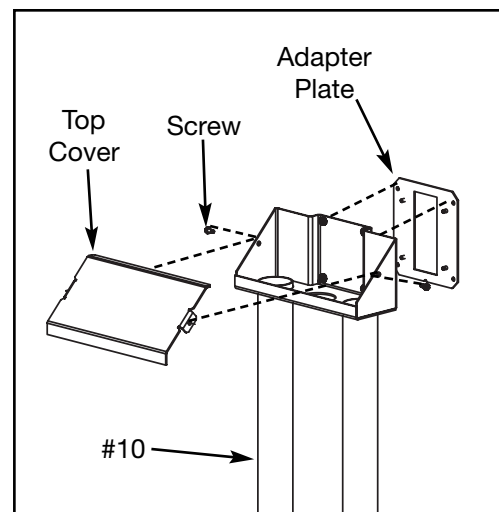


Figure 3

- C. Remove four nuts securing adapter plate to monitor bracket (#10). Install adapter plate on monitor with 100 mm hole spacing using hardware supplied with monitor. Discard adapter plate for monitors with 75 mm hole spacing.

! WARNING: Do not exceed maximum monitor weight of 21 lbs./9.5 kg. Do not exceed maximum monitor case width of 24"/61 cm.

- D. Secure the monitor to the monitor bracket (#10).
NOTE: Monitors with 100 mm hole spacing use adapter plate and hardware from step 2C. Monitors with 75 mm hole spacing use hardware supplied with the monitor. See Figure 4.

3. Install monitor cables.

- E. Plug the monitor VGA cable and monitor power cable into the monitor.
F. Route the two monitor cables up through the middle hole in between the support tubes. See Figure 5.

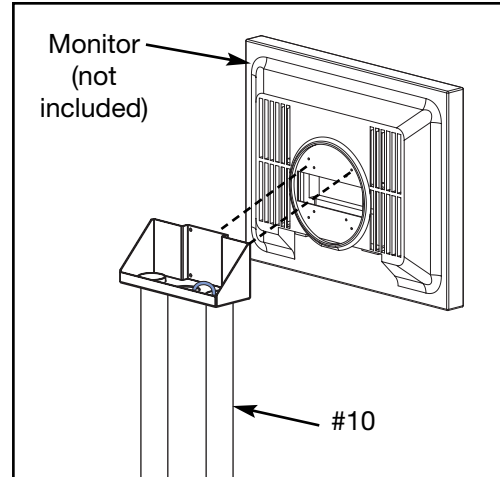


Figure 4

- G. Route the two monitor cables down through the monitor support bracket tubes until they exit at the bottom. **NOTE:** Route the VGA cable through the left tube. See Figure 5.
H. Using the Phillips head screwdriver (#28) install the two screws, removed in step 2B, securing the top cover in place. See Figure 6.

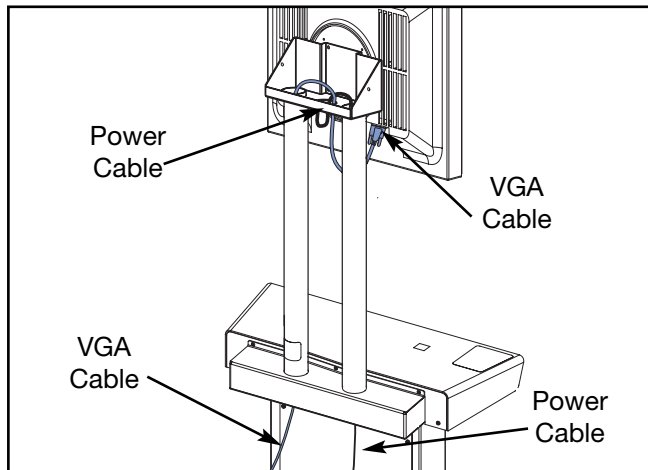


Figure 5

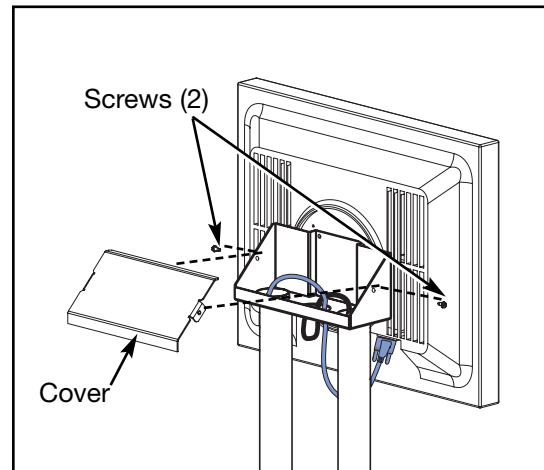


Figure 6

4. Install keyboard.

- A. Locate keyboard (#5).
B. Remove backing from velcro tabs on bottom of keyboard.

NOTE: Do not cover the warning decal on the left side of the top cover.

- C. Place keyboard (#5) towards the right side of the top cover of cabinet. Ensure that velcro adheres to top of cabinet. See Figure 7.

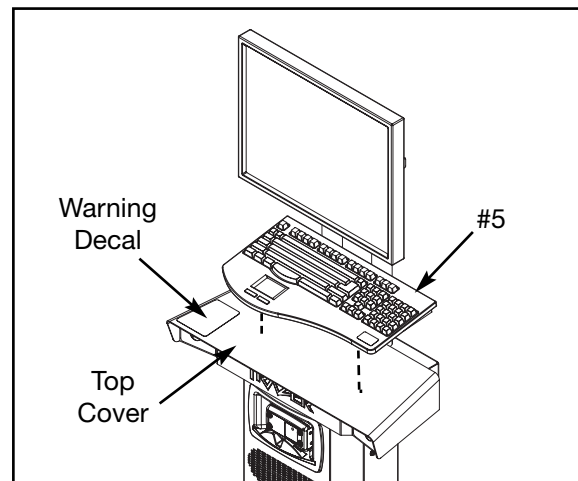


Figure 7

D. Locate the CPU access hole. See Figure 8.

E. Locate the keyboard's green plug (touchpad) and purple plug (keyboard). Locate the CPU's green receptacle (touchpad) and purple receptacle (keyboard).

NOTE: The keyboard cable plugs are keyed and can only be inserted in one direction. Forcing cables into the CPU receptacles can damage the cables or CPU. See Figure 9.

F. Insert the green plug into the green receptacle and the purple plug into the purple receptacle. See Figure 10.

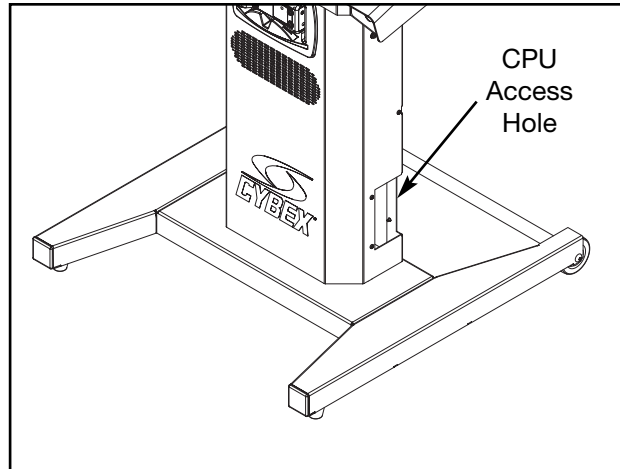


Figure 8

5. Install VGA cable.

A. Insert the monitor's blue VGA cable into the blue receptacle in the CPU. See Figure 10.

B. Secure the monitor's blue VGA cable to the CPU by turning the two screw shafts located on the VGA cable. See Figure 10.

C. Verify all cables connecting to CPU are connected properly and securely.

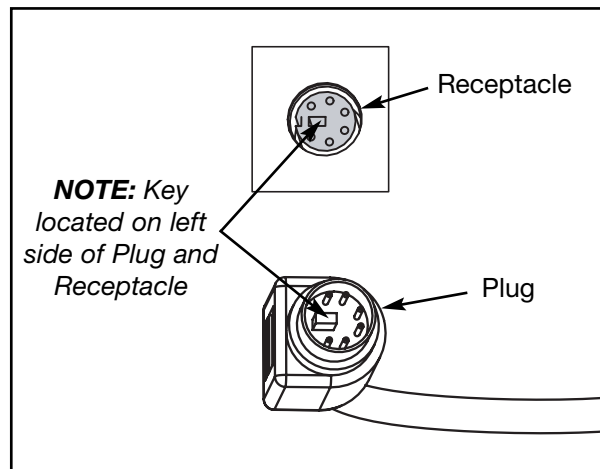


Figure 9

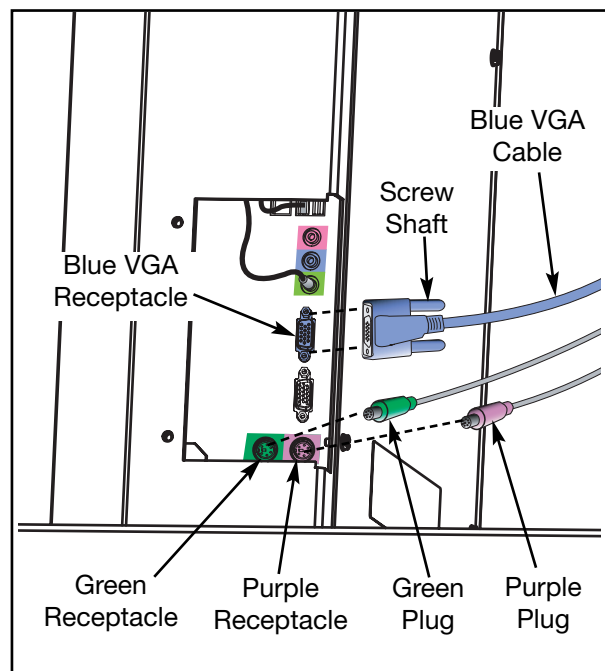


Figure 10

6. Install cable access cover.

- A. Locate the cable access cover (#20) and four screws (#25).

NOTE: Do not pinch the keyboard or VGA cables when installing the cable access cover.

- B. Guide the keyboard and VGA cable into the channel in the cable access cover (#20). **NOTE:** The monitor power cable will stay outside the cabinet. See Figure 11.
- C. Using the Phillips head screwdriver (#28) secure the cable access cover (#20) to the cabinet with four screws (#25). See Figure 11.

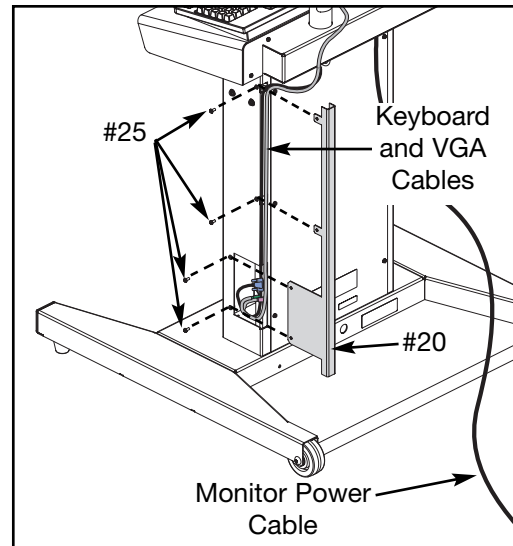


Figure 11

7. Level the unit.

- A. Confirm that the unit is on a level surface. See steps 7B - 7D for leveling.

! WARNING: Always use proper lifting methods when moving heavy items.

- B. Carefully tip the unit back to gain access to the leveling feet.
- C. Locate the leveling feet at the front of the unit. See Figure 12.
- D. Using your hands, adjust the leveling feet up or down until the unit is level.
- E. Using the adjustable wrench (#27) tighten each nut 5/16-18 (#20) to secure leveling feet.

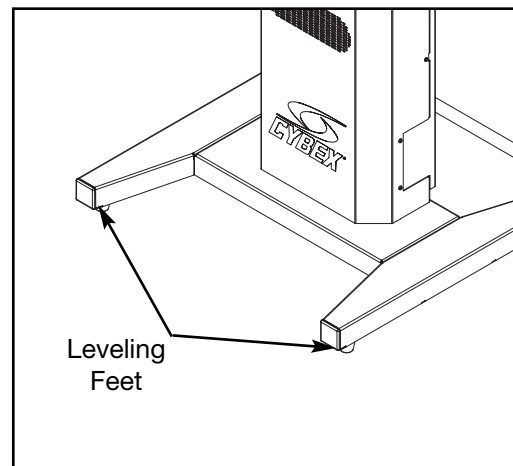


Figure 12

8. Connect the power cord.

- A. Plug the power cord into the inlet in the back of the unit. **NOTE:** Do not plug the power cord into an outlet at this time. See Figure 13.

9. Visually inspect the unit.

- A. Carefully examine the unit to ensure that the assembly is correct and complete.
- B. Proceed to *Testing the Operation* section.

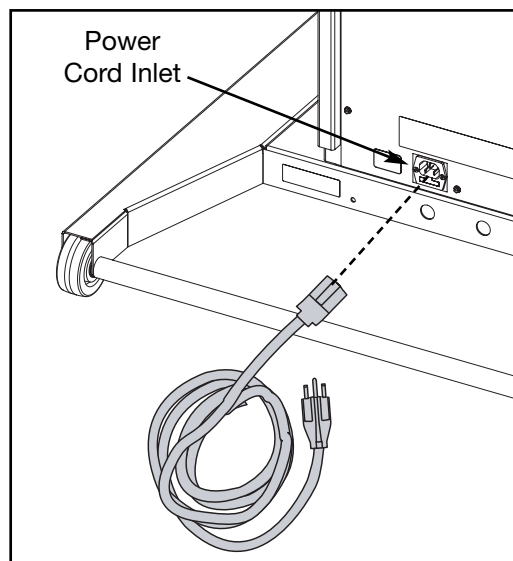


Figure 13

Cybox Trazer® Assembly with Projector Shelf.

1. Assemble projector shelf.

NOTE: Projector shelf includes top plate, bottom plate and base.

- A. Locate the projector shelf (#11), six screws (#25), two split lock washers, 5/16" (#29), two flat washers, 5/16" (#30) and two bolts, 5/16-18 x 1.50" (#31). See Figure 1.
- B. Thread the two split lock washers, 5/16" (#29), two flat washers, 5/16" (#30) and two bolts, 5/16-18 x 1.50" (#31) through the bottom plate into the base bracket.
- C. Using the adjustable wrench (#27), secure the bottom plate to the base bracket.
- D. Using the Phillips head screwdriver (#28) secure the top plate to the bottom plate with five screws (#25).

2. Attach the projector shelf to cabinet.

- A. Using the Phillips head screwdriver (#28) remove the six screws securing the blank cover to the cabinet. Set screws aside and discard the blank cover. See Figure 2.

NOTE: Do not damage the wires inside the cabinet when installing the projector shelf.

- B. Place the projector shelf (from step 1) inside the cabinet and align holes. See Figure 3.
- C. Using the Phillips head screwdriver (#28) secure the projector shelf to the cabinet using five of the six screws removed in step 2A.

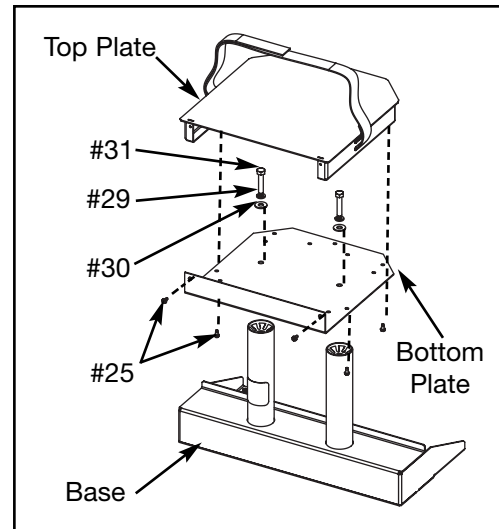


Figure 1

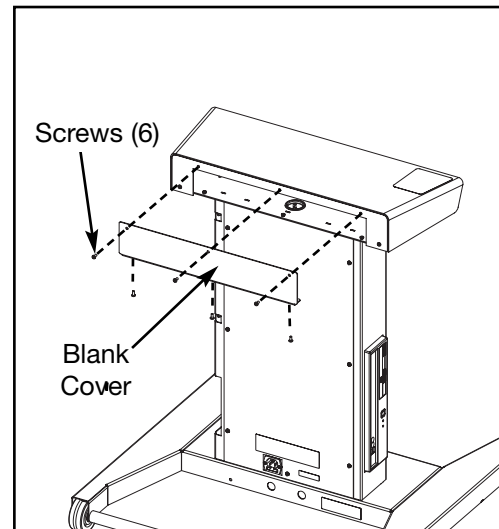


Figure 2

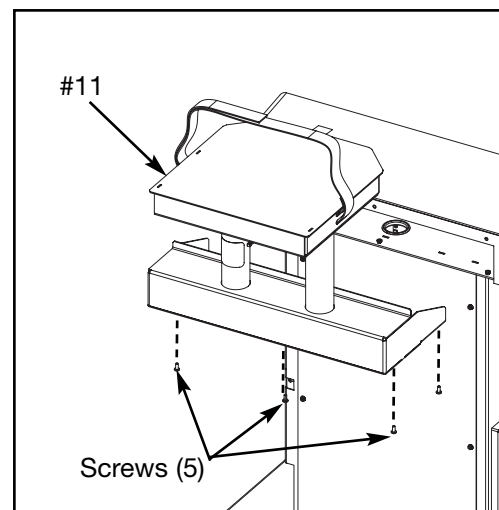


Figure 3

3. Install projector.

NOTE: Projector, VGA cable and power cable are not supplied with the unit.

- A. Locate Projector, VGA cable, power cable, wire ties (#32) and wire tie bases (#33).
- B. Place projector on the projector shelf. **NOTE:** Place projector so lens faces the back of the unit. See Figure 4.

! WARNING: Do not install monitor or television on projector shelf.

- C. Secure the projector to the shelf by tightly wrapping the straps around the projector. See Figure 4.
- D. Plug the projector's VGA cable and projector power cable into the projector.
- E. Secure the VGA cable and projector power cables under the projector shelf using the wire ties (#32) and wire tie bases (#33) provided. **NOTE:** Place the wire tie bases in the hole locations best suited for your projector cables.

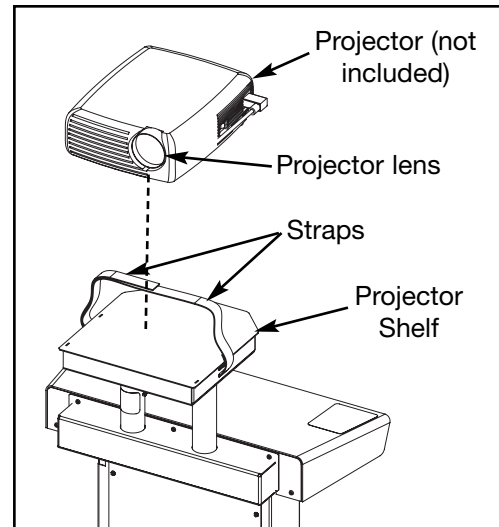


Figure 4

4. Install keyboard.

- A. Locate keyboard (#5).
- B. Remove backing from velcro tabs on bottom of keyboard.

NOTE: Do not cover the warning decal on the left side of the top cover.

- C. Place keyboard (#5) towards the right side of the top cover of cabinet. Ensure that velcro adheres to top of cabinet. See Figure 6.

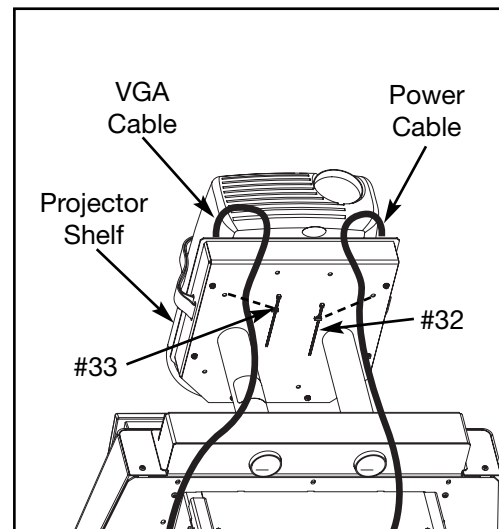


Figure 5

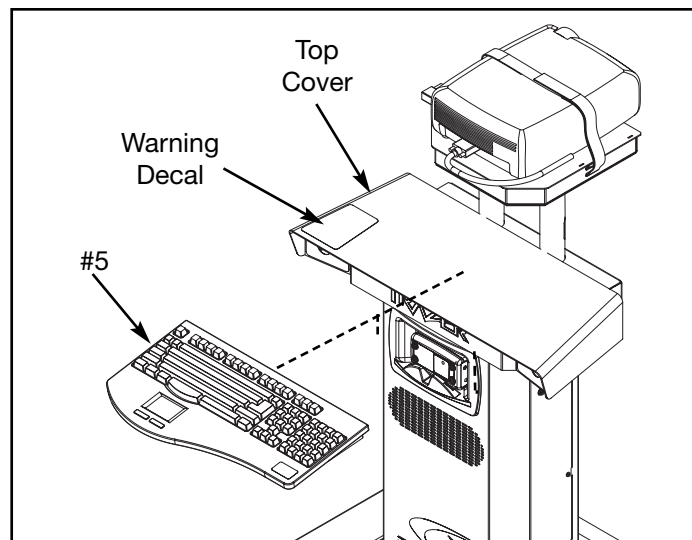


Figure 6

D. Locate the CPU access hole. See Figure 8.

E. Locate the keyboard's green plug (touchpad) and purple plug (keyboard). Locate the CPU's green receptacle (touchpad) and purple receptacle (keyboard).

NOTE: The keyboard cable plugs are keyed and can only be inserted in one direction. Forcing cables into the CPU receptacle can damage the cable plug or CPU. See Figure 8.

F. Insert the green plug into the green receptacle and the purple plug into the purple receptacle. See Figure 9.

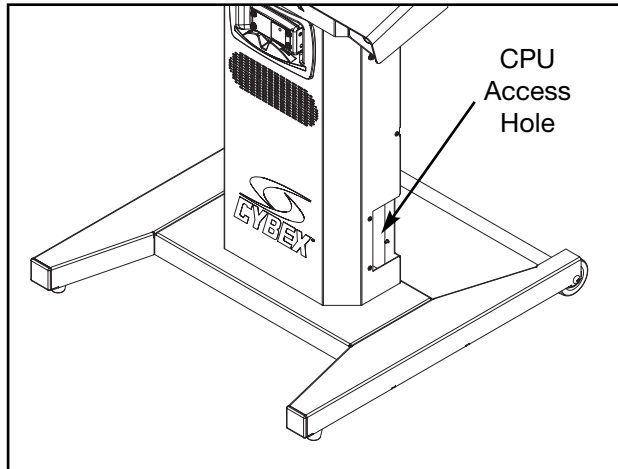


Figure 7

5. Install VGA cable.

A. Insert the projector's blue VGA cable into the blue receptacle in the CPU. See Figure 9.

B. Secure the projector's blue VGA cable to the CPU by turning the two screw shafts located on the blue VGA cable. See Figure 9.

NOTE: Some projectors may have a USB cable as part of the blue VGA cable.

C. Insert the USB cable (if included) into the USB receptacle. See Figure 9.

D. Verify all cables connecting to CPU are connected properly and securely.

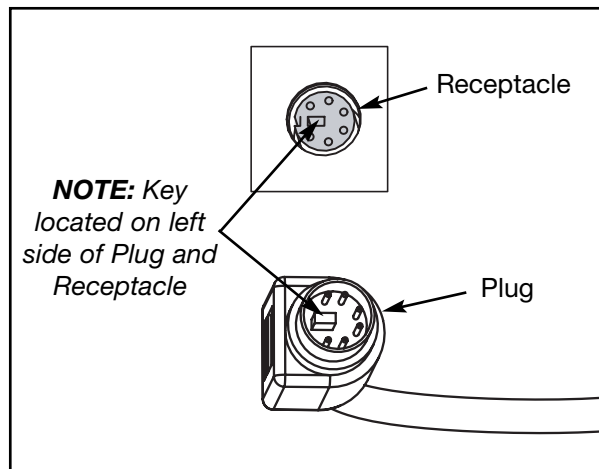


Figure 8

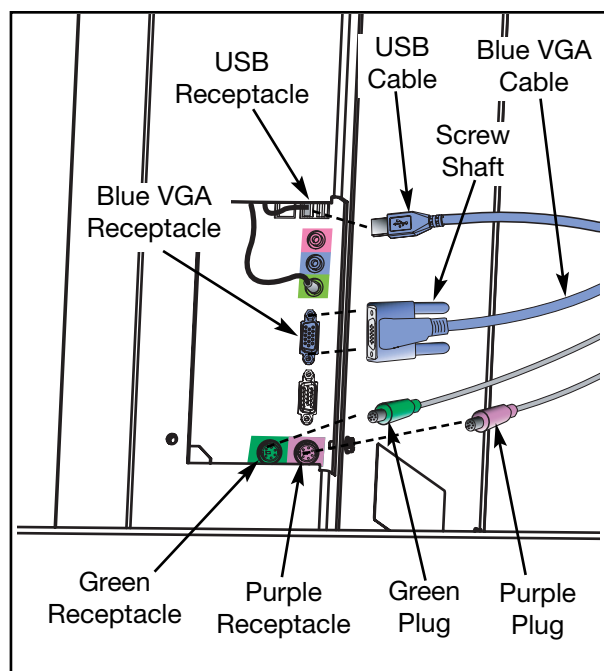


Figure 9

6. Install cable access cover.

- A. Locate the cable access cover (#20) and four screws (#25). See Figure 10.

NOTE: Do not pinch the keyboard or VGA cable when installing the cable access cover.

- B. Guide the keyboard and VGA cable into the channel in the cable access cover (#20). **NOTE:** The projector power cable will stay outside the cabinet. See Figure 10.
- C. Using the Phillips head screwdriver (#28) secure the cable access cover (#20) to the cabinet with four screws (#25). See Figure 10.

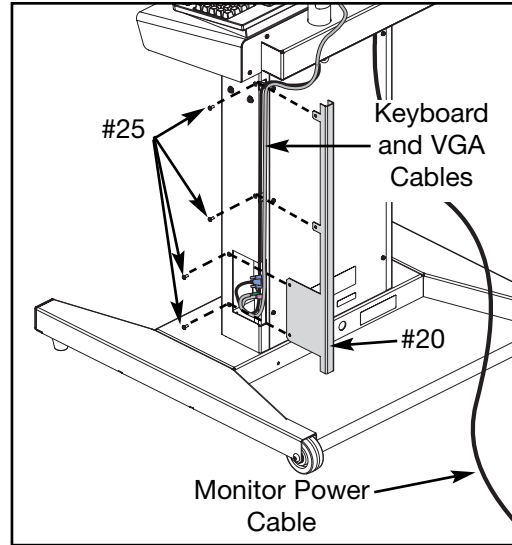


Figure 10

7. Level the unit.

- A. Confirm that the unit is on a level surface. See steps 7B - 7D for leveling.

! WARNING: Always use proper lifting methods when moving heavy items.

- B. Carefully tip the unit back to gain access to the leveling feet.
- C. Locate the leveling feet at the front of the unit. See Figure 11.
- D. Using your hands, adjust the leveling feet up or down until the unit is level.
- E. Using the adjustable wrench (#27) tighten the nut 5/16-18 (#20) to secure leveling feet.

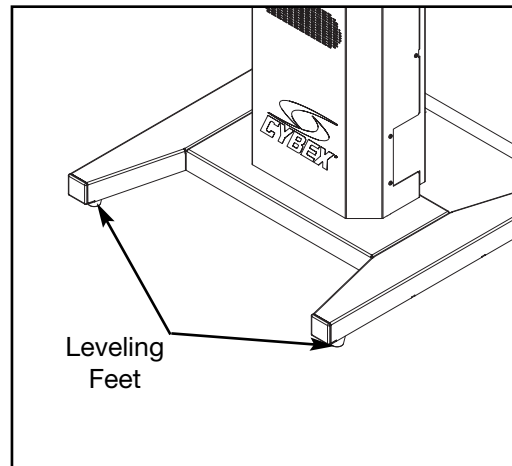


Figure 11

8. Connect the power cord.

- A. Plug the power cord into the inlet in the back of the unit. **NOTE:** Do not plug the power cord into an outlet at this time. See Figure 12.

9. Visually inspect the unit.

- A. Carefully examine the unit to ensure that the assembly is correct and complete.
- B. Proceed to *Testing the Operation* section.

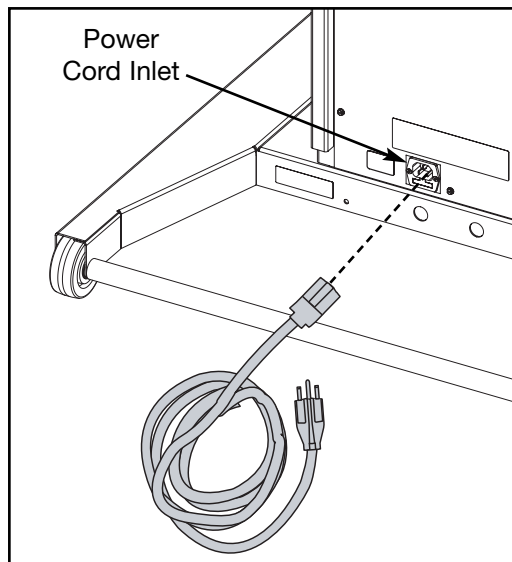


Figure 12

Cybox Trazer® Assembly with External monitor

1. Install keyboard.

- A. Locate keyboard (#5).
- B. Remove backing from velcro tabs on bottom of keyboard.

NOTE: Do not cover the warning decal on the left side of the top cover.

- C. Place keyboard (#5) towards the right side of the top cover of cabinet. Ensure that velcro adheres to top of cabinet. See Figure 1.

- D. Locate the CPU access hole. See Figure 2.

- E. Locate the keyboard's green plug (touchpad) and purple plug (keyboard). Locate the CPU's green receptacle (touchpad) and purple receptacle (keyboard).

NOTE: The keyboard cable plugs are keyed and can only be inserted in one direction. Forcing cables into the CPU receptacle can damage the cable or CPU. See Figure 3.

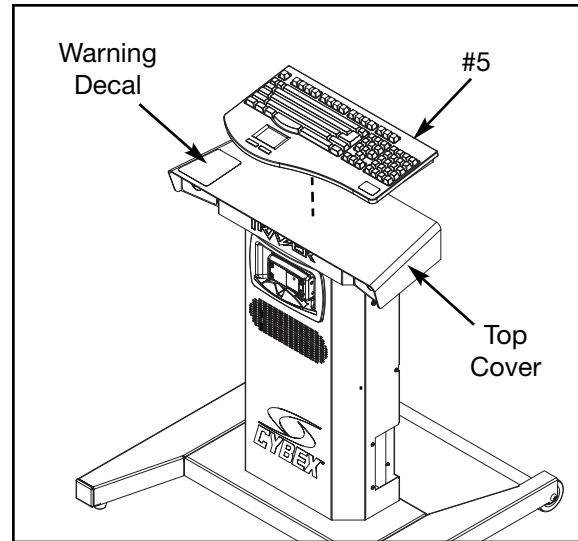


Figure 1

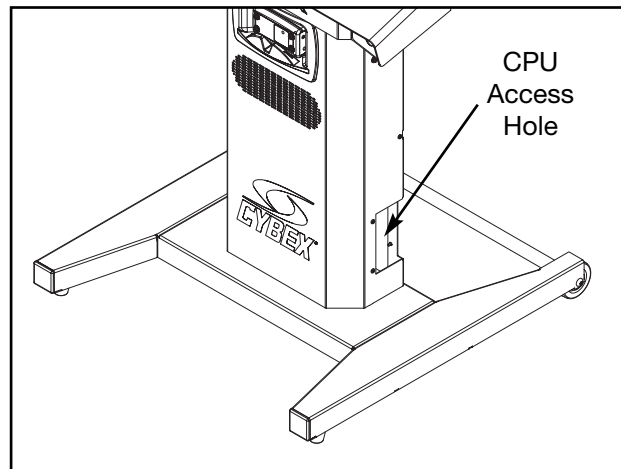


Figure 2

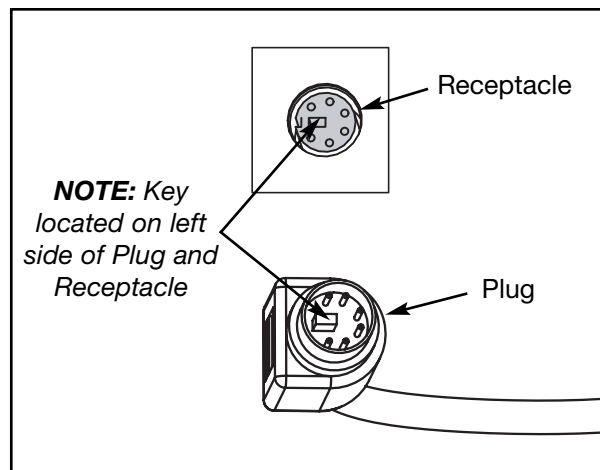


Figure 3

- F. Insert the green plug into the green receptacle and the purple plug into the purple receptacle. See Figure 10.
- G. Insert the external monitor VGA cable into the blue receptacle in the CPU. See Figure 10.

2. Install VGA cable.

- A. Insert the external monitor's blue VGA cable into the blue receptacle in the CPU. See Figure 9.
- B. Secure the external monitor's blue VGA cable to the CPU by turning the two screw shafts located on the blue VGA cable. See Figure 9.

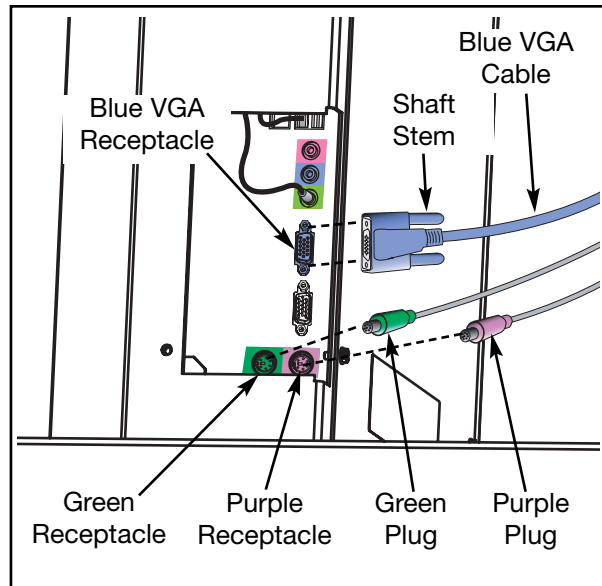


Figure 4

- C. Verify all cables connecting to CPU are connected properly and securely.

3. Install cable access cover.

- A. Locate the cable access cover (#20) and four screws (#25).

NOTE: Do not pinch the keyboard and VGA cables when installing the cable access cover.

- B. Guide the keyboard and VGA cables into the channel in the cable access cover (#20). See Figure 5.
- C. Using the Phillips head screwdriver (#28) secure the cable access cover (#20) to the cabinet with four screws (#25). See Figure 8.

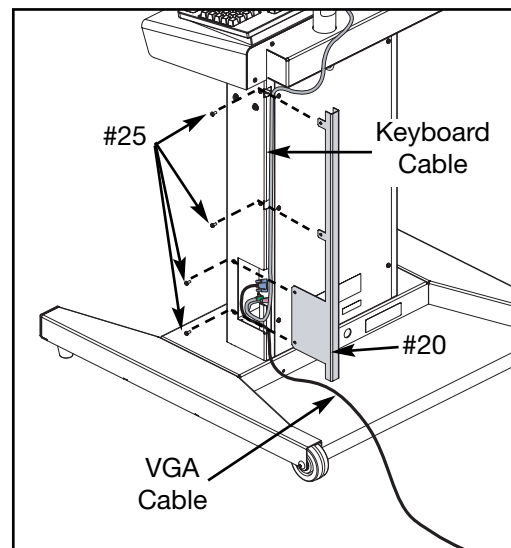


Figure 5

4. Level the unit.

- A. Confirm that the unit is on a level surface. See steps 4B - 4D for leveling.

! WARNING: Always use proper lifting methods when moving heavy items.

- B. Carefully tip the unit back to gain access to the leveling feet.
- C. Locate the leveling feet at the front of the unit. See Figure 6.
- D. Using your hands, adjust the leveling feet up or down until the unit is level.

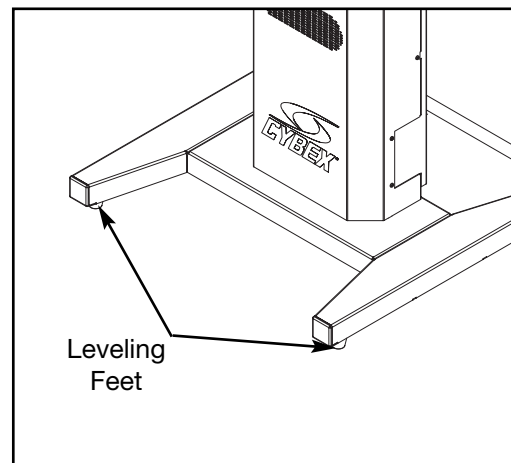


Figure 6

E. Using the adjustable wrench (#27) tighten the nut 5/16-18 (#20) to secure leveling feet.

5. Connect the power cord.

A. Plug the power cord into the inlet in the back of the unit. **NOTE:** Do not plug the power cord into an outlet at this time. See Figure 7.

6. Visually inspect the unit.

A. Carefully examine the unit to ensure that the assembly is correct and complete.

B. Proceed to *Testing the Operation* section.

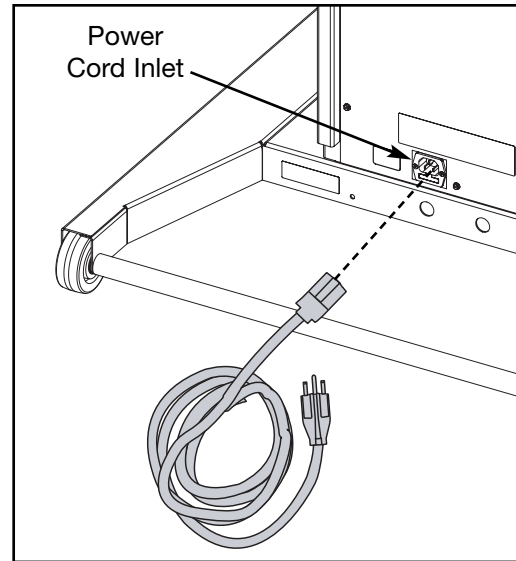


Figure 7

! WARNING: Be sure that all electrical requirements are met as indicated in the specifications at the front of the manual and at the beginning of this chapter prior to proceeding.

Testing the Operation

Use the following instructions to test the operation of the unit.

NOTE: Read “Using the Beacon” and “Basic Movements” sections before reading the “Detailed Operations Guide”.

NOTE: Cybex recommends that the unit be unplugged when not in use for extended periods of time.

1. Plug the power cord into a power outlet rated for the following: 115 VAC \pm 5%, 60 Hz and 15 amps.
NOTE: Coil up the remainder of the power cord and place it out of the way.
2. Locate the on/off power switch for your video display. Make sure the power cord is plugged into a power outlet and turn on as recommended by the manufacturer.
3. Locate the on/off power switch on the left side of the cabinet. Press it once to the on position.
4. The screen will illuminate and after approximately 10 seconds the main screen will be displayed.
5. Adjust the volume by using the F5 (lower) and F6 (increase) keys. Press F10 to turn sound on and off.
6. Locate beacon and install on the belt using the four metal snaps.
7. Locate the on/off button. Fasten the belt around your waist with the on/off button located on the right. Adjust the strap as tight as possible without affecting the user’s comfort or breathing. See Figure 1.
8. Turn beacon on by pressing the on/off button once.
NOTE: To turn beacon off, Press and hold the on/off button for three seconds.

NOTE: The beacon will remain on for sixty minutes then turn off automatically. Press the on/off button at the beginning of each session so that the beacon will reset and a new sixty minute time period will begin.

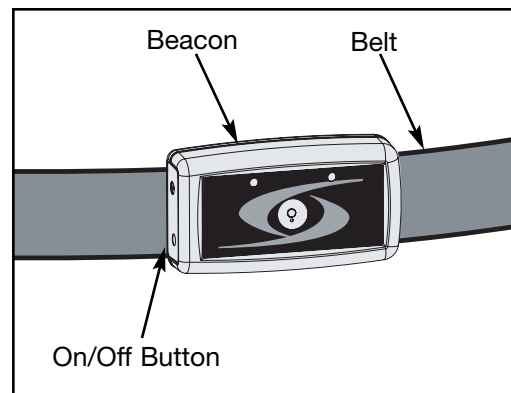


Figure 1

9. Locate the touchpad mounted in the keyboard. Using one finger touch the pad and move your finger to guide the pointer on the screen. See Figure 2.
10. Log in. **NOTE:** Each client must LOG IN to have individual performance scores and measurements saved on the system. See Administration and Reports.
11. For Cardio Control activities, client must wear a Polar® compatible heart rate monitor.

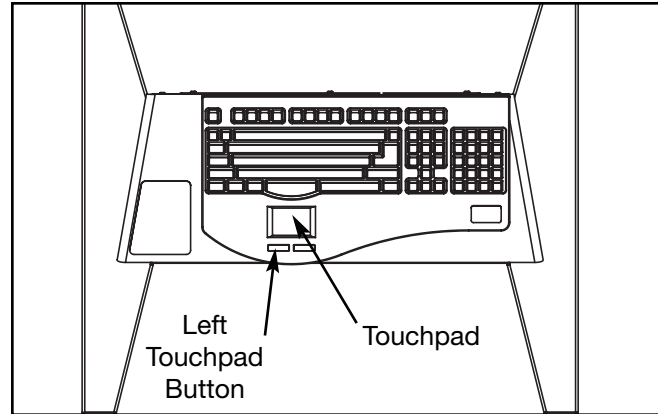


Figure 2

12. Select desired category on the left side of video display then press the left key below the touchpad.
13. Select desired activity on the right side of video display then press the left key below the touchpad.

NOTE: Most activities have an options setup screen that allows varying degrees of control or customization of the activity. Default settings for each activity remain until these options are changed. Changes made for every activity for each individual client are saved in that client's personal database.

14. Click OK! in the lower right hand corner of the screen. Stand a few feet away from the front center of the cabinet. Move in the direction of the on screen commands and towards the center of the bulls eye target. Remain still during the audible, three second countdown phase while facing the cabinet.
15. After the countdown is complete, move toward your target. Observe that "Physbot" follows your movements.
16. When finished with program, your score screen will appear. Press *Enter* to continue and return to setup screen. **NOTE:** To exit a program early, press the "Esc" (Escape) key to exit program and return to the main menu.
17. Remove beacon from belt and return it to charging station.

Set Date and Time

The date and time need to be synchronized between the PC and the Trazer unit. If the date and time are not synchronized the database will not be updated correctly. Perform this procedure for any PC's that will be running the TrazerMan software and all Trazers in the facility.

Setting the date and time on your PC

1. Using your mouse move your cursor to the lower right of your desktop.
2. Right click the time that is displayed in the lower right corner.
3. From the menu select *Adjust Date/Time*. See Figure 1.
4. Click the *Time Zone* tab.
5. Select your *Time Zone* from the drop down menu. Click the *Apply* button.
6. Click the *Date & Time* tab.
7. On the left side of the screen select the current *Month, Year* and *Date*. Click the *Apply* button.
8. On the right side of the screen adjust the clock to the current time. Click the *Apply* button.
9. Click the OK button.

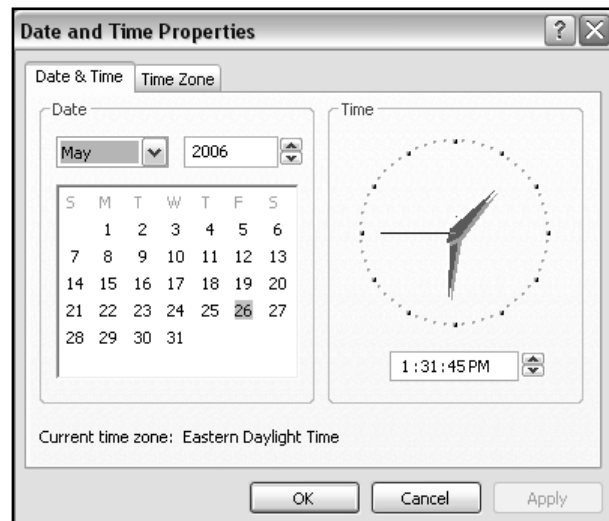


Figure 1

Setting the date and time on your Trazer

1. With the Trazer on and in the dormant mode press and hold down the *Alt* key and then press the *Tab* key. Release both keys.
2. Using the touchpad move your cursor to the lower right of your desktop until you see the time displayed.
3. Using the left button below the touchpad double click the time that is displayed in the lower right corner.
4. From the menu select *Adjust Date/Time*. See Figure 1.
5. Click the *Time Zone* tab.
6. Select your *Time Zone* from the drop down menu. Click the *Apply* button.
7. Click the *Date & Time* tab.
8. On the left side of the screen select the current *Month, Year* and *Date*. Click the *Apply* button.
9. On the right side of the screen adjust the clock to the current time. Click the *Apply* button.
10. Click the OK button.

6 - Customer Service

Contacting Service

Hours of phone service are Monday through Friday from 8:30 a.m. to 6:00 p.m. Eastern Standard Time.

For Cybex customers living in the USA, contact Cybex Customer Service at **800-766-3211**.

For Cybex customers living outside the USA, contact Cybex Customer Service at **508-533-4300** or fax **508-533-5183**.

Order parts and find information on the web at www.cybexinternational.com or by e-mail at techhelp@cybexintl.com.

Serial Number

Your serial number can be found on the back of the unit. See Figure 1.

For your convenience record your serial number below so that you will have it ready if you call Cybex Customer Service.

Serial Number _____

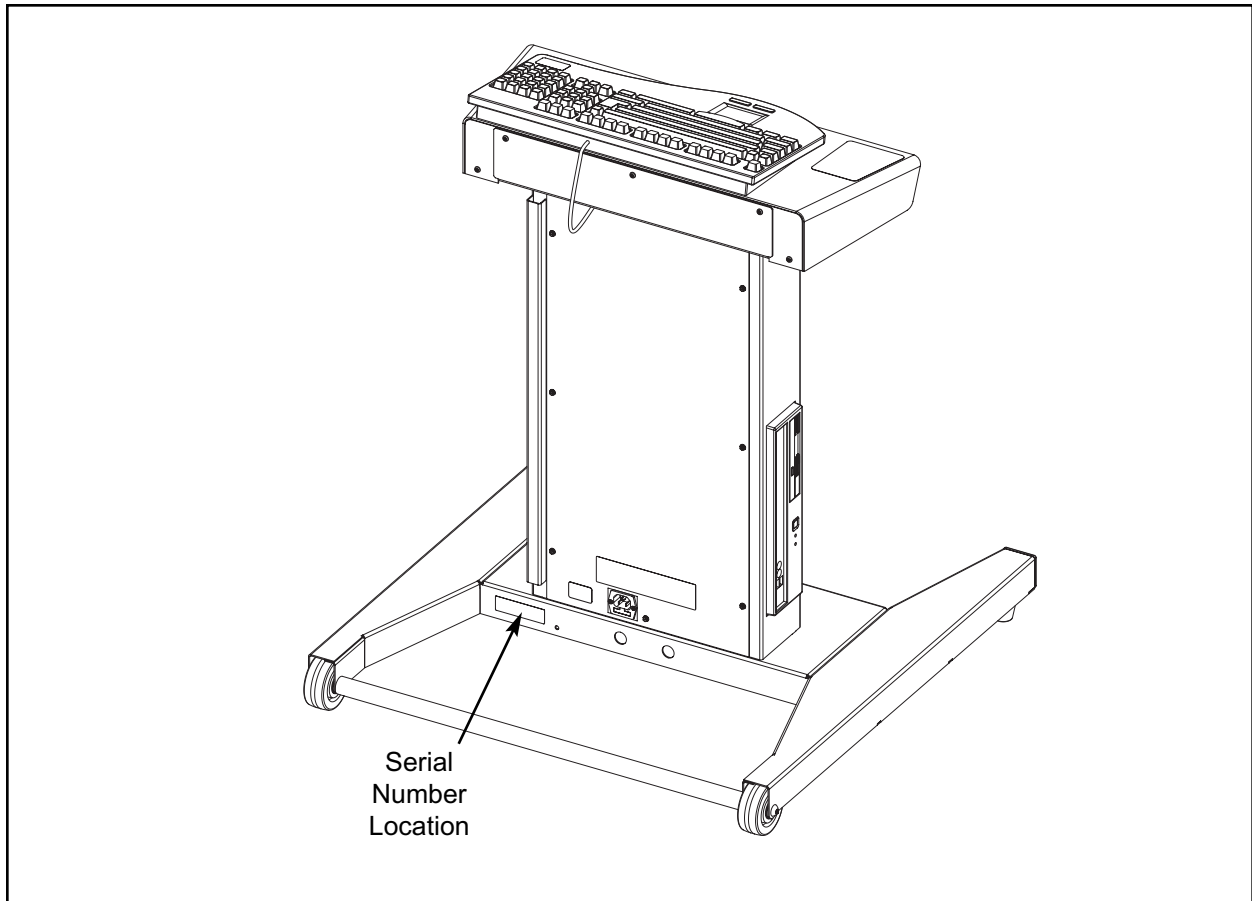


Figure 1

Return Material Authorization (RMA)

The Return Material Authorization (RMA) system outlines the procedures to follow when returning material for replacement, repair or credit. The system assures that returned materials are properly handled and analyzed. Follow the following procedures carefully.

Contact your authorized Cybex dealer on all warranty-related matters. Your local Cybex dealer will request an RMA from Cybex, if applicable. Under no circumstances will defective parts or equipment be accepted by Cybex without proper RMA and an Automated Return Service (ARS) label.

1. Call the Customer Service hotline listed on Page 6-1 for the return of any item that is defective.
2. Provide the technician with a detailed description of the problem you are having or the defect in the item you wish to return.
3. Provide the model and serial number. *The serial number is located on the front of the unit as shown in Figure 1.* The serial number begins with a letter, for example: R09-101331100.
4. At Cybex's discretion, the technician may request that you return the problem part(s) to Cybex for evaluation and repair or replacement. The technician will assign you an RMA number and will send you an ARS label. The ARS label and RMA number must be clearly displayed on the outside of the package that contains the item(s) to be returned. Include a description of the problem, the serial number of the unit and the name and address of the owner in the package along with the part(s).
5. Forward the package through UPS to Cybex.
Attn: Customer Service Department
Cybex International, Inc.
10 Trotter Drive
Medway, MA 02053

NOTE: *Merchandise returned without an RMA number on the outside of the package or shipments sent C.O.D. will not be accepted by the Cybex receiving department.*

Damaged Parts

Materials damaged in shipment should not be returned for credit. Shipping damages are the responsibility of the carrier (UPS, Federal Express, trucking companies, etc.).

Apparent Damage - Upon receipt of your shipment, check all boxes carefully. Any damage seen with a visual check must be noted on the freight bill and signed by the carrier's agent. Failure to do so will result in the carrier's refusal to honor your damage claim. The carrier will provide you with the required forms for filing such claims.

Concealed Damage - Damage not seen with a visual check upon receipt of a shipment but noticed later must be reported to the carrier as soon as possible. Upon discovery of the damage, a written or phone request to the carrier asking them to perform an inspection of the materials must be made within ten days of the date of delivery. Keep all shipping containers and packing materials: they will be needed as part of the inspection process. The carrier will provide you with an inspection report and the necessary forms for filing a concealed damage claim. Concealed damage is the carrier's responsibility.

Ordering Parts

Visit www.cybexinternational.com to shop for parts online or fax your order to **508-533-5183**. To speak with a customer service representative, call **800-766-3211** (for customers living within the USA) or **508-533-4300** (for customers outside the USA).



CAUTION

**Use only Cybex replacement parts when servicing.
Failure to do so could result in personal injury.**

Cybex will void warranty if non-Cybex replacement parts are used.

Parts List

Item	Qty	Part Number	Description
1	1	AF-19016	Cabinet, Main
2	1	AX-18738	Assembly, Tracker Bar, 60 Hz
2	1	AX-19395	Assembly, Tracker Bar, 50 Hz
3	1	AX-18829	Assembly, Charging Dock
4	1	AX-18833	Assembly, Speaker
5	1	EC-18584	Power Entry Module
6	1	CP-18580	CPU, Trazer
7	1	EH-10658	Grommet, 1.375 X .091"
8	1	FS-18816	Clamp, CPU
9	1	FS-18770	Cover, Cabinet, Back
10	1	AX-18827	Cabinet Foot, Left
11	1	AX-18828	Cabinet Foot, Right
12	1	AX-18868	Keyboard
13	1	AX-18943-4	Assembly, Top Cover, English
14	1	AX-18831	Beacon
15	1	DE-16928	Warning Decal, Voltage
16	1	DE-18777	Label, Cybex Logo, Silver
16	1	DE-18778	Label, Cybex Logo, Black
17	1	CP-18761	USB Memory Stick
20	2	HS-15706	Screw, 8/16 X .50", PNHD, STL, BLK ZN
21	2	HS-18814	Bolt, Whiz Lock, 1/4-20 X 3.5", HXHD
24	7	HS-18888	Screw, SLFTP, 8/32 X .38", SLT HXHD
25	1	AF-19005	Pivot Bar
45	1	AF-18960	Cover, Blank
46	1	AF-19334	Cover, Access and Cable
48	1	FS-19344	Bracket, CPU Mount Top
49	1	HN-42040	Nut, 1/4-20"
50	1	HX-19349	Clamp, Cable, .188", Nylon, White
51	17	HS-11977	Screw, SEMS, 8/32 X .38", PNHD PHIL, EXT
114	1	DE-19381	Decal, 50 Hz
114	1	DE-19382	Decal, 60 Hz
117	2	DE-19152	Decal, Tracker, Top Cover
118	1	DE-18775-4	Warning Decal, English
119	1	DE-18843	Decal, Cybex Logo, Keyboard
120	1	DE-18782	Label, Beacon, Front
121	1	DE-18919	Label, Beacon, Back
122	1	DE-18821	Decal, Beacon, End Plate
123	1	DE-18776	Decal, Trazer® Logo
124	2	HN-00164	Nut, Hex 5/16 - 18"
125	2	HX-19007	Foot, Leveling, .312-18, Neoprene
126	2	HX-18734	Cap, Plastic, 2.00"
141	1	AF-18743	Weldment, Monitor Support
142	1	AF-18552	Bracket, Adapter Plate, TV Mount
143	4	HN-11879	KEPS, 8/32", HEX STL ZINC

Item	Qty	Part Number	Description
144	2	HS-11977	Screw, SEMS, 8/32 X .38", PNHD PHIL, EXT
145	1	AF-18937	Cover, Monitor Mount
146	1	DE-18844-4	Warning Decal, Monitor Bracket, English
161	1	AF-19010	Weldment, Projector Shelf, Top
162	1	AF-19011	Weldment, Projector Shelf
163	6	HS-18888	Screw, SLFTP, 8/32 X .38", SLT HXHD WSH
164	1	HX-18958	Strap, Velcro, 33"
165	1	DE-19004-4	Warning Decal, Projector Shelf
167	2	HW-00165	Washer, Split Lock, 5/16", ZINC
168	2	HW-00189	Washer Flat 5/16"
169	2	HS-00195	Bolt, 5/16-18 X 1.5", HXHD
170	1	FS-18957	Plate, Projector Shelf, Bottom
171	2	EH-00472	Wire Tie, TY-23M
172	2	EH-10291	Base, Wire Tie
201	4	HS-12083	Bolt Lock, 1/4-20 x .625"
202	4	HW-19006	Washer, .281 ID x 1.25 OD x .13" Thick
203	2	HS-18834	Bolt, 3/8 X 2.25", BTHD CAP, BLK ZN, G5
204	2	CW-16712	Wheel, 3" Dia x 1.25" W
NS	1	AW-14007	Power Cord, 115 VAC, 60 Hz
NS	1	WR-14012	Power Cord, 230 VAC, 50 Hz
NS	1	AW-18585	Cable, Audio to Charger Board
NS	1	AW-18586	Cable, Ribbon, USB, Tracker Interconnect
NS	1	AW-18587	Cable, USB, Tracker to CPU Connect
NS	1	AW-18588	Cable, 12 VDC, Charger Power
NS	1	AW-18589	Cable, Power Harness, CPU
NS	2	AW-18591	Cable, Speaker Connect
NS	1	AW-18592	Cable, VGA (not included)
NS	1	AW-19020	Cable, Jumper, Ground
NS	1	AX-18944	Assembly, Monitor Support Bracket (optional)
NS	1	AX-18982	Assembly, Projector Shelf (optional)
NS	1	AX-19028	Hardware Pack (in box)
NS	1	BD-18840	Large Beacon Belt, 48", Black
NS	1	BD-18841	Small Beacon Belt, 32", Blue
NS	1	CP-18761	ROM Drive, USB
NS	1	EC-17871	Battery, AA NIMH, 1800+ mAh
NS	1	EF-18594	Fuse, 1.6A SB, 110/220 VAC, 50/60 Hz
NS	1	HT-19377	Wrench, Adjustable, 4"
NS	1	HT-19378	Screwdriver, Phillips
NS	1	HX-00440	Hex Key, 7/32"
NS	1	LT-18723	Assembly Poster, Base unit (in box)
NS	1	LT-19363	Assembly Poster, Monitor Bracket (in box)
NS	1	LT-19364	Assembly Poster, Projector Shelf (in box)
NS	1	LT-18891	Warranty Sheet (in box)
NS	1	LT-18568-4	CD, Owner's Manual
NS	1	TR-19025	Beacon Charger, 115 VAC, 60 Hz
NS	1	TR-19060	Beacon Charger, IEC-320, 230 VAC, 50 Hz

Note: NS = Not Shown

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