KnightTrainerPro

this is easy

The Knight Trainer Pro
Quick to set up
Easy to use

Don't let this detailed manual fool you. The Knight Trainer Pro is **quick to set up and easy to use.**

Basically, you will just do this:
- Open the stand
- Place the Knight Trainer Pro on the stand
- Plug in to an outlet, then connect the KTP to the computer and turn on the power for both
- Open the Trainer app
- Run drills and enjoy

This manual will add details to those simple steps. See section 5 for more about opening and using the Trainer app for drills. **The more of the manual you read, the more you will get out of using the Knight Trainer Pro.**

Bringing the Knight Trainer Pro to badminton players has been a labour of love for everyone on the team, and we hope that you will love using the KTP.

The Badminton Innovations KTP team

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CONGRATULATIONS!

The Knight Trainer Pro opens up a new world of badminton possibilities. Take some time to read this manual and the drill guide to get the most out of your KTP.

Be safe.
Set up.
Power up.
Connect.
Play.

1. Safety first:

a. General

i. **WEAR EYEGUARDS:** Eye guards are strongly recommended for everyone using or moving around the Knight Trainer Pro (KTP), but especially juniors.

   Protect eyes from shuttles being shot out of the KTP and shuttles being hit back by the player(s) using KTP.

ii. **POWER DOWN:** If you need to look into or reach into the Knight Trainer Pro, save your drill on the computer and turn off the KTP's power switch. If the power is needed during maintenance, remove the carousel and any shuttles that may be in the machine below the carousel.

iii. **USE ONLY AS INTENDED:** Only use the KTP to feed and eject regulation badminton shuttlecocks, whether nylon or feather.

b. **During setup or takedown**
   i. **The stand**
      o **LOWEST POSITION:** Use the handle to put the central cylinder at its lowest position to make it easier to lift the KTP onto the stand.
      o **HANDLE WITH CARE:** Do not place your hands where they can be caught by the machine as it is lowered onto the central cylinder, or by the scissor action of the stand's brackets as they open or close.
   ii. **The Knight Trainer Pro**
      o **2 PEOPLE:** Although the KTP can be set up by one person, for some people, due to height or strength, it may be difficult to lift it alone. When in doubt, or until experienced, 2 people should do it together. The main unit weighs about 40 lbs (18 kg) and is lifted to a height of about 40" (102 cm).
      o **WATCH YOUR STEP:** Keep the area clear around the KTP, to avoid stumbling while handling the unit.
      o **FIRM GRIP:** Whether working alone or with someone else, be sure of a firm grip on the KTP while placing it on the stand or removing it.

c. **During operation of the KTP**
   o **Keep non-essential people away**
   o **Those around the KTP should wear eye guards.**
   o **Use an extension cord that is long enough to lie flat on the floor (see section 2)**
   o **To power down completely, unplug the KTP from the power supply**
   o **Do not stand in the 180 degrees arc in front of an operating KTP. Remember that it changes direction.**
   o **Do not lean on the KTP.**
   o **Before removing or placing a carousel, stop any drill (this is done on the computer) and turn off the carousel motor (switch on side of Knight Trainer Pro below the top plate)**
   o ***NEVER*** **turn the carousel by hand. To turn it, keep the power on and use the contact switch at the top of the machine near the shuttle opening.**

2. Electrical requirements

The Knight Trainer Pro can operate at all voltages up to 250V, and frequencies from 50-60 HZ. We prepare KTPs for the voltage where they will be delivered unless otherwise advised. ***Let us know if you are moving your Knight Trainer Pro from a low to a high voltage country or the opposite.*** We'll guide you through the easy process of converting your KTP. Damage caused by ignoring this step is not covered under warranty.

> *We will set your KTP to the voltage of your country*

To operate:
- You need an extension cord that reaches from an electrical outlet to the KTP while lying flat on the court
- This extension cord will be connected to the power cord supplied with the KTP
- Outside of Canada, the US and some other 120V countries, you will need a plug adaptor
   o There are 2 electrical outlets on the KTP. One will accept the power cord that is provided. ***The other, with 2 flat holes and one round hole should only be used in 120V countries to***

charge or power other devices unless you are connecting a device with a built-in voltage transformer. Badminton Innovations will not be responsible for damage to any devices plugged into the wrong power outlet.

3. Shuttlecocks

The KTP works with new or used nylon and feather shuttlecocks with cork bases. If the shuttlecock is durable in normal play or training, then it will be similarly durable when used with the KTP.

> *Use feather or nylon (synthetic), new or used*

- If the shuttle is good enough for players to hit back, then the shuttles are good enough for the Knight Trainer Pro to feed. Note that:
   o Feather shuttles with broken or missing feathers are more likely to jam or cause 2 to feed together.
   o Shot quality and consistency are best with shuttlecocks in good condition. Shuttles in bad condition are best for drills where accuracy is less important.
- When loading the carousel with new shuttles, *make sure that the shuttles are not stuck together.*
- The corks of some brands of synthetic (nylon) shuttles are not glued on and may come off eventually. We tested most extensively with *Black Knight's synthetic models (corks are glued) and recommend them for use with the KTP.*
- Only use nylon shuttles with flexible nylon cages. Do not use shuttles like the Bird2 with rigid nylon cages.

Should feather shuttlecocks be humidified?
For best durability, feather shuttlecocks should always be lightly humidified. Steaming is common (but not best) but **never** *steam* directly into the KTP's feeding tubes, as the heat may damage the tubes. Instead:
   o In storage, you can cover the open tops of the carousel tubes with something slightly damp (not dripping wet), such as a towel. Place plastic over the damp towel to keep the towel moist.

> *Make sure that shuttles are not stuck together when loading the carousel.*

Will the KTP damage the shuttlecocks?
No, not more than a player hitting the shuttle as often, except for gradual abrasion to the cork cover*. The Knight Trainer Pro and a player will be much easier on the shuttles than 2 players hitting back and forth.

*This assumes the corks of nylon shuttles are glued on. Nylon shuttles with unglued corks may be affected differently.

4.   Setting up the KTP

🚫 *NEVER rotate the carousel's pyramid shaped support by hand - it will damage the carousel motor.* If you need to rotate the pyramid (shown in this photo, taken from above), turn on both the KTP and the carousel motor, and then press down on the contact switch (shown by the arrow in the photo) to activate the motor and turn the pyramid.
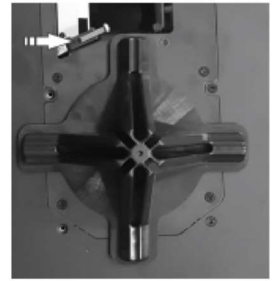
Other motorized parts of the KTP:

- To manually move the yellow mandible that supports the wheels, save your drill but leave the software open, then turn off the illuminated power button. Do not move the mandible with the power on. When finished, turn the power back on and resume working with the drill.

- The finger moving the shuttles to the wheels can be rotated manually in both directions with the power on
- You can rotate the Knight Trainer Pro left or right with the power on.

If the Knight Trainer Pro was shipped to you, keep the box for the main unit in case the KTP ever needs to be shipped back for servicing. For return of the main unit, the owner is expected to have the original shipping box available or to pay for a new box including shipping of the new, empty box to him/her (except when the Knight Trainer Pro was not originally delivered in a box).

Your Knight Trainer Pro has been used.
Every Knight Trainer Pro is thoroughly tested before being shipped or delivered. We do our absolute best not to leave any cosmetic blemishes, but proper testing is the top priority. If your Knight Trainer Pro shows a sign of use, please see this as a sign of our commitment to delivering to you the best functioning KTP.

Now let's get down to the details. The standard KTP kit normally includes:
- The KTP machine that will feed the shuttles
- A Microsoft Windows 10 tablet computer or laptop
- A three-legged wheeled stand, with adjustable height.
- A carousel that can hold 250 shuttles.
- A carrying bag for the stand.
- A Phillips screwdriver
- The top plate and, *if not already installed,* the six screws to secure it using the included screwdriver. If the Knight Trainer Pro has been shipped to you, the top plate will not be installed, and is normally packed in the main box.

  Slide the top plate into position under the pyramid and turn the 6 screws into the holes indicated by arrows in the photo. If any screw holes are covered by the pyramid, *do NOT turn the pyramid by hand*. Instead, follow the instructions at the beginning of this section to let the motor turn the pyramid.
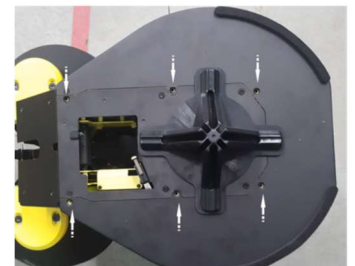
- A USB cable and a power cord to plug into the KTP and to connect to the user's own extension cord.

- Screwdriver
- Wrench
- Hex key
- Wheel spacer in case of adjustments

- Replacement foam pads for the top plate in case the originals wear out (The Knight Trainer Pro works without these pads but they can reduce vibration a bit).

a. **KTP's Stand (weight 14.5 lbs /6.6 kg)**
   (Steps with * *are only done the first time* the stand is used**)**
   i. *Unpack the box:
      o the stand
      o the stand's handle (if not attached, there will also be a hex key)
      o three wheels
      o a wrench
   ii. There are two collars on the outer shaft of the stand, each with a locking knob (A and B). Turn each knob counterclockwise to ensure that the collars will move freely on the outer shaft.
   iii. *Turn the stand upside down. Release each leg from the position in which it was packed. You'll see the threaded holes into which the wheels will be screwed
   iv. *Use the wrench to tighten a wheel into each threaded hole.
   v. Place the stand, wheels down, on the floor.
   vi. Press down on the upper collar and allow the three legs to spread outwards.
   vii. When the legs are fully extended, adjust the outer shaft so that the bottom of the shaft is at least 1" (2.5cm) off the floor.
   viii. Tighten the locking knobs (upper and lower) enough to hold the weight of the KTP. You can test this by pressing down with your own weight on the central shaft before placing the KTP on the shaft. Do not tighten more than necessary. Overtightening will damage the stand.
   ix. If necessary, install the handle using the hex key to secure it.
   x. Rotate the handle to adjust the height for your drill. You can go up to the red "Maximum" zone shown on the shaft.
   - *When the stand is at its lowest point, the KTP may block the first few turns of the handle*. If this happens, rotate the base of the KTP until the handle can be turned freely.

Keep hands away from this area when opening or closing

QUICK TIP: When folding up the stand, loosen *the upper knob* and then turn the stand upside down. Pull the legs towards the centre. They will collapse enough to fit into the storage bag. Loosen the other knob if necessary.

b. **Shuttlecock carousel – removing and placing on the KTP (when empty, 4.5 kg / 10 lbs)**
   i. If the carousel is on the KTP, then stop any drill that is running.

   If the carousel is empty, also turn off the carousel motor (switch on upper left side of the Knight Trainer Pro, if you are facing the KTP).

Hint: Turn off the carousel motor when a tube is in the centered, feeding position. Then it will be easier to put a reloaded carousel back in the right position.

Stand at the side or back of the KTP to remove or replace a carousel. Do not stand in front of it.

There will often be one shuttle remaining to be shot out of the Knight Trainer Pro even without the carousel, so do not walk in front or look inside if the power is on.

ii. Before putting back the carousel once the tubes are full, cork end facing downwards*, make sure that the tubes are set into the bottom ring of the carousel*. The funnels have barbs that lock the tubes into the correct position so out of position tubes are unlikely but can be popped back in if necessary.
   o If a tube is not in place, it can cause feeding errors.
iii. Make sure that the KTP is low enough that you can see the pyramid in the middle of the top plate and can easily lift the carousel above the pyramid. For some people, a sturdy, secure step or small ladder will be useful.
iv. Note the plus sign cut out of the bottom of the carousel and line this up with the 4 rails on the pyramid. Lower the carousel into position. When in position, the carousel will sit about ¼" (0.6 cm) above the top plate.
   o If the carousel does not settle down completely a shuttle's cork may be caught between the carousel and the top plate. Sometimes you may lift off the carousel to correct this, but often you can just spot the problem shuttle and push it into position.
v. Turn on the carousel motor
   o The power to the KTP must be on
vi. The active tube must be centered above the feeding zone. If it is not, lift the carousel and press down briefly on the contact switch to rotate the pyramid slightly. Replace the carousel and it should then rotate into the right position. To avoid having to reset the carousel, see the "Hint" above in "**i.**"

> **Don't tilt the carousel when you are putting it down.** The corks are outside the carousel at the bottom and lowering straight down pushes the shuttles more smoothly back into the tubes than if there is a tilt.
> - **Feather shuttles** usually go in smoothly if you are lowering without a tilt, but sometimes bits of feathers that are sticking out can get in the way.
> - **Nylon shuttles** have a lip where the cork meets the nylon. This lip can snag as a shuttle is pushed back up the funnel. Sometimes you may have to move a shuttle a bit to help it slip back into the tube so that the carousel can lie flat on top of the Knight Trainer Pro.

> **ESCAPE OF THE NYLON SHUTTLES!!!**
> *Due to the weight of 25 shuttles in the tube and the flexibility of the nylon cage of the shuttles, carry the carousel smoothly – a jerky motion may cause some shuttles to drop through the funnel. For transport and storage, try using the round metal sheet delivered with your KTP.*

The tubes should not be exposed to temperatures over 75°C (170°F) or they may soften and become misshapen. Therefore, don't steam the shuttles in the tubes.

Do not compress the shuttles into the tubes as it may cause some to stick together – the tube must be loaded loosely with no shuttles stuck together.

c. KTP main unit (feeding/ejection unit)

The KTP's main unit weighs approximately 40 lbs (18 kg) and must be lifted to a height of about 40" (102 cm) when the main stand is at its lowest height. If this is too heavy for you, be sure to have someone help with the setup, or when removing it from the stand.

i. To lock the stand's wheels, press "ON" on each wheel. It will be much easier to install the KTP if the stand cannot roll away.
ii. Make sure that the stand is at its lowest height.
iii. Make sure that the floor area is clear between you, the KTP main unit and the stand.
iv. With one hand, hold the KTP by the handle and with the other hand hold it on the underside of the yellow disk. There are 2 gripping ridges under the yellow disk so rotate the KTP until one is in the right place for you. ***Do not grasp the KTP by the wheel support or wheel cover.***
v. Place the flared yellow collar over the central shaft
vi. Lower the KTP into position.

d. **Computer and connections to one Knight Trainer Pro**
The power to the Knight Trainer Pro must be ON and the tablet/laptop must be connected by USB for the Knight Trainer Pro software to work.

For the software to work on your computer, it must be connected to a Knight Trainer Pro that is turned on. Sorry, but you can't use the software away from the Knight Trainer Pro. The software interacts with the KTP and must be connected.

- **If Wi-Fi is available where you keep the KTP, it is possible to leave the computer connected to the KTP and to connect remotely to that computer from another computer anywhere. If you are interested, we can help you set that up.**

i. The user name and password for your laptop or tablet are on the bottom of the device. We are now using **user BK** and **password KTP1**
ii. Place the tablet or laptop on a table or chair next to the Knight Trainer Pro.
iii. Connect the provided power cord to the KTP (press it in firmly).
iv. Connect the USB cable to the Knight Trainer Pro and the computer.
v. Turn on the Knight Trainer Pro. The power switch will light up.
vi. If the computer will need a power source, connect it now. Then turn on the computer and open the Trainer application.
   o If you need to turn off the power switch after you open the Trainer app, Trainer can remain open, although it won't be functional until you turn on the power again. This is useful when you need to turn off the power to reach inside the KTP. However, save any changes before doing closing that switch.
   o Unplugging the USB cable while the Trainer application is running will close the application and unsaved changes will be lost. Plug in the USB, make sure the application is closed and reopen Trainer.
vii. With the carousel in place, make sure that the carousel motor is on.

5. THE GOOD PART!

How to use the Knight Trainer Pro for the best badminton

The only way to operate the KTP is with the TRAINER application on a Windows 10 tablet or laptop, connected to a Knight Trainer Pro that has its power on. After connecting to the KTP, you can open the Trainer application by clicking on the shuttlecock icon on the computer.

If you are using your own Windows laptop, the shuttlecock icon will appear on your desktop after you have installed the TRAINER software.

If Wi-Fi is available where you keep the KTP, it is possible to leave the computer connected to the KTP and to connect remotely to that computer from computers and tablets anywhere. If you are interested, we can help you set that up.

Positioning: With the stand open in the standard way, the minimum height for a shot is 4.5 ft (137 cm) and maximum is 7 ft. (213 cm). This is measured from the ground to the middle of the space between the 2 launching wheels. Distance from the net or from the sides of the court is measured from the centre post of the stand.

> *An apology - metric versus imperial: For the time being, Trainer displays feet rather than meters where measurements are given. The metric option will be added in a later version and we apologize to our metric KTP users for this complication. However, in our drill names, we show height, distance from the net and distance from the outer left line in centimeters.*

Now, onto the computer and the Trainer app: If you are using a tablet or laptop from BK, the user and password are on the bottom side of the device (normally user BK and password KTP1). You will see these things on the computer's desktop.
- The shuttle icon that launches the software, called Trainer.
- A desktop shortcut the opens the folder of drills. There you will see a subfolder called "Official", with the drills that largely match those in the drill guide. Modify these to suit your needs and local conditions. Inside Official there is also another folder called "Backup". In there you have copies of all those original drills in case you ever want to return to an original.

   Accessing these drill folders is useful to organize the original drills and any that you create – for example, by creating folders of drills for each player using the KTP. However, you cannot open drills from here. You'll open drills from inside the Trainer software, while the computing device is connected to the KTP, and the KTP has the power on. In the Trainer app, in the "Open" window, you will be able to browse to the folder you want to use. Similarly, you can use "Save As" to change the name or location of a drill.

Shortcuts:

- Several function keys at the top of the keyboard are useful shortcuts to Trainer functions. Please note that on some laptops and tablets, you must hold down the FN key at the bottom of the keyboard while clicking on the function keys across the top. You will find a list of function keys further down in this section.

  Ctrl A open the shot adjustment table where you can see and change all shots and quickly select any shot for repeated feeding.

- Another useful shortcut with a keyboard is the escape key (Esc) at the upper left of the keyboard. The escape key will close many pop ups on the screen so that you don't have to use the mouse or touch pad to do so.

- However, if you have entered data, closing with the escape key will not save the new or changed data. For example, if you have accidentally opened the Shot Creator window, just click Esc to close it. Similarly, if you open the Adjust Shot window to check settings but make no changes, the fastest way out is the Esc key.

The installed drills are explained in detail in the separate drill guide.

Let's look at using the Knight Trainer Pro on a court. We recommend watching this video before continuing: https://www.youtube.com/watch?v=csHd9WkoWUs

In the Trainer app, a drill or game consists of shots created on the right side of the court and added to the Playlist. You can add some or all shots to the Playlist, which can be played in sequence, or randomly, or a mixture. Only the shots in the Playlist will be used in drills or games.

However, a new feature in Trainer rapidly lets you choose any shot from a drill or game, set an interval and feed up to 250 times, without using the Playlist.

The drills supplied by Badminton Innovations (see the Drill Guide) include the height and position in the drill name.
You will see:
- **"H"** followed by the height of the machine (MIN or MAX or in centimeters or inches for any height in between). The height is measured from the floor to the point where the shuttle comes out for a horizontal shot (zero degree tilt angle).
- **"N"** followed by the distance from the net, measured to the center of the tripod at floor level.
- **"L"** followed by the distance from the left doubles line to the Knight Trainer Pro, measured to the center of the tripod at floor level.

To get started, **OPEN** an existing drill or **CREATE** a new drill. Once a drill is open, you can **MODIFY** and **SAVE** under the original name, or under a new name.

However, each time you put the KTP in a position on court, begin by centering it.

HELP YOUR KTP FIND ITS ZERO ANGLE
The Knight Trainer Pro knows a lot, BUT you need to point it straight ahead so that it knows where to find the center (zero degree pan angle).

Each drill screen could include one shot with a zero degree pan angle, even if that shot is not put into the playlist. When you test the shot, if the KTP does not shoot out straight ahead, you should:
- manually turn the base of the machine (section below the yellow disk) as necessary, or rotate the tripod to turn the whole machine

- test again, and then adjust again if necessary

HELP YOUR KTP
FIND ITS ZERO ANGLE

4
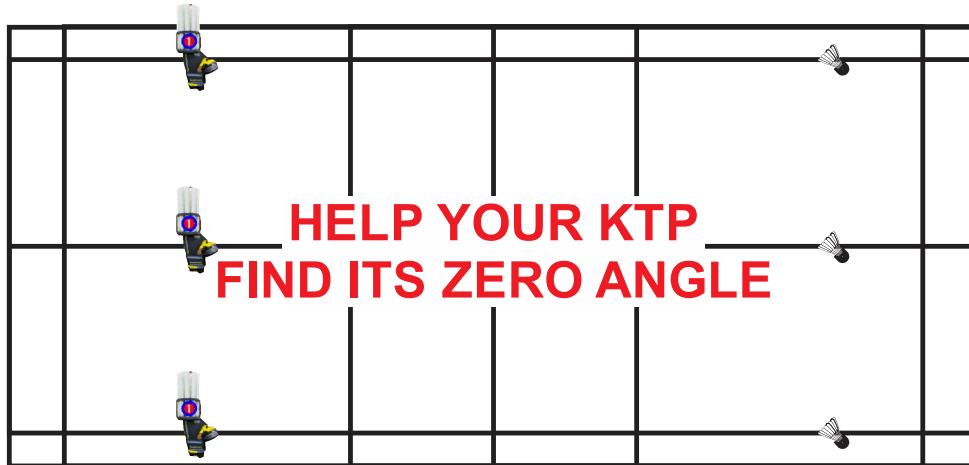
Once the KTP knows its zero pan angle, lock it into position by tightening the knob on the yellow cylinder under the Knight Trainer Pro and by locking the wheels on the stand.

Setting the zero-angle pan is important no matter where the KTP is shooting from.

***Continuing with drills, to open a drill, you can see the available drills and related folders by:***
- o using the File menu to choose Open, or
- o clicking on the Open icon, or
- o entering Ctrl O

You may have to change the folder to reach the drill you want to use. When we supply the tablet, the original Badminton Innovations drills are in a folder called "Official" and are also in a backup folder. We suggest that you not use the drills in the backup folder but copy them if you ever need to replace an original.

Once a drill is open, shots will show as shuttles on the court, and some or all the shots may be in the Playlist. Put the Knight Trainer Pro on your real court as required for the drill.

- An information box will appear to confirm any changes to the height and distances from the net and the left line compared to the previous open drill.
  - o The box *only displays changes* from the last drill used. If there are changes, you will see the message "Machine Adjustment Required" and then the changes.
  - o If the box doesn't appear, then the newly opened drill is using the same positioning as the previous one.
  - o Unfortunately, the box may display incorrect heights for drills we created before this feature was installed. If this happens, then the information in the drill name will be your guide.
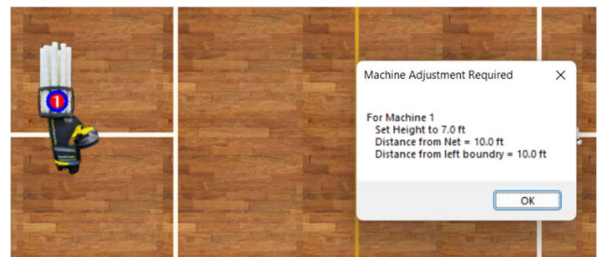
- ***To modify a drill,*** make any changes you wish, and then save with the changes. Consider changing the drill name to keep both the modified drill and the original (use **Save As** in the File menu, or **F12**).
  - o In the Trainer application, once you have specified the height and the distances to the net and to the left line for a drill, these parameters cannot be changed. Trainer will always show that original position for the KTP, whether or not you choose to use it that way.

o   If you want to have a similar drill but showing the KTP in a different part of the court, you will have to create a new drill.

You can make any drill easier or more difficult by changing:
o   The shot intervals in the Playlist, which can be different for every shot (as frequent as one per second)
▪   The interval is the time before the shot on the same line.
o   The number and types of shots
o   The total shots that the Playlist will feed
o   The angles and placement
o   Other aspects of difficulty for some or all shots

While making changes to a drill, save regularly with **CTRL S**, or the **Save icon**. However, if you make any changes and then run a drill, TRAINER will automatically save the drill under its name.
Customize drills for each player or group of players and name the drill or place in a folder accordingly.

-   ***To create a new drill***, decide on the position and height you will use for the Knight Trainer Pro.
o   Use the File menu and choose **New**, or click on the **New** icon, or enter **Ctrl N**. ***Name the drill*** and scroll down the page to enter the height, distance from the left and distance from the net in feet. (If your version accepts inches, please contact us for an upgrade)
o   Optionally, for position, you can drag the KTP icon to the spot that you want.
o   Click enter or OK to complete creation of the new drill. There may be warnings about height changes, but these can be ignored by clicking OK.
o   You will now see a badminton court where the Knight Trainer Pro is on the left-hand side of the net – represented by the KTP icon.
o   Create shots and build a Playlist as described below.
▪   If you plan your intervals in advance, note that a new shot will be added with the same interval as the shot above it in the list. If adding a lot of shots with the same interval, it can save time to change the interval with the first shot before adding more.
o   See the section above for information about saving drills.

Right click, left click: understanding shots – how to create, change and use them

Shots with the KTP are much like shots hit by players. A player considers:
-   Their location on the court
-   The height at which to hit the shuttle
-   The direction to give to the shot
-   The upward or downward angle of the shot
-   The force of the hit

To create and use shots with the KTP, think like a player. You use Pan (horizontal direction, to the left and right), Tilt (vertical angles up or down), velocity of the shuttle, KTP height, KTP location – all the same considerations as when we hit a shuttle with a racquet.

For a series of shots in the Playlist, you can also set the time before each shot (shown as Time Delta in the Playlist). You can also name each shot when created (recommended) and you can also rename shots.

For the shots in pre-installed drills, we have tried to consistently use the following system for shot names:
- The name begins with R for Right, L for Left or CTR for Centre. R and L are from the player's viewpoint.
- Then we add an indication of the type of shot
- Lastly, we may add the digits 3,2,1,0. The outermost shot ends with a 3, and shots ending with 2, 1 and 0 are progressively towards the centre. Shots on the centre line do not get a digit, just CTR in the name.

For example, RSM3 would be a smash to the player's furthest right zone, while RSM0, would be a smash to the right side of the centre line.

Let's create a shot: The Knight Trainer Pro appears on the left side of the net, represented by its icon. To create a shot, *left click* anywhere on the *right side* of the net. Use the next window (Shot Creation, shown here) to name your shot. If you are connected to more than one KTP, this is also where you select the number of the machine that will feed the shot. To close this window *without saving the shot*, use the Esc key or click Cancel. Otherwise make your changes and click on OK.

- There are slide controls in the window which you can use to customize the shot, but shots can also be adjusted with a lot of precision in the Adjustment window or with the new Adjust All Shots table view.
- You can test fire shots in the Shot Creation window and then make further adjustments using the sliders.
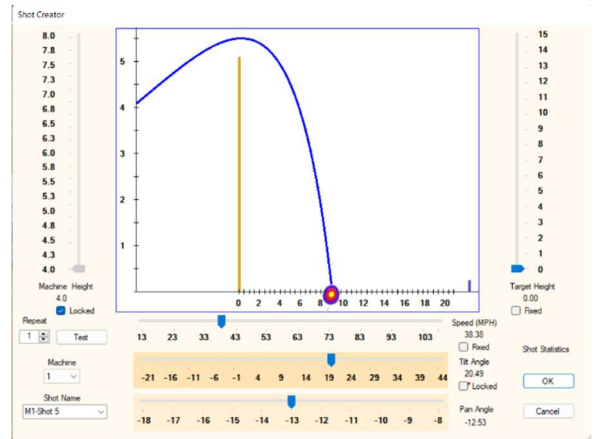
Adjust all shots (Ctrl A) – Table view
The new Adjust All Shots shows all the shots and their values in a table format where you navigate quickly, change any values, test shot or feed any shot up to 250 times.

- **Pan Angle** is for the horizontal direction you want. To the player's right, the angle will be negative.. To the player's left the angle will be positive.
  - o *The range is 90 degrees to the left and 90 degrees to the right.

- **Tilt Angle** is for the upward or downward angle you need. Up is positive and down is negative.
  - o *The range is +43 degrees up to -20 degrees down

- **Speed**
  - o *The range is from 13 to 110 mph / 21 to 177 kph. However, with the patented features of the KTP and other factors, players can experience smashes as if hit more than 100% faster.

*These limits may vary slightly on different machines. If you enter a value outside the range, the Trainer program will make the correction.
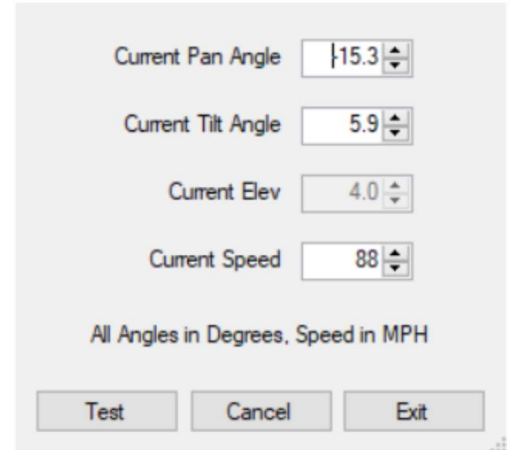
Adjustment window: To adjust just one shot, **right click** on the cork of the shuttle, and choose **Adjust Shot** from the menu that appears (you can type A or click on the command). A small window will open, with controls for Pan, Tilt and Speed.

Make your changes and then use the buttons to:
- **Test** the shot
- **Cancel** the changes, or
- **Exit** (the changes will be saved).

Current Pan Angle	-15.3
Current Tilt Angle	5.9
Current Elev	4.0
Current Speed	88

All Angles in Degrees, Speed in MPH

| Test | Cancel | Exit |

After testing, you can make further changes and test again, and then exit when you are satisfied.
- To make a change, type in new numbers, or use the up and down triangles

Other right click options
The right click on the cork also reveals other options for the shot:
- **Insert** places the shot into the Playlist
- **Rename** lets you rename the shot
- **Delete** deletes the shot
- **Mirror** copies the shot to the point on the court horizontally opposite the original shot

In each case you can type the first letter or click on the command.

Build your Playlist by adding shots
- The Playlist will be your drill or game.
- Decide the order of shots that you want in your drill
- **Right click** on the cork of those shots and choose Insert. Add shots in the desired order including adding the same shot more than once as needed.
    o When the top shot in the Playlist is selected, you will have the option of adding a new shot above (creating a new first shot) or below the first shot. Otherwise, shots will always be added below the selected line in the Playlist.
    o You can add shots at the bottom or insert anywhere in the list
- The default interval is 2.5 seconds (shown in the Time Delta column and also referred to as "shot duration" or "interval"), but you can enter a new interval between 1 and 15 seconds. New shots will get the same interval as the preceding shot on the playlist. However, when adding a shot after a line for a Loop or Group, the interval will go back to the default of 2.5.
- While editing a playlist item, the field turns yellow, indicating that the field is the point of focus. If you select another field in Trainer while a shot field is yellow, you may unintentionally make an entry in the yellow shot field.
    o This can lead to an error message described in the troubleshooting section below and is usually easy to fix.
    o The yellow state is terminated by clicking on it or on the field horizontally next to it.
- A red field in the time column is a signal to change the time interval because the one previously selected can't be carried out. This generally only happens with 2 or more machines connected.
- You can see some examples of Playlists in the separate drill guide.

A Playlist can be played in as presented or randomly. If run as presented, then Loops and Groups, described below, will be useful tools. If you choose "Run Random Drill", then loops and groups are ignored, and the system randomly chooses shots from the Playlist. Please see the end of this section for more details about running a drill randomly.

One powerful feature of the Knight Trainer Pro allows you to also create Playlists that combine random shots and sequential shots. You will find some examples of this in the drill guide.

THE RUN MENU AND ITS FUNCTION SHORTCUTS:
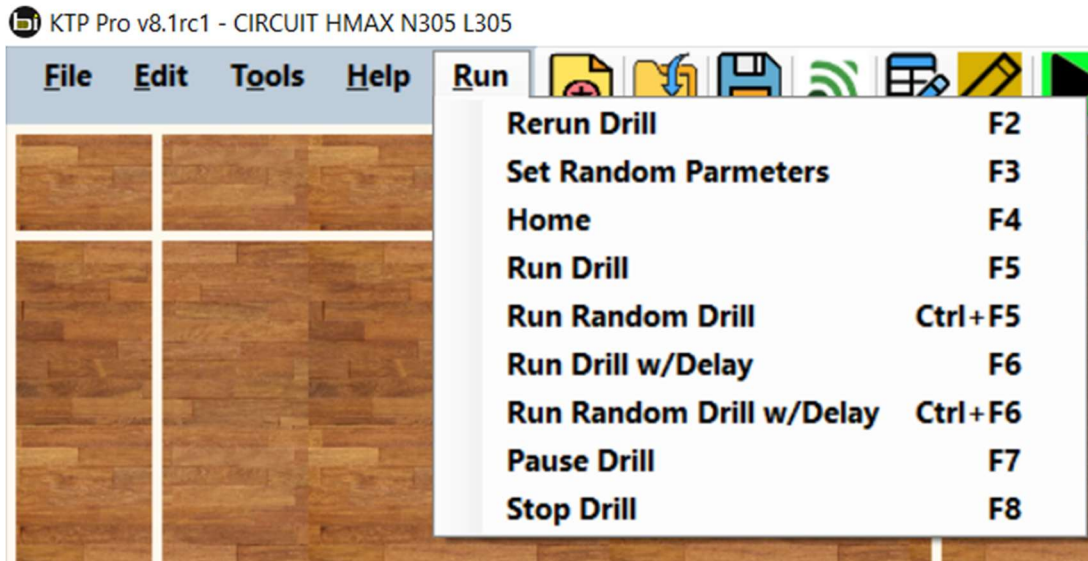
The graphic shows the options in the Run menu. However, the buttons to the right of the menu names control the most common.

The function keys at the top of the keyboard are also useful shortcuts to some Trainer commands. Please note that on some laptops and tablets, you must hold down the FN key at the bottom of the keyboard while clicking on the function keys across the top. On other devices, you may only have to click on the function keys.

F5 – runs the open drill according to the Playlist
Ctrl+F5 – runs all the shots in the Playlist randomly
F6 – runs the Playlist randomly after a delay (8 seconds)
F7 – pauses a running drill and also resumes the drill if it has been paused
F8 – stops drill

PLAYLIST RIGHT CLICK COMMANDS

Loop – see below
Group – see below
Insert Pause –when the Playlist reaches this line, the drill will pause. It will only resume with the Resume command from the Run menu, or with F7.
Delete Row – use this to delete all selected rows. Note that rows can also be deleted by selecting a row and using the delete key.
Change Loop Count – Select the top line of the Loop you want to change, right click and then choose this command. Enter the new number of repetitions that you want to have.

LOOPS:
- A Loop repeats all the Playlist lines inside the Loop for the number of repeats you have entered. Create as many Loops as you want in the Playlist, including Loops inside other Loops. You will see examples in the drill guide.

- o Select multiple adjacent shots, **right click**, choose Loop, and enter the number of Loop repetitions (the default is 5).
  - ▪ To change the number of repetitions of a loop, see above for the "Change Loop Count" command
- o Running in sequence, each Loop will play all its shots and Groups, and any inner Loops:
  - ▪ When all the repetitions are completed, the Playlist will continue to the shot after the Loop. If there isn't one, then the drill ends and the KTP stops.
- o Running a drill randomly, all shots are used, without regard to Loops and Groups. The more often a shot is in the Playlist, the more often it will be chosen randomly.

GROUPS:

- With Groups, part of your Playlist will run randomly, and the rest in sequence.
  - o Only one shot in a Group is played every time the Playlist reaches that Group, and that shot is randomly selected.
  - o Select the adjacent shots you want to put in a group, **right click** and choose Group. You have now created a Group. Yes, you can have Groups inside Loops. However, only shots can go into Groups. You *cannot* have a Group in a Group, or a Loop in a Group. Doing so will result in an error message.
  - o When you are running a Playlist in sequence and Trainer encounters a Group:
    - ▪ *The TRAINER app will randomly play **only one shot** from the Group*
    - ▪ The TRAINER app then moves to the next line after the Group if there is one. If not, then the drill stops.
    - ▪ If the Group is inside a Loop, then each time around, there will be another random choice from the Group.
  - o If you want one shot to be selected more than others, enter it in the Group more than others.
  - o If you run the drill randomly (Ctrl F5, or Run Random Drill), shots are selected without regard to Loops and Groups.

SHOT AND DRILL INFORMATION ON SCREEN:

- Once you have shots on your screen, useful information will appear at the bottom of the screen, below the court and playlist.

  - o Bottom left, "Unique Shots", gives the number of unique shots that you have on the court. This is not the number of shots in the Playlist
  - o Bottom middle:
    - ▪ "Ready" will be displayed when the drill is not running
    - ▪ When the drill is running, "Running" and a digit will be displayed. The digit is the count of how many shots have been played.
  - o Bottom right:
    - ▪ "Shots in Drill" with a digit, will display the number of shots that will be fed by the playlist. This considers any shot repetitions due to Loops, and only counts one shot for each time through a Group
    - ▪ "Drill Duration" displays how long it will take for the drill to run completely
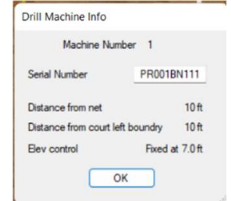
- In addition, you can find interesting details about each Playlist shot by double clicking (left button) on any shot in the Playlist. An information box will open in the upper left corner of the Trainer screen.
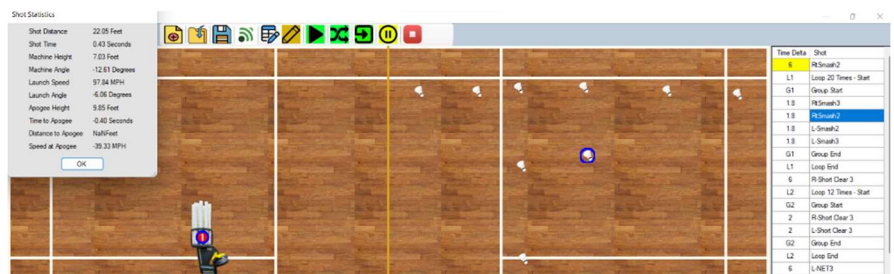
- Information is also available through the Tools menu, choosing Drill Machine Info. The other options in the Tools menu are not available at this time.

SOME SHOTS NEED MORE TIME

- The Knight Trainer Pro works in 5 dimensions – height, direction (pan), angle (tilt), speed and interval.
  - o Pan, tilt and speed require time to change between shots. When the Knight Trainer Pro feeds with short intervals between some shots, some changes may not complete before it is time to play the next shot, resulting in differences between the shot you created and the one that you get, especially concerning speed

  - o For example, if the hardest smash is followed by a delicate drop shot with only 1 second between, the drop will have more velocity than planned, and you'll get a deeper drop shot. Adjustments to the interval, to the shots and/or to the position of the Knight Trainer Pro will reduce this effect. Note that if you insert the drop again immediately after the first one, the 2nd drop will be closer to what you created.

MORE ABOUT RUNNING RANDOM DRILLS

When a drill is run as designed, the order of the actions is known, and shots can be modified by the user accordingly. Not so with random shots. Therefore – and especially with short intervals – random shots may need more repositioning time than the shot interval allows. To deal with this in Random Mode, the KTP checks the previous shot and adjusts the current shot time to be long enough for best repositioning and speed changes.

Sometimes it is preferable not to completely lengthen shot duration to the best repositioning time. Therefore, the KTP has a "Repositioning Time Delay" adjustment for Random Mode. The adjustment is made in the Trainer app by selecting "Set Random Parameters" in the Run menu. Here you can enter your desired shot delay enforcement percentage value. The default value is set at 90%.

TARGETS AND HEIGHT – settings not available

In a few places you will see references to targets and to adjusting the height that are grayed out and cannot be changed. Height adjustment and target system are built into the software, but the hardware is still in development. Please just ignore them for now and we'll get back to you when these options are available.

6.   Storing the KTP

   a. **Power**
  - i. Save your drill, close TRAINER, disconnect the USB cable from the computer.
  - ii. Turn off the KTP and unplug the KTP from the electrical source.

   b. **Carousel**
  - i. Remove the carousel
  - ii. Place on round pan, secured with bungee

  - iii. **KTP main unit (feeding/ejection assembly)**

    iv.   Set the stand to its lowest point.

    v.   Loosen the locking knob on the yellow collar.

    vi.   Due to the weight of the KTP and the height at which it is positioned, if necessary, have two people remove it from the stand.

    vii.   Grasping the KTP by the handle with one hand and on the underside of the large yellow disc, lift the KTP from the stand. There are 2 gripping ridges under the yellow disk, so rotate the KTP until a ridge is in the right place for your hand. Do not grasp the KTP by the wheel support or wheel cover.

    viii.   Lower the KTP to the floor. It will stand on its base.

c. KTP's Stand

    i.   With the stand adjusted to its lowest point, loosen the locking knob on the upper collar.

    ii.   Turn the stand upside down so that the wheels on the three legs are facing upwards. Press the legs towards the shaft or press the central collar downwards, taking care to keep fingers and hands away from the closing mechanisms.

    iii.   When it will not close any further, you can loosen the other locking knob and continue closing the legs or try the technique described in the box to the right.

    iv.   Insert the stand into the stand bag. The stand bag has a triangular cross section, so align the wheels with the seams as you lower the stand into the bag.

> **QUICK TIP:** When folding up the stand, try loosening *only the upper knob* and then turning the stand upside down. Pull the legs towards the centre. Often they will collapse enough to fit into the storage bag. The next setup will be much faster. with the lower collar already locked in the right position.

7.   Adjustments and Maintenance

The components and structure of the KTP have been designed for a long life with proper use. The KTP should be handled carefully and not dropped, crushed or exposed to liquids. The Knight Trainer Pro should only be used to shoot out standard badminton shuttles.

The KTP's mechanisms do not require any regular maintenance, but the wheels will require attention from time to time. The user may also decide to vacuum out or blow out dust which can build up inside.

Wheel spacing

If the wheel spacing becomes too wide, shots will not go as far as before. On the other hand, if the wheel spacing is too tight, the shuttle corks will wear away faster. Since the material of the wheels will slowly wear, the spacing can widen and may sometimes need to be reset.

With your Knight Trainer Pro, you received a spacer that sets the ideal gap between the wheels. This spacer slides onto on the finger that passes between the wheels. Be sure to *remove the spacer after the wheels have been adjusted*.

- Using the provided hex key, loosen the 2 bolts above each wheel on the yellow wheel motor support bracket (mandible).
- Shift the motors inwards slightly until the spacer causes the wheels to turn when the finger is moved between the wheels.
- Firmly hold a motor in its new position while using the hex key to tighten the bolts. Repeat with the other motor and its bolts. Check the spacer as you do this to be sure that the wheels are still in the new position.

Changing the wheels

If the wheels eventually wear to a point where the above spacing adjustment will not get the wheels close enough, then it is time for new wheels. Note the nuts on the bottoms of the wheels in the above photo. Use the wrench provided with your KTP to remove the nuts, and then remove the wheel hubs and the wheels. Remember which nut goes with which wheel because they will tighten in opposite directions. Put a new wheel on each shaft, followed by the wheel hub, and then the nut. After changing both wheels, check the wheel spacing and adjust as necessary.

CAROUSEL – INSERTING TUBES

If you ever need to insert carousel tubes, here are the steps to take.

- Start with the four upper holes closest to the handles. These are the strongest points. The next 4 tubes should be placed beside the first four. Then the last 2 will go into the remaining holes.

- To place a tube, insert a tube into one of the upper holes, black funnel facing downwards.

- With a twisting motion, push the tube through the upper opening and down into the matching circle cut out of the bottom foam.

- At the bottom, check that you are not pinching the foam. It may be necessary to pull back on the foam a bit to better allow the tube to twist all the way down.

The black funnels must snap into the holes in the lower metal disk. If you have trouble doing so, please contact us for suggestions.

If the foam rings loosen from the metal over extended use, it won't affect setting the tubes all the way down. However, glue can be used to re-secure the foam if you ever think that is necessary.

8.   Troubleshooting

NEVER rotate the carousel or supporting pyramid by hand. Doing so will
damage the carousel motor. If you need to rotate the pyramid (shown in the photo), turn on the
KTP and the carousel motor, and then activate the carousel motor by pressing down on the switch
(pointed to by the arrow in the photo).
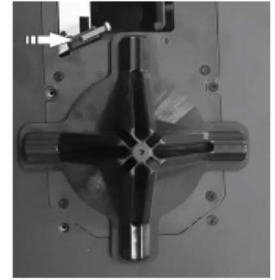
To move the yellow mandible that supports the wheel motors and wheels, first save your drill if
necessary and then turn off the illuminated power switch.

Other motorized parts of the KTP can safely be moved manually.
- The finger that feeds the shuttles to the wheels
- The entire assembly above the yellow disk, which can be freely rotated in both directions.

Power
If the Knight Trainer Pro won't start or abruptly powers down, check the power switch – it is illuminated when on. Is the
power cord firmly plugged into the KTP? Is the extension plugged into a live electrical outlet?

Errors
With the computer (tablet or laptop), the machine itself and the Trainer application, several kinds of errors can
occur.
- File location error, error in the functioning of the Knight Trainer Pro, communication error with the Knight
Trainer Pro, error in the Trainer application

Error message from the Knight Trainer Pro shown on the screen.

Some errors will show on the screen if the KTP is not plugged or if the illuminated power switch is turned off or if
the USB cable is not connected. Checking these basics never hurts.

If a shuttle becomes stuck in some way so that the finger cannot move the shuttle through the feeding cycle, then
you will see a message on the screen telling you to clear the jam and then press OK.
- Try clicking OK without trying to clear the jam. Often the 2nd effort by the Knight Trainer Pro to feed the
shuttle will be successful. Allow 10 seconds after pressing OK.
- If you still get the message:
  - save your drill but leave Trainer open. Then turn off the illuminated power switch
  - Is anything caught in the finger? Is a shuttle caught behind or above the finger? Bear in mind that
as of February 2021, you will see the inverted cage of a nylon shuttle inside near the top. Do not
remove this. It is part of a shuttle guide that improves accuracy.
  - can you see a jammed shuttle? If so, either reach in from above or move the mandible (holds the
wheels) and the finger to get access to the shuttle causing the problem
  - remove the shuttle. If it is bad condition – usually the cause of a jam – discard it
  - click OK in the error message
  - feeding should resume in 10 seconds
  - if there is no jam and the problem happens repeatedly, please contact us

Error messages from the Trainer application (Errors matter a lot less if you save regularly (Ctrl S or the save icon)
- You may get these types of error messages from the Trainer application: Loss of USB connection or "The
port is closed". One of these steps should solve this problem:
  - Is the Trainer software already open? If for example a "USB port" message persists, open
Windows' task manager. If you see Trainer among the list of open programs, close it.

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- o Did you disconnect or close the KTP before closing the Trainer application? If so, since you intended to shut down, just click on Quit. Otherwise, any one of the following may solve the problem. Try one at a time and see if your problem is solved before continuing to the next.
  - ▪ Is the Knight Trainer Pro turned on? If not, turn it on. The switch will light up.
  - ▪ Check your USB connections – are they fully inserted?
  - ▪ Change USB ports on the computer
  - ▪ Close and restart Trainer
  - ▪ Open the Task Manager on the computer. If Trainer is on the list of programs or processes, select that line, then click on "End task" at the bottom right
  - ▪ Restart your computer

- Input string error
  - o **Do not close (Quit)** the drill if you want to save it, BUT **do not save** unless you have been able to fix the error. If you save it with the error, it will still have the error when you reopen it. *Therefore, if you want to keep the drill, click on "Continue"* and let's try to clear the error.
  - o This error can happen when you have accidentally overwritten a field in the Playlist with characters that don't match the field.
  - o Find the error in the Playlist, choose "Continue" and try to correct it. Shown here is an example. The letter Q was typed into the Time Delta column for the first shot. This was fixed by choosing Continue, and then replacing Q with 2 or another digit for the interval that you want.

  - o If you cannot correct the Playlist entry, try selecting and deleting the line with the error. If the error is in a Loop field, you can try deleting the first line of the loop and then the last one.
  - o If you cannot solve the problem in either of these ways, you will have to choose Quit and then restart Trainer. It is possible that the drill will reopen without the error or that it will reopen, and you will be able to correct or delete the error. It is also possible that the drill cannot be corrected and that you will have to restart creation of the drill.
  - o Generally, to avoid this problem:
    - ▪ keep an eye on which field you are in when you are typing in the application. Note that while editing a playlist item, the field turns yellow, indicating that the field is the point of focus. If you select another field in Trainer while a shot field is in the yellow state, you may make an entry in the yellow shot field when you didn't intend to.
    - ▪ … and always save your drill as you work on it (Ctrl S is the shortcut, or click on the disk icon top left). Trainer will autosave as soon as you run a drill but that may be too late.

- Group error
  - o If you have tried to place either a Loop or a Group inside a Group, it will lead to an error message. Close and restart Trainer, then open the drill. This will be the last saved version which should not include the error. If your last saved version includes the error, then you will have to restart making the drill. The possibility of this error will be blocked in a later version of Trainer.
- Trainer stops responding - communication error
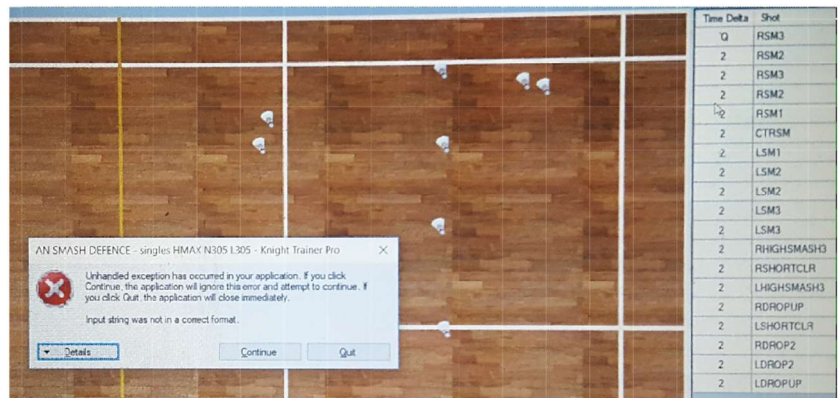
o If Trainer stops responding but the tablet or laptop is still working properly with other programs, close Trainer and then unplug the power to the KTP. Turning off the switch on the KTP does not cut the power completely, so unplugging is necessary. Reconnect, reopen Trainer.

Feeding system:
The KTP has been designed to operate with new and used nylon and feather shuttlecocks of standard size with cork bases. However, shuttlecocks are not perfectly consistent from one to another, especially after some usage, and from one brand to another. Variations in shuttles can affect consistent feeding or shuttlecock durability.

Also bear in mind that bad shots or jams result if shuttles are stuck together in the carousel. This can happen, for example, if feather shuttles are pushed directly from a shuttle tube into the carousel tube without separating the shuttles. The solution is simply to separate shuttlecocks that are stuck together.

- **Not grabbing shuttles:** From time to time the KTP will need several attempts to grab and feed a shuttlecock. If this happens, check these points:
    o Is the tube set fully into the base of the carousel? When set properly, all the tubes should be at the same height. If any are higher than the others, twist tubes downwards until they are all at the same height. This should be checked whenever you are refilling a carousel.
    o Has the carousel rotated into the right position? Is the active tube centered above the feeding zone? If it is not, lift the carousel a couple of inches and then put it back. The carousel motor may then rotate the carousel into the centered position. If this does not work, lift the carousel and press down briefly on the contact switch (at the opening in the top plate) to rotate the pyramid a bit. Replace the carousel and it should then rotate into the right position.
    o Is anything blocking the rotation of the carousel? If so, remove the obstruction and then replace the carousel. It should then rotate until a shuttle drops into position.
    o You can also try shaking the carousel a bit before putting it on the machine to help all shuttles settle into position.
    o Could it be the shuttle? Is there a snag or badly angled shuttle. Remove the problem shuttle to allow the next shuttle to descend. Run through the carousel again without the problem shuttles.

- **If there are no shuttles** in the active tube, but the carousel doesn't turn, make sure that the Knight Trainer Pro power is on and that the separate carousel switch is on.
    o For further checking, remove the carousel.
    o You will see that the carousel was pushing down on the contact switch. You will also see the black pyramid that the carousel sits on.
    o Push down and hold the contact switch. Does the black pyramid rotate? If not, try a couple more times.
    o If the pyramid turns then:
        ▪ the reason the carousel turns when empty is because a light is emitted at the front of the shuttle opening and hits a sensor at the back of the opening.
        ▪ If there is a shuttle, the light doesn't reach the sensor and the carousel motor is not activated.
        ▪ If no shuttle, then the light reaches the sensor, the motor is activated and the carousel turns until a shuttle drops into the opening, cutting the light beam
    o With that in mind, please check the sensor and emitter to make sure that nothing is blocking either of them. There is some glue on the sensor's lens and that is OK, but for the emitter and sensor, be sure that there is nothing else like dust or a piece of feather.
    o You can also hold down the contact switch and if it is turning the pyramid, then block the emitter with your finger (pyramid stops) and unblock (pyramid turns)
    o If your problem is not solved, please contact us.

- **Cork breakage:** Cork breakage may occur either from a lot of wear, or due to weak cork material or construction, or from too much pressure from the launch wheels. If cork breakage is a problem, try a different shuttle model or brand, or try slightly increasing the spacing between the ejection wheels. See the maintenance section for an explanation of how to adjust the spacing.

   Please also note that the Black Knight Truflight 3000 and 4000 nylon shuttlecocks will last longer with the KTP than some other popular brands of synthetic shuttles and should be tried if cork separation is a problem with other nylon brands.

Carousel not turning:

Automatically rotating the carousel to the next tube with shuttles requires these 4 steps:
1) Main power is turned on (on/off switch near the power supply must be illuminated)
2) Carousel's own power is turned on (switch on the side, below the top plate)
3) When the carousel is on the Knight Trainer Pro, it depresses the contact switch on top near the shuttle opening.
4) If nothing blocks the light from the emitter to the light sensor:
   a) the light hits the sensor and the carousel motor turns on and rotates the pyramid, which turns the carousel.
   b) If there are shuttles in any of the tubes, then when a shuttle hangs from the tube, it will block the light beam. The motor will be turned off.
   c) Once the tube is empty, the light will again hit the sensor and the motor will be activated.

If all the conditions are met and the carousel doesn't turn when it should, here are a few things to check.
- With 1 and 2 above verified, check that nothing is blocking the rotation of the pyramid or the carousel. For example, make sure that all screws are in as far as they go
- With the carousel not on the KTP, make sure that there is no debris (dust or feathers, for example) on the emitter and the sensor. However, the sensor does have some dried glue on the lens. Do not remove that – the glue serves a purpose.
- Push down on the contact switch. If the pyramid turns, place the carousel on the pyramid with an empty tube in the feeding position.
   o If the carousel rotates, then there doesn't seem to be a problem
   o If the carousel does not rotate, then the problem seems to be with the contact switch
      ▪ When in place, the carousel pushes down on the contact switch to make the connection. When the carousel is removed, that switch springs up and cuts power to the carousel motor.

- If the switch is not being pushed down enough by the carousel to turn on the power, then the solution will be to use a pair of pliers to gently give the metal strip of the contact switch a slight upward bend. This will create more downward pressure when the carousel is on top.

- If the pyramid does not rotate when you push down on the contact switch, and if nothing is between the sensor and emitter, see if the light emitter is aligned with the sensor.
   o While holding down the contact switch, push down on the light emitter.
   o Was the motor activated?
- Similarly, push the light emitter upwards while holding down the switch.
   o Was the motor activated?
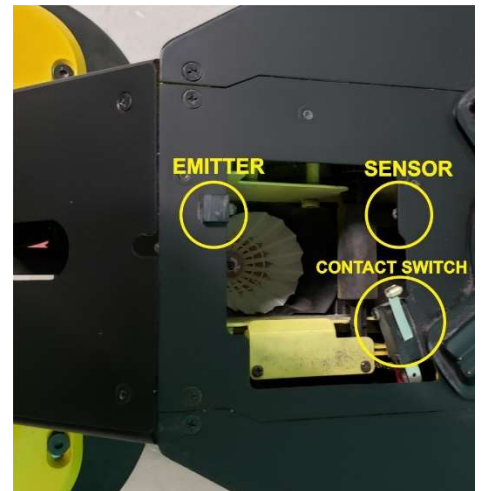
9. <u>Warranty – 24 months from delivery</u>

In the event of a problem that the owner cannot solve alone:

- Contact us by phone or email with a description of the problem. Photos and video are always helpful.
- Based on the information we receive, it may be possible to fix the problem using telephone or e-mail support.
- If the problem requires a replacement part that the owner can easily change, that part will be shipped by free of charge by Badminton Innovations.
- If the problem cannot be resolved in these ways, then Badminton Innovations will present the necessary steps to fix the Knight Trainer Pro, which may include return to a service centre, subject to the terms of the warranty.
- For return of the main unit, the owner is expected to have the original shipping box available or to pay for a new box including shipping of the new empty box (except if the Knight Trainer Pro was not originally delivered in a box).
- *Any damage or malfunction due to mishandling of the Knight Trainer Pro, including the main unit, the computer, carousel and stand, is not covered under this warranty. The computing device that may be supplied is intended only for use with the Knight Trainer Pro and the warranty only covers the operation of the KTP program on the device.*
  Examples:
  - **Owner modifications to the KTP or dismantling that cause problems (DO NOT MODIFY OR DISMANTLE ANY PARTS OF THE POWERED UNIT OF THE KTP, UNLESS INSTRUCTIONS AND PERMISSION HAVE BEEN GIVEN BY BADMINTON INNOVATIONS).**
  - **Allowing the KTP to become wet**
  - **Dropping the KTP**
  - **Using the KTP to eject objects other than regulation shuttlecocks.**
  - **Forcing rotation of the carousel**
  - **Modifying the computing device, if supplied, through hardware or software without authorization, causing problems running the KTP programs.**
  - **Using a KTP prepared for low voltage with high voltage.** *If you have received a KTP in a low voltage country (100 to 120 V), before you can run the Knight Trainer Pro under high voltages, a simple but important setting must be changed on one of the circuit boards. We can guide you through the process of converting your KTP. Damage caused by ignoring this step are not covered under warranty.*

First year, subject to the preceding restrictions:
It is assumed that the customer will work with us to the best of their ability for any problems that can be resolved without the return to Badminton Innovations.

Laptop or tablet computer is guaranteed against failure under appropriate use for a period of 12 months.

Except for normal wear of the launching wheels, the rest of the KTP is guaranteed against any failure of parts or build, or any sustained malfunction, as long as the KTP has been properly used. Guarantee covers the costs of parts and phone online support to carry out repairs, and transport if necessary subject to a $150 limit each way

per incident both to and from the original delivery point (or equivalent) to a service point. The guarantee also covers all labour and component costs at a service point.

Second year, subject to the preceding restrictions:
Guarantee includes the costs of parts and any labour charges at the service centre. Badminton Innovations pays for shipping to the customer up to $100 per incident or pays the cost of shipping back to the customer anything authorized to be shipped to Badminton Innovations, whichever is greater. The customer is responsible for the costs of shipping to Badminton Innovations.

Anything shipped back to Badminton Innovations must be properly packed to avoid damage in transit as the sender will be responsible for damage in transit.

The paid warranty extension option for a 3rd year provides the same coverage as the original second year guarantee.

To contact us:
info@KnightTrainer.com

☎ +1 514 668 9357 (Canada) 8am to 8pm (8h00 to 20h00) EST