

FREQUENTLY ASKED QUESTIONS...



The purpose of this FAQ, is to provide short & concise answers to some of the frequently asked questions we receive from design firms, owner/operators & contractors. Additional information can be provided via our specifications, drawings, operations & maintenance manual upon request. Please see full list of supplemental materials **at the end of this document.**

1. How long will my pool be shut down during installation?

Our typical installation (indoor & outdoor) takes 6-7 business days. On the last day, we conduct certification of the system, training of staff & owner turnover. This is a great time to schedule a “media day” with your staff and city employees for photos & video on the system.

2. How does the system raise & lower to water-level? How long is the deployment & retraction time?

The obstacle frame raises & lowers to water level in 60-seconds, with the simple push of a button. The frame is supported & stabilized via a series of pulley blocks, our direct-drive-pulley-system, winch & winch cable. The lift cables raise & lower the system to water level, while the static cables are activated when the system is deployed, taking the load off of the lift cables. There is a safety back-up set of cables in place, that create a redundancy and safety protocol, should the main winch cable, lift or static cables malfunction. Loading is distributed across this cables, pulley blocks and re-direct system, creating minimal point loads and stabilizing the system from swaying by splaying the cables at an angle to reduce any motion when competitors are on the system.

3. Can other activities take place simultaneously during NINJA use when the system is deployed to water level?

Yes. The system occupies 2 lanes for programming (classes, leagues, events, fitness, competition or recreation) during use & an additional 2 lanes for safety zones where no swimming or other programming should take place, for a total of 4 lap lanes during use. With a 6-lane pool, 8-lane or 10-lane pool, the operator has 2, 4 or 6 lanes open for other programming.

4. Can the system cross my lap lanes perpendicular instead of running parallel?

Yes. We have options with indoor, outdoor pools, bulk heads, 50m pools, dive wells, sloped or pitched ceilings etc. We can also create shorter courses or courses designed for 3-lane pools.

5. How many people can use the system at one time?

The system has been engineered by our licensed structural team (all 50 states & Canada) to support 10 competitors at one time (5 users per lane), with max weight of 275lbs each.

6. What is the staffing, lifeguard and attendant recommendations?

We outline staffing guidelines in our operations & maintenance manual. This is ultimately up to the owner once we complete installation. We would like to see (at minimum), 1 lifeguard

managing the 2-lane queue on the pool deck & the other lifeguard in the water, moving competitors along or instructing them to swim away & exit, if the course is too difficult.

7. Does the system require any special inspections?

The system is not an amusement ride and should not be regulated as such. The patent, IP and trademark are registered under sporting goods & fitness equipment. This is an organized event, not “open swim”. Our team will conduct an annual inspection every year.

8. What is the maintenance and expected lifespan of the system?

The system has been designed & engineered to withstand and resist the harshest indoor aquatic environments, mineral-rich mining wells, coastal climates, hurricane-level winds and using mechanical components tested for thousands of cycles before replacement is necessary and upgraded custom-fabricated aircraft cables for indoor systems exposed to high levels of humidity and chloramines. Please contact our team for a full list of anticipated maintenance items. The expected lifespan of our equipment is 20-30 years with proper care and scheduled inspections.

9. Do we have a choice on difficulty level for each lane?

Yes. We recommend a beginner & advanced lane. We design the system to failure, so that competitors must build their skill level, and will not complete the course on their 1st attempt. Owners may vary the difficulty level & update obstacles via our Obstacle of the Month Club, keeping the experience new for their members. The system is a living/modular system, similar to gym equipment at a fitness facility.

10. What are the minimums for age, height and weight limit maximum for use?

Please reference our O&M Manual as well as our standard Rules Sign. Participants must be 48” tall and weigh less than 275lbs to use the system.

11. How long is pricing good for? Do you expect pricing to increase or decrease in the future?

We have seen materials, freight and installation costs rise since 2019. We expect to see the same this year and in 2022.

12. Is there an operations & maintenance manual provided? Do you train our staff on proper use and operations?

Yes. The O&M manual comes delivered on an iPad with interactive videos, diagrams & drawings. Certification & Training of staff happens on Day 6 or 7 when installation is complete at your facility.

13. What steps have been taken to reduce equipment malfunction and possibility of user injury?

Please contact our team for a full list of health & safety guidelines. The winch which raises and lowers the system to water level has been oversized by a factor of 2x. Our safety back-up lines work similar to a climbing belay system, where the frame would be caught by this back-up system, should the main winch cable, lift or static cables malfunction. We have eliminated any flat or horizontal surfaces that we have used on close to 100 land-based systems, mainly to reduce sightline challenges or entrapment issues. All hardware or catch points is outside of the water located at the frame. On all sides of lane 1 and 2, we have designed in an 8’ envelope as a safety/fall zone including at the start & end of the course, in between both lanes and adjacent to both lanes. Our safety precedents were formed based on our 25+ years experience on 1,500 recreation, aquatics & adventure projects. Waterslides, Diving Boards & Lily Pad Walks formed the basis of our safety zones.

14. Is there a rules sign included with my system?

Yes. These rules can be modified for your specific facility and needs.

15. How long is each lane on the course?

Standard course lengths are available in 43', 54' and 64' lengths. We can create shorter or longer courses, as well as single-lane or multi-lane configurations.

16. What is included with the timing & entertainment system?

We provide a pro-audio sound system for deployment, competition & retraction mode music and/or sound effects. These can be chosen and changed by your staff. Also included is an LED display for both Lane 1 and Lane 2 times, a start button, stop bollard and NEMA-4 controls enclosure with a key-activated override.

17. Does your company include a daily, weekly and seasonal checklist for our staff?

Yes. These documents can be found in our Operations & Maintenance Manual.

18. Can you explain the 3 sets of cables that support the system and their function (static, lift & safety back-up cables)? Please see #2 above.

19. Has the system been engineered for my specific facility? What are the minimum requirements for the system? Are any items added to my ceiling structure to accommodate the system?

Yes. We provide site-specific 3d surveying / LiDAR, site visits and structural engineering specific to your facility and local codes. This is preliminary until a contract is executed and payment received. Please see #48 for a list of critical information to determine feasibility at your facility.

20. Is there an explainer video I can share with our team and decision-making committee?

Yes. Our marketing team updates videos weekly – please contact a member of our team for an informational explainer video, highlighting the system & programming options.

21. What is the target age and user groups for the system?

The system has been designed for all ages & skill levels, from small children to active-aging adults. We design the system to failure, so we recommend both an advanced & beginner lane to hit all user groups and populations in your community.

22. What types of facilities are you working with since the system was debuted in 2019? How are they implementing and programming the system for use with their members?

23. Can your company provide a list of references from past clients and projects?

Yes. We have a list of 17 references, as well as close to 1,500 completed projects over 25 years. These references come from Sports/Recreation Architects, Global Leaders in Aquatic Facility Design, Athletes, Olympic Swim Coaches, Heisman Trophy Winners, Commercial Pool Builders and Owner/Operators.

24. How many obstacles are included with each lane?

Each lane is comprised of roughly 6-8 obstacles. Some of these obstacles include 3 elements, such as our overhead rings, sea of discs and trapeze bars.

25. Has the system received any notable awards, been featured in any industry publications or at trade shows and conferences?

Yes. Our team was the recipient and honoree for the World Waterpark Leading-Edge Award in 2020. We have been featured in Athletic Business, World Waterpark, Aquatics International & Recreation Management Magazines. We are also an applicant for Fast Company's Innovation By Design Awards 2021.

26. What is the warranty your company provides?

We provide a standard 1-year limited warranty on the system. An extended warranty is also provided for all electronics & mechanical components. Please contact a member of our team for our standard warranty, timing+entertainment system & winch warranty.

27. Is your company available for a video conference or in-person meeting with our ownership group?

Yes. Over the last 25 years, it has become increasingly common for us to present to city council members, stakeholders & steering committees. We are available in-person or via virtual conference.

28. What are the benefits of the system to our community and more specifically, our facility?

The main benefits include health, wellness, physical, mental, social & economic impact. More specifically, boosting down time at your facility, creating new revenue streams and drawing wider user groups to your facility that wouldn't otherwise be found at your pool.

29. Are there any electronics located near or over the water?

All electronics are housed in a NEMA-4 enclosure. All components near the water surface are low voltage.

30. Can the obstacles be removed for any special events or additional clearance over water when the system is retracted?

Yes. The system utilizes (3) standard connection points that allow owners & operators to swap obstacles or remove them completely for special events where more visibility or clearance over water is preferred.

31. What is the required water depth of my pool?

We prefer to work with a pool depth of 4' or greater. This allows us to incorporate most of our obstacles on your course. That being said, we have worked with shallower pools and are currently developing obstacles that will require deeper water such as 6' or 7'. We are also working with several dive wells, and most pools we work with have a sloped pool depth.

32. What is the minimum "footprint" of the system overhead and when deployed to water level?

The standard 2-lane system occupies 2 lanes for programming and 2 lanes for safety, for a total of 4 lanes when in use. Our 3 standard obstacle frames are 11' on center and 12' end to end by 43', 54' or 64' in length.

33. What is the recommended ceiling height for indoor facilities?

We prefer a ceiling that is 21' or taller from water level to 1st overhead obstruction, for maximum clearance over water-level. We have solutions for lower ceilings, sloped or pitched ceiling profiles as well.

34. What is the system? What is the story and history of the system?

We designed, prototyped and tested the system in 2019. Our 1st contracts came in at the end of 2019 and beginning of 2020, with installations starting in the Spring of 2020. From beginners to athletes, children to seniors, **NINJACROSS™** is designed to engage members with catered programming, period. The system's patented design mounts directly to the ceiling or utilizing our super-structure arch span for outdoor installations, offering indoor and outdoor aquatic facilities a way to take advantage of previously unusable space. The system is an on-demand obstacle course delivering event-worthy competition and addictive strength training at the push of a button.

Developed for facilities battling empty schedules and still waters, the system deploys in under 60 seconds to supplement profitable programming – from high-intensity, low-impact exercise to fan-driven competitive events. Generate new member loyalty, sales and new revenue streams with paid memberships, entrance fees and center-of-attention events.

The **NINJACROSS™** was creatively designed with interchangeable obstacles that are fully customizable to continually create new courses and challenges with a range of difficulty. With 20+ obstacles placed above, below and on the water, courses create three-dimensional challenges for swimmers and exercisers of all ages and at any fitness level.

It's no secret. Competitive water is expensive water. The **NINJACROSS™** was developed for competition pools and facilities that are battling empty schedules and wasted facility time. You're just 55 seconds away from profitable programming with a brand new profit center that will generate members, sales and revenue with paid memberships, ticketed entry and events centered on the growing popularity of Obstacle Courses throughout North America. Don't waste time or money in your lineup with expensive turnover costs.

Design for your members. Using the same obstacles and same system, facilities can create a challenge course specified to its users. When it's not about racing, program directors, trainers and aquatic therapists can create and re-create systems designed for Aquatic HIIT (High Intensity Interval Training), rehab & recovery workouts and Multi-Week Strength & Conditioning Programs by using the **NINJACROSS™** as an on-demand Aqua Gym. Keep your members motivated, and keep 'em coming back.

Deployment / Retraction Time: **55 Seconds**. Controlled by a single-button operation, the suspended element truss is lowered into position using a winch and pulley system. Reinforced with steel cables and pulley blocks, the system is installed directly to existing ceiling space, or housed in structural leg truss frame for outdoor installations. Fully retractable, the system's idle position is raised high above the water's surface to resume normal swimming programming and scheduling.

The Original **NINJACROSS™** System was designed for competition pools and facilities seeking a fun, out-of-the-box system to redevelop programming without affecting current scheduling. For indoor facilities, the Structural Truss is mounted directly to the facilities existing ceiling space, securing the obstacle lanes which lower into position for use. For outdoor facilities, an Aluminum Leg Truss System holds the course into place leaving minimal footprint for facilities to continue normal programming.

35. What are the programming and user group options?

The programming can range from daily classes, weekly leagues & monthly paid events to private rentals, birthday parties, corporate outings, bootcamps, HIIT led by a trainer, OCR, strength, agility, stamina & endurance training. User groups range from small children to active-aging adults and even para-athletes & populations that may be handicapped. Please contact our team for a full list of 20+ programming ideas & inspiration for you and your staff to brainstorm on.

36. Do you have a fitness trainer and/or programming specialist that can work with our team?

Yes. We work with a fitness & celebrity trainer who also managed Group Fitness for Life Time

Fitness. Additionally, we work with a facility programming expert and leading aquatic programming specialists.

37. Is there a temporary set-up available?

Yes. Please contact our sales team for more information.

38. Can your team help us organize events such as monthly or over a 2- or 3-day weekend throughout the year?

Yes. We work with experts in facility programming, staffing, profit center development and event management, both in the public and private sector. We are also working on a mobile set up that can “travel” city to city.

39. How many obstacles are there to choose from?

Currently, there are close to 20 various obstacles to choose from and many in development.

40. Where is the system manufactured?

The system is designed, engineered and manufactured in the USA.

41. Has the system been engineered and tested?

Yes. Our dedicated structural engineering team worked with us in 2019 developing both the indoor & outdoor system. We have tested, prototyped and pre-assembled the 1st generation of our systems. Our team is licensed in all 50 USA states and all Canadian Provinces. We have taken further steps, designing in multiple redundancies, over-sizing tolerances and (4) safety back-up devices.

42. Can I finance the system?

Yes. We can set-up a lease-to-purchase, match revenue streams if cash flow is more prevalent during certain times of the year and terms that your ownership group is comfortable with.

43. Is the system patented? Do you have any competitors?

Yes. The system has been granted 2 utility patents. We also maintain IP insurance, both defense & abatement policies and can help protect our client’s unique offering against any imitators or copycats. Right now, we have zero competition in our space, based on the on-demand function and wide user groups.

44. Can you provide exclusivity to my facility / ownership group in my local territory and market?

Yes. If this is important to your ownership group, we are open to discussing an exclusivity for a set amount of time and territory. We are also happy to provide a mutual non-disclosure agreement for both parties.

45. How do I pay for the system and measure my ROI?

We can provide a Pro-Forma Spreadsheet that has tabs showing a Good, Better & Best Scenario. You can work with our team, provide us the data input for the variable fields or work with the spreadsheet on your own. Factors such as days open, hours of NINJA programming use, pricing for classes, leagues, events, birthday parties, private rentals, corporate outings etc. will all play a factor when determining the ROI & Payback time period. Our Pro-Forma shows a \$200K - \$500K income potential through programming if utilized properly. Additional revenue can be realized from local sponsors, donors, fundraising & naming rights opportunities with banners and branding enhancements on the system. Please contact our team for a list of 20+ programming ideas and inspiration for your staff.

46. How long does the system take to design, engineer, fabricate and install?

Our standard installation indoor & outdoor takes 6-7 days (without draining your pool). From

date of signed contract & 1st payment, you could estimate a 90-120 day lead time for engineering, fabrication, freight to your facility and installation.

47. How will my local regulatory agencies approve the system?

Our team is experienced in working with regulatory agencies in almost all 50 United States, as well as Provinces in Canada & international agencies. By seeking design input early on from leading Architects, Engineers & Aquatic Design Firms, we have addressed all concerns we have observed over 25 years within the aquatic equipment and recreation industry. The system's patents, IP & Trademark is registered under Sporting Goods & Fitness equipment, so there should be no circumstance where the system is classified as an Amusement Ride. Additionally, this is an organized and queued activity, not for open swim without staff supervision and lifeguarding.

48. Can you help us with marketing the system during fabrication, leading up to installation and after the system has been installed?

Yes. Please contact our team with timelines and needs for photo, video and any other assets. Facebook and other social media platforms have been tremendous for our clients, with close to 500 reactions, 200 shares & 200 comments from communities just 1 week after posting our system on their social media sites.

49. What critical information must I provide to your company to determine system feasibility at our facility?

Some critical factors include the size of the pool, length, width, number of lap lanes, water depth, water depth slope, ceiling height from water level to 1st overhead obstruction such as support beams, fans, lighting, sprinklers, HVAC etc. If your facility is outdoors, we need to know the width of concrete deck available around the ends and perimeter of the pool to locate our (4) concrete footings. Lastly, does your facility use a timing display today such as displays supplied by Colorado Time Systems (our provider) or Daktronics? Our design and engineering team can take you through the next steps, assuming the criteria above meets our minimum requirements.

50. How does the timing system work? Can I upgrade for any biometric sensors or cameras for streaming to social media?

The standard timing system includes a push-button start as competitors begin the course in the water. At the end of the course, there is a "stop" bollard that competitors activate to stop their elapsed time. Upgraded options are available for photo, video, streaming to the cloud, social media and even biometric sensors such as pace, heart rate etc.

51. Have you had any special user groups on the system, such as swim teams, para-Olympic athletes or handicapped individuals?

Yes. We have designed the system for active adults down to young children, for the everyday recreation center member. In addition, we have modified the system targeted towards advanced athletes, Olympic coaches/swimmers, military and special-needs facilities. We have had a para-athlete amputee on the system as well.

52. What countries has the system been installed in?

We are working on projects throughout the USA, Canada, Australia, New Zealand, Germany and other European countries, Asia and other markets.

53. What experience does your team come from?

Our team spans 25+ years and 1,500 completed projects in almost every State within the USA, as well as projects in Canada, Mexico, Europe and other international countries. We bring design, manufacturing, operations, engineering and product development experience to your

project. Our clients range from municipal recreation/aquatic centers, military, YMCAs, to fitness facilities, universities, hotels, resorts, waterparks and adventure parks, including close to 100 land-based NINJA courses, as one of the early pioneers in the market.

54. What ceiling profiles and materials can you anchor to?

Our system is versatile and live/dynamic point loads are minimal, therefore we can make most facilities work. This includes steel, concrete, timber (wood) or Glulam structures with flat, sloped or pitched roofs. We also have the ability to frame, brace and improve a structure if engineering determines it so.

55. Can your team help us with fundraising, donors and sponsors?

Yes. Please contact our team for the Project Funding Guide supplied by one of our partners.

Upon Request, Our Team Can Supply The Following. Please contact us at info@ninjacrosssystems.com

- Standard written specifications & drawings, preliminary electrical, structural & foundation details
- Materials list
- Entry & Egress drawings
- Proposal & Scope of Work, including full list of exclusions
- 2d & 3d design and exports for most widely-used design programs available today
- Structural Engineering White Paper
- 3 example "S" (structural) sheets from past projects – Load Summaries
- Operations & Maintenance Manual in PDF, iBooks & Video format
- Digital publications in World Waterpark, Athletic Business, Recreation Management & Aquatics International Magazines
- Engineering Memorandum letter & submittals to local regulatory & health departments
- Sample stamped permit & fabrication drawings
- 17 References from Owner/Operators, Sports & Recreation Architects, Olympic Swim Coaches, Heisman Trophy Winners, Aquatic Design Engineers & Commercial Pool Builders
- ROI & Payback Pro-Forma Spreadsheet
- 20+ Programming Ideas
- Project Funding Guide
- Photos, Video & Explainer Materials
- PowerPoint Presentation