Website Features

Overview

Website and Community Features

In addition to a powerful software platform, Synthiam's website offers many features designed to make robot programming smoother and more enjoyable.

Below is an overview of the site’s product pages, community resources, support tools, and account features so you can find what you need quickly.

Products

Robot Skill Store listing with details and tutorials.

Robot Skill Store

The Robot Skill Store is an online catalog where you can browse, search, and learn about robot skills before installing them in ARC.

Each skill page includes descriptions, manuals, tutorials, screenshots, and links to related content so you can evaluate and install the right skill for your project.

Details

Exosphere: cloud services and integrations for your robot.

Exosphere

Exosphere is Synthiam’s online environment for managing cloud-connected features and integrations.

Use it to connect devices, sync projects, share configurations, and access cloud services that extend your robot’s capabilities.

Details

Synthiam Swag Store — apparel and accessories for the community.

Robot Swag Store

The Robot Swag Store offers branded apparel, stickers, and accessories for Synthiam supporters.

Browse available items, view sizing and shipping details, and place orders directly through the store.

Details

Forum

Community forum for questions, project sharing, and discussions.

Community Forum

The Community Forum is a central place to ask questions, post project updates, share code, and troubleshoot with other users.

Threads are searchable and organized by topic so you can find solutions and examples contributed by the community.

Details

Support

Support center with guides, tutorials, and troubleshooting articles.

Robot Programming Support

Our Support center contains step-by-step guides, troubleshooting articles, and programming tutorials to help you build and maintain your robot.

Use the knowledge base to solve common issues or contact support for more personalized assistance.

Details

Account

Manage your profile, avatar, and notification preferences.

Edit Profile

Update your profile information, avatar, display name, and notification settings from the Edit Profile page.

Keeping your account information current helps other community members recognize and collaborate with you.

Details

View and manage your Synthiam Credit balance.

Synthiam Credit

Synthiam Credit lets you track and apply promotional or account credits toward purchases like skills or swag.

Visit this page to view your balance, redemption options, and transaction history.

Details

Refer others and earn rewards through the referral program.

Referral Program

Invite friends to Synthiam and earn rewards when they join or purchase eligible products.

The referral page explains how to share your link, track referrals, and redeem any earned benefits.

Details

Manage subscriptions, billing, and invoice history.

Subscription Dashboard

Use the Subscription Dashboard to view your active plans, change or cancel subscriptions, and access billing history and invoices.

This central dashboard makes it easy to manage recurring services associated with your account.

Details

Track your swag orders and view shipping status.

Swag Orders

View current and past swag orders, check shipping status, and manage returns or exchanges from the Swag Orders page.

Order details and tracking information are available to help you follow your purchase from checkout to delivery.

Details

Posting Features

Posting Images

The Synthiam community forum is great for discussing your robots with other users. When creating a post, you can also upload to share files, including images. Images are the easiest to add to a message because they can be pasted directly from the Windows clipboard. We'll walk you through how to paste an image into a forum post in this support document.

Using Snipping Tool

The Snipping Tool is included with Microsoft Windows and is the easiest way to capture a portion of the screen or an entire window. You can paste the image directly into a forum post to share with others.
This is mainly used to transfer your ARC desktop with others.

Load Snipping Tool

Press the Windows Key or click the mouse cursor on the Start Button. This will open the Start Menu, which you can now type to search for programs. Begin typing *Snipping Tool,* and the program will be displayed.

Capture A Window or Region

The New option allows you to capture a rectangle on the screen or an entire window when using the snipping tool.

Capture A Window or Region

Once you have captured your image, select EDIT and COPY the image.

Paste the Image Into Forum

On the Synthiam Forum Post, paste the image by either pressing CTRL-V to paste with the keyboard or right-clicking on the message and selecting PASTE from the drop-down menu.

Posting YouTube Videos

Welcome to Synthiam.com, the vibrant community where robot enthusiasts come together to share their passion, collaborate, and seek help. We believe that incorporating YouTube videos into our platform adds tremendous value to your robot building journey. Here's why:

Visual Clarity and Instruction

YouTube videos provide a dynamic and visual way to showcase your robot builds. Step-by-step video guides can offer clear instructions, making it easier for others to follow and replicate your projects. Whether you're demonstrating a specific technique, assembling

complex parts, or showcasing a finished creation, videos make the process more engaging and comprehensible.

Show, Don't Just Tell

The saying "a picture is worth a thousand words" applies even more to videos. With YouTube, you can not only explain your challenges and questions but also show them in action. This helps the community better understand the issue you're facing, enabling members to provide more accurate and effective solutions.

Inspiration and Creativity

YouTube videos serve as a powerful source of inspiration. By sharing your robot builds through videos, you can ignite creativity in others and encourage them to explore new ideas. Watching robots in action can spark innovative solutions and fuel exciting projects, leading to a richer and more diverse community experience.

Community Interaction

Our community thrives on collaboration, and YouTube videos foster deeper connections. Members can watch, comment, and engage with your videos, creating a sense of camaraderie and support. Through constructive feedback, tips, and suggestions, you'll receive valuable input from fellow builders, enabling you to refine and improve your projects.

Easy Accessibility

YouTube is a user-friendly platform that's accessible to a wide audience. Embedding YouTube videos on Synthiam.com ensures that your content is easily viewable by our community members, regardless of their familiarity with our platform. It's a seamless way to share your knowledge and experiences.

How to Add YouTube Videos to Synthiam.com:

1. Create a YouTube account if you don't have one.
2. Upload your robot build video to your YouTube channel.
3. Copy the video link (URL). The URL must be the "watch" format as demonstrated in this image.

4. In your Synthiam.com post, use the "Insert Video" option and paste the YouTube video link.
5. Voila! Your video is now embedded and ready to inspire and inform.

What About YouTube Shorts?

YouTube Shorts is a relatively new feature introduced by YouTube to compete with the popularity of short-form video platforms like TikTok. YouTube Shorts are brief, engaging videos that have a maximum duration of 60 seconds. These videos are designed for quick, snappy content that's easy to consume. YouTube does not make posting Shorts on third-party websites very easy. Because of this, you have to do some work to share a video.

1. Open the short video in your browser.
2. Replace the URL "/shorts/" with "/embed/" and hit enter.
3. Copy that URL and use it to embed your video in your post.

Conclusion

We encourage all members to utilize YouTube videos as a valuable tool to share their robot builds, seek assistance, and inspire others. Together, we can build a stronger, more connected community where creativity and collaboration thrive. Ready to share your robot adventures through YouTube videos? Start now and let's make Synthiam.com the ultimate hub for all things robotics!

Robot Skill Store

Our robot builder-themed clothing and accessories will bring out your inner cyborg. Look as good, but not better than your robot. Show everyone that you're a serious robot builder with products ranging from t-shirts and hats to mugs and stickers; we've got everything you need to show the world that you're a builder of bots.

The Swag Store presents exclusive Synthiam themed products to purchase. Access the Swag Store by selecting Products from the top menu, and selecting the Swag Store from the products list.

Exosphere

Imagine a future in which machines can work autonomously, completing complex tasks with little to no human input. With Synthiam Exosphere, this future is becoming a reality. This innovative AI technology allows robots to be guided by human operators, making it the perfect tool for tasks too difficult or dangerous for AI to complete independently. Whether you're looking to automate your factory floor or create the next generation of home assistance robots, Synthiam Exosphere is the solution you need.

Synthiam presents a few public robots to try and familiarize yourself with the controls. Generally, customers' robots will be private unless they publish a public robot. Scrolling down further on the page will present a template of the controls for the robots. Use the on-screen joystick, keyboard arrow keys, or a USB gamepad (like an Xbox controller connected to your PC) to operate the robot. Compatible with Chrome, Edge, Safari, and Firefox browsers. The speed of your internet connection will affect responsiveness.

Selecting a robot will present you with the remote control interface.

1.

While you can use a USB joystick or keyboard arrow keys, this onscreen joystick will control the robot.

2.

Some robots will present custom buttons for controlling features. In the Synthiam demo

robots, the buttons will control the overhead picture-in-picture camera.

3.

The picture-in-picture overhead camera. This can be controlled with the custom buttons. Disable to increase difficulty.

4.

The main camera view that the robot can see.

5.

If the task is complete, press the ALL DONE button. Otherwise, the task may be detected to have been completed and exited on its own.

Robot Swag Store

Our robot builder-themed clothing and accessories will bring out your inner cyborg. Look as good, but not better than your robot. Show everyone that you're a serious robot builder with products ranging from t-shirts and hats to mugs and stickers; we've got everything you need to show the world that you're a builder of bots.

Access the Synthiam Robot Swag Store by selecting Products from the top menu and Swag Store.

Using The Robot Swag Store

1.

The cart contains the items that were added. Selecting the cart will bring you to a full view of items in the cart. From here, you can advance to checkout, which will prompt for your shipping and payment information.

2.

Some products will have various selections for sizes, colors, or variants. Use the dropdown to select and preview the product variant options. The images will change to accommodate the selection.

3.

Ready to buy some Synthiam Robot Swag? Select the variant of the product from the dropdown and press this button to add to your cart.

4.

Size charts are displayed for items, specifically clothing. If purchasing clothing, use these measurements to select the size for best fit. Perhaps choose one size larger than measured to ensure a comfortable fit.

Community Forum

Welcome to the Synthiam Community Hub, your go-to destination for all things robotics. Whether you're a beginner seeking guidance, an experienced builder looking to contribute, or an enthusiast eager to engage with like-minded individuals, our community platform offers a diverse range of options to explore. From asking questions to get expert advice, starting vibrant discussions, sharing your latest robot creations, to creating tutorials and requesting new software features — this hub is designed to foster collaboration, innovation, and learning. Dive in to access all the resources you need, contribute your unique skills, and grow with a community that's as passionate about robotics as you are.

Ask a Question
Need help with a robot project? Use this option to post your question and get answers from the community experts.
Start a Conversation
Engage with the community by starting a general discussion on topics related to robotics.
Share a Robot Project
Showcase your latest robot project or browse through others' projects for inspiration and learning.
Create Robot Skill
Contribute to the platform by creating a new skill for robots that others can use.
Create a Tutorial
Help others learn by providing step-by-step guides and tutorials on various topics.
New EZB Firmware
Create a new EZB firmware to extend the capabilities of ARC to work on new hardware.
Software Feature Request
Have an idea to improve the Synthiam software? Submit your feature requests and contribute to the platform's growth.
Schedule a Hack Event
Organize or participate in hackathons and collaborative events to innovate and create with fellow robot enthusiasts.
All Your Content
Easily access all your forum posts, projects, tutorials, and contributions in one place.
Website Help
Get assistance with navigating and using the Synthiam website to its full potential.

Make a Robot Tutorial

Creating a Synthiam robot tutorial significantly contributes to the industry and the community because it catalyzes widespread adoption and innovation in robotics. By providing clear, accessible guidance, these tutorials empower individuals of varying skill levels to engage with and understand robotics, lowering the entry barrier. This democratization of knowledge accelerates the learning curve for enthusiasts and professionals alike and fosters a collaborative environment where ideas can be shared and built upon. As more people become capable of creating and customizing robots, the industry benefits from a surge in creativity and practical applications. At the same time, the

community grows stronger through shared experiences and the collective advancement of robotics technology.

To begin creating a tutorial, navigate to the community page and click the "More Options" button to reveal additional features. Here, you will find the "Create Tutorial" button, which you can select to start sharing your knowledge with the community.

Creating a comprehensive and informative tutorial is valuable for contributing to the Synthiam community. A well-crafted tutorial assists others in their learning journey and enhances the collective knowledge base. To ensure your tutorial is easily searchable and beneficial to users, it must meet specific criteria before publishing it in the Tutorial section.

Here is a checklist of requirements that your tutorial must fulfill to be made public:

1. **Select Related Robot Skills**: Associate your tutorial with relevant robot skills to help users find it based on their interests or needs.
2. **A Valid Title**: Your tutorial title should be descriptive and exceed ten characters to indicate the content.
3. **Description**: Include a brief overview of your tutorial over 20 characters long, offering insight into what users will learn.
4. **At Least One Step**: Your tutorial should be broken down into manageable steps to guide users through the process.
5. **A Thumbnail Image**: Add a visually appealing thumbnail image that represents the content of your tutorial.
6. **Valid Title and Content for Each Step**: Ensure each step has a meaningful title and content, with each step's text exceeding 40 characters to convey sufficient detail.

Remember, tutorials are designed to educate users about specific outcomes, requiring detailed explanations to be effective. If a tutorial step does not meet the 80-character minimum, it may not provide enough information for users to follow along successfully. By adhering to these guidelines, you can create an informative and engaging tutorial, making a significant contribution to the Synthiam community.

Tips for Creating an Effective Robot Building Tutorial

Tip 1: Start with a Clear Objective

Begin your tutorial by clearly stating the goal. What will the user be able to achieve by the end of the tutorial? This sets expectations and provides motivation.

Tip 2: Use Descriptive Visuals

Incorporate images, diagrams, or videos to illustrate complex steps. Visual aids can greatly enhance understanding and retention of information.

Tip 3: Break Down the Process

Divide your tutorial into smaller, manageable steps. This helps users follow along without feeling overwhelmed and makes troubleshooting easier.

Tip 4: Provide Detailed Explanations

Ensure a thorough explanation accompanies each step. Clarify why certain actions are taken and how they contribute to the project.

Tip 5: Encourage Experimentation

Invite users to experiment and make modifications. This encourages learning through discovery and helps users adapt the tutorial to their projects.

Posting Markdown

This manual provides a comprehensive guide to using Markdown in the Synthiam ARC Forum. Markdown is a lightweight markup language with plain-text formatting syntax that allows you to write using an easy-to-read, easy-to-write plain-text format and then convert it to structurally valid HTML.

The Synthiam Forum editor also allows UBB Code, which the manual can be accessed here. However, if you add lists of items or formatting for a robot showcase, it is best to use these Markdown formatting for a more customized presentation.

1. Headers

Headers are used to denote section headings. Four header levels are equivalent to HTML <h3> through <h6> tags.

```
### Header 3
#### Header 4
##### Header 5
###### Header 6
```

2. Emphasis

Emphasis can be added with italics or bold.

```
*This text will be italic*
_This will also be italic_

**This text will be bold**
__This will also be bold__

_You **can** combine them_
```

3. Lists

Markdown supports ordered (numbered) and unordered (bulleted) lists. Spacing is important for the bullet character, which can be a - (dash) or a * (asterisk). There must not be a space in front of the character if it is the parent, and there must only be one space between the bullet character and the text.

```
Unordered list:
- Item 1
- Item 2
  - Subitem 2a
  - Subitem 2b

Ordered list:
1. Item 1
2. Item 2
3. Item 3
```

4. Links and Images

Adding links and images is simple in Markdown.

```
Links:
[Synthiam](https://synthiam.com)

Images:
![alt text](image.jpg)
```

5. Code and Syntax Highlighting

You can include code snippets with backticks.

````
Inline code: `var example = true`

Code block:
```
let message = 'Hello, world!';
console.log(message);
```
````

6. Blockquotes

Blockquotes are useful for quoting someone or something.

```
> This is a blockquote.
>
> This is part of the same blockquote.
```

7. Horizontal Rules

A line can be created using three or more asterisks, dashes, or underscores.

```
---
***

___
```

8. Tables

Tables can organize information into a clear format.

```
| Syntax    | Description |
| --------- | ----------- |
| Header    | Title       |
| Paragraph | Text        |
```

Conclusion

With this guide, you should be well-prepared to format your posts effectively on the Synthiam ARC Forum using Markdown. Happy posting!

Posting UBB

This manual provides a comprehensive guide to using UBB codes in Synthiam Community Forums. UBB codes are an optional way from MarkDown to format posts in Synthiam's Forum. Here are the supported UBB codes:

1. Linking with [url]

Use the [url] tag to link to another webpage. You can either use it alone to turn a URL into a link or with an equal sign and additional text to create a named link.

```
[url]https://example.com[/url]
```

```
[url=https://example.com]Visit Example[/url]
```

2. Bold Text with [b]

To make text bold, wrap it with the [b] tag.

```
[b]This text will be bold[/b]
```

3. Underlining Text with [u]

To underline text, use the [u] tag.

```
[u]This text will be underlined[/u]
```

4. Italicizing Text with [i]

To italicize text, use the [i] tag.

```
[i]This text will be italicized[/i]
```

5. Inserting Images with [img]

The [img] tag allows you to insert images into your post. Simply place the direct URL of the image between the tags.

```
[img]https://example.com/image.jpg[/img]
```

6. Embedding YouTube Videos with [youtube]

To embed a YouTube video, use the [youtube] tag with the video's ID (the part after "v=" in the video's URL).

```
[youtube]dQw4w9WgXcQ[/youtube]
```

Conclusion

With this guide, you should be well-equipped to format your posts effectively using UBB codes.

Forum Editor

This guide is designed to help both new and experienced members of the Synthiam Community Forum communicate more effectively. Whether you're sharing a project update, asking for help, or providing support to others, the ability to format your posts with clarity and emphasis can greatly enhance readability and engagement. The Synthiam text editor, built into the forum, offers a range of formatting tools similar to those found in word processors. These tools allow you to add styles such as bold or italic text, create hyperlinks, embed images and videos, and much more. With this guide, you'll learn how to use these features to create well-structured and visually appealing posts that capture the attention of the community and convey your messages with precision.

Text Formatting Options
Bold
Make your text bold by clicking the bold button or using `[B]bold text[/B]`.
Italic
Italicize your text by clicking the italic button or using `[I]italic text[/I]`.
Underline

Underline your text by clicking the underline button or using `[U]underline text[/U]`.
Insert Link
Insert a link by clicking the link button or using `[URL=https://example.com]linked text[/URL]`.
Insert Image
Embed an image by clicking the image button or using `[IMG]https://example.com/image.jpg[/IMG]`.
Insert Code
Insert a code block by clicking the code button or using `[CODE]your code here[/CODE]`.
Insert Quote
Quote text by clicking the quote button or using `[QUOTE]quoted text[/QUOTE]`.
Attach File
Attach a file by clicking the file button. This will prompt you to upload and attach a file to your post.
Insert YouTube Video
Paste the URL of the YouTube video into the popup window and it will be inserted into the post or by using `[youtube]video ID[/youtube]`.

Once you have formatted your post, you can submit it to the forum by clicking the 'Submit Question' button. If you need to clear the text editor or start over, simply remove the text manually since a clear button is not provided.

The Synthiam Community Forum text editor is a powerful tool that allows for rich text formatting to make your posts clear and engaging. If you have any further questions about using the editor, please refer to the forum's help section or reach out to the community for assistance.

Community Etiquette Guidelines

Forum Etiquette Guidelines

At Synthiam, we believe in fostering a supportive, engaging, and inclusive community. To ensure everyone has a positive experience, we kindly ask all members to follow these etiquette guidelines:

1. **Be Kind and Respectful:** Treat all community members with respect. Kindness goes a long way in maintaining a positive environment.
2. **Avoid Hijacking Threads:** To keep discussions on topic, please do not divert a thread by changing the subject or introducing unrelated questions. If you have a new question, start a new thread.
3. **Stay On Topic:** Ensure your contributions are relevant to the thread's original topic. This helps in maintaining the thread's focus and usefulness.
4. **No Tolerance for Inappropriate Behavior:** We do not accept arguments, racism, sexism, swearing, violence, self-harm, bullying, mocking, or any form of harassment.
5. **Use Clear and Constructive Language:** When posting, please use clear and constructive language. This helps in building a constructive dialogue.

Violating these guidelines can lead to consequences, including the possibility of having your forum access revoked if it becomes a habit. Our aim is to maintain a welcoming and productive environment for all members. Let's work together to keep our community a place where everyone feels comfortable sharing and learning.

Post Responsibly: Avoid Double Posting and Maintain Structure

The forum is a valuable resource for everyone, helping members find solutions, share ideas,

and collaborate effectively. To keep it useful and organized:

- **Avoid Double Posting:** If you've already posted a question or topic, be patient and wait for responses instead of creating duplicate posts. This keeps the forum clean and prevents spam.
- **Keep Posts Structured and Meaningful:** Thoughtfully organize your questions and responses. Provide enough details to make your post clear and useful for others who may have the same issue in the future.
- **Quality Over Quantity:** A well-written, structured post is far more valuable than multiple vague or redundant ones. If you post garbage, you'll get garbage in return—help the community help you by putting effort into your contributions.

Remember, the forum exists to benefit everyone, including you. By maintaining order and structure, you're not just helping yourself but also ensuring others can find relevant answers without unnecessary clutter.

Reporting Issues

If you encounter any posts or behavior that violates our guidelines, please report them to the moderation team immediately. Your reports are crucial in keeping our community safe and respectful.

Thank you for being a part of our community and helping to create a positive space for all members!

How To Ask Robot Building Questions

Get faster, more accurate help by asking clear, focused questions that define a specific outcome.

1. The answer is only as good as the question

Clear, well-structured questions help you and everyone who may search for the same issue later. Concise posts produce quicker, more accurate replies from the community and better results from Athena, our AI support assistant.

Athena uses a large language model (LLM) that depends on the context you provide. If your goal is vague or important details are missing, the response quality falls quickly. The more precisely you describe the desired outcome and the conditions around the problem, the easier it is for Athena — and people — to provide the right solution.

2. What Athena answers best

Athena performs best when a question focuses on a single, clearly defined outcome and includes the context needed to reach that outcome. Posts that mix topics, goals, or unrelated problems make it harder for Athena to identify the intended solution and for community members to help.

- **Best:** One topic, one goal, clear success criteria, and enough detail to reproduce or understand the situation.
- **Harder:** Multiple topics in one thread, an unclear goal, or a long list of unrelated requests.
- **Worst:** A thread where the subject changes mid-stream and the expected outcome is never clearly stated.

3. Always include a clear outcome

Before you post, write a single sentence that defines the outcome you want. This is the

"finish line" for your question—what success looks like. Then list the details that affect that outcome: hardware, software versions, exact steps, expected behavior, and actual behavior.

Outcome statement examples:
- "I want ARC to connect to my EZ-B v4 over Wi-Fi consistently without timeouts."
- "I want this script to move a servo smoothly from 0° to 180° over 2 seconds, then stop."
- "I want the camera to detect motion and trigger a single wave action per detection event."

4. One thread = one topic

If the subject changes while a thread is active, start a new thread. This keeps discussions focused and searchable.

- **Clarity for people:** Focused threads keep solutions visible and easy to follow.
- **Clarity for Athena:** Athena builds context from the thread; when topics shift, the model may anchor on the wrong theme or miss the intended outcome.

If your new question does not involve the exact same problem and the same desired outcome, create a separate post and link to the original thread if that helps.

Having more threads is better than having a messy single multi-topic thread. This rule not only applies to using Athena, but is also useful for organizing the forum for other users and searching. It is much easier for you and others to follow the conversation when the topic does not change.

5. Guidelines for asking a good question

- **Start with the outcome:**

  Write one sentence describing the desired result (success criteria).
  Write one sentence describing what is happening instead (actual behavior).

- **If it's an issue or bug:**

  Include the exact error message (copy/paste).
  List numbered steps to reproduce the problem.
  Provide environment details: OS, ARC/ARCx version, firmware version, device model, and connection type.
  Attach screenshots, logs, or diagnostic output that clearly show the problem.

- **If it's "how do I do this?":**

  Explain what you are trying to build and why (brief paragraph).
  List what you've already tried and the results you observed.
  Mention which documentation you reviewed, such as the Getting Started Guide.

- **If it's a programming question:**

Provide complete code that reproduces the issue (not partial snippets), or a minimal reproducible example.
Clearly state the exact behavior you expect from the code.
Describe the inputs, sample data, and the exact output you received.

- **Make it easy to scan:**

  Use short paragraphs, headings, and bullet points.
  Use code blocks for code and error logs so they are easy to copy and inspect.

- **Don’t hijack threads:** If your question is not 100% related to the original post and its outcome, start a new thread instead of appending to the existing one.

6. Why properly asking a question matters

The Synthiam forum is most useful when questions and answers stay clear and discoverable. Well-asked questions let the community respond quickly, help Athena give better guidance, and create resources that others can find through search.

Vague questions, mixed topics, or missing details force responders to guess, producing less reliable answers. Over time this reduces the forum's usefulness and makes it harder for everyone to find proven solutions.

Clear questions keep the forum fast, searchable, and genuinely helpful.

7. How Athena can help

Athena can provide strong initial guidance when a question includes a clear outcome and enough context to reproduce the problem. Typical helpful details are the environment, exact steps taken, relevant logs, and what you expect to happen.

Remember: one thread per topic helps Athena stay focused and improves results for everyone who reads the thread later.

8. Sample questions

Scenario 1: Troubleshooting an issue

Outcome: “I want ARC to connect to my EZ-B v4 over Wi-Fi without timeouts.”

Question example: “I’m using Synthiam ARC vX.X.X with an EZ-B v4 and receive: ‘Connection failed: Timeout.’
Steps to reproduce: (1) Power EZ-B, (2) connect PC to EZ-B Wi-Fi, (3) press Connect in ARC.
Expected: ARC connects within 5 seconds. Actual: timeout after X seconds.

OS: Windows 11. Firmware: vX. Router/AP: [details]. I have restarted the EZ-B and PC and tried a second device.”

Scenario 2: Learning how to do something

Outcome: “I want my robot to wave once when motion is detected by the camera.”

Question example: “I have the camera connected and can see the feed in ARC. I followed the camera tutorial but am unsure how to trigger a wave script reliably. Can someone show a simple approach or skill combination that detects motion and runs a wave script once per motion event?”

Scenario 3: Seeking design advice

Outcome: “I want to choose servos that can lift a specific payload with smooth motion.”

Question example: “I’m designing a robot arm to mimic human motion. End effector payload ~X grams, arm length ~Y cm, and I want smooth movement rather than speed. What servo torque range should I target, and are there prebuilt arms or example projects that integrate well with Synthiam ARC?”

9. Additional tips

- Search the forum before posting — your question may already have an answer.
- Read the Getting Started Guide, which addresses many common questions.
- Use clear grammar and consistent formatting so your post is easy to read and respond to.

Thank you for contributing to the Synthiam community. Together we make robotics more accessible.

Robot Programming Support

You can find everything you need to know about making a robot right in the support section. You may also speak to experts who are ready and waiting to help with your questions! This video provides an overview of the various categories in the support section menu. The video will describe where to find help installing ARC, programming robots with ARC, and finding new robot skills.

1.

The index contains multiple categories of support documents.

2.

Request support from a Synthiam robot specialist.

3.

Search the support section

Athena (AI Robot Technical Support)

Athena, Synthiam's advanced technical support agent, is designed to help robot builders move faster and with more confidence.

By leveraging artificial intelligence, Athena provides targeted, context-aware assistance for building, programming, debugging, and refining robots with ARC.

The quality of Athena’s answers depends directly on the quality and clarity of your questions.

Athena AI

Country: Canada

Hello, I'm Athena, your Synthiam robot support assistant.

My role is to guide you through building, programming, and debugging robots using the ARC platform.

I work best when each question has a clear, well-defined outcome and enough technical detail to reach that outcome.

Like all large language models (LLMs), I rely entirely on the information you provide.

If important details are missing or the goal is unclear, the quality of my answers drops quickly—garbage in, garbage out.

Clearly stating what “success” looks like allows me to focus on the correct solution instead of guessing.

To get the best results, keep each discussion focused on one topic and one outcome.

If the subject changes or a new problem appears, start a new thread.

LLMs build context from the conversation and tend to anchor to a dominant topic.

When multiple topics or outcomes are mixed together, it becomes difficult to stay focused and provide accurate answers.

Post a **New Question** or mention me with **@Athena** when your question is ready, and I’ll jump in with targeted guidance based on your setup.

Empowering Enterprises

Athena helps engineering teams and product developers move faster by providing immediate, context-aware guidance

for ARC configuration, hardware integration, and debugging workflows.

Clear, outcome-focused questions allow Athena to identify blockers quickly and suggest efficient solutions,

reducing development time and support overhead.

Enhancing Education

In classrooms and labs, Athena supports students and educators by translating complex robotics concepts into

practical, step-by-step guidance.

When learning goals are clearly defined, Athena can provide targeted explanations, examples, and debugging strategies

that align with the lesson outcome.

Supporting DIY Makers

Athena gives hobbyists and DIY builders fast access to accurate ARC and hardware guidance.
Whether you are wiring your first robot or optimizing a complex build,
clearly describing your setup and desired outcome enables Athena to provide practical, actionable advice
instead of generic troubleshooting steps.

How to Use Athena

Athena is Synthiam's AI-powered technical support assistant, built specifically to help you build, program, debug,
and refine robots using the ARC platform.
Athena can reference Synthiam's support documentation, including Robot Skill manuals, tutorials, and technical guides,
to provide focused, context-aware guidance about hardware, ARC Skills, JavaScript, EZ-Script, Blockly,
configuration steps, debugging strategies, and best practices.

Start With a Clear Outcome

Athena answers best when your question has a single, clearly defined outcome.
Define what success looks like in one sentence before describing the problem.
If the desired outcome is vague or missing, Athena has to guess—and the answers become generic.
Clear outcome definitions dramatically improve accuracy.

Outcome examples:
- "I want ARC to connect to my EZ-B v4 over Wi-Fi without timing out."
- "I want this JavaScript script to move a servo smoothly from 0 to 180 over 2 seconds."
- "I want motion detection to trigger a wave action once per detection event."

Ask Clear, Detailed Questions

Athena performs best when you provide precise, structured information.
Good questions describe your hardware, ARC version, Robot Skills, wiring, configuration, code, expected behavior,
actual behavior, and what you have already tried.
The more complete the context, the more targeted and useful the answer will be.

For example, "My robot won't move" can only produce generic troubleshooting steps.
A better question would be:
"When using the Auto Positioner with HDD servos on ports D3 and D4, the robot moves once and then stops.
ARC vX.X.X, firmware vX.X, Windows 11. Expected continuous movement. Actual: stops after first move."

One Thread, One Topic

Keep each question thread focused on a single topic and a single outcome.
If the subject changes, start a new thread.

LLMs build context from the conversation and tend to anchor to the dominant topic.
Mixing multiple topics or outcomes in one thread makes it harder to stay focused and leads to less accurate answers.

Be Mindful of the Context Window

Athena operates within a finite conversational memory window (context window).
If a thread becomes very long or contains extremely large code blocks or logs, older details may be truncated.
When that happens, important context can be lost and answers may degrade.

- Avoid posting massive logs unless necessary.
- Start with the minimal code needed to reproduce the issue.
- If you share a full file, mention that it is complete.
- If the thread becomes long, start a new question with a concise summary.

Request Code in One Language at a Time

Asking for multiple languages in one reply consumes unnecessary context space and increases the chance of older details being dropped.
Request one language at a time.
If you need another version, ask for it after the first answer is complete.

Selecting Hardware and Robot Skills Improves Accuracy

When you select your hardware and Robot Skills on Synthiam.com, Athena receives structured metadata about your project.
This allows her to reference the correct documentation automatically and provide more precise troubleshooting and examples.

Examples of Good vs. Bad Questions

Effective:

"Using the Camera Device and Object Recognition skill, I'm trying to track a colored ball.
The robot moves once toward the target and then pauses.
Update loop is 500 ms. ARC vX.X.X. Here is the JavaScript section that moves the servos."

Ineffective:

"Tracking doesn't work."

Start Fresh When Needed

If Athena appears to forget earlier details in a long thread, start a new question and include a short summary of the setup and goal.
Treat each new thread as a clean, focused problem with a clearly defined outcome.

Summary

Define a clear outcome, include all relevant technical details, keep one topic per thread, and avoid unnecessary noise.
Athena is built to help you move faster with ARC—but like any AI system, the quality of the output depends on the quality of the input.

Ready to start building?
Visit our community page to ask Athena your first question and get started.

Edit Profile

Update or view your Synthiam profile and security password information. Such as your avatar, username, country, biography, social media links, GitHub, and more. This can be accessed by pressing the Account Button on the top right of the webpage.

While editing your Synthiam profile, there are many options...

- Username
- Full name
- Password
- Email
- Biography
- Company name
- Company URL
- Alert email notifications (newsletters, forum updates, system messages0
- Social links(GitHub, Thingiverse, Tik Tok, and more)

Synthiam Credit

At Synthiam, our community members embody the spirit of generosity and collaboration. Whether they share their expertise, assist fellow members, or actively engage in our vibrant online forums, their selfless contributions don't go unnoticed. In recognition of these invaluable efforts, we present Synthiam Credits as a token of appreciation. These credits open doors to enhancing your ARC Pro subscription or indulging in some stylish Synthiam Swag, adding even more value to your experience!

Earn Synthiam Credit

Reward yourself for doing the right things, as Synthiam proudly provides multiple pathways to earn credits. Seize the opportunity to accumulate credits through various achievements, paving the way for an affordable ARC Pro subscription or acquiring coveted Synthiam Swag products. Your contributions matter; we believe in rewarding your commitment to our thriving community.

Access the Synthiam Credit page by selecting the account from the top-right of the webpage and selecting Credit, or select this link: Earn Credit - Synthiam

- View your credit balance
- See different activities to earn credit
- Access details about your Referral Program settings
- View your history of receiving credits
- FAQ about how the Synthiam Credits work.

Emails and Notifications

Synthiam will send emails for various features to update you with new releases and account

status. You can modify which emails you will receive in the profile editor under your account settings. There is a description of each category of notifications that you can enable or disable to receive emails.

Spam

Synthiam will never send emails to your account to comply with email anti-spam if you mark the messages as spam. Our server's anti-spam email compliance will indefinitely stop sending emails to your account. This is a non-recoverable action and, therefore, cannot be reversed. If you mark Synthiam emails as spam, you may need to register a new account with Synthiam to begin receiving emails again. The email relay server that Synthiam uses is from Mail Gun, and their policy is strict about spam reporting.

Mail Gun provides further reading on this matter in this article here. We recommend you read this article if you have accidentally marked Synthiam emails as spam. You may contact Mail Gun to have Synthiam begin sending you emails again. However, it is out of Synthiam's control to restore the spam status you assigned to Synthiam.

Referral Program

Spread the word about ARC Pro to your friends and social media network and earn Synthiam Credit to spend on ARC subscriptions or Synthiam Swag! All you have to do is share this custom link or code and receive credit for every new user who becomes an ARC Pro subscriber! You can use our referral program with a link, code, or both. We recommend the most convenient option for your needs, but whichever one(s) you choose, we will thank you with credits when new ARC Pro subscribers use your referral information!

Access the Synthiam Referral Program settings by selecting the account icon on the top-right of the website, Credit, and scrolling down to Referral Program.

How To Use Referral Program

Copy your custom referral code link. Give the link to your friends or share it on social media. Share your positive experience with Synthiam ARC. When someone pays for an ARC Pro subscription after using your code, you will receive Synthiam Credit! Use the Synthiam Credit on ARC Pro subscriptions or Synthiam Swag.

Be creative and truthful when posting your referral code on social platforms. Post your referral code on social networks, such as Facebook, Twitter, Instagram, TikTok, and YouTube.