



# USER MANUAL

## THANK YOU FOR YOUR PURCHASE!

You have both a powerful and easy-to-use game creation tool in your hands.

This is more than an AI package! It contains templates and PlayMaker examples for First Person Shooter, Tower Defense, Capture the Flag, integration C# scripts, and more! It is the perfect PlayMaker starter kit, and the perfect complement to an advanced developer's toolbox.

## DOCUMENTATION & TUTORIALS

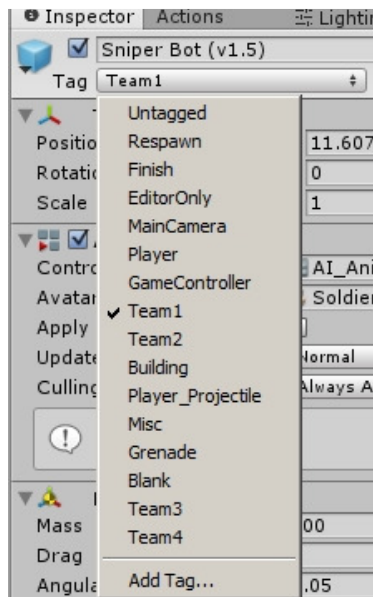
The full documentation is ONLINE to give you the most up-to-date docs and tutorials.

Go to <http://www.AIBotSystem.com> and click on Documentation/User Manual under Advanced Battle AI.

## GETTING STARTED: ADDING NECESSARY TAGS

You will probably receive “Tag Undefined” errors after importing. This is because our product is not placed in the “Complete Projects” category on the Unity Asset Store, which means that project settings are not included with your download. As a result, the tags used in the demos will be missing.

As soon as you import our asset, add the following tags to your project:



# NEED TECHNICAL SUPPORT?

## WHERE TO SEND QUESTIONS OR ISSUES?

If you have any issues, questions, or require technical help with the Unity game engine itself, please contact Unity Technologies ([www.unity3d.com](http://www.unity3d.com)) Any questions about refunds should also be directed to Unity Technologies. This AI solution is sold exclusively on the Unity Asset Store. We are unable to offer you a refund ourselves since this product contains usable source code.

If you have any issues, questions, or require technical help with the PlayMaker tool itself, please contact Hutong Games ([www.hutonggames.com](http://www.hutonggames.com)).

If you need additional help regarding our AI solutions, give us a shout at [aibotsystem@gmail.com](mailto:aibotsystem@gmail.com) or ([www.aibotsystem.com](http://www.aibotsystem.com)) and give us your Unity Receipt Number (to help us combat scammers looking to get free stuff). You can also contact us through our contact form at our website: [www.AIBotSystem.com](http://www.AIBotSystem.com)

**For legal reasons, we will not do custom development for your game or receive your game ideas, since we make games ourselves. A member of our team will never ask for your game designs, passwords, trade secrets, etc...**

**[REQUESTING SUPPORT] Asset Store Reviews:** Please know that we, developers, are **not auto-notified** when we receive a review on the Asset Store. So please don't leave tech support requests as a review on the Store, because this will result in a very slow response. With that said, if you think we're doing a good job, let us know by giving us a good rating! This tells us that we're doing something right so we can keep doing it right! THANK YOU!

**On the next page you will find important tips and troubleshooting notes. We recommend you read them because you might run into the same issues later.**

# IMPORTANT TIPS & NOTES

The notes in this section are extremely important. We suggest you read it all, especially if you're having issues right after downloading.

**[ERROR] NavMesh Errors:** Some people have requested tech support regarding NavMesh errors. Please know that you must follow Unity's own instructions for NavMesh baking, or else you will receive a ton of NavMesh errors. **The NavMesh errors then triggers hundreds of other errors. Sounds familiar?** This has nothing to do with our A.I. – this happens to every Unity project/scene that does not have a baked NavMesh. The reason for the errors is because the A.I. needs a “picture” of your scene's obstacles and routes and if you don't bake the NavMesh, the A.I. will have no idea of where to go. You have to bake the scene's navigation mesh before playing and each time you change the environment. Bots will not function properly inside a scene without a properly baked nav mesh.

**[CORRUPT FILES]** For strange reasons, sometimes the files you downloaded from the Asset Store become corrupted, the download is smaller than it should be, will not open correctly in Unity, etc... This can happen if your firewall was turned on or you were using a proxy when you downloaded from the Asset Store. Try downloading again with proxies/firewalls turned off. If you still have issues, email us with your Unity Receipt Number and we can email you a package.

**[CORRUPT FILES] FSM Errors:** Sometimes the FSM's were all removed from the bots after downloading. This results in you having to add the FSM script to each bot. We're not sure why this happens on some downloads, but after hearing about similar things from users of other PlayMaker kits, it seems that this happens sometimes when you update PlayMaker. After the update, Unity apparently no longer recognizes the unique FSM scripts attached to prefabs and you have to manually add FSM to each. Try starting a blank new project, **install PlayMaker FIRST (latest update)**, then import our asset. **PLAYMAKER ACTION ERRORS:** Some older PlayMaker actions are not compatible with Unity 5. If you're using PlayMaker 1.8, you should have no issue with this. If not, you will need to remove the AddComponent and AddScript actions.

Also, make sure you have the latest version of PlayMaker installed. This was built for PlayMaker 1.7+.

**[UNITY 5] BOT IS NOT MOVING AFTER PATH FOUND:** Unity 5's NavMesh Agent now requires you to declare Agent.Resume to set the bot on a new course. We have already done this in our prepared bot prefabs, but if you are venturing on your own, you will need to add the NavMesh Agent Resume action to your FSMs. More information can be found on the Unity 5 website regarding the new API.

**NAV MESH IS BAKED BUT BOT IS STILL NOT MOVING:** Check your bot's settings:

- 1) The bot's Movement and Awareness FSMs are not disabled
- 2) Walk speed and Run Speed [Movement FSM]
- 3) Random walk speed and random run speed [RandomizeStats FSM]
- 4) Your bot has a NavMesh Agent component
- 5) Bot's sight range and hearing range [Awareness FSM]
- 6) Check your bot's current command [Tactics FSM]. A bot under GUARD mode will not move unless he spots an enemy.
- 7) If using waypoints, check that your waypoint nodes are placed above ground, and at a reachable location on the nav mesh.

**BOT NOT MOVING IN DIRECTION I DIRECTED:** Check the following settings:

- 1) charROLE\_RunAwayWhenLowHP [HealthAndDamage FSM] – your bot is probably low on health and running away. If that happens, your bot will disengage all other orders. Turn this off by setting it to FALSE.
- 2) TACTICS\_PatrolChase [Tactics FSM] – If set to true, your bot will deviate off course

from his current path to chase a nearby enemy. Set this to false if you want to force your bot to follow a set path, regardless of nearby enemies (your bot will continue to shoot at the enemy though).

3) Check your waypoint nodes and check their positions

#### **BOT NOT SHOOTING AT ENEMY WITHIN SIGHT AND ATTACK RANGE:**

If an enemy is both inside your bot's sight range and attack range, but not attacking, check the following:

- 1) Your ranges are not negative, are not 0, and not unreasonable.
- 2) Your bot is behind a wall or another object (Teammate) and do not have the enemy in his line of sight, even though they are within range.
- 3) `charSTAT_EnemyTag` [Awareness FSM] – this accounts for the majority of issues with a non-attacking bot. Often, developers forget to set the correct enemy team tag. Also, a bot's enemy tag cannot be the same as its own tag.
- 4) Check your bullet prefab – it must have a rigidbody and the bullet component FSM. A working example is the provided demo bullet prefabs.
- 5) Your bot isn't giving the bullet enough Force

**BOT NOT DISAPPEARING AFTER BEING KILLED:** Our default bot setup has the bot remaining on the battlefield as a corpse for 30 seconds. You can have the bot be immediately removed by setting the wait period to 1 second. See the Health FSM – towards the bottom of the FSM graph, you can specify a wait period before removing the corpse. Set the wait period to 0 seconds.