

The cover art features a large, stylized fractal structure composed of overlapping, semi-transparent geometric planes. The central plane shows a silhouette of a figure with a cape standing on a rocky outcrop, looking out over a vast, cloudy sky. The overall color palette is dominated by warm, golden-brown and grey tones, with a bright light source on the left side. The text 'FRACTAL' is prominently displayed in a large, white, sans-serif font, with the 'A' being a different color. Below it, 'AUTOMATA' is written in a smaller, white, sans-serif font.

FRACTAL
AUTOMATA

Rulebook

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Credits



We have so many people to thank that we dedicated them an entire section on our website.

Introduction

Automatas are entities that simulate the behavior of real players. They have unique rules and components that differ from the core rules, making them unpredictable and challenging opponents.

With the Automata expansion, you can simulate up to 2 opponents and these rules work with any combination of players and Automata(s).

Important concepts

The Automata presents some important concepts players should know to enjoy the experience.

Exploration

When the Automata's units enter a sector with an obstacle or anomaly, these are immediately discarded without revealing or resolving the cards. The Automata also doesn't trigger exploitation areas on living galaxies.

Cards

When the Automata draws an action or technology card, these are placed face-down in its play area. The effects are irrelevant, as only the type and number of cards matter.

Training

When the Automata improves an AI tactic card, draw a random elite AI tactic from the elite reserve, then replace the basic version of that card into the deck (e.g., *Elite Orbital Assault* replaces *Orbital Assault*).

Last breath

If the Automata cannot complete at least one of the possible actions in a row on an AI protocol card, perform an Advance action instead.

If it cannot Advance either, perform a Recruit action instead.

Hold the line

If the Automata is trying to move and there are many valid sectors to move *space units* from, always choose to move the ones closer to the Automata's starting sector.

Short-circuit

If the Automata can do an action in two different ways, and the AI behavior cannot help you break the tie, the priority player on the currently active AI protocol card decides.

Components and terms

Factions

The Automata expansion features the 7 unique factions from the core game.

These are double-sided mats containing a description of the faction's traits and abilities, lore text, and some unique elements such as starting colony and units.

Non-core factions cannot be automated, but can be used by the players against the Automata.

Faction abilities

(A) Faction ability: This is the unique ability of the faction, usually an effect similar to the original on the player faction.

(B) Pendulum action: The Automata triggers the applicable action indicated with the **(A)** icon. This effect applies after the Automata takes an action card and places it face-down in its play area.

(C) Civil technology: As the Automata develops technologies, these are placed face-down in its play area and unlock new abilities.

Empire board

Automatas have their own empire board to track their development throughout the game.

(D) Choose a faction token of any color, place it here as a reminder, then use the corresponding miniatures.

(E) This area allows the Automata to track its empire's influence.

(F) These 4 colony tracks allow the Automata to track its empire's current expansion.

(G) This area allows the Automata to track its empire's victory points during scoring.

(H) These areas hold the AI tactics (top) and AI protocols (bottom).

AI tactic cards

AI tactic cards are used to resolve battles for the Automata. They work similarly to standard tactic cards, with initiative value, unit composition, damage, and tech upgrade panels. Each card contains 2 rows. Read them top-down until a composition matches the Automata's units.

Elite tactic cards

The Automata can also unlock more powerful tactic cards known as AI elite tactics. These are progressively added to the tactic deck as they are unlocked, **replacing tactics of the same name** just like for the players (e.g. *Elite Orbital Assault* replaces *Orbital Assault*).



AI protocol cards

AI protocol cards contain the information required to play the Automata's turn. Cards are read in tandem, with the discarded card completing the active one. They contain the following information:



A Triggers: The two arrows show which rows of actions to trigger for the turn.

B Actions: The sequence of actions played by the Automata this turn.

C Behavior: The completed box shows which AI behavior to follow for the turn.

D Living storm: This area indicates where and how to move living storms.

E Player order: This area indicates the priority for targeting a player during an action.

F Priority: This area determines the priority order for units and colonies used with the AI behavior.

AI behavior cards

AI behavior cards automate the decision-making process of the Automata when using the Recruit and Advance actions.



Check which AI behavior is triggered by the AI protocol card, and follow the decision tree to resolve the Automata's action.

The conditions for the Advance action must be checked before each separate movement, not just once.

Automata setup

1. Choose a color for the Automata and place the corresponding faction token on its empire board.
2. On the Automata empire board, place the corresponding colonies, influence marker on 1, and victory points marker 0.
3. Place the faction mat to the left of the empire board.

For your first play, it is recommended to use the Saura Automata.

4. Place the AI behavior cards on the empire board.
5. Shuffle the AI protocol cards, and draw cards according to the difficulty level to form the AI protocol deck. Place each deck in its corresponding space. The rest forms the reserve.
6. Discard the top card of the AI protocol deck face-up.
7. Shuffle the AI tactic cards and AI elite tactic cards (depending on your difficulty level) to form the AI tactic deck. Shuffle and set the rest of the elite AI tactics aside to form the reserve. Place each deck in its corresponding space.
8. Deploy the starting units in the starting sector.

9. Shuffle the following singularities: *Resonant Monolith*, *Opened Rift*, *The Forbidden Pact*, *Void Throne*, and *Tainted Civilization*. Place one face-down on the Utopian sector.

For your first game, we suggest you use the *Resonant Monolith*, as it requires less player input to be used efficiently by the Automata.

Difficulty level

The Automata has two ways of increasing its power. First, the number of AI protocols determines how many actions it can perform per cycle. Second, AI elite tactics increase its combat prowess.

You can follow these rules to tweak the initial difficulty of the Automata.

Difficulty level	AI protocols	AI elite tactics
Normal	4	0
Hard	5	1
Impossible	6	2

AI empire tracks

Imperial track

- **No colonies:** Execute 2 movement orders when you Advance.
- **First colony:** Gain 1 influence (colonization bonus). Execute 3 movement orders when you Advance.
- **Second colony:** Gain 2 influence (colonization bonus). Execute 3 movement orders when you Advance.
- **Third colony:** Draw artifacts until you find 1 that is valid (colonization bonus). Execute 5 movement orders when you Advance.

Productive track

- **No colonies:** No effect.
- **First colony:** Add 1 AI protocol card from the reserve to the top of the discard pile.
- **Second colony:** Add 1 AI protocol card from the reserve to the top of the discard pile.
- **Third colony:** Add 2 AI protocol cards from the reserve to the top of the discard pile.

If the Automata loses a productive colony, return the top card(s) of the discard to the reserve.

Scientific track

- **No colonies:** Develop technologies with a cost of 1 when you Research. Move 1 sector per movement order when you Advance.
- **First colony:** Develop technologies with a cost of 2 or less when you Research. Move 2 sectors per movement order when you Advance.

- **Second colony:** Immediately develop a civil technology (colonization bonus). Develop technologies with a cost of 5 or less when you Research. Move 2 sectors per movement order when you Advance.
- **Third colony:** Draw artifacts until you find 1 that is valid (colonization bonus). Develop technologies with a cost of 7 or less when you Research. Move 3 sectors per movement order when you Advance.

Military track

- **No colonies:** Recruit 1 infantry and 1 lightship when you Recruit.
- **First colony:** Recruit 1 mech and 1 lightship when you Recruit. If this is not possible, use the option exactly to the left on the track.
- **Second colony:** Add 1 AI elite tactic to the top of the AI tactic deck (colonization bonus). Recruit 1 mech and 1 warship when you Recruit. If this is not possible, use the space exactly to the left on the track.
- **Third colony:** Add 1 AI elite tactic to the top of the AI tactic deck (colonization bonus). Recruit 1 extra infantry and 1 extra lightship whenever you Recruit.

Automata Cycle

The Automata has special rules and conditions that differ from regular players during each phase of a cycle.

1. Income phase: Reset the AI protocol deck.

2. Action phase: When the Automata has to play, reveal a new AI protocol card and resolve its effects. After the Automata plays its last AI protocol card, it passes and takes the watcher token (if available).

3. Conflict phase: Each sector that contains the Automata's units and at least one other player's is in conflict. Resolve battles with the Automata, following the core rules but using its own AI tactic cards. Sieges are resolved as usual.

4. End of Cycle phase: Trigger any end-of-cycle effects.

Income phase

Shuffle all discarded AI protocol cards to form the deck and discard the top card face-up.

Action phase

On the Automata's turn, draw an AI protocol card which becomes the new active card. If it is the last card in the deck, the action phase ends for the Automata after this turn.

Active and discarded cards line up so that the arrows on the left part of the discard determine which actions are triggered on the active AI protocol.

Cards and actions are resolved from top to bottom and left to right.



Conditional Activation

Perform actions on the AI protocol cards from left to right. On each row, there are 2 separate actions. The symbol in between indicates how to resolve the effects:



If the first action is not available, perform the second one.



Perform one action, then the second one.

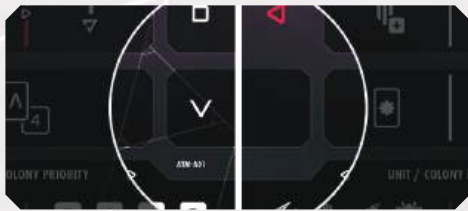


Perform the first action, then the second one if the first was available.

Behavior

To determine how to trigger some specific actions, you need to refer to the active AI behavior for the current turn.

Looking at the active and discarded AI protocol cards, one of the letters has a completed box around it. Refer to the matching AI behavior and follow the question tree to automate the decision-making of two basic actions: **Recruit** and **Advance**.



There are 4 different behaviors the Automata cycles through during the game:

(A) **Aggressive:** The Automata attacks valuable sectors, besieges colonies, or threatens its opponents' units.

(D) **Defensive:** The Automata defends its colonies and disables enemy transports to diminish their offensive capacity.

(E) **Expansive:** The Automata expands and controls areas with colony spaces or the Utopian sector.

(V) **Victory:** The Automata completes as many objective conditions as possible without losing the ones currently controlled.

The 4 behaviors are detailed in depth at the end of this rulebook.

Priorities

Sometimes the question trees require a priority check for targeted units and/or colonies. Check the bottom part of the currently active AI protocol card for priorities, following the order determined by the arrows and take the first available option.



Check the top part of the card to determine the players targeted by the Automata.



Discard AI protocol

Once the AI protocol card is resolved, discard it face-up. It will be used next turn, along with the new active AI protocol, to indicate which rows of actions to play and which AI behavior to choose.

Actions

Recruit



Add units to a sector colonized by the Automata, determined by the active AI behavior.

The rightmost visible space on the military track determines the recruited units. If the Automata doesn't have enough units in reserve to place the indicated units, check the composition of the space immediately to the left. Keep going until you find a valid set of units.

If the Automata can't recruit the required units in full because it doesn't have enough in its reserve, then apply the *Last breath* rule. If the Automata still cannot perform the action, ignore it.



The blue Automata is performing a Recruit action, the rightmost revealed space on the military track states to add 1 lightship and 1 mech, but all the Automata's mechs are currently on the board. The Automata checks the previous revealed space, which indicates to add 1 infantry and 1 lightship instead.

Advance



Move the Automata units on the board according to the active AI behavior.

The imperial track determines how many movement orders the Automata can give, i.e., how many *space units* can move during the action, while the science track determines the number of sectors they can move.



Thanks to its imperial and science colonies, this Automata can move 3 *space units* up to 2 sectors each.

For each *space unit* you move, check the AI behavior to determine how they must move. This process must be repeated every time a unit moves, not just once.

Remember the Automata *Hold the line* rule. The Automata always tries to move units closest to its starting sector.



The active AI protocol and discard point to a defensive behavior. The Automata seeks to defend its colonies from attack.

Colonize



Add a colony to a colonizable sector controlled by the Automata and containing at least 1 infantry.

The active AI protocol determines the colony type following the priority order at the bottom right of the card.

If two possible sectors have priority for colony placement, use the *Short-circuit* rule.

The Automata can't place a colony unless it controls a colonizable sector with at least 1 infantry.



The Automata controls a sector suitable for science and military colonies. The active AI protocol dictates that scientific colonies go first, followed by military ones. The Automata places a scientific colony from its empire board.

Research



The active AI protocol card indicates the type of technology (civil or military) to develop.



Check the science track on the empire board for the card with the highest scientific cost that can be developed. On the corresponding technology board, take a card of the indicated type that matches this cost. If there is no card with that cost, take a card with the next lower cost. If there are no valid technologies, use the *Last breath* rule.

Remember that the Automata always develops technologies face-down.



The Automata performs a Research action, and the science track indicates that it can develop cards with a cost of 2 or less. The Automata checks all the civil card slots and cannot find any card that corresponds to that cost, so it looks for cards with a cost of 1 and develops one of these.

Lose / Gain influence

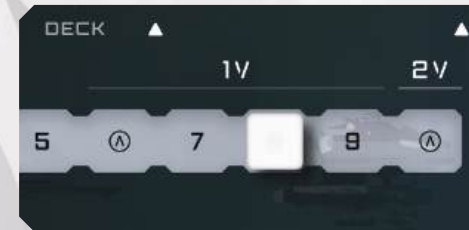


Move the influence marker left or right on the empire board as required.



The Automata gains and loses influence throughout the game. The first time the influence marker reaches spaces 6 and 10 (as indicated on the board), add 1 AI protocol card from the reserve to the top of the discard.

At the end of the game, the Automata gains 1 victory point if it has 6, 7, 8 or 9 Influence, or 2 victory points if it has 10.



Influence is gained or lost the same way as regular players and used to score and trigger specific AI protocols.

Movement



The Automata performs a single movement order.

This follows the same rules as the Advance action.

Storm movement



Move the living storm nearest the priority player (on the active AI protocol).

Identify one of the possible movements of the storm and the final position indicated by the icon. Icons have 2 possible directions and orientations.

Examples of storm movement:



Move the storm right or down; the final position must be vertical.



Move the storm down or left; the final position must be horizontal.



The Automata is trying to get access to the Utopian sector or to block access to other players.

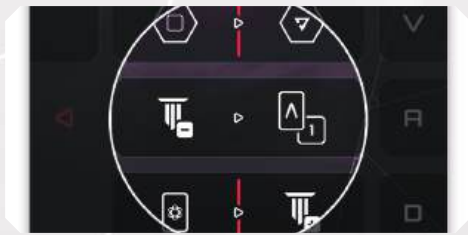
Play an action Card



The Automata plays an action card corresponding to the slot number on the Action display.

A new action card is immediately drawn and placed face-down.

Check the pendulum action section on the faction mat and trigger the applicable action.



The Saura Automata must spend 1 influence to take the action card on slot number 1 and replace it with a new card face-down.

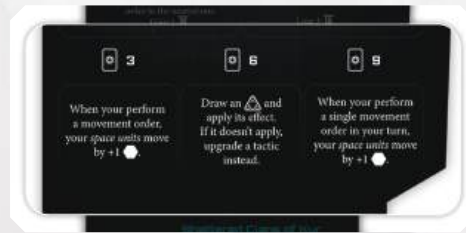


The Saura Automata checks the conditions of the pendulum action. As it currently has 3 influence, it triggers the left action.

Technology benefits

At the bottom of the faction mat, the Automata has 3 specific abilities that are unlocked as it develops civil technologies (when the total scientific cost of all developed cards reaches 3, 6 and 9).

Many of these effects are one-time benefits, but others increase the efficiency of certain actions.



The Saura Automata develops 2 technologies with costs of 1 and 2, unlocking the first civil technology benefit. When the Automata performs a movement order, its space units gain +1 speed.

Conflict phase

Battles against the Automata are similar to those between players, but it uses different tactic cards.



During each battle turn, reveal an AI tactic as players reveal their own tactics. Reading from top to bottom, resolve the first eligible effect on the card.

If none of the two effects can be triggered, draw another AI tactic until you can activate an effect.

If the Automata has no tactics left, shuffle the discard pile to form another deck. **The AI tactic deck is not shuffled between battles.** Instead, continue drawing cards until the deck is exhausted.

Initiative

The initiative value is indicated in the top left corner of each section. Automata initiative works as explained in the core rules, with ties resolving simultaneously.

Unit composition



The left side of each section indicates the unit compositions required in the sector to trigger the effect.

When the icons are red, the composition is defensive and takes into account enemy units instead of Automata units. These tactics block damage, similar in function to the *Ground Defense* and *Orbital Defense* tactics in the player deck.

Damage

The icons on the right side of the arrow indicate the damage. When the composition is defensive, these are shown below the red icons.

The damage inflicted is resolved from left to right.

Tech upgrade



If the total scientific cost of all developed military technology cards is met, the Automata trigger the tech upgrade, which adds additional damages or blocks.

End of cycle phase

- Resolve the end of the cycle as usual.
- The Automata participates in the prestige check just as any other player.
- If the Automata is the watcher, check the active AI protocol to determine the new first player for the next cycle.

AI Behavior extended

The Automata uses 4 unique AI behavior cards featuring decision trees to determine the activation of the Recruit and Advance actions.

You can find an expanded explanation of each behavior in this section.

A few rules apply to all AI behaviors:

1. **Recruit** always happens in a single sector. The Automata can recruit several types of units at once (AI military track) but can't spread them out on several colonies in a single action.

2. Checking the behavior for the **Advance** action happens **before each movement order**, not just once. The Automata can move as many *space units* as the imperial track allows (2 by default).

Victory behavior

Recruit

If an Automata colony is besieged and the Automata doesn't control the sector, add the units there. Otherwise, add the units to the colony closest to the Utopian sector. In case of a tie, check the colony priority on the active AI protocol card to determine which colony to reinforce.

Advance

The priority is to take control of the Utopian sector. Before each separate movement determined by the imperial track, the Automata checks if it controls the Utopian sector.

If it does, the Automata focuses on scoring victory points by completing objective conditions that require control of sectors. The Automata checks which sector types are on the objective cards and then tries to control the sectors in range.

In case of a tie, the Automata prioritizes sectors in the following order: mystery > biodiverse > arid.

If there is no valid target, the Automata triggers the *Aggressive behavior* instead.

If the Automata doesn't control the Utopian sector, it moves its units to it. If the Utopian sector isn't in range, it triggers the *Defensive behavior* instead.

Defensive Behavior

Recruit

If an Automata colony is besieged and the Automata doesn't control the sector, add the units there. Otherwise, add the units to the colony closest to the most enemy units. In case of a tie, check the unit priority on the active AI protocol card and reinforce the colony under threat by the most priority units.

Advance

The Automata's priority is to reinforce its besieged colonies. Before each separate movement, check if any Automata colonies in range contain more enemy units than the Automata's.

If there are, move *space units* there, transporting the maximum number of *ground units* to reinforce the sector. If several colonies are under

siege, choose the closest one and, if tied, the priority one. If several *space units* are in range, use the *Hold the line* rule to break the tie. If there are colonies under siege but the Automata cannot move its units to defend the sector, it triggers the *Aggressive behavior* instead.

If there are no besieged colonies, check whether the opponent has *space units* in range that are not pinned-down, i.e., not currently engaged with the Automata's (or another opponent's) *space units*. If there are, move the closest Automata units to engage.

If several units are in range, choose the priority units. If several Automata units can engage, use the priority units to determine which ones move.

Finally, if no options are available, the Automata triggers the *Expansive behavior* instead.

Aggressive Behavior

Recruit

Add units to the Automata colony closest to the most enemy colonies. In case of a tie, check the colony priority on the active AI protocol card.

Advance

The priority is to attack and besiege enemy colonies. Before each separate movement, check if there are any enemy colonies in range of the Automata's *space units*.

If yes, move *space units* carrying at least 1 *ground unit* to reinforce the sector. If several colonies are in range, choose by priority. If several Automata units are in range, select the priority units. Use

the *Hold the line* rule to break the tie. If *space units* cannot transport *ground units*, the Automata triggers the *Defensive behavior* instead.

If no enemy colonies are in range, check if there is a contested sector with the Automata's units in range but not under its control. If yes, move the closest Automata units to reinforce the sector.

If several *space units* are in range, use the priority one. If several sectors are tied, move towards the one containing the most priority units. If still tied, use the *Hold the line* rule.

Finally, if no options are available, the Automata triggers the *Expansive behavior* instead.

Expansive Behavior

Recruit

Add units to the Automata colony closest to sectors it may colonize or invade. If two colonies are at the same distance from colonizable sectors, choose the one with the most colonizable sectors in range. In case of a tie, check the colony priority on the active AI protocol card.

Advance

The priority is to expand on the board to be in a position to colonize new sectors. Before each separate movement, check if you can transport infantry to a colonizable sector without Automata infantry.

If you can, move a *space unit* there transporting an infantry. If several colonizable sectors are in range, use the priority colony. Use the *Hold the line* rule to break the tie.

If there are no *space units* able to transport infantry in range or there are no colonizable sectors, move units to the nearest sector with enemy colonies. If there are multiple options, use colony priority or use the *Hold the line* rule to break the tie.

Lastly, if there are no colonizable sectors or enemy colonies in range, move towards the Utopian sector even if the Automata can't reach it. If not possible, reinforce contested sectors instead.

Game modes

The scoring *Dawn of the Galaxy* refers to the advanced modules at the end of the core rulebook.

Machine empires

Composition: 2 players vs. 2 Automatas.

Difficulty: Normal or Hard.

Galaxy map: 4-player compact.

Singularity: *Resonant Monolith* in Normal, random one in Hard.

Special Rule: The Automatas are allies and only consider players as opponents, including during battles where they always target players' units.

Scoring: Standard or *Dawn of the Galaxy*.

Victory: Add the $\sqrt{}$ of both Automatas and both players separately. The team with the highest score wins the game.

Fallen civilization

Composition: 2 players vs. 1 Automata (Fallen Civilization) or 1 player and 1 Automata vs. 1 Automata (Fallen Civilization)

Difficulty: Impossible.

Galaxy map: 3-player compact.

Singularity: *Resonant Monolith*.

Special rules (Fallen Civilization only):

- Add 1 extra AI protocol card.
- Banish 3 random AI tactic cards.
- Gain 3 influence.

Scoring: *Dawn of the Galaxy*.

Victory: Players win the game if at least one of them has more $\sqrt{}$ than the Fallen Civilization. If you want an even harder challenge, both players must have more $\sqrt{}$ than the Fallen civilization at the end of the game.

Tides of steel

Composition: 1 player vs. 2 Automatas.

Difficulty: Any. Both Automatas can have different difficulties.

Galaxy map: 3-player compact.

Singularity: *Resonant Monolith* in Normal, random one in other difficulties.

Special Rule: The Automatas are allies and only consider players as opponents, including during battles where they always target players' units.

Scoring: Standard or *Dawn of the Galaxy*.

Victory: The player wins the game if they have more $\sqrt{}$ than the Automata with the lowest score. If you want a harder challenge, the player must have more $\sqrt{}$ than the Automata with the highest score.

Symbol reference



Recruit: Add units to a sector the Automata colonized, determined by the active AI behavior.



Advance: Move the Automata units on the board according to the active AI behavior.



Colonize: Add a colony to a colonizable sector controlled by the Automata and containing at least 1 infantry.



Research: The active AI protocol card indicates which type of technology (civil or military) to develop.



Move the influence marker left or right on the Automata empire board as required.



The Automata performs a single movement order.



Move the living storm nearest the priority player.



The Automata plays an action card corresponding to the slot number on the Action board.

Player's hub



We've dedicated an entire section on our website to gather all resources and information about the game.

The background of the page is a dramatic, atmospheric illustration. On the left, a sleek, dark rocket or space lander is shown in the process of launching, with a bright white and orange plume of fire and smoke trailing behind it as it ascends into a cloudy, hazy sky. In the lower right foreground, a small figure of a person stands on a dark, rounded rock or ledge. The figure is wearing a dark suit and a long, dark cape that flows out behind them. The overall lighting is soft and diffused, creating a sense of mystery and grandeur.

Automated opponents for Fractal.

We discovered a universe filled with friends and foes, ready to face us in our ascension.

But we encountered more than that: enemies with no allegiance that couldn't be persuaded, threatened, or reasoned with. Following their own secret agendas, these adversaries will need to be dealt with if we ever hope to fulfill our destiny.

The Automata is an expansion for Fractal used to simulate up to 2 neutral players using any of the core factions of the game. More than a variant or a series of tweaks to the rules, it's a complete automation framework using new boards and components to bring complex and believable adversaries to life.

With it, you can add new opponents to 2 and 3 players games and even unlock solo play.