

# Robot Commands and Questions

*This is the reference version, section 7 is the detailed version.*

## 1. WHAT ROBOTS UNDERSTAND

Bot Colony is unique because you type or speak to robots who understand what you say - PROVIDED it's about what they know. Ask "**What do you know?**" and **use the answer you get** to drill further down. You'll need to **command** robots to overcome game challenges. You'll also need to **ask questions** to explore their past observations or facts they learned - to piece together what happened. **Browsing the information below WILL improve your game experience - ignore at your own risk!**

## 2. HOW TO BE UNDERSTOOD

- **THE SHORTER, CLEARER you say something - the better you'll be understood! Use correct English ('pick up the vase' works better than 'pick up vase'). Be direct and DON'T attempt to explain - that is LONGER and only adds to the confusion :).**
- Play initially **by typing** - this eliminates Speech-to-text errors and gives our Natural Language Understanding a better chance to work correctly. Once you know what you can expect from NLU (the tech we make!), please feel free to experiment with Speech-To-Text (the tech we integrate!).
- **Don't skip the tutorial at the beginning of Intruder. Our new update starts there!**
- For Speech-To-Text training we used material similar to the one here, to improve your chances to be understood when speaking to robots.

## 3. CONTROLS

- Click F1 to talk to your assistant Miki-05. Ask "**What should I do now?**" when you're not sure how to proceed.
- Use F10 to see the dialog history, use the thumbwheel to scroll through it. Very useful when playing the Investigation mission!
- Click on tablet/console to enter 'camera mode' in Intruder or in Arrival.
- Use the camera mode minimap to select a ceiling camera, or the robot's eyes camera. Minimaps show other useful things like objects in place, ! for objects out of place, Mike's commands in Arrival.
- Ask Jimmy "What do you know?" and then "What commands do you know?" to find out the types of commands a robot understands (movement, manipulation, etc.). Then drill down to a specific command, eg "**What are your manipulation commands?**". Jimmy's commands are listed below. Pay special attention to 'align' - it can make a huge difference :).
- Click F3 to exit camera mode.
- Click Up Arrow to scroll through a previous questions, commands, etc. You can edit the one you want and hit Enter to re-issue it (**saves you lots of typing!**).
- You can teach a new command that uses commands a robot already knows.

- Click ESC to access Help from the game menu.

### 3.1 ARRIVAL ONLY

- Click CTRL to bring up your PDA in Arrival.
- Click on a robot to talk to it (Arrival only, in Intruder you're in 'camera mode').
- Click ESC to disengage from conversation with a robot (closes dialog box).

## 4. COMMANDS

Just say or type the place or object you want instead of *place, object*, like in 'drop the blue guitar':

- Go to *place* EXAMPLE: "Go to the living room", "Go to the vase." The robot will go there. If you say an object, it will go to it and face it.
- Pick up *object* "Pick up the vase." EFFECT: chains the **face, reach and grab** commands. Try asking "What do you hold?" after "Pick up *object*".
- Drop *object*
- Face *object* (command is not exposed, it's part of pick up X)
- Reach for *object* (part of pick up X)
- Grab *object* (part of pick up X)
- Push in *object* (push in the cushion). Close the drawer (or the cushion :) also works.
- Put *object1* on *object2* "Put the red box on the blue box." "Put *object1* to the left/right of *object2*."
- Put *object1* between *the objects* (put the vase between the candles, put the bottle between the sinks). Put *object1* in the center of *object2*[/].
- Rotate *object* by Z degrees clockwise/counterclockwise However, when you can, use 'align X with Y' - it's faster and more precise!
- Swap *object1* with *object2*. "Put *object1*[/] where *object2* was" - also works.
- Align *object1* with *object2* (for pot, television, chair - imagine you're on a plane or ship looking FORWARD; you'll have a red light on your left and a green one on your right. The object you align with is the plane, look for red/green color hints in the interface :)
- Open the door (open cupboard door - in the kitchen)
- Close the door (or guitar case)
- Point to <object> (or point to room)
- Move forward/back (by Y meters)
- Turn clockwise/counterclockwise ( by Y degrees)
- Stop (to reset a robot).
- wave, jump, nod
- Cindy can 'follow me' or 'stop following me'
- Mike moves up/down or goes to a shelf.
- TEACHING COMMANDS: You can combine the commands above to form new ones - this can be great fun! Try teaching 'mess up the room' and post a screenshot of the result. Steam keys await up-voted screenshots !!

## 5. CLARIFY TARGET OBJECT AFTER GIVING A ROBOT COMMAND

This is useful right after you give a command when the robot needs to **clarify on what object your command should be carried out:**

- ORDER: When Jimmy asks "Which vase? The..., or the ....?", you can reply "the first one" , "the second one", "the last one"
- COLOR When Jimmy asks "Which game box?" you can answer 'the blue one', 'the purple one'
- LOCATION Use the object's location to pick it 'the pot in kitchen', 'the one on the stovetop',
- STATE Use an object's open or close state. For the drawer, cushion, you can answer 'the open one' to select the one you want.

## 6. INVESTIGATION QUESTIONS

Use the investigative questions below to discover Jimmy's 14 videos! When Jimmy answers, **he sets time/date. Keep that in mind when asking your next questions.** This saves having to specify the time and date, and the answer will make more sense.

- Who is X?
- What do you know about X?
- How do you know that?
- When did you first/last see X?
- What did X do at HH:MM on Day/Date? (example: What did Ayame do at 20:15 on Thursday?) What did Ayame do then? What did Masaya do next? What did X do before that?
- What happened then? What happened before/after that? What happened at HH:MM on (day of week)? (What happened at 11:30 on 26/08/2021?) – this will work even if after/before don't return more facts because Jimmy doesn't look back/forward far enough.
- What happened to X? What happened to X at (time) on (date)/(day of week)?
- When did X arrive/enter/leave the house? When did you arrive? Where did X go after that?
- What did X say at (time) on (day)? What did X say before/after that?
- Where was X at (time) on (day of the week)/date?

Other questions that will help you find out more about the characters, like :

- What does X like? When did X play? When did Y speak on the phone?

### QUESTIONS

Try adapting these questions and experiment!

- What is this? (click, then ENTER - useful when you don't know the English word for an object!)
- What is *English word* - useful when you don't understand a word Jimmy says
- What is the color of... (whatever you clicked)
- What is the size of ....?
- Where is....?
- Where are you?
- How tall is the fridge?
- How many chairs are in the room?
- What do you see? - use this to look through Jimmy's camera to see what's inside the chest in Hideki's room!
- Where is the beer? (teach "bring me a beer"!)
- Who is Masaya?
- How do you clean?
- What date is today?
- What day is today?

- Is Ayame in the house? (Y/N question)

## **7. LONGER VERSION OF THE GUIDE (SAME STUFF, MORE DETAIL)**

### **7.1) What robots know (and don't)**

Robots can only answer questions about the things they know.

Robots know things they were taught in the factory, like all the words in the language. They are trained to recognize the people they serve, and they know a few things about what they do and like.

Robots can also recognize the objects in the household they serve, and they remember where they are, their height, width, color, and so on. Same goes about places, like rooms.

Robots know how to do their job, which consists of specific tasks. They know the commands needed to carry out their tasks.

For product liability reasons, robots pay special attention to people coming into view. Therefore, they will know what they saw in the last 48 hours, and what they heard.

This means that you can ask questions that a robot can answer from their observations like "What is this?", "Where are you?" or "Who lives in this house?"

In general, you should only expect robots to know only what they need to know in order to do their jobs.

Don't expect robots to know facts unrelated to their jobs.

Don't expect robots to know about anything they did not witness first hand.

### **7.2) How to be understood**

You'll have a better chance to be understood by robots if you follow these guidelines.

Robots rarely understand words out of context, so use complete sentences.

Pleasantries are wasted on robots. Direct questions and commands will work better. Ask specific questions, like "What is your job?"

If a robot asks you a question, try to reply in a simple way.

If the robot asks you a yes or no question, answer with "yes" or "no", as appropriate.

A robot's understanding of language is very different from a human's. A human brain processes concepts better when more explanations and examples are given.

A robot's processing unit will always work better with simple, clear statements.

So, do not attempt to clarify a previous statement that the robot did not understand because you will just confuse it.

If a robot fails to understand you, simply restate what you said, perhaps using simpler, more direct words.

Shorter, more direct is better. As a guideline, try to say things in 10 words or less.

You don't need to be polite with robots. Instead of saying

"Can you show me the kitchen?"

or

"Please tell me where the kitchen is."

Be as direct as possible and say:

"Show me the kitchen."

or

"Where is the kitchen?"

However, being brief does not mean omitting words. Always speak in well-formed sentences.

For example, do not say "Go kitchen" instead of "go to the kitchen" or "pick up statue" instead of "pick up the statue".

Instead of helping a robot understand you, dumbing things down only makes things worse.

It's best to avoid slang, and to stick to standard, correct English.

A robot will remember the facts you tell it. For example, if you say "My name is Jeff" and then ask a robot "What is my name?", it will answer "Your name is Jeff."

Or if you say "I'm 18 years old" and then ask "How old am I?", it will answer "You are 18 years old."

You can experiment with telling it many facts about anything you want, and then asking questions about the things you said to see how well it remembers.

To orient yourself in the game, ask Jimmy "What do you know?". Use his answer to probe deeper.

When he says "I know some commands", you can ask him "What commands do you know?".

When he says I know some movements commands, some manipulation commands and so on, ask him "What are your manipulation commands?" or "What are your movements commands?" to get more detail.

In general, the idea is that in-game help should be available from the robots, just by asking.

### 7.3) Robot commands (with examples)

If you want Jimmy to **go to a place** or to an object, but you don't know its name, ask first "What is this?" and left click the object instead of Enter.

Once you know its name, you can say "**Go to the kitchen**" or "**Go to the vase**".

Say "**pick up the vase**" to get Jimmy to pick up this object. You can also say "**Go to the vase**" and then "**Pick it up**" and Jimmy will pick up the vase.

You can ask Jimmy "**What do you hold?**" after you tell him to pick up something.

When Jimmy holds an object, you can ask him to put it somewhere. For example, you can tell him "**Put the beer bottle on the table.**"

You can say things like "**Put the red box on the blue box**" or "**Put the blue box to the right of the red box**".

You can also ask Jimmy to **put an object between other objects**, or **in the center of several objects** (*in the center of the candles*).

You can ask Jimmy to rotate something by a number of degrees clockwise or counterclockwise. For example, **rotate the pot by 90 degrees clockwise**.

However, it is much more efficient to ask Jimmy to **align an object with another one**, called the reference object. Align makes the two object faces parallel, a very useful feature.

During align, you'll see red and green markings appear on the sides of the reference object. If you've traveled on a ship or a plane, facing forward, you may have noticed a red light on your left and a green light on your right. You can think of the reference object as a ship or plane and imagine you're on it facing forward, so red means left and green means right. There will be a yellow arrow emerging from the object you're aligning. Just tell Jimmy if you want the arrow to point to red (or to the left) or to green (or to the right) and he'll make the two object faces parallel. When Jimmy holds an object, if you tell him "**Drop it**", he'll let it go and physics will take over. You can ask Jimmy to "**Face the pod**", "**Face the fridge**" and he'll turn to face in the direction of that object. To move objects forward, you can say things like "**Push in the chair**". You can ask Jimmy to **swap two objects**. For example, **swap the salt with the pepper**. If you say "**Pick up the pepper**", "**pick up the salt**" and then "**put the pepper where the salt was**" and "**put the salt where the pepper was**", that will work as well. You can ask Jimmy to open doors. For example, "**open the fridge door**". Of course, he can also close it. Jimmy can also close a drawer, or a guitar case. If you'd like to know the direction of an object or a place, ask Jimmy to **point to it**. You can ask Jimmy to **move forward by 2 meters, move back by one meter, turn clockwise by 90 degrees** or counterclockwise by 30. Sometimes, you may want to stop a robot in the middle of an action. Just say '**stop**'. Jimmy can also **wave, jump** or **nod**. Other robots can do other things. For example, Cindy the welcome bot understands "**follow me**" or '**stop following me**'. Mike the baggage bot understands **move up** and **move down** to access different shelves. You can teach a new command to a robot. You simply combine commands he already knows to make a new one. This can be fun.

## 7.4) Referring to objects

Often, there is more than one object of the same kind in a place. For example, there can be several guitars, several game boxes or several cushions. If you want a robot to manipulate a particular object, you have to be clear which one it is. Often, you can identify the object you mean by clicking on it. However, it is fun to probe how much robots understand and use language to identify the object you meant. When Jimmy lists a number of similar objects, like 'the blue guitar, the silver guitar, the gold guitar' you can **answer 'the blue guitar', 'the blue one', 'the first one', 'the second one' or 'the last one'**. You can use colour to distinguish objects, for example when asked "Which game box?" you **can answer with "the blue one"**. Sometimes, you can use the place of an object to identify it. For example, you can answer "Which pot?" with "**the one on the stovetop**". You can also use the state of an object. For example, you can answer "Which drawer" with "**the open one**".

## 7.5) Investigating

You can ask things like

- **Who is Masaya?**
- **What do you know about Ayame?**
- **How do you know that?**
- **When did you first see Ayame?**
- **When did you last see Masaya?**
- **What did Ayame do at 20:15 on Thursday?**
- **What happened then? What happened before that? What happened after that? What did Masaya do then?**
- **What happened at 20:00 on August 20, 2021?**
- **What did Takeshi say then?**
- **Where was Takeshi at 4 pm on August 20, 2021?**
- **What date is today?**
- **What day is today?**

## 7.6) Other questions you can ask

You can also ask a robot various questions. You can ask questions about its work, its environment, or the events a robot has witnessed first-hand.

"What is the height of the fridge?"

"How old are you?"

"What is a pencil?"

"How do you clean the dishes?"

"What do you see?"

Robots also respond to friendly conversation. You can say:

"Hello"

"Good morning"

"What is your name?"

"How are you?"

"Goodbye."

## 7.7) In Closing

Remember you can use up arrow to access things you've said before and edit them - that's an efficient way to communicate.

Review each message in the dialog box before pressing the enter key.

If you notice a mistake, you can edit using the keyboard before issuing a statement.

If you speak, you can repeat the phrase you just uttered, and the text will be replaced.

You should now be just about ready for your mission. Good luck!

## 8. TO EXPLORE BOT COLONY FURTHER....

If you're interested in the story background, browse Backstory and World Design on <http://botcolony.com/media.php>. If you'd like to dive deeper, you can buy the Bot Colony eBook here <https://www.amazon.ca/Bot-Colony-Novel-Present-Future-ebook/dp/B00K7O6BSE>