Getting started with KIBO

1. If this is your first time using your KIBO, insert 4 AA batteries into the battery case. The red scanner light will start blinking.

2. Choose the motors, wheels, and sensors that you want to use. Orient the motors so that the green dot shows through KIBO's transparent bottom.

3. Sequence some blocks into a program. Every program needs a BEGIN block and an END block.

4. Push the triangular button to turn KIBO on. The red scanner light will blink.
   - KIBO will turn itself off if left alone for a few minutes.

5. Use KIBO to scan the bar codes on the programming blocks, left to right, one at a time*. If your scan was successful, KIBO will beep and the scan LED will glow green after each block.
   - *See scanning tips on the back of this guide.

6. Push the triangular button to tell KIBO to go!
   - To re-run the program: push KIBO's button again.
   - To change the program: re-arrange the blocks, re-scan, and push the button. Watch KIBO go!

7. Decorate KIBO with the rectangular stage.
   - Insert stage support or motor module into stage pedestal
   - Insert the wood stage onto the stage pedestal buttons
   - Push & rotate counter-clockwise to secure

Fun things to try

- Try inserting the motors “upside-down,” with the green dot *not* showing and see what happens.
- Insert the motors into the wheels so that the motors’ axles are off-center, relative to the center of the wheels. See what happens!

Good things to know

- KIBO’s red scanner light and triangular button will blink when KIBO is ready to scan a program – OR – when KIBO is ready to run a program. The button will stop blinking while KIBO is scanning a program; the red scanner light will stop blinking while KIBO is running a program.
- When KIBO’s triangular button blinks, it means that KIBO has a program stored in its memory. The triangular button will go dark while KIBO is scanning a new program, and also after inserting new batteries.
- You can put KIBO to sleep by pressing and holding the triangular button for several seconds.

KIBO’s lights can tell you lots of useful things:

- Use KIBO to scan the bar codes on the programming blocks, left to right, one at a time*. If your scan was successful, KIBO will beep and the scan LED will glow green after each block.
- *See scanning tips on the back of this guide.

Use KIBO to scan the bar codes on the programming blocks, left to right, one at a time*. If your scan was successful, KIBO will beep and the scan LED will glow green after each block.
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Check out more fun challenges and activity guides at http://resources.kinderlabrobotics.com.
KIBO 14 robot kit contents
- KIBO body
- Motor modules (2)
- Wheels (2)
- Rectangular stage pedestal
- Support stand
- Slot edge
- Programming blocks (14)
- Parameter cards (12)

Scanning tips
- To scan, hold KIBO 2-4" away from the bar code.
- Shine the red scanner light onto the bar code. It's ok if the light is a little 'bigger' than the bar code.
- If KIBO won't scan, try changing KIBO's position slightly. Move it slightly closer or farther away from the bar code.
- If the light is a little 'brighter' than the bar code, shine the red scanner light onto the bar code. If KIBO won't scan, try changing KIBO's position slightly. Move it slightly closer or farther away from the bar code.

Programming tips
- Make sure you plug in the sensors that your program needs! If you use the WAIT FOR CLAP block, you will need the "ear" (sound) sensor. If you use the LIGHT or DARK parameter cards, you will need the "eye" (light) sensor. If you use the NEAR or FAR parameter cards, you will need the "telescope" (distance sensor).
- If you use the WHITE LIGHT ON block, you will need the light bulb.

Uh-oh...
- If the red scanner light is not blinking, it usually means that your program may have mis-programmed or there may be a problem with the bars.
- If KIBO is turning left or right (or going backward) when it should be going forward, check the motors to make sure that the green dots are showing through KIBO's transparent bottom.

Tips & Troubleshooting
- Follow us on Twitter @KinderLabRobot
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- Join our KIBO community!
- Sign up for our email newsletter for KIBO news, activity ideas, classroom tips, and more at http://kinderlabrobotics.com
- Additional parts available at http://kinderlabrobotics.com/faq
- FAQs and complete parts list at http://kinderlabrobotics.com/faqs

Light output:
- Light sensor: eye
- Light bulb

Distance sensor:
- Telescope

Sound sensor:
- Ear