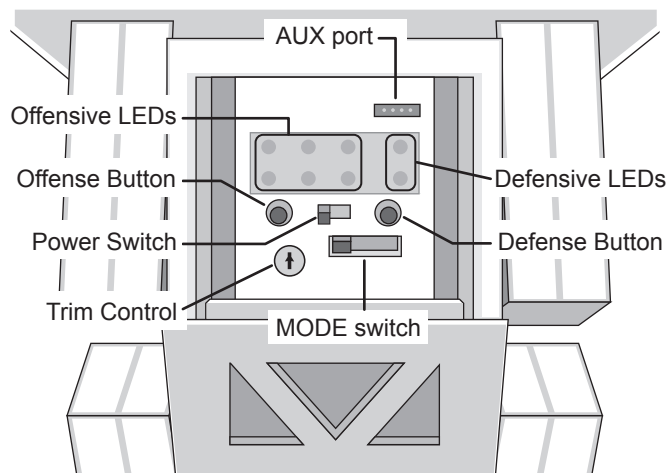


Advanced Instructions: Using two or more Robots



AI-01 Back Panel Controls

Have you ever wanted to practice your passing but had no one to practice with? With the AI-01, this problem is solved. The AI-01 has an **AUTONOMOUS** mode that allows you to select a play pattern to run on one robot, which it does by itself with no direction, while you control the quarterback robot by remote.

There are four things you must understand to control more than one robot: the **MODE** selector switch on the robot, the robot/remote **CHANNEL**, the robot **PLAYS**, and the remote control use of **SWITCH** and **HIKE** buttons.

The **MODE** selector on the robot's back panel is a 3 position switch. The positions are A, B, and X.

A	Remote only	Used to control 1 robot on one channel
B	Mixed remote and autonomous	1 robot under remote control, 1 (or more) acting autonomously. And you can change which robot is under remote control at will.
C	Autonomous only	Used to set robot(s) to only run autonomous instructions. Mode X robots ignore remote commands except HIKE .

Remotes and robots must be on the same **CHANNEL** for the robot to respond to remote control commands. There are 12 separate channels available. The channel is defined by two pieces: the robot number (1-6) and the team number (1 or 2).

The channel is displayed on the LED window of both remote and robot for about 2 seconds when you switch them on. The yellow LEDs show the robot number. #1-3 on top left to right LEDs, and #4-6 on bottom. The team number is 1 when the red LED is lit, and 2 when Green. Note that remote and robot come shipped in **DEMO CHANNEL** so that a robot in demo mode does not interfere with robots on normal channels. DEMO channel shows as Robot 1, but Team is both 1 and 2.

TO SET CHANNEL ON THE ROBOT: Turn off robot, then hold down both Offense and Defense play buttons and turn robot power switch ON while holding both buttons. The channel will be displayed briefly, then after about 3 seconds a yellow LED and either a red or green LED will flash. The robot is now in **SETUP** mode where you set the channel. Press the Offense button to change the robot number, and Defense button to change team number. When you have set the channel that you want, press both buttons at the same time and hold for about 3 seconds. LEDs stop flashing when robot exits setup mode.

TO SET CHANNEL ON THE REMOTE: Similar to the robot. Turn off remote, but now hold down the **SWITCH** and **THROW** buttons. Use **SWITCH** to change robot number setting. **THROW** changes team number. Press and hold both for 3 seconds to lock in your channel.

Once you have set robot and remote channel, set the robot's **MODE** selector.

If you want to have one robot a receiver running a play, and one robot a QB that throws a pass, set QB to **MODE A**, and receiver to **MODE B**.

Now that you have the robot and remote set up, it's time to run some **PLAYS**. On the robot's back panel there are displayed the preprogrammed play patterns available. There are 6 offensive patterns and 2 defensive patterns.

Offensive Plays: Fly, Button-hook, Slant Left, Ladder Right, Ladder Left, and Slant Right. When in offensive patterns, the robot will attempt to evade another robot if it detects one in the path.

Defensive Play: Close and Scan (runs forward a short distance then scans for an opponent) or Zone (stay in a zone scanning for opponent). If another robot is detected in defensive mode, robot will move to tackle.

Select Offensive plays by pressing the Offense button. Pressing Defense button toggles between defense patterns.

On the remote, the **HIKE** button starts and stops a play. When in play, the red or green LED on remote will flash to indicate that play is in progress. A steady LED means that you are in huddle.

A robot in **MODE B** will execute an autonomous play when you press **HIKE**, while robot in **MODE A** will respond to Joystick and other button controls. Pressing **SWITCH** (for instance, if you complete a pass to a receiver robot in **MODE B**) changes control to Robot B, and Robot A then executes its autonomous play. When in Robot A command mode, the remote's red LED will be on (and flashing if play has been started). The green LED is on if in Robot B command mode. With practice this becomes easy.

FCC Notification: FCC ID VNG-AI01. This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. The user is warned that any modifications to the electrical circuitry of the robot or remote could void the user's ability to operate them within FCC rules.

