Objective: This tutorial shows the user how to make a simple program that will move the robot from one point to the next.

Turning on the Denso: Find the plug that is attached to the back of the Denso controller. Plug it into the 3 phase 208V plug that’s attached to the 3 phase power trainer. Flip the POWER switch on the back of the robot controller.

Note: If you turn the controller off, DO NOT TURN IT ON AGAIN WITHIN 6 SECONDS.

The robot controller and the teach pendant will turn on. The teach pendant will take you to its main program window. On the left hand corner of the teach pendant is a key. Turn the key to manual mode. Manual mode is where you will do all the programming on the teach pendant.
Create a New Program

To create a new program press F1, (Program). This will take you to the program window. (Below)

Press F1 (NewProg.) again. Another window will appear.

Choose program and press OK. Enter the program’s name and press OK. The new program screen will appear. (Next page)
Go down to line 3 and press F5 (EditLine). Delete the apostrophe and type in TakeArm 0 keep=0. This command allows the robot to download and use the program. Hit OK.
This will take you back to the program menu. Go to line 4 and press the EASY TEACH button on the left of the program window.

Hold down the deadman’s switch on the bottom of the controller until you hear a click. The deadman’s switch allows the teach pendant to control the robots movement.
Now press the MOTOR button on the top left hand corner of the teach pendant. The motor will turn on. Now press CreateLn on the right-hand corner of the program window. This will record the robot’s current position. This current position will be the starting point for the program. Now press the yellow speed button on the top right-hand corner of the program window. A new window will appear. Change speed to 10% and press OK.

Flip the enable bit switch on the back of the robot controller.
Now use the X, Y, and Z keys on the teach pendant to move the robot to another position. This position is the next point that the robot will move to.

Again press CreateLn to record the position. Do this to create as many movement points as you want. Once you are done the last line of your code should be END.

Press F6(Save), and then press OK.
Running the Program

You will return to the Main Program window. Make sure you have selected your program. Then press the Config. button.

A window will ask you if you want to make the programs active. Select ‘Programs in a present folder are active.’ and press OK.
It will ask you if you want to compile. Press OK. Another window will appear. Press OK again. Now turn the key in the left-hand corner to AUTO, and switch the enable switch in the back of the robot. The display will look like this.

Select your program and turn on the motors by pressing MOTOR. Now press F4(Start). A window will appear. Select Single-cycle and press OK.

The robot will then run your program. Return the controller to its original settings and power down the robot.