

## Instructions for installing the track as an upgrade to an existing R17 robot.

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1. Mount the track in a suitable place. There are fixing bolts slid into T-grooves on the underside of the track. The surface must be flat but when you tighten the screws ensure that no strain is applied to the track bed or it will not run. If necessary put rubber or shim under the track.
2. Mount the robot onto the track using the 4 bolts provided. These are metric. Mount the robot such that if the track connector is on your left then the robot connectors will be facing you. The nominal working area (Y-positive) will be the other side of the track, away from the R17 connectors. In Cartesian mode the robot will only work on that side but in joint mode it can access either side. Note: Cartesian coordinates do not include the X value of the track i.e. if you move the track in Cartesian mode the R17 will not register that X value in its WHERE display and all Cartesian commands will be relative to the R17 home, not to Track home.
3. With **the controller switched off** connect the existing sensor cable to the track. Connect the new motor cable from controller to track. You do not need the old R17 motor cable.
4. Connect the flying leads from the track to the robot. There are also two pneumatic tubes in case you need them. If not you may remove them or tie them out of the way.
5. Switch on the controller for a quick test. The robot should work as before but the track will not run yet.
6. Switch off the controller and remove the lid. In the uppermost card you will see a small 8 pin plug-in device labeled h5. Replace this with the one provided marked h6.
7. Switch on the controller in cold start mode. Press enter once. In ROBWIN click "load binary", choose bank 0, start 4000, length 5800. Choose file R17CxxxT.RAM
8. When loaded type ROBOFORTH <enter> then PSAVE <enter>.
9. Test with START then use the teach box. J6 is the track.