

Epson RC+ Programming Language and Operations Training Course



DAY 1

- **Advanced PC based Controller (RC620+ only)**
- **Stand Alone**
- **Remote Control**
- **Robot Safety**
- **Starting EPSON RC+**
- **Independent and Cooperative modes (RC620+ only)**
- **Setup > Controllers**
- **Print Command**
- **Lab 1 (Tutorial)**
- **Input and Output Control**
- **Hardware I/O**
- **I/O Monitor (Tools Menu)**
- **IO Label Editor**
- **Reset Statement**
- **Motor On Statement**
- **Sfree / Slock**
- **Keyword discussion**
- **Pulse Function**
- **Wait Command (Time, input condition)**
- **SW Command (Discreet input condition command)**
- **Comments**
- **Editor Colors**
- **Project Build Status Window**
- **Syntax Errors**
- **Point Labels**
- **Lab2 (Developer basics and control structure)**
- **Projects**
- **Expand Pick and Place Program**
- **Variable Data Types**
- **If...Then...Else...Endif Statement**
- **Basic Loop Structures > For / Next**
- **Do...Loop**
- **Lab 3 (Applied Control Construction)**
- **Motion Concepts**
- **Point to Point Motion Commands**
- **3D motion commands**
- **Robot Manager - Control Panel**
- **Jog and Teach (Direct, PC driven, Teach Pendant)**
- **Points**
- **Lab #4 (Motion PTP & INT)**

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DAY 2

- **Command Mode / Point Manipulation**
- **Working With Robot Points**
- **Pallet**
- **Lab #5 (Pallet stacking packaging routine)**
- **Functions and Call**
- **Lab #6 (Recommended code Structure)**
- **Debugger**
- **Help**
- **Debugging Lab #6 (Step modes)**
- **Motion Control**
- **Lab #7 (Power, acceleration, velocity)**
- **Optimization Techniques**
- **Lab #8 (Corner rounding, best approach)**
- **Tool Offsets (Wizard)**
- **Lab #9 (Working with dynamic tools)**
- **Continuous Path**
- **Interpolated Motion Commands**
- **Parallel Processing During Motion (Forward process IO)**
- **Lab #10 (Dispensing motion commands)**
- **Advanced Editing**
- **Working With Strings**
- **Input Statement Line Input #**
- **Message Box and Input Box (RC620+ only)**
- **Select...Send**
- **Lab #11 (Simple GUI based program selection routine)**
- **Variable Scope**
- **Global Preserve Variables**
- **Multitasking**
- **Quit Statement**
- **Task Manager**
- **Lab #12 (Basic Multitasking)**

DAY 3

- **Numbering Systems**
- **Additional IO Commands**
- **Memory I/O**
- **Lab #13 (Controlled Multitasking)**
- **Advanced Point Manipulation and Control**
- **Sense & Till (Bit triggered motion suspension)**
- **TW Function (Wait time reaction trigger)**
- **CX, CY, CZ, CU CV, CW Statements**
- **Lab #14 (Package manipulation control commands)**
- **GUI Explanation and Usage**
- **Task Control and Management**
- **Lab #15 (Applied Remote Control)**
- **Traps (System and User interrupts)**
- **Lab #16 (Trap commands and associated code structure)**
- **System History**
- **Controller Tools**
- **Error Handling**
- **Lab #17 (Function based error handling)**
- **User Error Editor with User Error built in logging**
- **Lab #18 (Function based User error handling)**
- **Local / Base Coordinate Systems (Wizard)**
- **Local Base Lab Exercise**
- **Advanced Topics**
- **Passing Parameters (ByVal and ByRef)**
- **Serial Communications**
- **Declare and execute DLL (RC620+ only)**
- **Array Variables**
- **Frame Grabber (RC620+ only)**
- **Point File Control**
- **File I/O (RC620+ only)**
- **Always Running Background Tasks (RC620+ only)**
- **CurPos (Sample current position)**
- **Preprocessor Directives (#Define ..)**
- **VB Guide (Overview)**
- **Fieldbus I/O (Overview)**
- **Certificates / Question and Answer**