



HMI-KCO-MT54-KC

For Program Download:

The communication ports on the Kinco PLCs have female DB9 Connectors, which means a USB to RS-232 Converter is needed if your computer does not have a RS232 port. Anaheim sells the UT232R-200 if you don't already have a USB to RS232 converter. A standard RS232 cable will not work, so you need to purchase the HMI-KCO-MT54-KC so that you don't have to make your own cable.



Getting Started



L011237 Select the directory for your new project and enter the name

| Workspace | | |
|--|---|--|
| Project: demo | Address Symbol Var Type Data Type Comment | |
| PROGRAM | VAR BOOL | |
| Initial Data | VAR BOOL | |
| (MAIN) MAIN | VAR BOOL | |
| CONFIGURATION | VAR BOOL | |
| E- RESOURCE | | |
| Global Variable | | |
| Status Chart | | |
| Generations | (* Network 8 *) | |
| _ | | |
| | 1111 | |
| | (NUL) | |
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| vorkspace instructions invication | | |
| Output | | |
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| Workspace | ą | | MAIN | Hardware | | | |
|---|---|---|---------|---|---|--------------------------|--|
| - Project: demo | | | | Module | I Address | Q Address | Comment |
| PROGRAM | | Þ | 1 | K508-40AR | 02 | 01 | CPU508, AC220V Power Suply, DI 24*DC24V, DO 16*R |
| PROGRAM Initial Data MAIN) MAIN CONFIGURATION Second Construction Second Construction Status Chart Communications | | | | O Comm Port0 (RS232/I Address Baudrate Party: DataBits StopBits: Default | 02 Reten CANOpen Others RS485 • • :: 1 • None • • : 8 • 1 • Tir Cancel Help | t1 (RS485) Agdress: 1 | Port2 (RS485) Address: 1 Party: None Party: None DataBits: 8 Modbus Master Timeout 300 ms Retry 0 |
| Workspace Instructions HW Catalo | g | - | ► \ N | $\left \text{ote} \right\rangle 1 / 1$ | | | |

In the Workspace navigate to the Hardware Resource to setup your hardware. If the list view does not contain the PLC you are using, right click and delete.

HW Catalog д 🖃 🧰 КЗ 🛓 💼 CPU 🗄 🛅 Digital modules 🗄 🔲 Analog modules - 💼 K5 🗄 🛅 CPU K504-14DR K504-14DT K504-14AR K504-14AT K504EX-14DR K504EX-14DT K504EX-14DT K504EX-14AR K504EX-14AT K506-24DR K506-24DT K506-24AR K506-24AT K508-40DR K508-40DT K508-40AR K508-40AR K508-40AX K506EA-30AR K506EA-30AT 🛓 🧰 Digital modules 🗄 🧰 Analog modules Workspace Instructions HW Catalog

Select the HW Catalog tab and double click the PLC you are using to add it to the list view, so that the hardware can be setup.



Since most PCs no longer have RS232 ports a USB to RS232 converter must be used. Open the Device Manager, plug in the USB to RS232 converter to see what COM Port number it is given.

| I/O Comm Reten Local AI Loc | cal AO CANOpen Others | | | | |
|------------------------------|------------------------------|------------------------|--|--|--|
| Port0 (RS232/RS485) | Port1 (RS485) | Port2 (RS485) | | | |
| Address: 1 💌 | A <u>d</u> dress: 1 ▼ | Address: 1 | | | |
| <u>B</u> audrate: 9600 ▼ | Ba <u>u</u> drate: 9600 💌 | Baudrate: 9600 💌 | | | |
| Parity: None | Pa <u>r</u> ity: None 💌 | Parity: None 💌 | | | |
| Da <u>t</u> aBits: 8 ▼ | DataB <u>i</u> ts: 8 💌 | DataBits: 8 💌 | | | |
| <u>S</u> topBits: 1 ▼ | StopBits: | StopBits: | | | |
| | Modbus Master | Modbus Master | | | |
| | Timeout 300 ms Retry 0 | Timeout 300 ms Retry 0 | | | |
| Default Cancel Help | | | | | |

Default Parameters of the PLC

L011237

| ware] | | - | | |
|---------------|------------------------|---------------------------------|--|--|
| <u>D</u> ebug | <u>T</u> oo | ols <u>W</u> indow <u>H</u> elp | | |
| 🗳 📫 | | Options | | |
| MAIN | <u>C</u> ommunications | | | |
| | K. | PID wizard | | |
| ▶ 1 | | <u>R</u> eset local variable | | |
| 3 | _ | | | |

Go to the Tools menu \rightarrow Communications

| Communications | And and a second |
|--------------------------|------------------|
| Address | Auto-detecting |
| <u>R</u> emote: 1 ▼ | |
| Local Parameters | |
| Port COM2 - | Slave ID range: |
| <u>B</u> audrate: 9600 ▼ | 1 • 31 • |
| Parity: None 💌 | |
| Data Bits: 8 💌 | Start Stop |
| Stop Bits: 1 | |
| | OK Cancel Help |

Select the COM port that the PLC is connected to with default COM

| Communications | the second se |
|--------------------------|---|
| Address | Auto-detecting |
| <u>R</u> emote: 1 v | |
| Local Parameters | Searching |
| Port: COM2 - | Slave ID range: |
| <u>B</u> audrate: 9600 👻 | 1 • 31 • |
| Parity: None 🔫 | (mmm) |
| Data Bits: 8 👻 | Start Stop |
| Stop Bits: 1 - | |
| | OK Cancel Help |

Click Start to begin auto detecting

| Communications | And and a second second |
|--------------------------|-------------------------------|
| Address | Auto-detecting |
| <u>R</u> emote: 1 v | |
| Local Parameters | Searching completed successfu |
| Port: COM2 - | Slave ID range: |
| <u>B</u> audrate: 9600 ▼ | 1 • 31 • |
| Parity: None 🔻 | |
| Data Bits: 8 🔻 | Start Stop |
| Stop Bits: 1 | |
| | OK Cancel Help |

PLC was successfully detected

| | MAIN * Hardware | | | | | | | |
|---|-----------------|--------|----------|-----------|---------|--|--|--|
| Γ | Address | Symbol | Var Type | Data Type | Comment | | | |
| F | | | VAR | BOOL | | | | |
| | | | VAR | BOOL | | | | |
| | | | VAR | BOOL | | | | |
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| | Ł | <u>D</u> ownload | | F8 | |
| _ | | Co <u>m</u> pare | | | |
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| | | Password | | | |
| | | Information | | | |
| | | Fatal errors | 5 | | |
| | | Common | errors | | |
| le | | <u>T</u> ime of Da | ay Clock. | | |
| Go to the PLC menu \rightarrow Download | | | | | |

| ownload project | |
|--|-------------------|
| Result: | Download Close |
| Set the CPU to "Upload Disabled". | Help |
| $\overline{\mathbb{V}}$ Clear the Retentive Ranges in $\underline{\mathbb{V}}$ area after downloading. | |
| ☑ Clear the <u>P</u> ermanent Backup Ranges after downloading. | |
| | |

CLICK DOWNLOAD

×10:0 ×40.0

Go to the Main tab to write our first program. On the first Network designate the contact I0.0 and the coil Q0.0

| Note | |
|------|---|
| ? | The PLC is now in RUN mode. Do you want to place it in STOP mode and continue to download? |
| | <u>Y</u> es <u>N</u> o |

Click Yes to play the PLC is STOP mode for program download.

| Download project | |
|--|----------|
| Result: | Download |
| Set the CPU to " <u>U</u> pload Disabled". | Help |
| $\overline{\!$ | |
| Clear the Permanent Backup Ranges after downloading. | |
| | |



Program is downloading.

Simulation

KincoBuilder has a simulation tool that allows you to view the status of all contacts, coils, and registers real-time. The simulator will not work unless the PLC is connected to the PC and has the same exact program in its memory.



Go to the Debug menu → Monitor



The contact is ON therefore the coil is ON

HMI and PLC Connection

