

Denso Robotics  
Adding Ethernet Card & Extracting a Backup Project.  
RC5

**\*\*Attention\*\***

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## Equipment Necessary

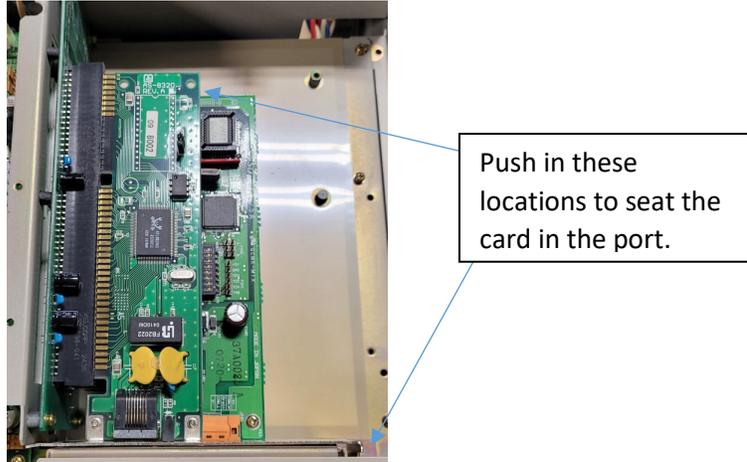
- #2 + (Phillips) screw driver
- RC5 Ethernet Card (discontinued) – 410010-0710
- Computer with WCII installed
- Cross or patch Ethernet cable (depending on computer)
- RC5 Full sized teaching pendant.

## Controller Configuration

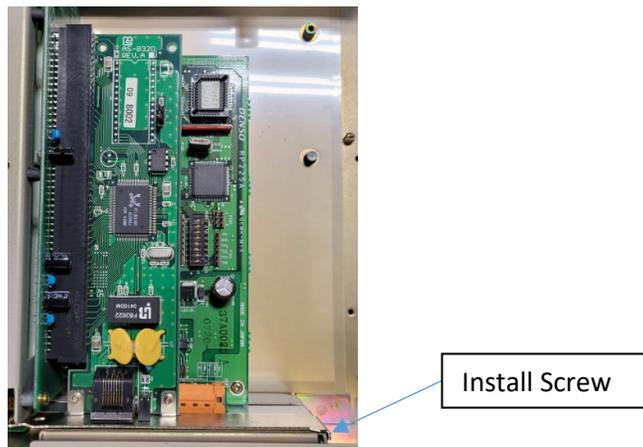
1. Power down controller and remove top cover by removing 8 screws.
2. Remove right side panel from controller by removing 2 screws



3. Remove empty PCI port cover by removing 1 screw, remove panel to allow installation of Ethernet card.
4. Align Ethernet card with open slot and push evenly on the back and front of the card as pictured below.



5. When gold contacts are no longer visible, the card is seated, install port cover screw removed in step 2 to secure the card.



6. Replace top cover, and install 8 cover screws and power controller on.

7. When controller has booted completely, switch the full size pendant to manual mode. From the main green screen, push Set (F6) -> Set Com (F5) -> Permit (F1). Set the Com 2 RS232C to disable or read only, and set Ethernet to Read / write. Push OK to save your changes.

Device	Permission
COM1 (Pendant)	Read/write
COM2 (RS-232C)	Disable
COM3	Disable
COM4	Disable
I/O Ports	Read/write
Ethernet	Read/write

Callout 1: Set to Disable or read only (points to COM2)

Callout 2: Set to read/write. (points to Ethernet)

Callout 3: Use the change button to change com method. (points to Change. button)

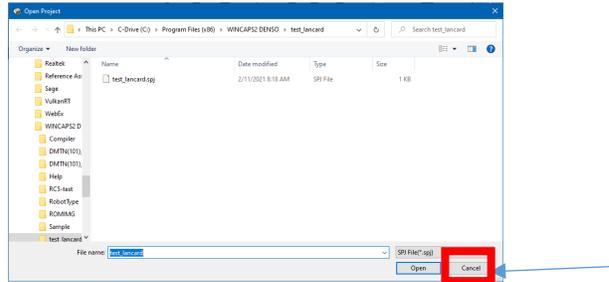
Bottom bar: F5: Change the selection, OK: Exit with saving

Bottom bar buttons: Conn.IP, MultiIP, Change.

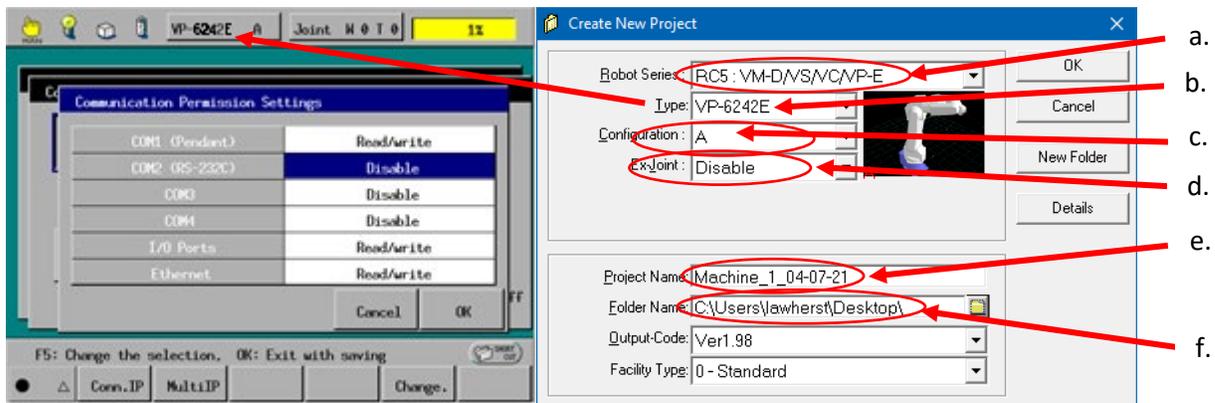
8. Push the “address” button to confirm the controller IP address. Make note of this address.

## Wincaps II

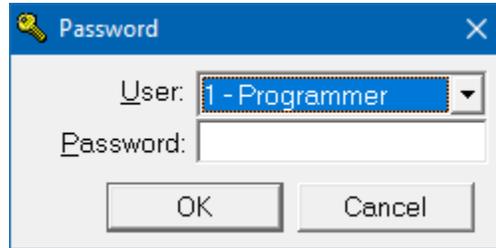
1. Attach your computer to the RC5 controller. Change your computers LAN port's IPV4 address to be able to talk to the controller.
2. Launch Wincaps II. Upon launching WCII you will be prompted to open a file. Push the cancel button.



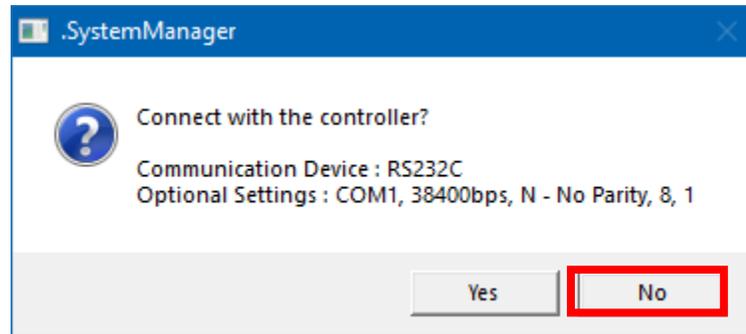
3. Using the teaching pendant, populate the new project window with details from the RC5 controller.
  - a. Robot series found using the noted robot type at the center of the top of the teaching pendant screen. Being a RC5 controller for a VP, the setting of RC5: VM-D/VS/VS/VP-E is selected
  - b. Robot type found using the noted robot type at the center of the top of the teaching pendant screen. In the example below the pendant displays VP6242E thus the Type in WCII is defined as – VP6242E
  - c. The configuration should usually be set to A if the controller is in the USA. This matches the information at the top of the pendant in the example below, the robot type VP-6242E A designates the robot type is for use in the USA.
  - d. The extra joints should be set to disable unless the controller has a J7 and J8 axis on the controller. The robot type for additional axis systems includes an “I” in the robot type. In the example below, the robot type does not include an “I” so the ex. joint is set to disable.
  - e. Name the project. Note – no spaces can be used in the project name. if you need to include a space, use an underscore ( \_ )
  - f. Click the folder icon and chose a directory for the project after it has been created. Note. The default directory is buried within the Wincaps II install and can be difficult to find. It is easier to locate the project on your desktop, or within “my documents”
  - g. Click ok once all of this information is complete and correct. Note – 1 mistake on this screen yields a situation where Wincaps II will be unable to talk to the controller.



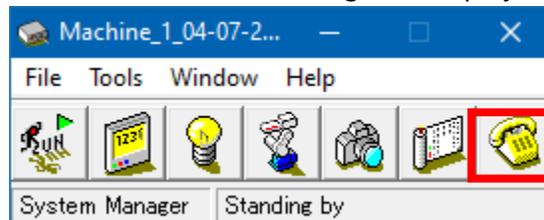
- Change user to programmer, and within the password field use the password bypass of pushing and holding the shift key, then pressing the down arrow.



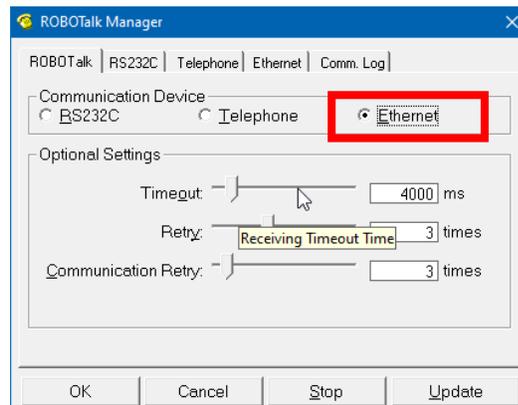
- Select no when asked to connect to the controller.



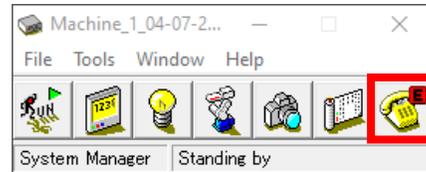
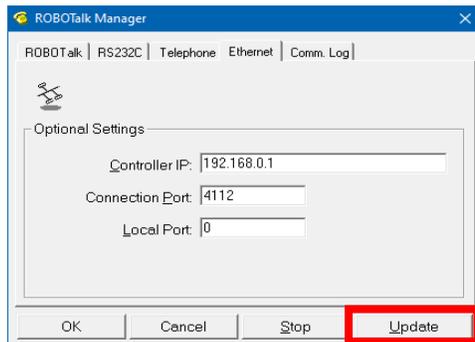
- Select the telephone icon to define communication settings for the project.



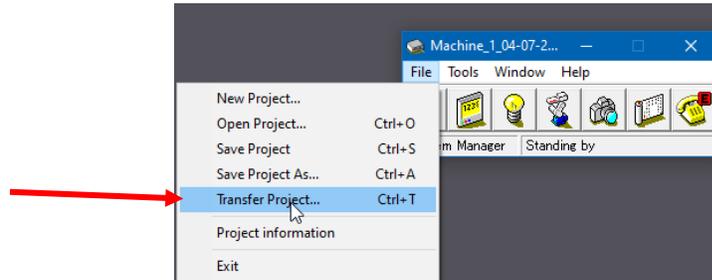
- Select the Ethernet setting within the Robotalk tab.



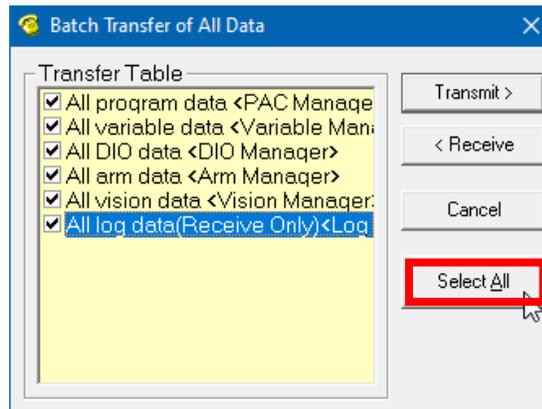
- Select the Ethernet tab and populate the IP address of the controller. You made note of this address in step 8 of controller configuration. Select "Update" after you have this information populated. The telephone icon should now have a red "E" next to the phone to designate the controller and WCII are now connected.



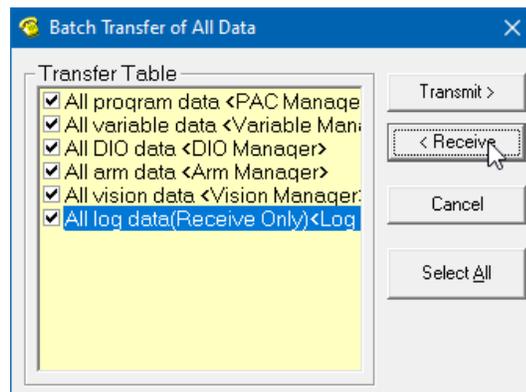
9. Select File – Transfer Project.



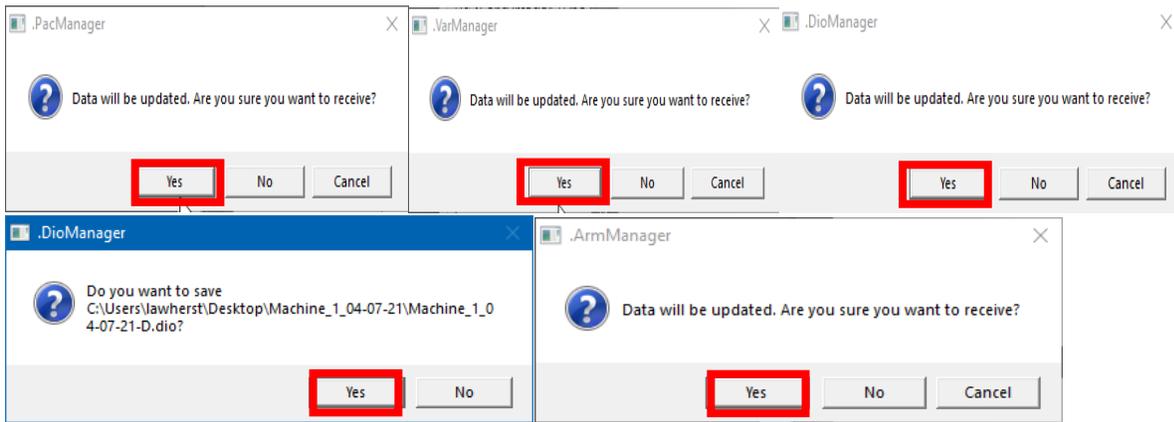
10. Click the select all button in the batch transfer of all data window.



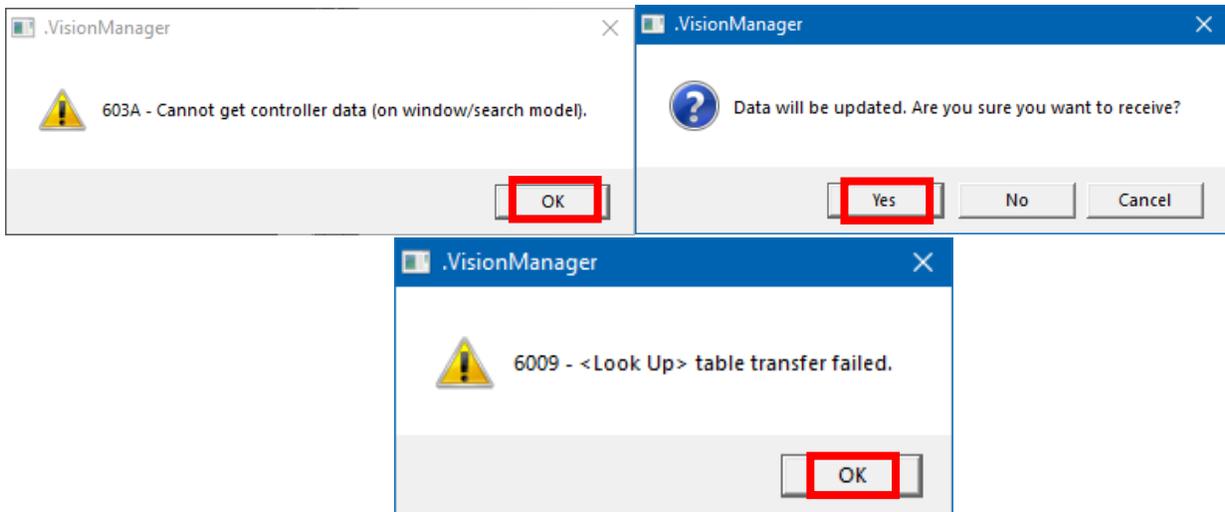
11. Click the **RECEIVE** button as pictured below. Do not select any other button on this screen. Pushing any other button other than **RECEIVE** can result in a situation where you overwrite the project in the controller with empty data.



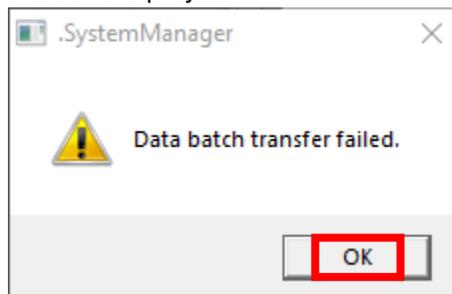
11. Select “Yes” when asked if you want to receive data in the .pacmanager, .varmanager, .diomanager, .armmanager as displayed below.



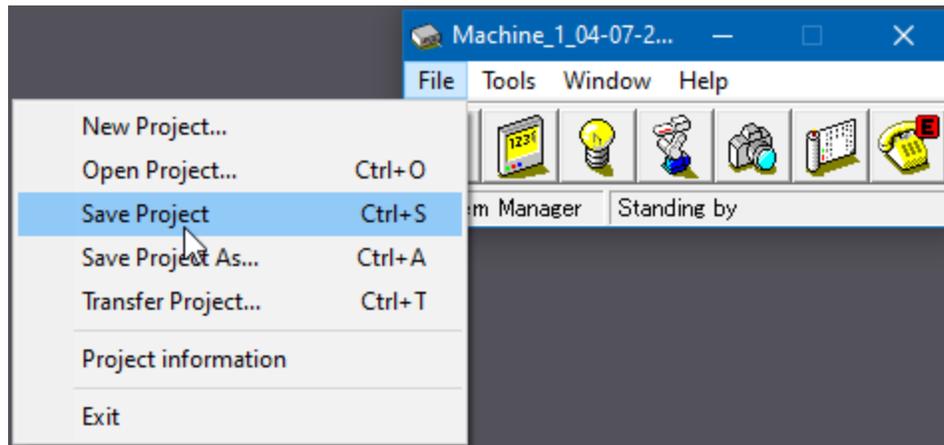
12. You will likely encounter errors from the .visionManager unless your controller has the optional vision board mounted. Click ok to clear the error. Click ok on the .visionmanager to update the vision data, click ok again to clear the “transfer failed” error.



13. Click “ok” on the .systemmanager noting the data batch transfer failed. The failure is only present due to the failure to receive vision data. The rest of the project will have been received in the project.



14. Click File – Save project.



15. WCII saves projects as a series of files located in a folder. As displayed below. Zip the folder to allow it to be archived or e-mailed. Process complete.

