



# APPLICATION NOTE

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**Product Family:** C-more

**Number:** AN-EA-017

**Subject:** Improving C-more Remote Access Performance

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**Revision:** Original

## Improving C-more Remote Access Performance

1. Update to version 6.31
2. Screen Quality and Update Interval Settings
3. Setting the Proper Resolution in the panel project

### Update to C-more Programming Software Version 6.31

C-more Firmware Version 6.31 greatly improves the stability of the Remote Access connection. To take advantage of this install the latest version of the C-more Programming Software and update the firmware in your panels. **Be careful to back up the project in the panel before updating the firmware.**

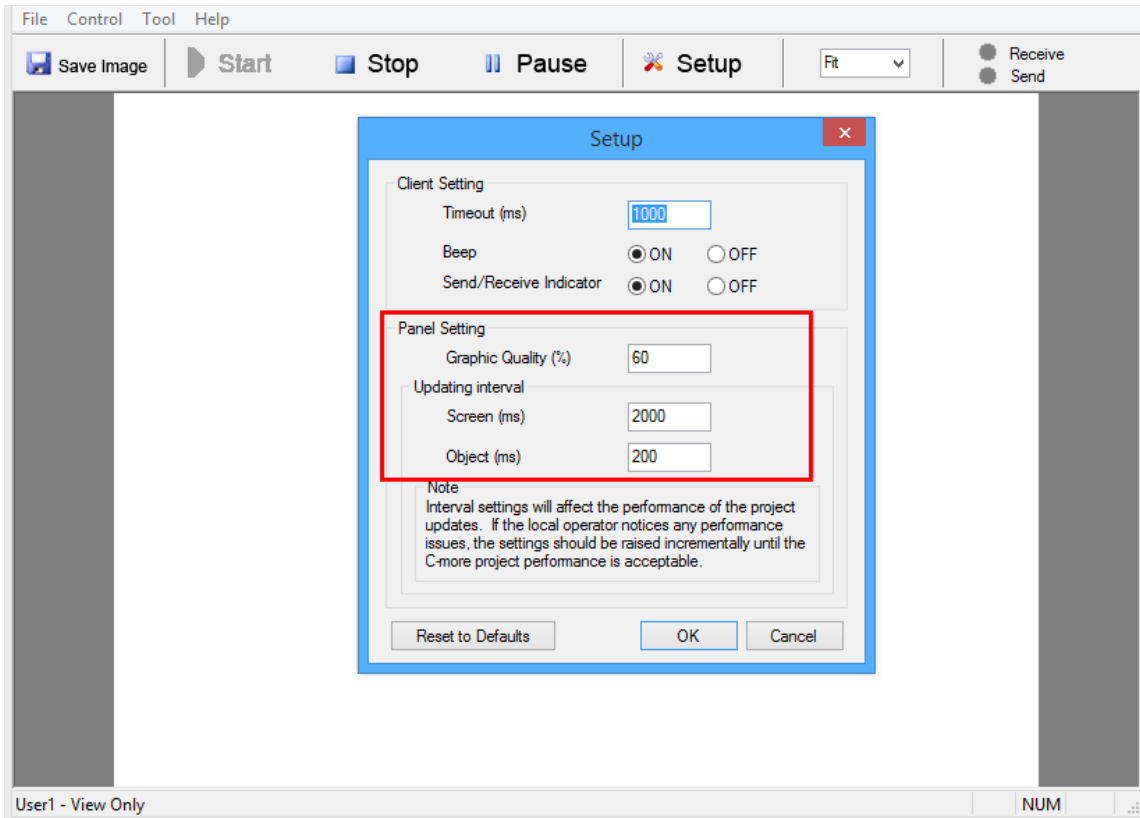
### Screen Quality Settings and Object Update Intervals

Data throughput (Bandwidth) will greatly affect the Remote Access Connection. Reducing the Graphic quality of the Remote Access session reducing the throughput, therefore improving the connection performance.

Note: The Graphic quality setting only effects the Screen updates, **not** Object Updates. Object Updates are **always** 100% quality. As a result, if the Object Update Interval is set to something very small, the Quality setting will have little effect on reducing the data throughput.

#### Reducing Data throughput

To reduce the data throughput, increase the Object Update Interval. Keep in mind longer Object Update intervals will also cause delay in touch response of objects. Indication that an object has been touched will be delayed by the Object Update Interval.



## Remote Access Connection Timeout and Project Resolution

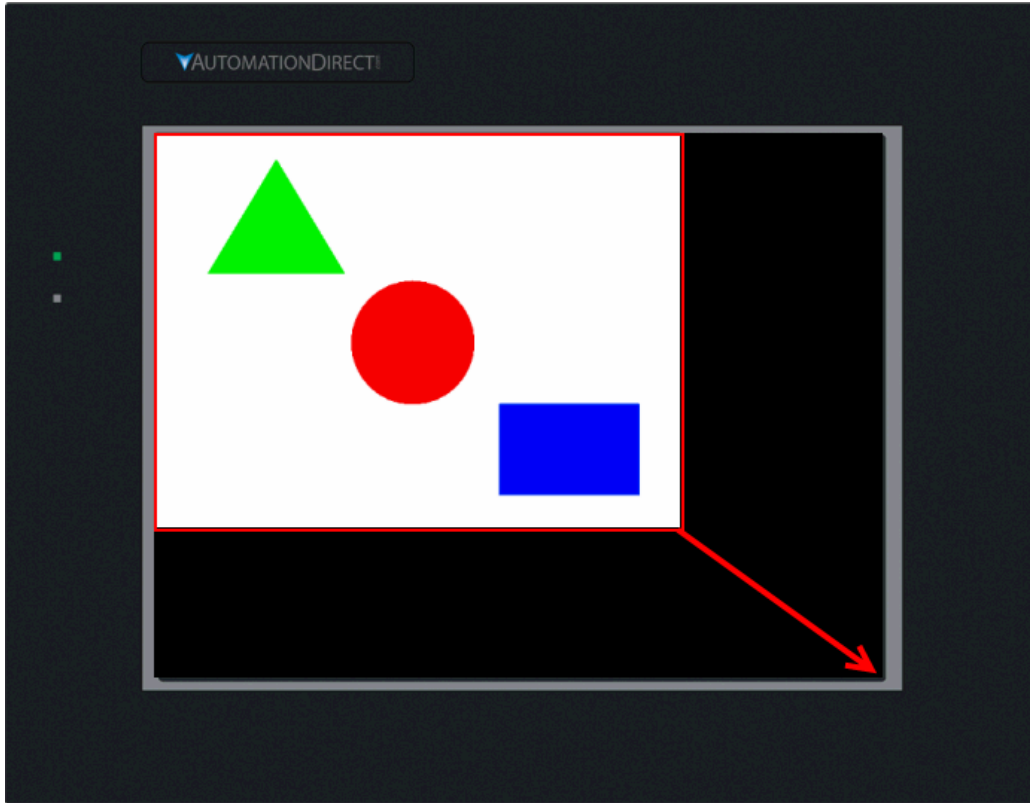
### Effects of Non-Native Resolution on the Panel

The C-more Programming Software is designed to make the conversion from EA7 models to EA9 models with very little effort on the part of the customer. As a result, the resolution of an EA7 project converted to an EA9 project is preserved so that when downloaded the project running in the panel will look just like the EA7 project.

As a result, the project is set to a resolution that is not the native resolution of the panel, which can severely affect the Remote Access Connection performance.

Example: Loading an EA7-T8CL 640x480 pixel project to an EA9-T8CL 800x600 pixel panel.

When a project is downloaded to the panel at a non-native resolution, the panel must calculate the new screen every scan (stretch or shrink). This puts a heavy load on the C-more CPU, especially when it is accessed remotely.



If the project resolution is changed before downloading it, the calculations are made by the PC once, therefore taking this load off the C-more CPU.

### Achieving Optimal Performance with proper resolution setting

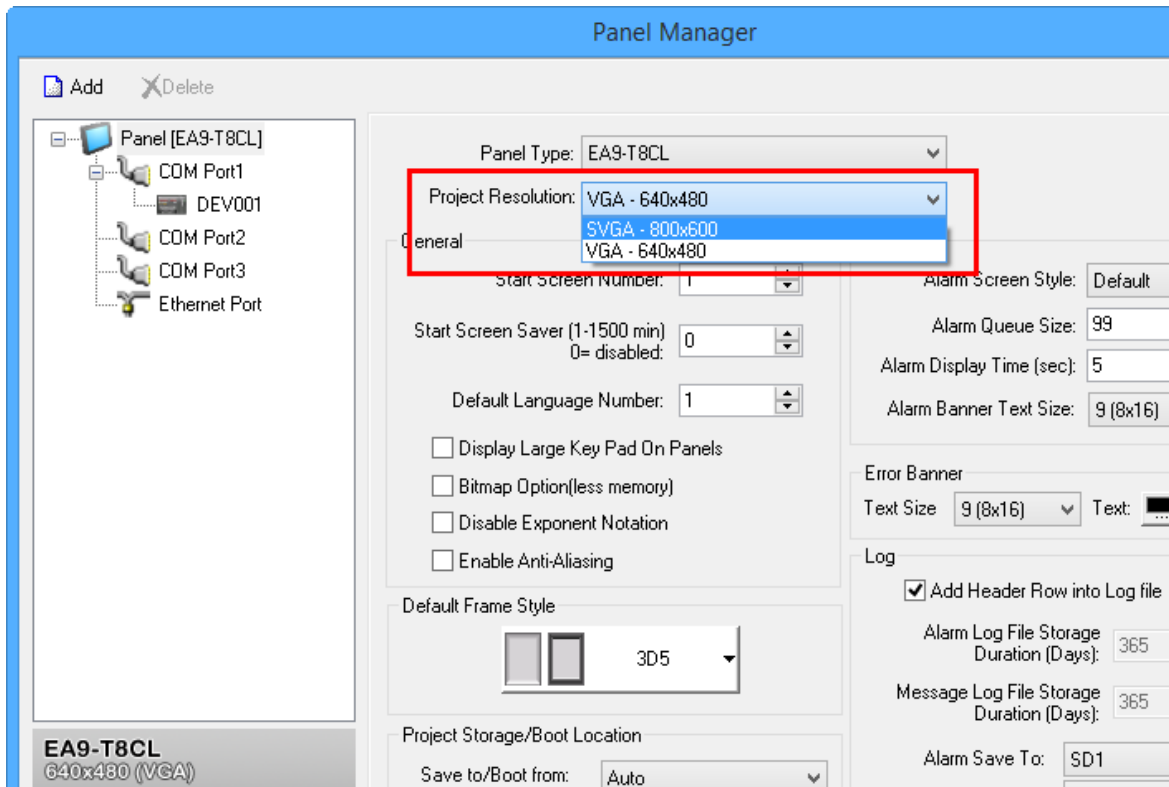
To achieve optimal performance, make sure the C-more project is set to the native resolution of the C-more panel.

Note: The EA9-T6CL is not affected by this.

Model	Native Resolution
EA9-T7CL	800 x 480
EA9-T7CL-R	800 x 480
EA9-T8CL	800 x 600
EA9-T10CL	800 x 600
EA9-T12CL	800 x 600
EA9-T15CL	1024 x 768

## Changing the C-more Project Resolution

The resolution of the C-more project is changed in the Panel Manager as shown below.



## Examples of cause and remedy

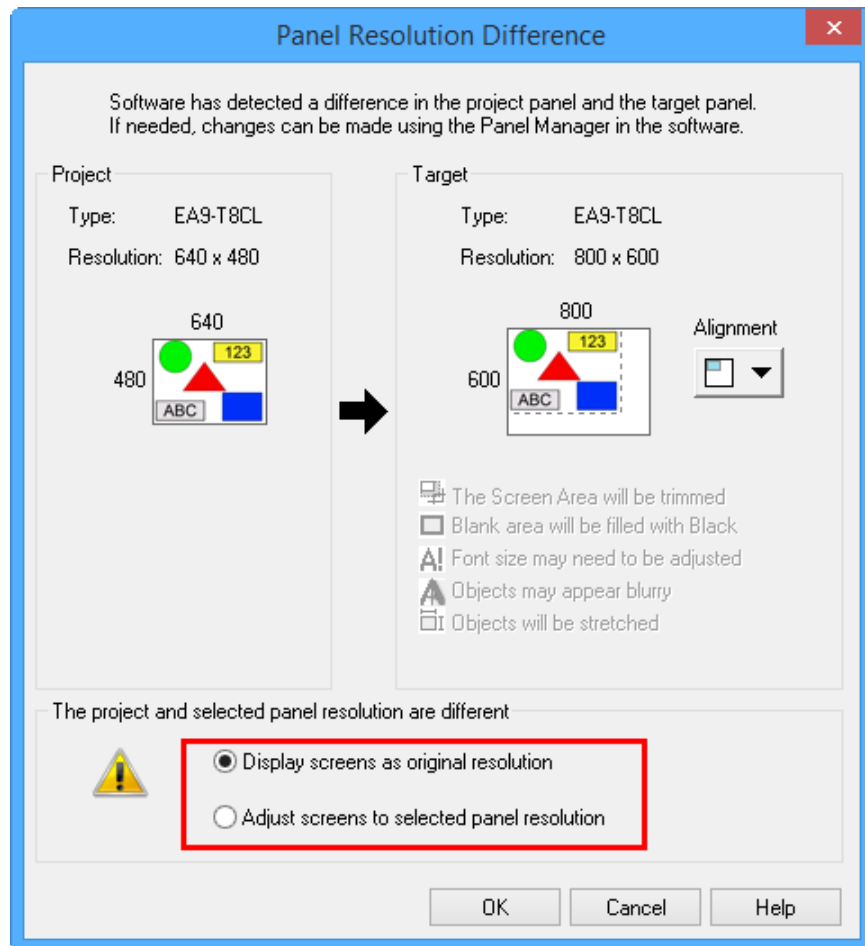
### Converting an EA7 project to EA9

- 1) Convert an EA7 8" or 10" project to EA9
- 2) The native resolution of the project will remain the same as old EA7 project, which is 640x480, without warning.
- 3) The native resolution of the EA9 panel is 800x600.
- 4) When this project is downloaded into the EA9 panel, the panel will have to "stretch" the screen images with each update. This can affect the Remote Access performance.

### Best Practices:

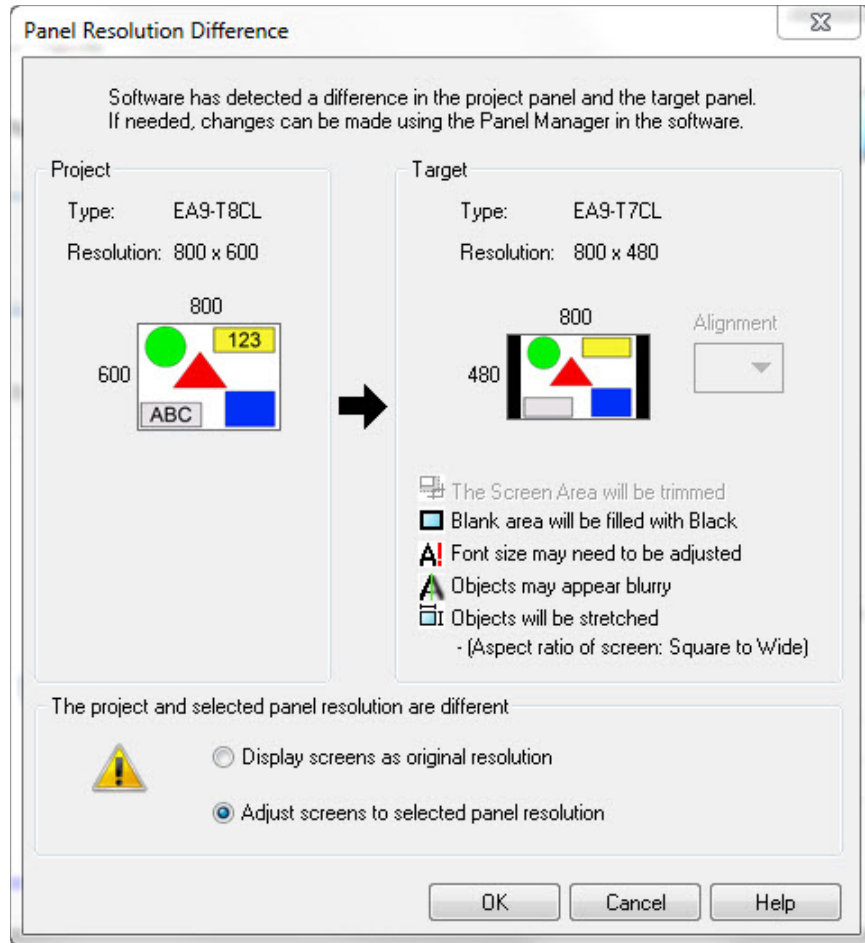
- 1) In the C-more Programming software go to the Panel Manager
- 2) Change the Project Resolution to the highest resolution available for the model, 800x600 in this case.

- 3) As shown below, select either to **Display screens as original resolution** or **Adjust screens to selected panel resolution**. It does not matter which one you choose because once it is adjusted and saved, the C-more panel will not have to make this adjustment again.



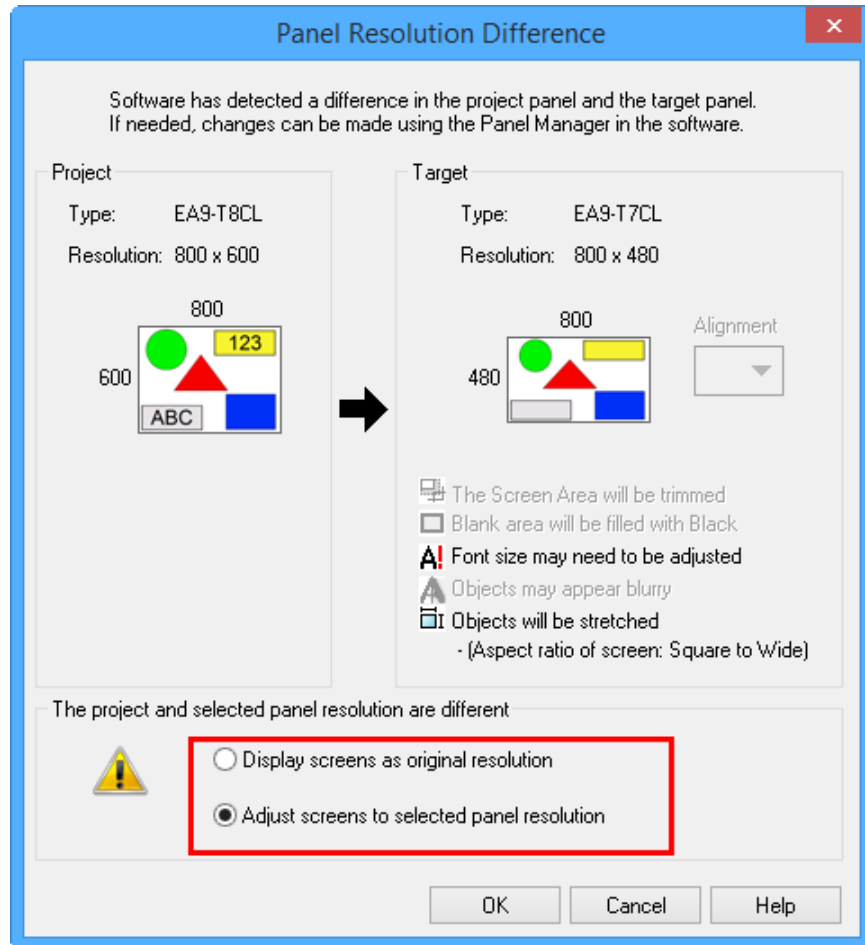
Sending project set to one model to a panel of a different model

- 1) Project is designed as an EA9-T8CL project.
- 2) Project is downloaded to an EA9-T7CL, which cannot support the Project Resolution.
- 3) **Adjust screens to selected panel resolution** is selected. This way the calculations are made once by the PC, taking the load off the panel CPU.



#### Best Practices:

- 1) In the C-more Programming software go to the Panel Manager
- 2) Change Panel Type to match the model of the C-more panel at the highest available resolution, EA9-T7CL at 800x480in this case.
- 3) As shown in the following screen capture, select either to **Display screens as original resolution** or **Adjust screens to selected panel resolution**. It does not matter which one you choose because once it is adjusted and saved, the C-more panel will not have to make this adjustment again.



**Technical Assistance:** If you have questions regarding this Application Note, please contact us at 770-844-4200 for further assistance.