

RCP02 V20 Release Notes

These notes cover changes made to the RCP02 code since release V19 of 15 October 1999. If you are upgrading from an earlier release, please read those notes also.

Bug Repairs

1. The unresponsive antenna checks are now disabled whenever a Dual-System RCP is in the inactive state.
2. Bug repaired in the Dual-System INHERIT mode strategy. It was not properly acquiring the IRIS mode from the other system.
3. The “Monitor Angles” command will now bring about a “Status:Lockout” front panel message as soon as any motion control commands are entered. The message will subsequently be removed only upon exiting the monitor. Previously, incoming serial control packets were indeed inhibited during these times, but the front panel lockout message was not properly shown.

New Features

1. Improvements to the Logic Equation Editor. See *Setup Changes* below.
2. The Dual-System IRIS mode switch strategy now extends to the four cases of Oper/Maint modes and Active/Inactive. New questions allow you to choose the IRIS mode to request for Maint Active and for Maint Inactive. If the requested mode is nonzero, then an additional question appears to choose whether auto mode switching is allowed. A recommended strategy is to request a mode of zero in Maint Active, so that a running RCP will continue doing whatever it was doing already. Maint Inactive should request the IRIS maintenance RST mode, and allow auto switching.
3. The Dual-System site status is not merged into the RCP’s OKAY state when the overall system is in Maintenance mode, i.e., either unit has been disabled with the switch, or the A/B/Auto selector is not in AUTO. Also, Maintenance mode can be detected with new variable “drpc_maint”.
4. The Dual-System transition into INACTIVE now allows for graceful stopping of the antenna. A zero velocity servo is requested during the cool-down period, followed by a zero drive servo. The setup questions set the cool-down time when becoming inactive, and the additional warm-up time when becoming active. The total warm-up time is the sum of the two values.
5. The Dual-System concept of Maintenance Mode has been extended to allow skipping of the warm-up wait time whenever that wait time has already transpired. In particular, if we have been in a “stable” Maintenance Mode for the full warm-up time (i.e., the exact conditions causing that mode have remained the same), then transitions to ACTIVE will occur immediately, without waiting the warm-up interval each time.

Setup Changes

1. It is now possible to enable and disable control logic equations while keeping the content of the equation intact. Use the new “/” command within the equation editor to toggle whether the current equation is effectively “commented out”. The text for disabled equations will still be shown in the editor, but will be prefixed with the “#” character. This feature is very handy when you want to temporarily disable some trusted and debugged equations without the risk of retyping them incorrectly later.
2. It is now possible to add a line of comment text to each logic equation. Use the new “#” command, followed by the text (which may be up to 74 characters in length). If no non-blank text is found, then the comment is removed. Whenever an equation includes a comment, the comment text will be displayed in the line preceding the equation during the editing process.