# Custom Parameter 10 Settings

Some RTU configuration specifics can be set via RTUdiag and its Custom Param 10 feature. This is basically a 16-bit word with each individual bit enabling or disabling a specific feature. To determine the proper value, go down the list and decide which of the features below you want - once you have picked them out, add up the numeric codes for each of these features and this is the value to use for Custom Param 10. For example, if you want "enable quiet operation (no sounds)" and "turn off messages to video screen", then use 1 + 4 = 5 as the value. A common setting is “enable basic error reporting COS to host” and “enable ASCII (text-based) error reporting COS to host”, 2 + 512 = 514.

The following settings are supported by V1_5 and V8 RTU software:

- 1 = enable quiet operation (no sounds)
- 2 = enable basic error reporting COS to host (recommended)
- 4 = turn off messages to video screen
- 8 = enable saving of AO values to non-volatile storage
- 16 = enable saving of DV values to non-volatile storage
- 32 = enable saving of SP values to non-volatile storage
- 64 = enable transmission of syslog messages to host via Ethernet
  (For HSQ use only. This can fill up the host disk. Not yet implemented in V8 sw.)
- 128 = increase size of COS buffer by a factor of 4 *
- 256 = increase size of COS buffer by a factor of 16 *
  (The standard COS buffer size is 8K bytes, which is about 740 COS reports. If factor of 4 and factor of 16 are both selected, the buffer is increased by a factor of 64.)
- 512 = enable ASCII (text-based) error reporting COS to host
- 1024 = enable logging of RTU screen messages to file RTyymmdd.LOG
  (For HSQ use only. This can fill up the RTU disk.)
- 2048 = enable CI types to count every transition as specified by host point definition (requires V1_5 R12n software or better)

In most cases, changes to add or remove RTU Custom Param 10 features do not require an RTU reboot. Features which *do* require an RTU reboot before they take effect are marked with an asterisk (*).

Once you have determined the desired Custom Param 10 value, you can use RTUdiag to set this value in the RTU. Do this as follows:

- From the RTUdiag main menu, select the following menu entries:
  RTU… RTU Hrdwr Cnfg
  - To modify settings that are in a file, select Send Config to change the settings as described below and download them to the RTU.
  - To modify settings that are in an RTU, select Read Config and save the results in a file. Then use Send Config to change the settings as described below.
- When prompted for “Parameter Group”, enter “m”.
- Press Enter to skip the first 9 custom parameters.
- When prompted for “Custom_Param_10”, enter the desired value.

On some MISER systems, it is also possible to modify Custom Param 10 using the host R10 command – see the example below.

```
UNJMVA$ r10 99 /qu
R10 - Set RTU Custom Param 10 Setting
RTU-UNJMVA::1:99              Set Custom Param 10 value         1026? 2
Updating RTU, please wait...
Committing config record
Update complete
```