How to Change HART Type on a DCM-2

When the DCM-2 was designed around the new microprocessor the firmware was completely rewritten to add new features and make improvements. This new firmware, (Type 239) requires a completely new HART device description (DD) to interface with the DCM-2. However, written into the new firmware is the ability to set it to closely emulate Beck's earlier DCM boards (Type 1 code in Group 11, Type 10 Group 22). This makes it possible to interface with the DCM-2 using the older DD's. A handheld device or AMS system can interface to the DCM-2 using old resources, but any new features of the DCM-2 will not be available when the board is set to emulate the earlier firmware. It is always best to use the correct DD to interface with the DCM-2.

There are two ways to set the DCM-2 firmware to act like an earlier product: via HART or via serial commands. Both procedures are outlined below.

Using a HART device (e.g. a 275 or 375)
to make the new DCM-2 "act as" the old DCM and therefore communicate using the old DD:

1. Use the Descriptor field from the communicator as follows:
    Attach the communicator to the demand circuit. Assuming the new DD is not available, when turned on it will communicate using the "generic" DD.
2. Go to the "Descriptor" field (Path: Drive setup/ Detailed setup/Device Information/Descriptor) and enter "USE-BECK-DD-0001".
3. After it is entered and sent, an error will appear indicating that the descriptor was not accepted as data. (The error is normal since we do not want it to write to the field permanently so that it can be changed back at a later date.)
4. Turn off the communicator. Once it is turned back on it will communicate using the old DD.
    Once the new "BECK MK2" DD has been installed in the communicator, the same procedure can be used to change the DCM back using the new code by typing "USE-BECK-DD-0239" into the descriptor field (Path: Functions/ Device Information/ Descriptor)

Using serial commands using HyperTerm
1. Set up HyperTerm, connect the Beck serial cable and establish communications.
2. Type in the command "harttype 1" to use the old DD. "harttype 239" will restore it to the new DD

Reference Table

	Firmware designation	HART DD name	Possible P/N's
DCM-2	Type 239	BECK MK2	22-5012-59
DCM	Type 1	ESR-D	22-5009-05
			22-5009-09
			22-5009-55
			22-5009-59
Group 22 DCM	Type 10	BECK DCM	12-8224-22
			12-8224-32