PROCEDURE
to
CHANGE AMPERE-TIME RESOLUTION
280 PROCESSOR BD.
W/DynaNet v5.xx or v6.xx

Rev. 01 4/11/03

SCOPE:

This procedure is applicable to the newer DynaNet II control system (the Processor Bds. are P/N 138-0280-XX rather than 138-0150-XX). With this system the configuration for the supply is changed via software rather than firmware.

PURPOSE:

To change the ATC resolution parameters stored in the configuration settings of the 138-0280-xx Processor Board. These settings are stored in the non-volatile EEPROM (Electrically Eraseable Programmable Read Only Memory) within the MC68HC11 microproessor (U20). These settings are originally factory-set based on customer specification on the purchase order.

EQUIPMENT REQUIRED:

1. A Personal Computer with at least one RS232 Serial Port, capable of running baud rates up to 19.2kbaud.

2. A terminal emulator program such as HyperTerminal, ProComm or DynaTerm which will run on the PC.

3. A Male/Female 9-conductor RS232 serial cable.

PROCEDURE:

1. Read this entire procedure before attempting to change the Ampere-Time resolution configuration parameters.

2. Disconnect or discontinue communications from the Host Controller, otherwise use of the Terminal will cause DynaNet II to crash (lock up).

3. Using a 9-pin M/F serial cable, connect to the RS232 Terminal Port inside the control panel.

   NOTE: Some Terminal Port connectors may be located on the rear panel or bottom panel or under the top cover. Consult the Operating Manual for the location in a specific unit.

4. Setup the Terminal Emulator program (HyperTerminal or ProComm) as follows:

9600 baud typical	No parity,
No flow control	8 data bits
VT52 emulation	1 stop bit

5. If applicable, select the Cell No. to be configured. Single cell units have no select switch, 2 cell units typically have a toggle switch and 3 cells or more will have a rotary select switch.

6. Power the unit or cycle power, if already powered. The display should show a preamble of POST tests being performed by the DynaNet II control system. After approximately 10 sec, one of two possible screens will display:

   With DynaNet II v5.44, or earlier, the screen should display 'Initialization Complete';please continue with Step 4.

   With DynaNet II v5.45 and later, including v6.xx, the formatted VDT screen will display; please skip to Step 6 and continue from there.

7. Now press <ENTER>; 'ok' should display.

8. Type 32 XRAM VDT and press <ENTER> (Don't forget the "space" between 32 and XRAM, XRAM and VDT and use caps (suggest enabling Caps Lock)).

9. Press "S" key to display the SHOW menu.

10. Press 1 <ENTER> to select SHOW CONFIGURATION PARAMETERS.

11. The information you are interested in is mid-way down the left side of the screen:

    ATC range xxx.x Amp*minutes (or xx.xx Amp*hours)

    ATC range specifies two parameters, the unit of measure (Amp*minutes or Amp*hours) and the resolution of the 4-digit (Cycle) or 7-digit (Totalizer) ampere-time value (only 4 digits are displayed, however, the Totalizer is set, internally, to the same decimal place).

12. To change the resolution (Decimal Place):

    Press the "q" (lower case) key; 'Successful QUIT' should display. Now press <ENTER>; 'ok' should display.

13. Type # ATC-RANGE EEC! <ENTER>

where # would be selected as follows: 0=xxxx 1=xxx.x 2=xx.xx 3=x.xxx Amp*min
4=xxxx 5=xxx.x 6=xx.xx 7=x.xxx Amp*hrs
and where ATC-RANGE is the variable to be set and EEC! is the Store to Memory command.

NOTE: Don't forget to use caps and place a "space" between the # and variable as well as between the variable and the Store command.

For example, if you want hundredths (xx.xx) of Amp-Minutes, type:

2 ATC-RANGE EEC! <ENTER>

or, if you want tenths (xxx.x) of Amp-Hours, type:

5 ATC-RANGE EEC! <ENTER>

the supply should respond with 'ok'.

14. Type SHOWSTATS <ENTER> to check that the information displaying the three ATC counts has changed. About mid-screen on the right side, if you selected the first example, the 4 Ampere-Time parameters should now show:

Ampere time	amp*minutes
Preset	XX.XX
Counter	XX.XX
Totalizer	XXXXX.XX

15. Either type RESET [ENTER] (RESET must be all caps) or cycle power on the unit. The new A*T resolution is now active.

16. If this unit has a spare Processor Bd., you will need to perform this same procedure on it. Otherwise, by the time the spare board should ever be used, nobody will remember that the ATC resolution must be changed.

17. The unit is now ready for use with the new Ampere-Time resolution. Verify the new setting by observing the decimal point displayed on any local control (MicroTouch or Terminal Port). It can also be verified on any Host Controller which uses the Upload Config command to set the Decimal Place on its Operator Interface (if the Host does not use the Upload Config, the Host will need to be independently configured to the new resolution). Also, verify the accuracy of an ATC- Controlled cycle to ensure that the resolution is as expected.

18. Disconnect from the Terminal Port. Reconnect Host Port if necessary. Cycle power and the unit is ready to re-establish communications with the Host.