

CDI COMMON LOGIC INTERFACE

PART NUMBERS: 30-0001-1

REVISION LEVELS: _____

CURRENT REVISION LEVEL: M

REVISED PART NUMBER: 60-0001-1 REV M

RECOMMENDATIONS: Use only revision "G" and above boards.
Insure R7 blanking resistor is 53.6k ohms
Insure Z24 and Z34 are 74107 type chips
All new boards will be revision "M".
Change C2 from 50 pf to a 100 pf to increase and stabilize the clock signal strength.

CM500KB MODEM

PART NUMBERS: 30-0002-1

REVISION LEVEL: _____

CURRENT REVISION LEVEL: G

REVISED PART NUMBER: 60-0002-1 REV G

RECOMMENDATIONS: The revision levels 'C' and above should be modified to the following ECN upgrades. Replace all others.

ECN UPGRADE: REV F - Ground test point #7
REV C - Junction of C19 & R39 needs wire to ground. R55 changed from 100 ohms to 249 ohms
Add C58 20 PF CAP to all boards ECN 01-876.
All new board purchased to be REV G.

CALIBRATION: Calibration for the CM500K Modem should be done by the manufacturer before shipping. Any attempts by anyone else to calibrate these boards are approximate and may not be correct. To determine if the Modems are set properly use an oscilloscope to

look at TP-3, an FSK carrier approximately 1.5v P-P equally spaced above and below ground. The other area to look at would be the TTL data at TP-6. The TTL data should be symmetrical and at the proper TTL level.

An approximate Pulse width of 2 milliseconds should be present.

NOTES: R55 can be a maximum value of 499 ohms to reduce the effects of noise on the cable. This value is approximate and depends on length of cable. This should be tested thoroughly at the furthest point before changing all boards.

CDC I COMPUTER INTERFACE

PART NUMBERS: 30-0004-1

REVISION LEVEL: _____

CURRENT REVISION LEVEL: J

REVISED PART NUMBER: 60-0004-1 REV J

RECOMMENDATIONS: There are no significant modifications necessary.

NOTES: Computer interface cable should be as short as possible or redesigned for differential transmission.

CDC-2 COMMON LOGIC

PART NUMBER: 30-00005

REVISION LEVEL: _____

CURRENT REVISION LEVEL: Obsolete

REVISED PART NUMBER: None

RECOMMENDATIONS: This board will operate correctly and can be repaired.
It is not being manufactured and will be replaced
with a 30-0056-1 will be used.

CONTACT INPUT

PART NUMBER: 30-0011

REVISION LEVEL: _____

CURRENT REVISION LEVEL: C

REVISED PART NUMBER: 60-0011

RECOMMENDATIONS: There are no significant modifications necessary.

CONTACT OUTPUT

PART NUMBER: 30-0012

REVISION LEVEL: _____

CURRENT REVISION LEVEL: Obsolete

REVISED PART NUMBER: 30-0092

RECOMMENDATIONS: The 30-0012 board is functional and repairable. It is not being manufactured and will be replaced with a 30-0092.

FAULT DETECT

PART NUMBER: 30-0016-3

REVISION LEVEL: _____

CURRENT REVISION LEVEL: F

REVISED PART NUMBER: 60-0016-3 REV F

RECOMMENDATIONS: All ECN's have no effect on function.
Board timing should be observed with the use of the remote Computrol tester. The LED should go out approximately 2 seconds after addressing is terminated.

CARD READER

PART NUMBER: 30-0020

REVISION LEVEL: _____

CURRENT REVISION LEVEL: F

REVISED PART NUMBER: 60-0020 REV F

RECOMMENDATION: Insure Z20, Z21, Z32 are 74107
Insure ECN # 01-0068 is implemented

SUPERVISED CONTACT

PART NUMBER: 30-0022

REVISION LEVEL: _____

CURRENT REVISION LEVEL: C

REVISED PART NUMBER: 60-0022

RECOMMENDATIONS: There are no significant modifications to this board.

CDC II COMPUTER INTERFACE

PART NUMBER: 30-0056-1

REVISION LEVEL: _____

CURRENT REVISION LEVEL: H

REVISED PART NUMBER: 60-0056-1 REV H

RECOMMENDATIONS: Insure the R1 Resister is 36.5k ohms.
Insure the R9 Resister is 53.6k ohms.
Insure Z5 is 74107.
Insure Z8 is 74107.

NOTES: Computer interface cable should be as short as possible or redesigned for differential transmission.

MULTI-LEVEL SUPERVISED CONTACT

PART NUMBER: 30-0059

REVISION LEVEL: _____

CURRENT REVISION LEVEL: D

REVISED PART NUMBER: 60-0059

RECOMMENDATIONS: There are no significant modifications to this board
and it can be replaced with a 60-0076 board.

POWER SUPPLY SENSING

PART NUMBER: 30-0068-1

REVISION LEVEL: _____

CURRENT REVISION LEVEL: C

REVISED PART NUMBER: 60-0068

RECOMMENDATIONS: Change CR1 from 1N1183A to a 1N6098.
Increase if necessary the heat sink surface
Inspect for loose connections due to heat generation
and the breakdown of the board materials.

Note: This part was changed to obtain a higher power rating and lower voltage drop. This will reduce the load on the power supply and the heat generated by the voltage drop.

COAXIAL SWITCHER

PART NUMBER: 30-0069-1

REVISION LEVEL: _____

CURRENT REVISION LEVEL: D

REVISED PART NUMBER: 60-0069

RECOMMENDATIONS: The surge suppressers should be checked from line to ground to ensure proper protection.

Contact resistance should be measured and verified to be at or near zero.

The original manufactures surge suppressers are obsolete. If replacement is necessary, a new board will be supplied.

These boards have been redesigned. High efficiency relays and new surge suppression components are used.

BACKPLANE MOTHER BOARD

PART NUMBER: 30-0071

REVISION LEVEL: _____

CURRENT REVISION LEVEL: C

REVISED PART NUMBER: 60-0071

RECOMMENDATIONS: There are no significant recommendations to this board.

+/- 12V REGULATOR WITH SENSING

PART NUMBER: 30-0073

REVISION LEVEL: _____

CURRENT REVISION LEVEL: O

REVISED PART NUMBER: 60-0073

RECOMMENDATIONS: There are no significant modifications to this board.
The +/-15v inputs in a dual supply setup should not be wired in parallel. The voltage is supplied from the power supply not the Sense board.

MULTI-LEVEL SUPERVISED CONTACT WITH CHANGE OF STATE

PART NUMBER: 30-0076-2

REVISION LEVEL: _____

CURRENT REVISION LEVEL: G

REVISED PART NUMBER: 60-0076-2 REV G

RECOMMENDATIONS: Replace revision levels "D" and below.

UPGRADE: D to E- ECN-01-039

E to F- Refer to ECN 01-0603 and ECN 01-0335

Relocates RC circuit (see schematic)

Changes Resistor Values for alarm circuitry

OUTPUT CONTACT/CONTACT-OUT

PART NUMBER: 30-0092-1

REVISION LEVEL: _____

CURRENT REVISION LEVEL: F

REVISED PART NUMBER: 60-0092-1 REV F

RECOMMENDATIONS: No modifications required.

NOTES: DS1 - 'ON' indicates communication to the 30-0092 board from the CPU.

Board must start with an even address.

POWER SUPPLIES

The Power supplies at each multiplexor should be wired as shown in the appropriate diagram located in the supporting documentation. It is important that the grounds are common at the power supply and, if desired, a single chassis ground as short as possible is connected from the power supply to chassis. Also, note that there is no +12 and -12 volt ground going to the card cage backplane. Also important is that +15 and -15 volt ground must be run directly from the power supply to the card cage and must be as short as possible. This ground is used for referencing the alarm inputs and must be at the lowest voltage potential in the system.