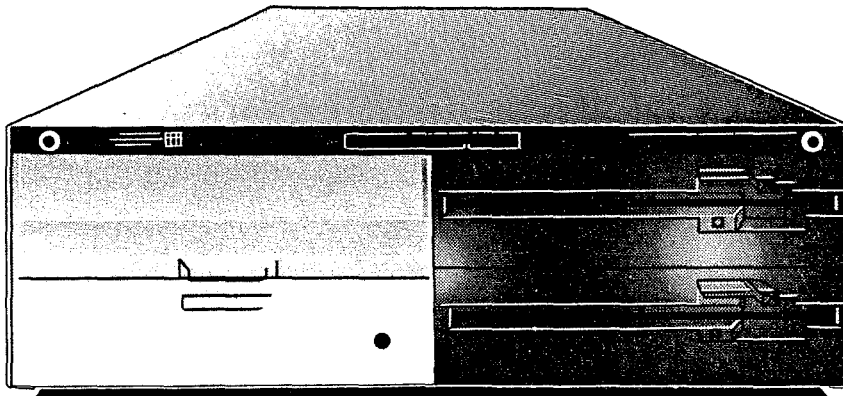


INTERNATIONAL INSTRUMENTATION, INCORPORATED
31131-602 Via Colinas
Westlake Village, CA 91362
(213) 991-9614

UNIVERSAL DISK ENCLOSURES™
from III...The Housing Authority™

Part Numbers

UDE-004 ✓
UDE-TTT
FDE-002
& various options



General Information/Pricing
as of Sept. 16, 1982

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Publication no.
LIT-UDE8208R2

UNIVERSAL DISK DRIVE CABINETS

INTERNATIONAL INSTRUMENTATION INC. HAS INTRODUCED A SERIES NEW DISK DRIVE CABINETS--DESIGNED FROM THE GROUND UP TO ACCOMMODATE A WIDE RANGE OF 8 INCH DISK DRIVE TYPES:FLOPPY AS WELL AS HARD DISK, THIN LINE (TANDON TYPE) AND STANDARD (SHUGART 801 OR 851 TYPES) AND INCORPORATING AN OPTIONAL 5 SLOT S-100 CARD CAGE TO PROVIDE AN INTEGRATED COMPUTER SYSTEM & DISK HOUSING IN THE SAME CABINET. ADDITIONALLY, A VARIETY OF SINGLE BOARD MICROCOMPUTERS MAY BE HOUSED IN THE ENCLOSURES USING III'S EXCLUSIVE MICRO-D-CHASSISTM TO MOUNT SINGLE BOARD MICROCOMPUTER SYSTEMS SUCH AS "THE BIG BOARD" AND THE "MEGA BOARD" THESE SPECIAL CHASSIS HAVE MOUNTING PROVISIONS FOR THE COMPUTERS AND FIT INTO THE SAME PHYSICAL SPACE AS VARIOUS COMBINATIONS OF THIN OR NORMAL 8 INCH DRIVES. THEY CAN BE HOUSED IN III ENCLOSURES ALONG WITH NORMAL DRIVES FOR A TOTALLY INTEGRATED DISK/MAINFRAME SYSTEM. IN MOST CASES, THE NORMAL III DISK SUPPLY CAN PROVIDE THE NEEDS OF BOTH THE COMPUTER AND THE DISK SUBSYSTEMS. A VARIETY OF POWER SUPPLY OPTIONS ARE AVAILABLE TO INCREASE BOTH THE CURRENT CAPACITY OF THE STANDARD 5V@6AMP/-5v@1AMP &24v@6AMP SUPPLY AND TO PROVIDE AN ADDED +12 AND -12 VOLT CAPABILITY TO THE BASIC SUPPLIES.

GENERAL

III UDE series enclosures feature full wrap around covers of 16 gage cold rolled steel and an inner chassis of 14 gage cold rolled steel for strength, durability and a finely styled assembly to suit the most discriminating tastes. The FDE series incorporates the same cover but in a tilt back design coupled to a combined rear/panel main chassis of .090 inch aluminum.

Positive forced air "**CLEAN ROOM**" cooling is standard as is the integral hefty 179 watt triple DC supply and 6 Amp EMI filtering. The FDE series provides 97 watts of DC power and a standard international socket for AC power input. Even such fine detail as selection of electrostatic powder paint for fuze coated durability, chemically impervious protection and mar proof finish is standard for all III ENCLOSURES. UDE series units incorporate an exclusive slip out chassis arrangement for swift but securely latched access to both the drives and power supply. The FDE series uses a tilt back cover to allow rapid access.

SLIP OUT OR TILT BACK ACCESS TO DRIVES/POWER SUPPLY

The UDE series covers have no external holes or screws for attachment to the inner chassis. Instead, the inner chassis is fitted with 1/4 inch steel locking pins which are spring loaded to extend 1/2 inch outside the bottom of the main chassis (two spring loaded pins on the UDE-004 and one on the UDE-TTT). These pins may be drawn up inside the chassis by means of latch pulls on the front panel of the UDE. The Locking pins mate with holes found in 1/2 inch 14 gage tube stock which has been rosette welded along the bottom of the wrap around cover- one set of holes in the fully encased location and two others at convenient, partially slid out positions. The tube stock also provides ventilation space for drawing air into the filter chamber of the cooling fan (also mounted on the bottom of the main chassis). The FDE series uses pivot pins to attach the rear of the cover to the upper portion of the back panel to allow tilt up access to the drives and power supply.

19 INCH RACK MOUNTING OPTION

Part no. UDE-RCK

The UDE-004 and FDE-002 models are also available in a rack mount version which cradles the cover/cabinet with a standard 19 inch rack panel mounting assembly. This allows direct use of the standard spring loaded pin slip out chassis features of the UDE for easy slip out access to the drives and integral supply when rack mounted. The same rack mount also accommodates the FDE series of enclosures but without the slip out feature.

POSITIVE PRESSURE/FILTERED FORCED AIR COOLING

All III enclosures feature cooling by filtered fans forcing air into the cabinet rather than blowing air out. This is a major advantage in design, keeping the enclosure dust free by having the air continuously forced out of all open spaces (such as the slip for the diskette's insertion into the drive). The more common approach, of having the fan expell air, simply draws dust and other particles through the media slip on each of the drives and invites the problems that dust creates with sensitive recording media, read/write heads or close tolerance parts found in modern disk systems.

The filtered fan is mounted inside the cabinet atop a die cut cork gasket filter chamber near the rear of the chassis. This allows the filter element to be easilly accessible for rapid change or cleaning from outside the case. It also provides vibration free/ quite operation of the fan.

HIGH CAPACITY INTEGRATED POWER SUPPLY

III's power supplies use a 1/8 inch aluminum rear panel as the mounting location for the power pass elements, with the elements mounting on the outside of the rear panel and heat sunk with it

and the low power sense and drive circuit board on the other side of the panel (inside the case). This places the main heat producers of the supply outside the case in the ambient room conditions rather than inside the case. This eliminates the heat oven created by the off the shelf/stuff em inside approach. III also uses novel blow by ports to allow even more efficient use of the small, quite fan which is forcing air out of the cabinet. This air exits through ports which are directed past the rear panel power pass elements. This approach is made possible by integrating the power supply as a basic part of the design rather than adding someone else's off the shelf open frame supply to fulfill the minimum requirements of the smallest number of drives that will fit into the cabinet.

III's standard supply for UDE enclosures is a triple supply having outputs of 5, -5 and 24 volts. However, the supply is modular and provides output currents of .8 amps for the -5 but various current capabilities for the 5 and 24 volt supplies depending upon the needs of the user. Also, optionally, a + and - 12 volt capability is available on all III supplies. The basic supply in both UDE cabinets is sufficient to handle up to two Shugart or three Tandon type 8 inch drives (24 volts at 6 amps and 5 volts at 6 amps). However, an augmentation power supply module is available to increase the 5 volt supply current to a total of nine amps. All UDE series supplies are overcurrent protected and the 5 volt supply features overvoltage protection as well. The 5 Volt has its own 25 turn trimming adjustment (accessible on rear panel) for trimming the output voltage and all three supplies have their own LED indicators (on rear panel) to show power on for that particular supply. Test jacks are provided on the rear panel to monitor the actual voltage levels or to use the supplies for other purposes. Each of the supplies is separately fused. The FDE series standard supply is sufficient to handle two normal sized Shugart type drives. It provides 5 Volts at 4 amps, 24 Volts at 3 amps and -5 Volts at 800 milliamps. This supply is optionally available with overvoltage protection on the 5 volt supply and with +/- 12 volt capability.

PLUG TO PLUG DRIVE POWER CONNECTION

Nothing could be easier than attachment of the actual drives to the UDE or FDE supplies. The UDE DC power board contains four of the same AMP DC power connectors found on the drives themselves - with the same pin-outs for power and ground connections. FDE series DC power boards have two such connectors. Each unit is shipped complete with DC-DC power cables (with 14 gage wires) with AMP connectors on both ends. Simply plug one end into the DC power board and the other into the drive and the job's complete. AC power to the drives is introduced in much the same way. Each III enclosure a separate AC power distribution board

which is fitted with AMP .250 FASTON spade terminals. III Enclosures are shipped complete with AC power cables having mating FASTON connectors on one end and both type (QUNE and SHUGART compatible) AMP AC drive connects on the other. Simply plug one end into the AC power board and the other into the connector on the drive.

EMI FILTERED/INTERNATIONAL CORD SET/SOCKET AC POWER

Power to the units is introduced via an international grounded line cord socket on the rear panel and is externally fused for easy fuse access and replacement. On UDE models, this socket is actually a six amp EMI filter for noiseless operation.

BLANKING PORTS

Part no. BLK-xxx

For the user desiring a GROWTH PATH SYSTEM without buying all of the expansion drives at once, attractive plastic over metal blanking ports are available in three different sizes to blank out any of the possible disk mounting locations in either of the cabinets. Part no. BLK-SML is used in place of a 1/2 sized Tandon type drive and Part no. BLK-LRG is used in place of standard sized drives or Winchester type Hard Disk Units. the BLK-HOR provides blanking for a space equal to two thin line drives arranged side by side. The BLK-HOR is available exclusively on the UDE-004 Model.

S-100 CARD CAGE

Part no. UDE-S100

In addition, III offers a fully modular S-100 card cage to fit into UDE or FDE enclosures (or anyone elses). This card cage and five slot mother-board is enclosed in a slip in cabinet/chassis which is precisely the same size and has the same mounting holes as a standard 8 inch disk drive. It contains its own self contained 33 CFM FORCED AIR cooling fan to serve the five S-100 cards of the mother-board. It has a front panel mounted RESET switch and optional main power switch (Keyed). Power to the mother-board is brought in via an 8 pin board mounted AMP power connector which can be either connected to the users separate S-100 supply or to the UDE power supply on a shared basis. +8 volts is available as a plug in tap on the standard UDE power board and can be shared with the disk drives as long as the total power load for the combined requirements of the S-100 and the 5 Volt disk drive loads is less than 6 amps for the standard UDE or 9 amps for the augmented UDE power system. These same combined load ratings apply to the FDE series as well. In addition, a +/- 16 volt and + 8 volt direct connect capability is offered with the optional III S-100 supplies (Part number UDE-S100PWR) Separate, UDE or FDE contained, S-100 supplies are available as options. (Part number S100-SPY).

SINGLE BOARD MICRO-COMPUTER COMPARTMENTS

Part no. MCD-xxx

Three different compartments to house a variety of single board micro-computer systems are available. The MCD-HOR is a chassis mounting system for very large single board micro-computers such as the MEGA system. The chassis is a 16 gage compartment which is the same size as a pair of Thin line disk drives mounted side by side and fitted with PEM nuts at the mounting hole locations for these drives allowing it to be mounted in the UDE-004 enclosure in place of two of the four Thin Line drives which will fit into this enclosure. The chassis has an attractive Plexiglas over metal front panel with provision for the reset button of the micro-computer system. The rear panel of the chassis is punched for D-connectors and power connections for use with micro-computers mounted on the chassis. The chassis comes pre-PEM nutted to mate with the MEGA single-board computer system. Others may be easily substituted with user drilled holes and plastic standoffs. Single board systems such as the "BIG BOARD" will mount either in the MCD-HOR (with lots of room left over) or in the MCD-SML or MCD-LRG. These two computer compartments are the same physical size as either a single Thin Line drive(SML) or a full sized drive(LRG). Both have been pre-PEM nutted for the "BIG BOARD" microcomputer and have Plexiglas over metal front panels pre-drilled for the RESET button and/or a front panel keyed power switch. Possible configurations for

mixed disk/single-board systems with the MCD series are as follows:

MCD TYPE	ENCLOSURE TYPE	COMPUTER TYPE	DISK TYPE
MCD-HOR	UDE-004 only	MEGA OR ANY	2xThin line
MCD-LRG	UDE-004	BIG BOARD SIZE	FULL SIZED DRIVE 2 X THIN LINE HARD DISK DRIVE
	UDE-TTT	BIG BOARD SIZE	1 X THIN LINE
	FDE-002	BIG BOARD SIZE	FULL SIZED DRIVE HARD DISK DRIVE
MCD-SML	UDE-004	BIG BOARD SIZE	HARD DISK+THIN LN 3 X THIN LINE THIN LN+REG. DRIVE
	UDE-TTT	BIG BOARD SIZE	HARD DISK 2 X THIN LINE

DISK ENVIORNMENT MONITOR

Part no. UDE-DEM

Another unique option for any III drive enclosure is the Disk Environment Monitor (DEM). This option monitors all of the critical operating elements inside the case and brings out an audio/visual presentation of their status to the front panel. The status of each of the three supply voltages is shown via LEDs on the front panel. The internal case temperature is measured with a solid state CMOS temperature sensing circuit and an over temperature condition is relayed to the operator using a flashing LED display and a beeping solid state pizeoelectric alarm. This is factory adjusted to trip whenever the internal case temperature exceeds 50° Centigrade. In Practice, this trip point may be user set anywhere in the range of 15 to 200 degrees Centigrade using the 25 turn front panel trip point adjustment pot provided. In addition, the precise internal case temperature may be directly monitored by simply plugging any DVM into the tip jack sockets, provided on the front panel, for a direct digital readout of the temperature in tenths of a degree Centigrade on the 2 Volt DC scale of the voltmeter. The DEM is available as a factory installed option on any III Disk Enclosure systems by simply adding the suffix EM to the main part number. It may be added at a later time by ordering the DEM separately as part no. UDE-DEM. In the later case, the user simply installs the DEM circuit board on PEM nutted mounting positions in the UDE or FDE enclosures using the two screws provided with the UDE-DEM and plugs the cable(also supplied as part of the kit) into a mating connector already mounted on the main DC power supply board. The DEM comes from the factory already assembled/ tested and calibrated --- ready for installation and use.

III enclosures consist of three basic cabinet types. The first of these is the:

UNIVERSAL DISK ENCLOSURE

III Part No. UDE-004

The Universal Disk Enclosure (UDE) is designed to adapt to a wide range of disk drives--both hard and soft as well as normal sized or half sized units.

In addition, the UDE provides numerous functional advantages not found in any other OEM drive cabinet available in today's market.

The UDE will accommodate any combination of standard 8" floppies or their size equivalent fixed hard disk counterparts. The UDE will, for example, accommodate any of the following combinations:

1. Two standard 8" drives such as Shugart, Qune, CDC, etc.
2. Two half sized 8" Tandon or Shugart type drives and one standard Shugart, Qune, CDC, etc.

With the addition of the augmentation supply (III part no. UDE-004AUG), the cabinet will support the following combinations:

3. Four 8" Tandon type half sized floppies.
4. One hard fixed disk plus one standard 8" Shugart type drive.
5. One hard fixed disk plus two 8" Tandon type half sized drives.
6. One UDE-S100 5 card S-100 card cage & motherboard plus two double sided-double density thin line drives.
7. One UDE-S100 5 card S-100 card cage & motherboard plus one full sized 8 inch double sided/double density disk drive.
8. One UDE-S100 5 card S-100 card cage & motherboard plus one hard disk.
9. One MCD-LRG single board micro-computer chassis and any of the drive combinations shown in 6,7 or 8, above.
10. One MCD-SML single board micro-computer chassis and One hard disk plus one thin line series double sided/double density floppy drive.
11. One MCD-SML single board micro-computer chassis and One normal sized Shugart type floppy plus one Tandon type thin line floppy.
12. One MCD-SML single board micro-computer chassis and three Tandon type single or double sided/ single or double density floppies.

13. One MCD-HOR single board micro-computer chassis whose width may be up to 17 inches plus two Tandon type floppy drives.

The UDE is shipped complete with base supply, 50 pin rear panel data connector and all internal cables necessary to connect a total of two internal drives. The power cable assembly is shipped complete and is designed to fit the standard AMP connectors found on the Shugart as well as the Qune type drives.

The rear panel is also punched for the connectors necessary for up to two hard disks and all internal cables and connectors are provided when the hard disk option (III part no. UDE-HDO) is ordered.

All of the power supply options are available with the UDE-004 drive enclosures. The standard supply should support all of the options listed above for standard floppy disk drives. However, if the UDE-S100 card cage, any of the Single Board micro-computer options or hard disk drives are to be housed, the user should probably order the augmentation supply (part no. UDE-004AUG) to assure adequate power.

The second UDE disk drive cabinet is the:

THIN THREE™ UNIVERSAL 8 INCH DISK ENCLOSURE
III Part No. UDE-TTT

The III Thin Three™ cabinet will allow the user to house and power three Tandon or Shugart (1/2 SIZED) 8 inch single or double sided double density disk drives, one 5 card S-100 cage and one DD/DS thin line drive or one Thin line drive and one WINCHESTER type hard disk (any fitting into the same space as a standard 8 inch drive). This last configuration requires the augmentation power supply option (III Part no. UDE-TTTAUG). The three TANDON version is ideal for the RADIO SHACK TRS-80 MODEL II (BUSINESS SYSTEM) user since it is plug for plug compatible with the requirements of the TRS 80™ Model II expansion drive system offering all of the storage capacity (when three single sided/double density TANDON or SHUGART drives are installed) as the RADIO SHACK™ package but at far less cost, with far less bulk and weight and with far more features. The package is complete with all of the power supply, cabinet design, cooling and other features outlined above.

The Thin Three™ enclosure will house any of the following combinations:

1. Three Tandon type thin line floppy drives-single or double sided and single or double density.

2. One standard Shugart style floppy plus one Tandon type thin line drive.
3. One hard disk drive plus one Tandon type thin line floppy.
4. One UDE-S100 5 card S-100 chassis & motherboard plus one Tandon type thin line floppy disk drive.
5. One MCD-LRG single board micro-computer chassis and one Tandon type thin line drive.
6. One MCD-SML single board micro-computer chassis plus two Tandon type thin line floppy disks.
7. One MCD-SML single board micro-computer chassis plus one Shugart type full sized floppy.
8. One MCD-SML single board micro-computer chassis plus one hard disk drive.

The unit is shipped with all internal power and signal cables necessary to attach three 1/2 sized 8 inch drives and with fan/international AC grounded line cord EMI filtered receptical/seven foot heavy duty ac cord/rocker type on<>off switch/ full integrated power supply as described above, rear panel mounted fuse holder and rear panel mounted 50 pin signal line connector.

All the user need do is attach his system via a 50 pin ribbon cable with connectors on both ends (this cable is also available from III as part number CBL-650).

The rear panel is punched for the 20 pin control and 50 pin data connectors necessary for hard disk data cable connection. The internal cable assembly for the HARD DISK is available as III Part number CBL-IHD which provides the rear panel 20 PIN panel mount connector and the internal cable and edge connector for the hard disk. The external 20 conductor ribbon cable with end connectors to attach the system to the drive cabinet is also available as III Part number CBL-620.

This system is designed for double duty as either a 3 drive removable floppy disk subsystem which is a direct replacement for the RADIO SHACKTM model II expansion drive system - or for any other application requiring three 8 inch single or double sided/ single or double density drives in a small well engineered cabinet or as the much sought after hard disk with back up system. In this configuration, the 8 inch drive is usually employed to spool information from the hard disk to high density floppy removable media for back up archival purposes.

All of the power supply options except the S100-SPY are available with the UDE-TTT drive enclosures. The standard supply should support all of the options listed above for standard floppy disk drives. However, if the UDE-S100 card cage, any of the Single Board micro-computer options or hard disk

drives are to be housed, the user should probably order the augmentation supply (part no. UDE-TTTAUG to assure adequate power.

The third III enclosure series is the:

FUNDAMENTAL DISK ENCLOSURE

Part no. FDE-002

The FDE-002 series provides quality housing at budget prices. The FDE series will accomodate any combination of standard sized Floppy or Hard disk drives but is not designed for Tandon thin line types. It will also house the UDE-S100 card cage and motherboard chassis as well as the MCD-LRG single board micro-computer chassis. Part of the economy of this unit is by limiting the power supply to the normal needs of pairs of standard sized floppy drives. The power boards (AC distribution and DC) are identical to the UDE series but have fewer pass elements and, therefore, less current capabilities. The 5 volt supply provides 4 Amps, the -5 volt supply will deliver 800 milliamps and the 24 volt supply is rated at 3 amps continuous operation. However, if the augmentation supply version is ordered, the power supply capability becomes the same as the UDE-004AUG with 5 volts at nine amps, -5 volts at one amp and +24 volts at 6 amps. This version has a part no. of FDE-002AUG. Also, the S-100 seperate supply is available as part no. S100-SPY as is the plus/minus 12 volt add on (part no. PMT-SPY). This unit is available with the Disk Environment Monitor as part no. FDE-002EM.

The configurations possible with the FDE series is as follows:

1. Two standard sized eight inch floppies.
2. One standard sized floppy and the UDE-S100 card cage/motherboard chassis.
3. One standard sized floppy and the MCD-LRG single board micro-computer chassis.
4. Hard disks may be mounted in the FDE enclosures but no provision is made on the rear panel for their data/control cables.

PRICING:

PART DESCRIPTION	PART NUMBER	PRICE
UNIVERSAL DRIVE CABINET complete with power supply and all internal cables for attachment of two 8 inch floppy drives	UDE-004	\$495.00
UDE-004 with built in Environment Monitor for voltages and temperature	UDE-004EM	\$595.00
UDE-004EM with larger power supply. This increases the +5 volt supply to nine amps of current.	UDE-004EMAUG	\$744.95
THIN THREE TM DRIVE CABINET complete with power supply and all internal cables for attachment of three thin 8" floppy drives(TANDON TYPE)	UDE-TTT	\$495.00
UDE-TTT with built in Environment Monitor for voltages and temperature	UDE-TTTEM	\$595.00
UDE-TTTAUG same as above but with augmentation supply	UDE-TTTEMAUG	\$744.95
Economy drive enclosure for housing full sized 8 inch drives and/or MDC-LRG com- puter mounting chassis	FDE-002	\$359.95
FDE-002 but with Over voltage protected 5 volt supply	FDE-002OV	\$389.95
FDE-002 with DEM(Disk Env Monitor) & OV protection installed	FDE-002EM	\$489.95
FDE-002 with DEM, OV pro- tection and Augmentation supply installed Single board micro-computer	FDE-002EMAUG	\$549.95

Disk Environment Monitor kit for monitoring voltages and temperature. May be installed on any III enclosure by simple two screw attachment and cable plug into DC power board. May also be mounted in other enclosures when +/- 5 and 24 volts are available.

UDE-DEM \$ 89.95

Single board micro-computer chassis-PEM nutted for "BIG BOARD" type SB micro-computer and fitted into chassis with same demensions as thin line style disk drive. No internal fan option possible.

MCD-SML \$ 99.95

Same as MCD-SML but sized like a full size 8 inch drive and with option of adding internal fan cooling inside chassis with SB micro-computer.

MCD-LRG \$149.95

MCD-LRG but with internally mounted 33 CFM fan and air ducting to cool SB micro-computer for MCD-LRG series computer chassis.

MCD-LRGFAN \$199.95

Double wide single board micro-computer chassis. Same size as a pair of Tandon Thin Line type drives set side by side. Has option for internal fan cooling. PEM nutted for "MEGA" single board micro-computer but will accomodate most others.

MCD-HOR \$189.95

MCD-HOR but with internally mounted 33 CFM fan and air ducting to cool the SB Micro-Computer.

MCD-HORFAN \$249.95

S-100 Card Cage and 5 slot mother-board. Mounts in place of one Shugart type drive.

UDE-S100 \$ 185.00

33 CFM cooling fan and air ducting for UDE-S100 cage.

UDE-S100FAN \$ 249.95

S-100 power supply mod will allow use of standard UDE or FDE power supplies to handle both disk and S-100 motherboard requirements as long as the total current for both systems does not exceed 6 amps for combined +/- 16(S100) and 24 volt requirements and 6 amps for the combined +8 volt and +5 volt supplies. These upper current limits are the same for both series in spite of the fact that the FDE has a lower DC supply current rating. This is possible because both have the same transformer and rectifier circuits and differ only in the DC pass element sections and deliver the same unregulated DC power.

UDE-S100PWR \$ 95.00

NOTE: If the Augmentation supply option is ordered with the UDE system (PART NO. UDE-004EMAUG) or the FDE system (PART NO. FDE-002EMAUG), then the combined power for Disk and S100 use is increased to 9 amps for the +8(S100) and +5 volt supplies. Added +/- twelve volt capability for any of the enclosure supplies. This is useful for combined supply operation of the single-board micro-computers.

PMT-SPY \$ 79.95

Separate built in power supply for S-100 requirements-this will be in addition to the normal UDE or FDE disk supply already built into the units. Provides 8 volts at 25 amps and +/- 16 volts at 3 amps each. Not available on Thin ThreeTM cabinets

S100-SPY \$ 195.00

HARD DISK INTERNAL CABLE connection package for connection of hard disk

CBL-IHD \$ 89.95

50 COND. RIBBON CABLE TERMINATED WITH 50 PIN MALE CONNECTORS for attachment of drive cabinet to host system (5 feet long)

CBL-550SS \$ 49.95

20 COND. RIBBON CABLE TERMI-

NATED WITH 20 PIN MALE CON-
NECTORS for attachment of
hard disk drive sybssystem to
host computer system. Length
is five feet.

CBL-520SS \$ 39.95

DC power connects and cables
include AMP sockets at each
end of 14 gage 6 wire cables
for attachment of added drives
in any III disk enclosure

CBL-612SS \$ 19.95

AC power connect cables have
AMP FASTON terminals on one
end and SHUGART/QUNE type
AMP connects on other end of
12 inch 16 gage cables.

CBL-312SF \$ 9.95

Three drop positions on data
cable daisy chain. If ordered
with initial unit, these are
substituted for normal 2 drop
daisy chain and are priced as
shown.

CBL-3DCR \$ 14.95

If ordered separately

CBL-3DCT \$ 54.95

Four drop positions on data
cable daisy chain. If ordered
with initial unit, these are
subsittituted for normal 2 drop
daisy chain and are priced as
shown.

CBL-4DCR \$ 29.95

If ordered separately

CBL-4DCT \$ 69.95

Two drop daisy chain data
cable. Required for FDE
series as data cables are
not supplied.

CBL-2DCT \$ 49.95

BLANKING PORT-BLACK PLASTIC
OVER METAL FRONT AND PEM
NUTTED INNER CHASIS TO FIT
INTO SAME SPOT AS DRIVES TO
BE ADDED AT LATER TIME

Small Tandon Type

BLK-SML \$ 24.95

Large Shugart 801 or
Winchester types

BLK-LRG \$ 29.95

19 inch rack mounting kit
provides standard rack
mounting for either the UDE-004

or FDE-002 enclosures.

UDE-RCK

\$ 89.95

FAN FILTERS

package of five

die cut filters-units shipped

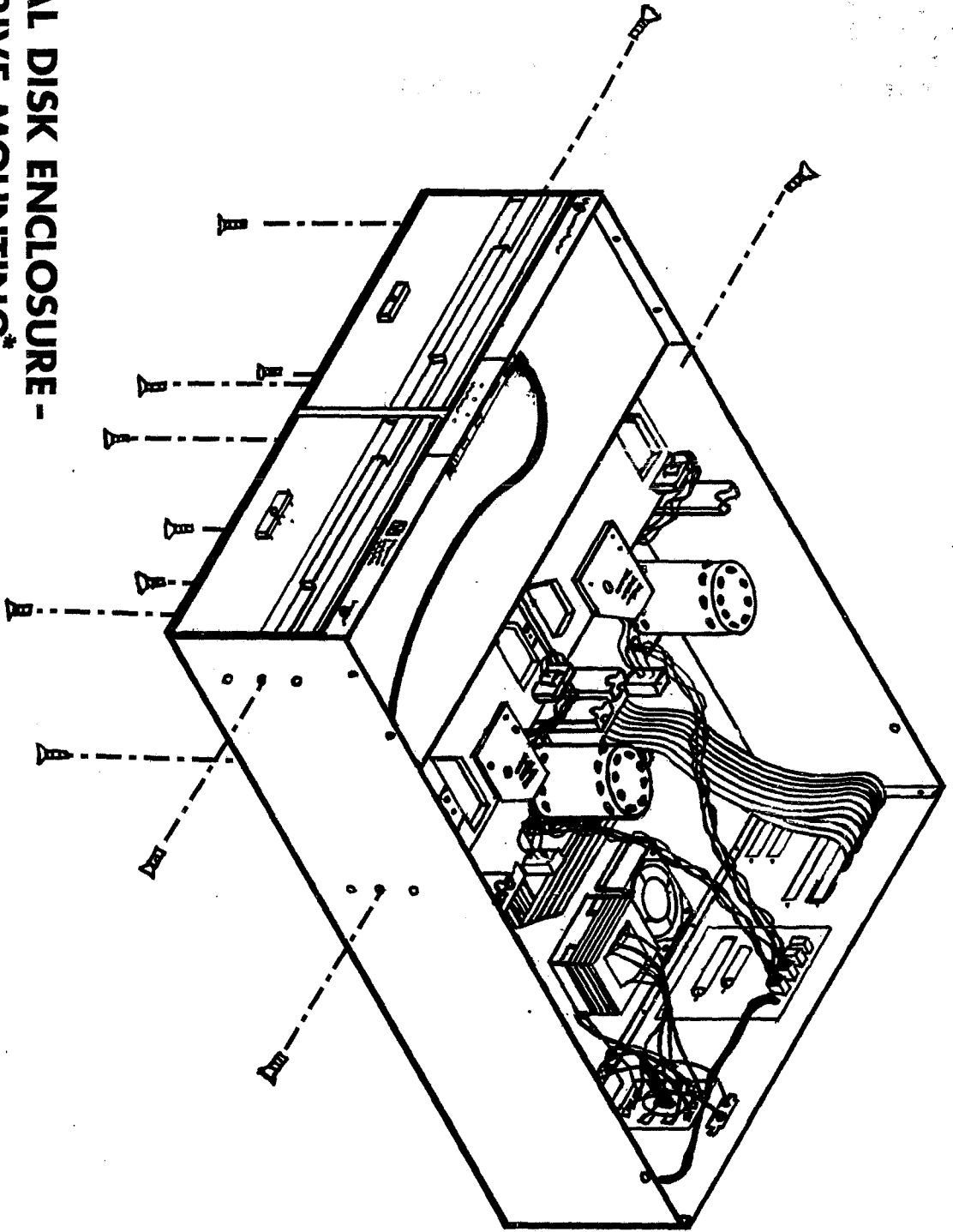
with one filter installed

FAN-FLT

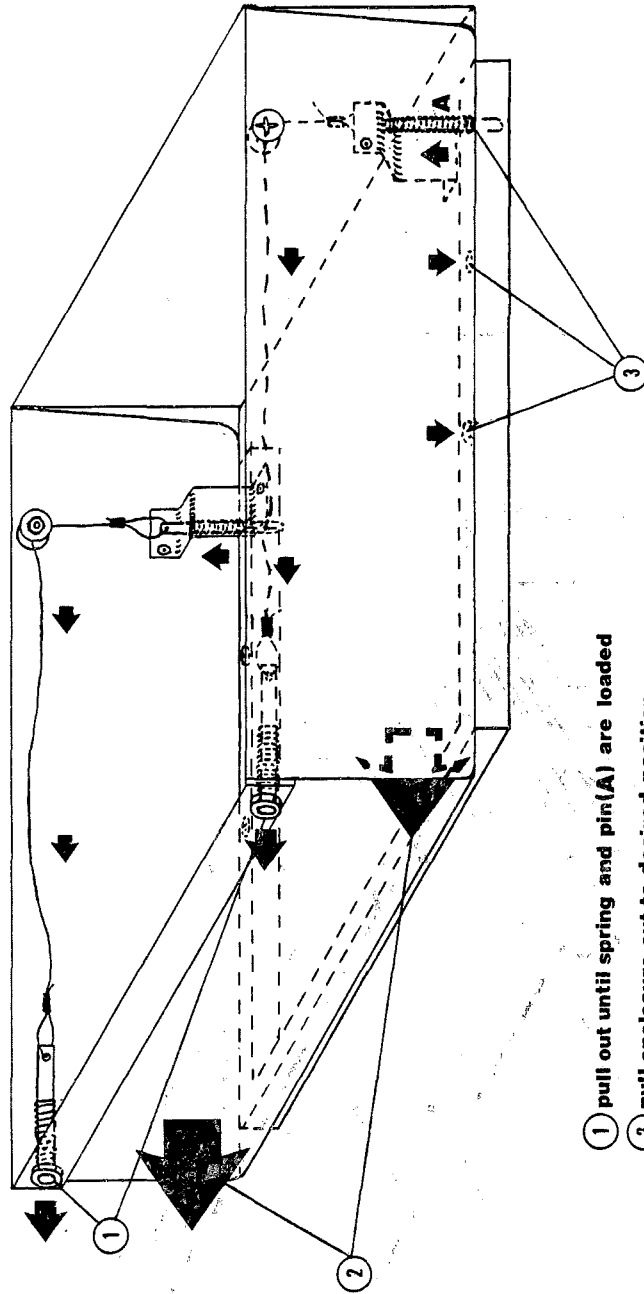
\$ 9.95

**UNIVERSAL DISK ENCLOSURE -
DRIVE MOUNTING***

***all mounting screws 8-32**

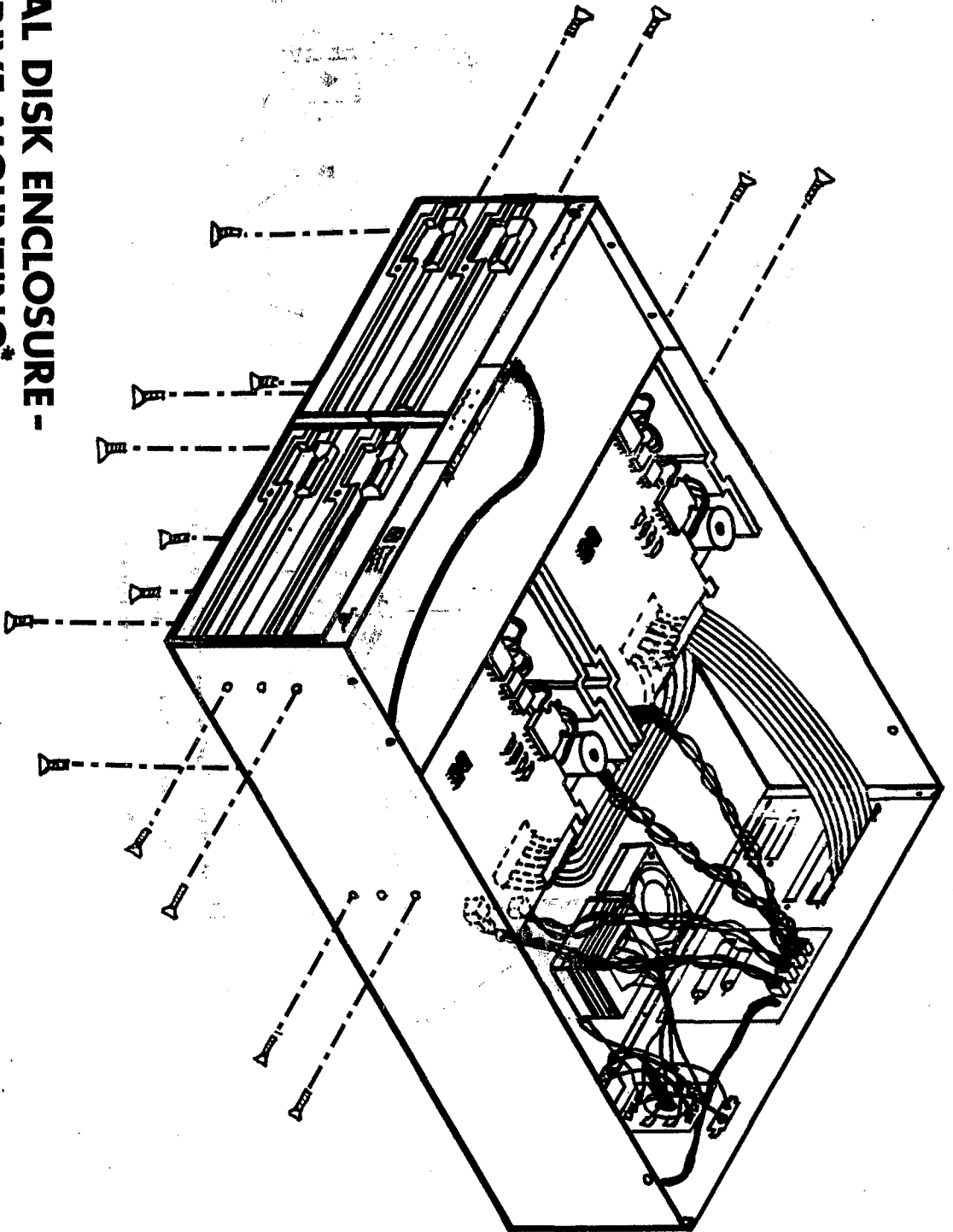


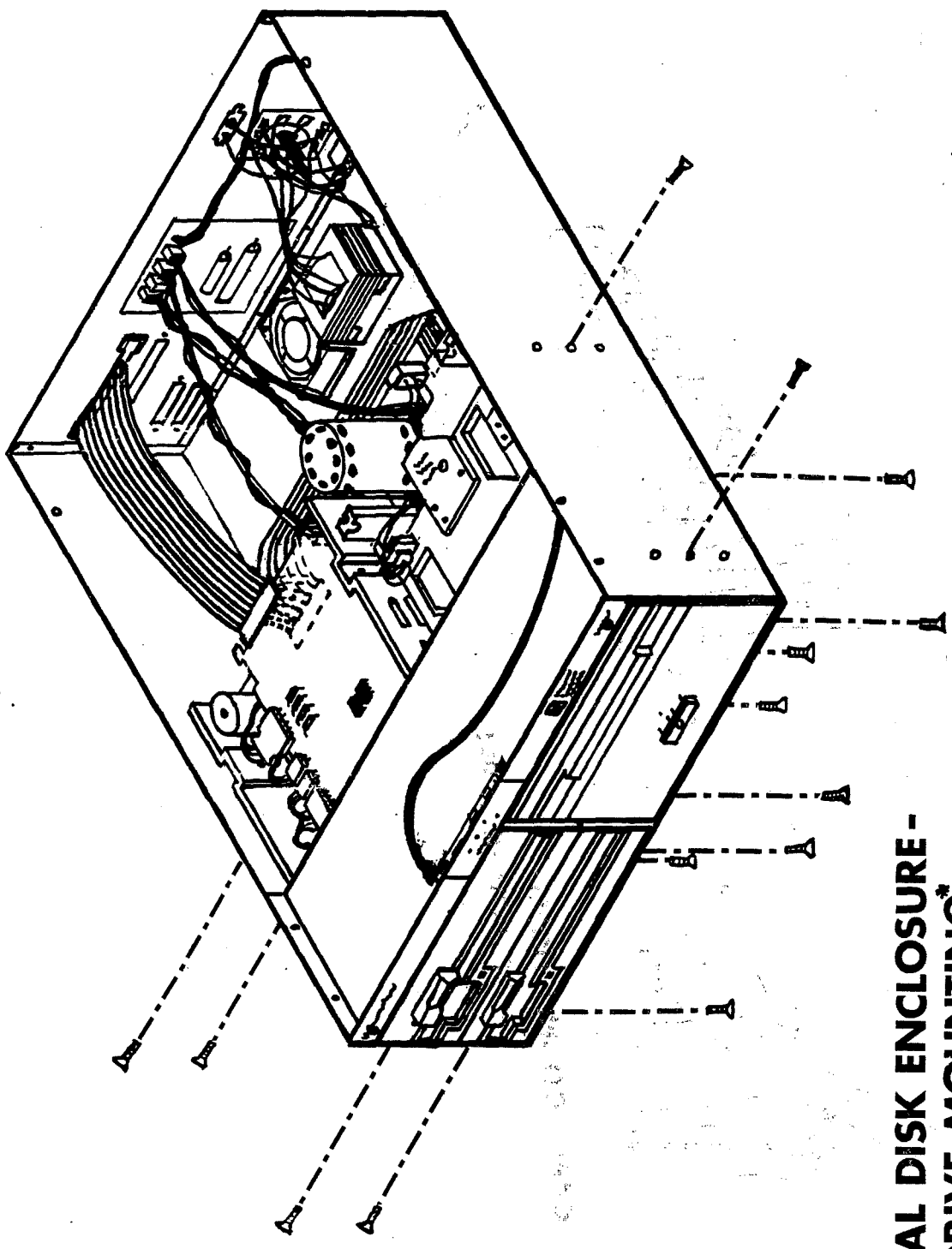
LATCHING PIN MECHANISM



**UNIVERSAL DISK ENCLOSURE -
DRIVE MOUNTING***

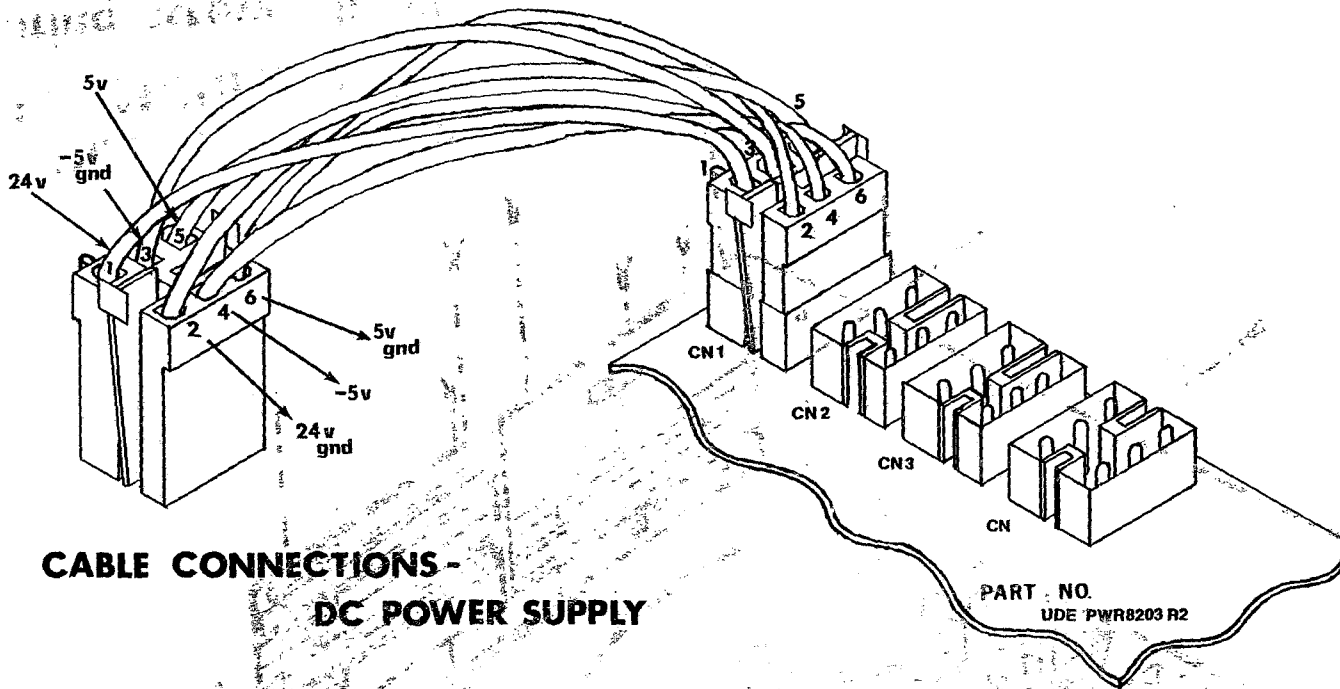
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**UNIVERSAL DISK ENCLOSURE -
DRIVE MOUNTING***

*all mounting screws 8-32

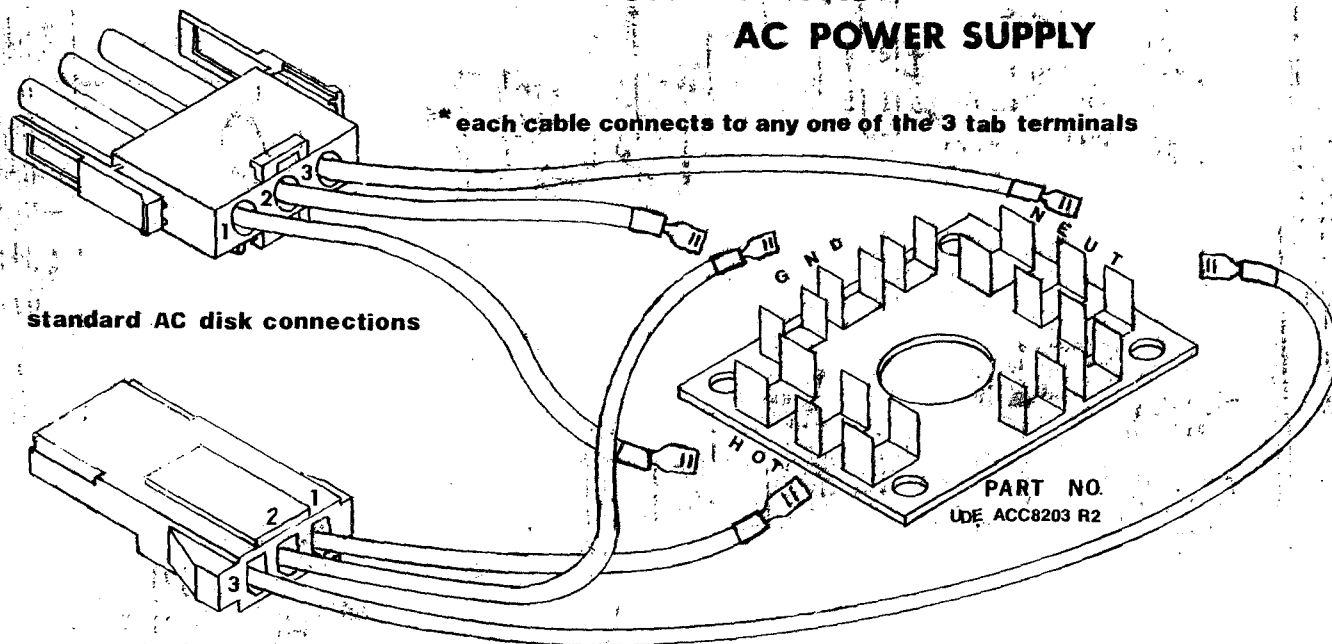


**CABLE CONNECTIONS -
DC POWER SUPPLY**

PART NO.
UDE PWR8203 R2

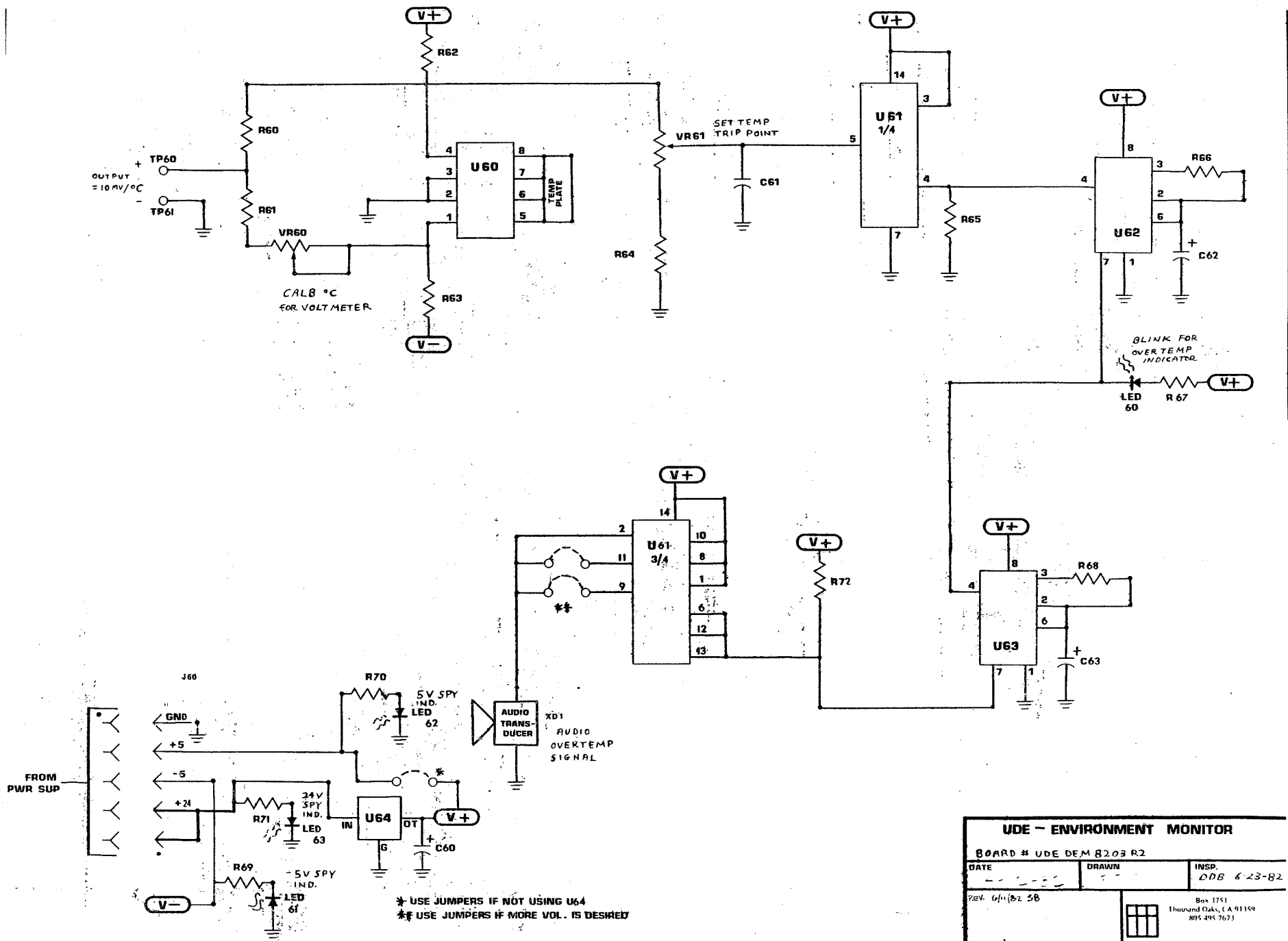
CABLE CONNECTIONSSM AC POWER SUPPLY

* each cable connects to any one of the 3 tab terminals



standard AC disk connections

PART NO
UDE ACC8203 R2



UDE - ENVIRONMENT MONITOR

BOARD # UDE DEM 8203 R2

DATE	DRAWN	INSP.
		DDB 6-23-82

Rev. 6/1/82 58

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