APPLICATION		REVISIONS				
NEXT ASSY	USED ON	REV	DESCRIPTION		DATE	APPROVED
		A	PRODUCTION RELEASE/SEE E.O. 33705		4–17–98	KRIS WU
		B	SEE E.O. 33997		8–25–98	L.D.HATCH
		C	SEE E.O. 34673		9–30–01	L.D.HATCH
		D	SEE E.O. 35345	*aes*	9-20-01	*wu*

MANUAL

SHEET 0 – THIS SHEET
SHEET 1 – FEATURES
SHEET 2 – GENERAL SPECIFICATIONS
SHEET 3 – EXPLODED ASSY VIEW & PARTS REFERENCE
SHEET 4 – ASSY INSTRUCTIONS
SHEET 5 – CASH DRAWER MOUNTING CONFIGURATIONS
SHEET 6 – OPERATION
SHEET 7 – KIT NUMBERING SCHEME

REV STATUS OF SHEETS	REV	D	D	C	C	C	C	C	D									
	SHEET	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCE ARE :
FRACTIONS DECIMALS ANGLES
± .XX± ±
.XXX±
DO NOT SCALE DRAWING

TREATMENT

FINISH

CONTRACT NO.

APPROVALS		DATE
DRAWN ISIS WOLFE		4–13–98
CHECKED D.SUMMERS		4–17–98
ISSUED KRIS WU		4–17–98

IEE INDUSTRIAL ELECTRONIC ENGINEERS, INC.
VAN NUYS, CALIFORNIA

TITLE
MANUAL,
PDK–220S–XXXXXX
INSTALLATION & OPERATING INSTRUCTIONS

SIZE	CAGE CODE	DWG NO.	REV
A	05464	PDK–220S–INOPML	D

SCALE – | PROJ NO. 468 | SHEET 0 OF 7

IEE FILE: ASIZE1.DWG

PDK-220S-XXXXXX* AEDEX 220G Compatible VF POS Pole Display Kit

INSTALLATION and OPERATING INSTRUCTIONS

Key Features:

- **Vacuum Fluorescent (VF) display - 2 line x 20 character 9mm 5x7 dot matrix - with contrast enhancing filter, EIA-232 interface, pass-through system cable and wall mount power supply.**
- **Fully Plug-and-Play compatible with the AEDEX PSD-220G pass-through system.**
- **Display module housed in an impact resistant enclosure with four-position tilt-recline and 330° swivel adjustment. Pole and pass-through mounting base kit are included.**
- **Display certified to the requirements of UL, CE, TUV and FCC Part 15, Class A.**

(* Refer to Page 7 for exact configuration of your kit).

Table of Contents:

Page 2 provides General Specifications and an introduction to the Assembly and Installation of the pole display.
Page 3 provides an exploded view of your pole display assembly with part numbers, so you can identify and verify that you have all the parts ordered
Pages 4 and 5 provide instructions for assembling the display and attaching it using one of many mounting configurations.
Page 6 provides information on how to prepare the display for operation.
Page 7 provides the kit numbering scheme that defines the exact contents as referenced by the number on the lid of the shipping box. **PDK-220S-XXX** defines the characteristics of the display head (i e. display type, software functionality, pole position, housing color and filter color) and cannot be revised.

PRODUCT SUPPORT

For information not found in these Instructions, please contact IEE's Sales Application Engineering Department:

Industrial Electronic Engineers, Inc.
7740 Lemona Avenue
Van Nuys, California 91409-9234 USA

Phone:	**(800) 422-0867 or (818) 787-0311**
Fax:	**(818) 901-9046**
E-mail:	**mail@ieeinc.com**

PDK-220S-INOPML
September 17, 2001

GENERAL SPECIFICATIONS

Interface:

			• Pin Assignments:		
• **Power:**	Supply voltage	11-29 Vdc			
	Supply current @24 Vdc	213 ma (max)	**(Host)**		**DB-25F**
	Supply risetime	100 milliseconds (max)			
• **Caution:**	Supply sequencing	Rapid ON/OFF sequencing	FG	1	FG
		is not recommended.	TXD	2	RXD
	Start cycle	The display is not ready to accept	RXD	3	TXD
		data until 1.2 seconds after	N. A	4-6	N. C
		application of power.	SIG GND	7	SIG GND
			N A	8-25	N C.
• **Signal:**	Serial EIA-232	9600 baud - 8 bits - no parity			
	Serial input levels	+3V to +15V (space/logic 0)			
		-3V to -15V (mark/ logic 1)			
	Data Format				

```
+V      (LSB)                              (MSB)
    ┌──┬────┬────┬────┬────┬────┬────┬────┬────┬──┐
    │  │ D₀ │ D₁ │ D₂ │ D₃ │ D₄ │ D₅ │ D₆ │ D₇ │  │
    │  │    │    │    │    │    │    │    │    │  │
-V    START            8 DATA BITS              STOP
      BIT                                       BIT
```
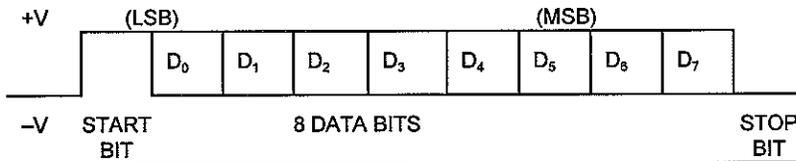
Environmental:

- **Operating Temperature:**   0 to +70 °C (+32 to +158 °F)

- **Storage Temperature:**   -20 to +70 °C (-4 to +158 °F)

- **Relative Humidity:**   0 to 95% (non-condensing)

ASSEMBLY and INSTALLATION

Overview

To achieve the greatest mounting and cabling flexibility available in a POS pole display system, this kit provides a cable break a few inches from the pod. The DIN8M on the module pigtail cable connects to the DIN8F on the Host/Power cable assembly after it has been installed and routed through the pole. This allows easy connect and disconnect of the display module.

The DIN8F should be routed through any holes, slots, etc. in the installation and mounting hardscape (organizers, hardware, mounting surfaces, mounting bases or kits) between the Host DB25F, Printer DB25M and Power Supply connections before it is routed through the pole, from the bottom (threaded end) The independent power supply cable provides additional flexibility in locating the wall mount power supply.

Pages 3, 4 and 5 provide information on the assembly and installation/attachment of the pole display Details are provided for attaching the pole to a variety of bases, kits, surfaces and organizers.
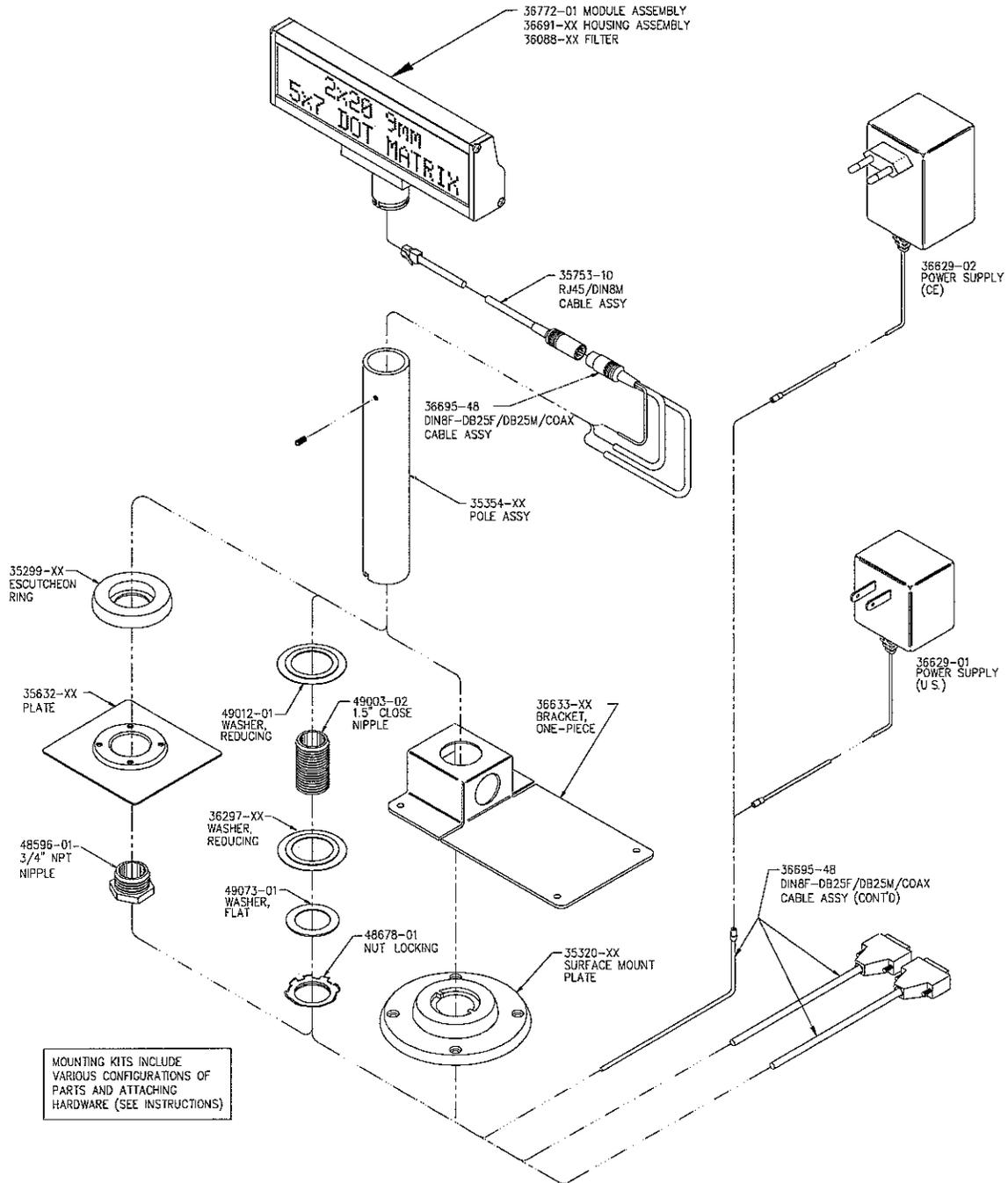
Installation Instructions:

Perform these electrical installation steps after, or as a part of, the attachment instructions appropriate for the specific mechanical installation

1. Connect the DB-25 (female) to the appropriate port on the host system and the DB-25 (male) to the appropriate printer port.
2. Plug the wall mount power supply into an appropriate AC outlet.
3. The POS display is now ready for operation, refer to page 6.

PDK-220S-XXXXXX
POS POLE DISPLAY DISTRIBUTOR KIT
TYPE 3C POD RS232 INTERFACE

36772-01 MODULE ASSEMBLY
36691-XX HOUSING ASSEMBLY
36088-XX FILTER

2X20 9mm
5X7 DOT MATRIX

35753-10
RJ45/DIN8M
CABLE ASSY

36629-02
POWER SUPPLY
(CE)

36695-48
DIN8F-DB25F/DB25M/COAX
CABLE ASSY

35354-XX
POLE ASSY

35299-XX
ESCUTCHEON
RING

35632-XX
PLATE

49012-01
WASHER,
REDUCING

49003-02
1.5" CLOSE
NIPPLE

36633-XX
BRACKET,
ONE-PIECE

36629-01
POWER SUPPLY
(U.S.)

36297-XX
WASHER,
REDUCING

48596-01
3/4" NPT
NIPPLE

49073-01
WASHER,
FLAT

48678-01
NUT LOCKING

35320-XX
SURFACE MOUNT
PLATE

36695-48
DIN8F-DB25F/DB25M/COAX
CABLE ASSY (CONT'D)

MOUNTING KITS INCLUDE
VARIOUS CONFIGURATIONS OF
PARTS AND ATTACHING
HARDWARE (SEE INSTRUCTIONS)

ASSEMBLY INSTRUCTIONS

Mounting Kits:

- **35360-0X SURFACE MOUNTING KIT (standard)**
  - (1) 35320-XX SURFACE MOUNT PLATE
  - (1) 48596-01 CONDUIT NIPPLE
- **35697-0X BASE KIT, HEAVY METAL**
  - (1) 35632-XX PLATE, MULTI-PURPOSE
  - (1) 35299-XX ESCUTCHEON RING
  - (1) 48596-01 CONDUIT NIPPLE
- **36231-0X ICD POLE KIT**
  - (1) 36297-XX WASHER, REDUCING
  - (1) 49003-02 CLOSE NIPPLE
  - (1) 49012-01 WASHER, REDUCING
  - (1) 48678-01 LOCKNUT

- **36631-99 APG BRACKET KIT**
  - (1) 36630-99 BRACKET, POLE
  - (1) 48596-01 CONDUIT NIPPLE
  - (2) 8989-02 #8-32 PAN HD. SCREW, LOCKWASHER
  - (2) 43311-04 #8-32 NUT, HEX
- **36632-0X MS CASH KIT**
  - (1) 36297-XX WASHER, REDUCING
  - (1) 49073-01 WASHER, FLAT
  - (1) 48596-01 CONDUIT NIPPLE
- **36634-0X MOUNTING KIT, SHEET METAL BASE**
  - (1) 36633-XX BASE, SHEET METAL
  - (1) 48596-01 CONDUIT NIPPLE
  - (4) 48765-10 #8-18 PAN HEAD SCREW, THD. FORMING

Surface Mount and Freestanding Configurations:

Mounting Kit, Sheet Metal

Thread the DIN8F connector through a hole in the mounting surface or one of the two side openings in the bracket and then through the conduit nipple. Thread the connector through the bracket top hole and into the threaded end of the pole, continue to feed the cables in until the connector emerges from the pole, and pull out some slack. Holding the conduit nipple in place screw the pole down snugly onto the bracket. The sheet metal base can be freestanding, mounted with 48765-10 screws or slid under the cash register, etc.


ALTERNATE CABLE ENTRIES
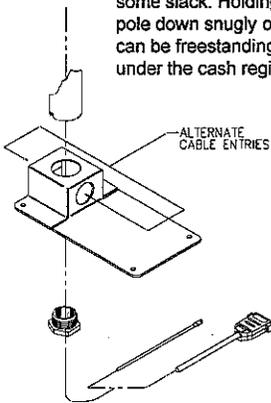
Surface Mount Plate

Thread the DIN8F connector through a hole in the mounting surface and conduit nipple, or breakout one of the tabs in the surface mount plate (use wide, square jaw pliers) and route the cable through the conduit nipple. Thread the cable through the surface mount plate and pole. Holding the pole in the plate, tighten the conduit nipple into the pole. Attach the mounting plate to the surface, being careful to route the cables through the breakout tab if applicable.
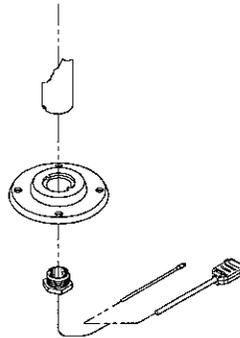
Base Kit, Heavy Metal

Thread the DIN8F connector through a hole in the mounting surface and conduit nipple or just through the conduit nipple. Thread the cable through the base, escutcheon ring and pole. Pull some cable slack through, push the nipple into the recess in the base, put the pole in place in the escutcheon ring and tighten it onto the nipple threads until snug
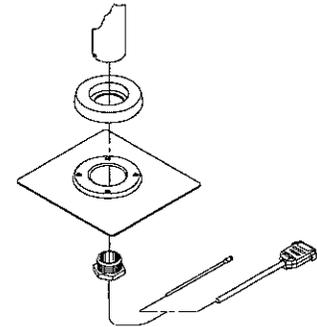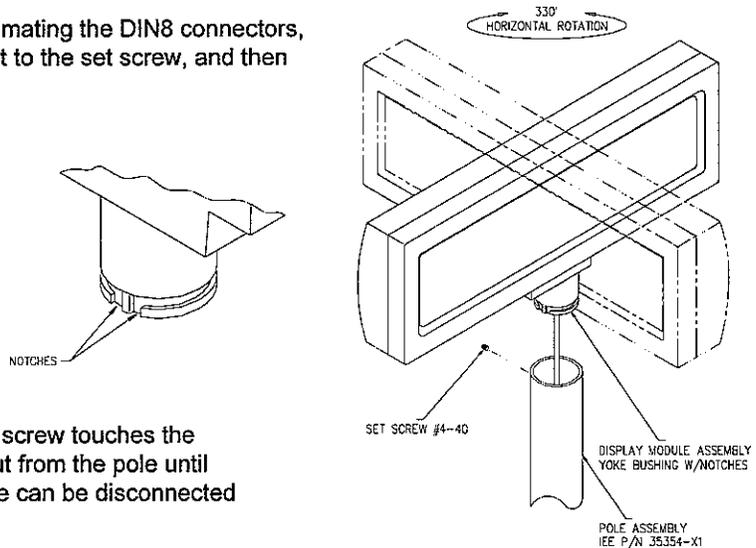

Display Module and Pole Assembly:

The display module is attached to the pole assembly by mating the DIN8 connectors, inserting the display yoke into the pole at the end closest to the set screw, and then rotating the display.

1. Push the cable slack back into the pole.
2. Insert the display module partially into the pole and align the set screw with one of the two notches on the yoke bushing.
3. Push the yoke bushing completely into the pole, then rotate the module on the pole as desired

TO REMOVE THE MODULE:

Rotate the module in either direction until the set screw touches the stop on the yoke, then pull the module straight out from the pole until the DIN8 connectors are exposed and the module can be disconnected

NOTCHES

330° HORIZONTAL ROTATION

SET SCREW #4-40

DISPLAY MODULE ASSEMBLY YOKE BUSHING W/NOTCHES
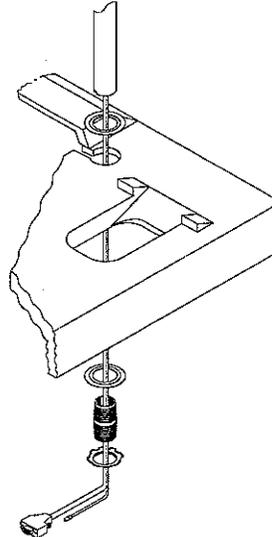
POLE ASSEMBLY IEE P/N 35354-X1

4

• APG CASH DRAWER

Thread the DIN8F connector through the conduit nipple, bracket and pole, pulling out some slack. Hold the nipple in place and tighten the pole down onto the bracket. Mount the assembly (through the partner) in the selected position along the row of mounting holes at the rear of the drawer using the hardware as shown.
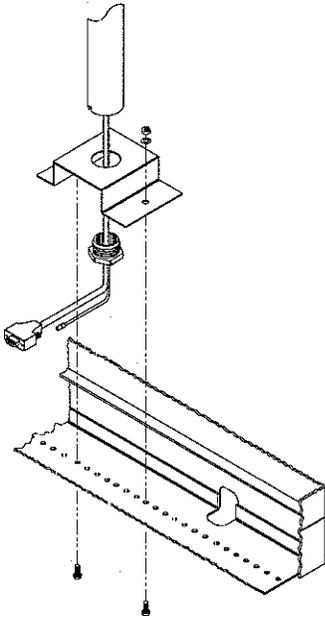
• INDIANA CASH DRAWER

Remove the mounting bracket on the underside of the shoe. Tighten the close nipple into the pole. Thread the DIN8F connector through the locknut, metal washer, shoe, painted washer and pole. Put the pole on the painted washer and tighten it in place with the locknut.

• MMF CASH DRAWER

Loosen the U-clamp nuts on the pole mounting bracket in the POS platform system. Thread the DIN8F connector through the POS platform, eccentric washer and pole. Seat the pole in the bracket to full depth and tighten the U-clamp nuts to secure the assembly in place
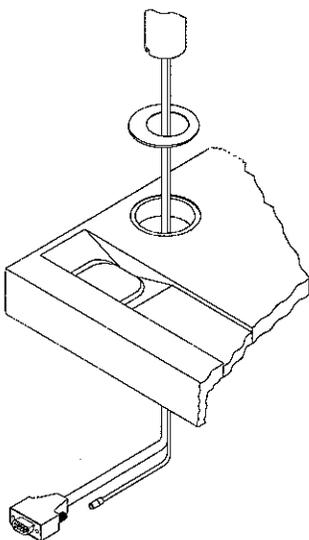
• MS CASH DRAWER

Remove the clamp assembly from the mounting bracket on the underside of the POS deck. Thread the DIN8F connector through conduit nipple, small washer, POS deck, painted washer and pole, pulling out some slack. Slide the small washer under the edges of the spotwelded bracket at the underside surface of the POS deck. Hold the nipple in place through the washer and tighten the pole onto the nipple, over the painted washer, to secure the pole in place.

5
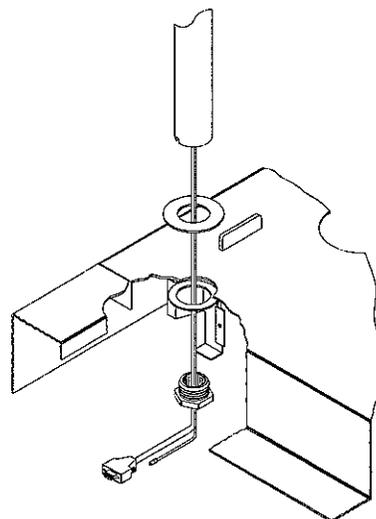
OPERATION

The display module is pre-loaded with AEDEX POS Display PSD-220G emulation software. The default protocol is 9600 baud, 8 data bits, no parity and 1 Stop bit. The display is pre-set to operate in Pass-Through mode, Message Memory Write is Disabled and the Character Set is English. If it is necessary to operate with different input protocol or mode parameters, the display software can be changed using the included 36779-01 diskette. Connect the display to a PC (or equivalent) and using the instructions on the Diskette, load and initiate the Uniload program* Using the HELP file and Menu driven procedure select the new settings and download the new setup to the display

NOTE: When changing protocol or mode parameters, if a communication error is displayed,
    (1) Power down the display,
    (2) Check I/O connections,
    (3) Power up the display to enter re-try or press ESC to cancel.
If download is successful and correction is required, with the display connected to the Uniload host and program, power the display down and back up, to re-establish communication at the download baud rate (9600).

The following data is provided to assist the user in understanding the operation of the pass-through system.

WIRING DIAGRAM - Pass-through cabling

HOST   PERIPHERAL UNIT
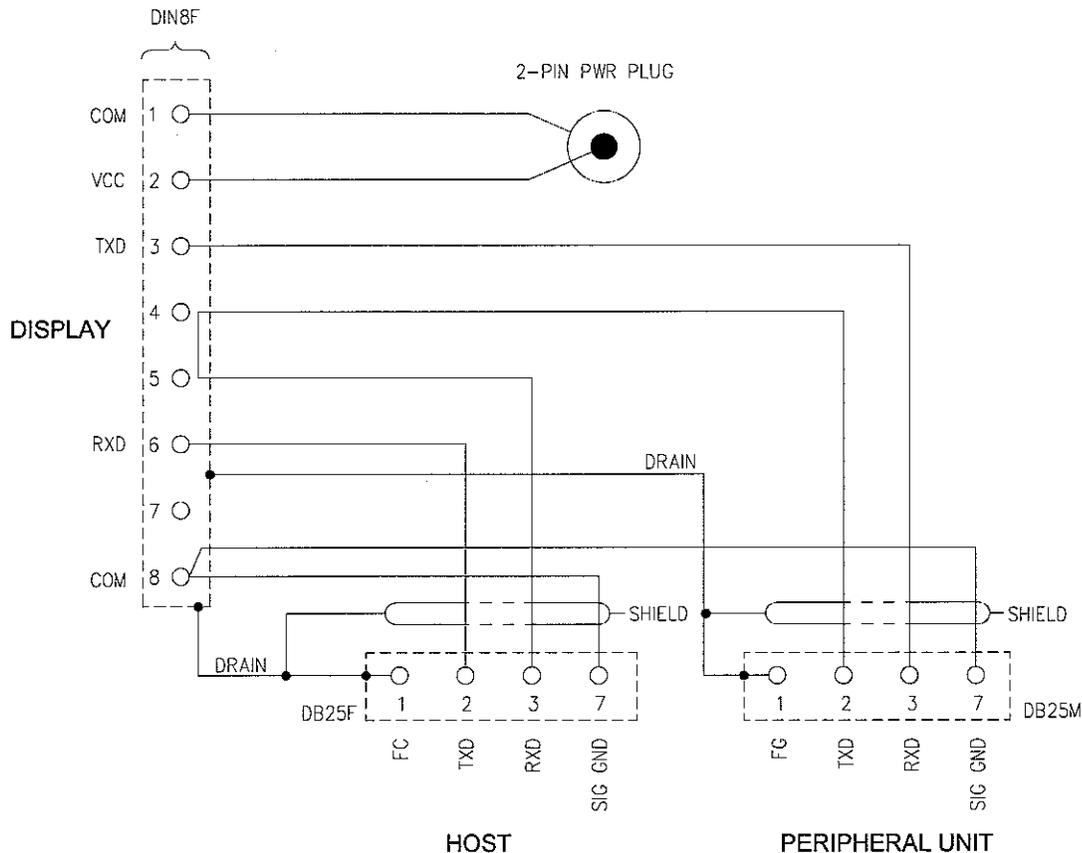
*NOTE: In order to connect the display module to a COM1 port on the PC you will need a 36618-60A interface cable which can be obtained from your distributor. Connect the display module (DIN8M) to the DIN8F on the 36618-60A. Connect the DB9F to the COM1 port on a PC (or equiv.); connect the wallmount power supply to the coax connector.

KIT NUMBERING SCHEME

PDK-[220S]- X₁ X₂ X₃ X₄ X₅ X₆

POLE POSITION

    0 = CENTER/NO OPTION
    C = CENTER
    L = LEFT SIDE
    R = RIGHT SIDE

HOUSING COLOR

    W = WHITE (IEE IVORY GRAY)
    B = JET BLACK

FILTER COLOR

    A = AMBER
    B = BLUE
    G = GREEN
    N = NEUTRAL GRAY
        (DISPLAY APPEARS AQUA)

POLE LENGTH

    0 = NOT PROVIDED
    B = MINIMUM LENGTH (2 IN.)
    S = SHORT (6 IN.)
    D = MEDIUM SHORT (10 IN.)
    M = MEDIUM (12 IN.)
    L = LONG (18 IN.)
    X = EXTRA LONG (22 IN.)

MOUNTING KIT

    0 = NOT SUPPLIED
    1 = MNTG KIT, UNIVERSAL
    2 = MNTG KIT, HARD
    3 = MNTG KIT, SHEET METAL
    4 = BASE KIT, PASS THRU
    5 = BASE KIT, HEAVY METAL
    6 = SURFACE MOUNT KIT
    A = MNTG KIT, APG BRACKET
    I = MNTG KIT, ICD POLE
    C = MNTG KIT, MS CASH

POWER SUPPLY

    0 = NOT SUPPLIED
    1 = 115VAC-24VDC/US-COAX (2.1MM)
    2 = 230VAC-24VDC/CE-COAX (2.1MM)

NOTE: THE SUB-SET **PDK -[220S] -X₁X₂X₃** DEFINES THE DISPLAY ASSEMBLY IN THIS PDK KIT.