APPLICATION		REVISIONS				
NEXT ASSY	USED ON	REV	DESCRIPTION		DATE	APPROVED
		A	PRODUCTION RELEASE/SEE E.O. 34196		12-23-98	L.D.HATCH
		B	SEE E.O. 34672		9-30-01	L.D.HATCH
		C	SEE E.O. 35345	*llß* 9-20-01		*wm*

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 – KIT NUMBERING SCHEME

REV STATUS OF SHEETS	REV	C	C	B	B	B	C												
	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	CONTRACT NO.		**IEE** INDUSTRIAL ELECTRONIC ENGINEERS, INC. VAN NUYS, CALIFORNIA
TREATMENT	APPROVALS	DATE	TITLE MANUAL, PDK-102C-0XX0XX INSTALLATION & OPERATING INSTRUCTIONS
	DRAWN ISIS WOLFE	12-14-98	
FINISH	CHECKED D.SUMMERS	12-22-98	
	ISSUED L.D.HATCH	12-23-98	SIZE A	CAGE CODE 05464	DWG NO. PDK-102C-INOPML	REV C
			SCALE –	PROJ NO. 468	SHEET 0 OF 5

IEE FILE: ASIZE1.DWG

PDK-102C-0XX0XX* EPSON DM-102 Compatible VF POS Pole Display Kit

INSTALLATION and OPERATING INSTRUCTIONS

Key Features:

- **Vacuum Fluorescent (VF) display - 2 line x 20 character 5mm 5x7 dot matrix - with contrast enhancing filter, EIA-232 interface and RJ-45 cable.**
- **Fully Plug-and-Play compatible with the EPSON DM-102 interface.**
- **Display module housed in a compact, impact resistant enclosure with four-position tilt-recline and 330° swivel adjustment. Pole and mounting base kit are included.**
- **Display certified to the requirements of UL, CE, TUV and FCC Part 15, Class A.**

(* Refer to Page 5 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
Page 4 provides instructions for assembling the display and several mounting configurations.
Page 5 provides the kit numbering scheme that defines the exact contents as referenced by the number on the lid of the shipping box. **PDK-102C-0XX** 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
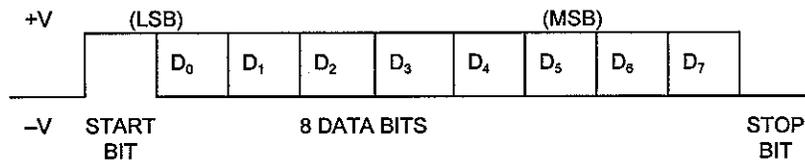E-mail: mail@ieeinc.com

PDK-102C-INOPML
September 17, 2001

GENERAL SPECIFICATIONS

Interface:

• Power:	Supply voltage	11-29 Vdc	**• Pin Assignments:**		
	Supply current @24 Vdc	213 ma (max)	**(Host)**		**RJ-45**
	Supply risetime	100 milliseconds (max)			
• Caution:	Supply sequencing	Rapid ON/OFF sequencing	FG	1	FG
		is not recommended.	RXD	2	TXD
	Start cycle	The display is not ready to accept	TXD	3	RXD
		data until 1.2 seconds after	DTR	4	DSR
		application of power.	DSR	5	DTR
			SIG GND	6	SIG GND
• Signal:	Serial EIA-232	9600 baud - 8 bits - no parity	+24VDC	7	11-29VDC
	Serial input levels	+3V to +15V (space/logic 0)	PWR GND	8	COM
		-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

Pages 3, 4 and 5 provide information on the assembly and installation/attachment of the pole display. Review the installation steps below, before proceeding to the assembly and attachment of the unit, as they may impact the sequence and/or details (cable routing, etc.) of your unique configuration.
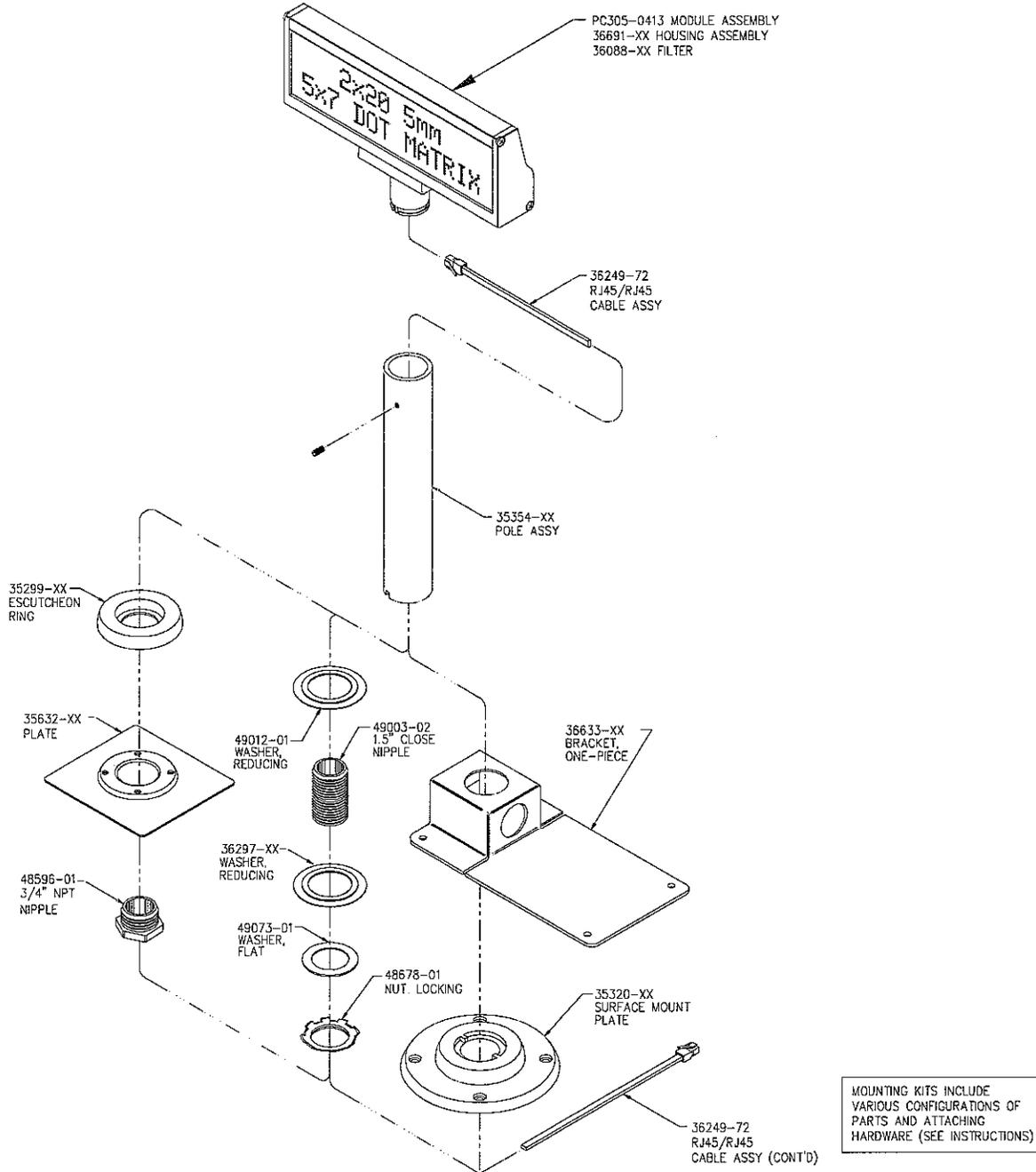
Installation Instructions:

Perform these electrical installation steps after, or as a part of, the attachment instructions appropriate for the specific mechanical installation
1. Plug the RJ-45 (male) display connector into the Host receptacle (computer, printer, etc.)
2. The POS display is now ready to respond to the EPSON DM-102 command set and display the EPSON character formats.

PDK-102C-0XX0XX
POS POLE DISPLAY DISTRIBUTOR KIT
TYPE 3C POD RS232 INTERFACE

PC305-0413 MODULE ASSEMBLY
36691-XX HOUSING ASSEMBLY
36088-XX FILTER

36249-72
RJ45/RJ45
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

36297-XX
WASHER,
REDUCING

48596-01
3/4" NPT
NIPPLE

49073-01
WASHER,
FLAT

48678-01
NUT, LOCKING

35320-XX
SURFACE MOUNT
PLATE

36249-72
RJ45/RJ45
CABLE ASSY (CONT'D)

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

3

ASSEMBLY INSTRUCTIONS

Attaching Kits:

- **36328-0X MOUNTING KIT, UNIVERSAL**
  - (1) 36213-XX BRACKET, POLE MOUNTING
  - (1) 36214-XX PLATE, POLE BRACKET
  - (1) 35299-XX ESCUTCHEON RING
  - (1) 48596-01 CONDUIT NIPPLE
  - (2) 43206-23 #8-32X5/16 FLAT HEAD SCREW
  - (2) 48989-02 #8-32X3/8 PAN HEAD SCREW
  - (1) 35635-02 ATTACHMENT KIT
- **35697-0X BASE KIT, HEAVY METAL**
  - (1) 35632-XX PLATE, MULTI-PURPOSE
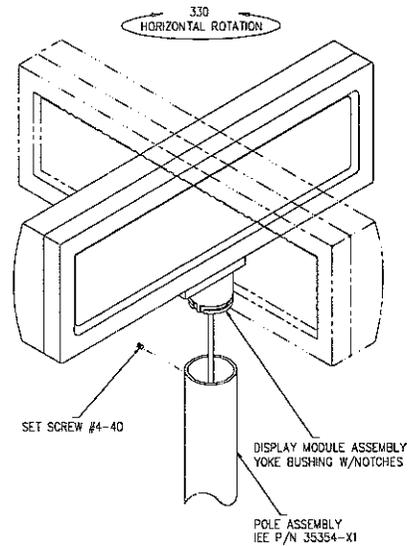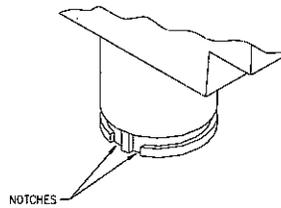 - (1) 35299-XX ESCUTCHEON RING
  - (1) 48596-01 CONDUIT NIPPLE

- **36329-0X MOUNTING KIT, HARD**
  - (1) 35299-XX ESCUTCHEON RING
  - (1) 36297-XX WASHER, REDUCING
  - (1) 48596-01 CONDUIT NIPPLE
  - (1) 49003-02 CLOSE NIPPLE
  - (1) 49012-01 WASHER, REDUCING
  - (1) 48678-01 LOCKNUT
  - (1) 35320-XX SURFACE MOUNT PLATE
  - (1) 35638-01 MOUNTING SCREW KIT
  - (1) 49073-01 WASHER, FLAT

Display Module and Pole Assembly:

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

1. Insert the cable into the pole *at the end closest to the set screw.* Pull the cable through the pole to eliminate slack.
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.
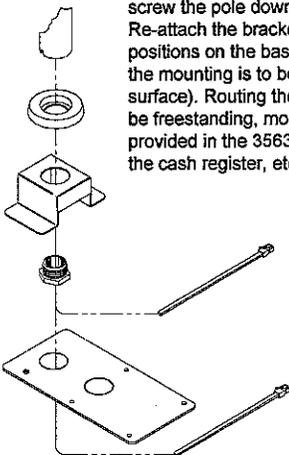
TO REMOVE THE MODULE:

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.
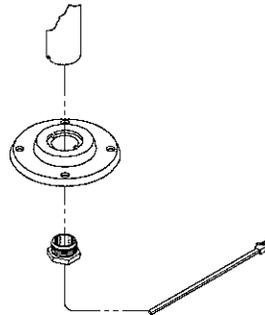

NOTCHES

330 HORIZONTAL ROTATION

SET SCREW #4-40

DISPLAY MODULE ASSEMBLY YOKE BUSHING W/NOTCHES

POLE ASSEMBLY IEE P/N 35354-X1

Surface Mount and Freestanding Configurations:

Mounting Kit, Universal

Detach the bracket from the base plate. Thread the cable through the escutcheon ring, the hole in the bracket and the conduit nipple. Holding the conduit nipple up through the bracket hole and escutcheon ring, screw the pole down onto the conduit nipple until tight. Re-attach the bracket in one of the three mounting positions on the base plate (drive out the knockout first if the mounting is to be over a hole in the mounting surface). Routing the cable appropriately, the base can be freestanding, mounted with screws or Velcro provided in the 35635-02 Attachment Kit, or slid under the cash register, etc.
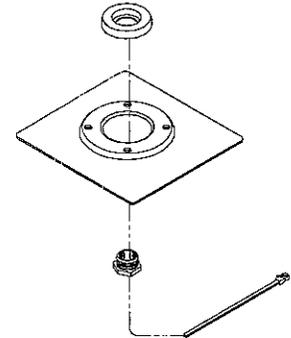
Surface Mount Plate

Thread the cable through the surface mount plate and conduit nipple. Place the pole in the surface mount plate and screw the conduit nipple into the pole until tight. The cable can be routed through one of the breakout tabs (use wide, square jaw pliers) and along the mounting surface or through a hole (1-2 in. dia.) in the mounting surface. Attach the mounting plate to the surface with the 4 screws in the 35638-01 Mounting Screw Kit.

Base Kit, Heavy Metal

Route the cable through the escutcheon ring and base. Route the cable through the conduit nipple and push the nipple into the recess in the bottom of the base. Pulling the cable slack through, put the pole in place in the escutcheon ring and tighten it onto the nipple threads until snug.

4

KIT NUMBERING SCHEME

PDK-[102C]- 0_1 X_2 X_3 0_4 X_5 X_6

POLE POSITION

    0 = CENTER/NO OPTION

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

NOTE: THE SUB-SET **PDK -[102C] -$0_1X_2X_3$** DEFINES THE DISPLAY ASSEMBLY IN THIS PDK KIT.