

K-Plus User Manual

Product

- Model K-Plus@ (with Printing Function)
- Model K-Plus (without Printing Function)

* All the functions other than printing and operating procedures are identical for both products.

1. K-Plus Taximeter Configuration

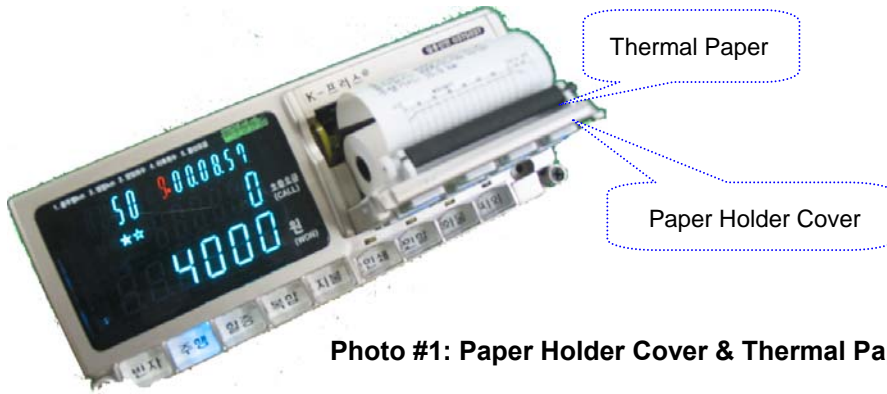


Photo #1: Paper Holder Cover & Thermal Paper of K-Plus@



Photo #2: Key Pad & Function Switch of K-Plus

KEY-PAD

MENU, CALL, SET,
CANCEL, 0-9, *, #

SPEED REDUCTION RATIO S/W

MENU, CALL, SET, CANCEL, 0-9, *, #

VFD DISPLAY

Display
FARE, CALL CHARGE
MENU, SPEED, PULSE
TIME, DATE

FUNCTION

INDICATION (Blue)



Photo #3: VFD Indication Section & Current Mode Indication with Back-Light

2. Menu and Functions of K-Plus Taximeter

Summary: VFD indicating or setting up functions of Taximeter with orange color display.

Menu No.	Description	Menu No.	Description
1	Total Travel Distance (Unit: Km, Display Decimal Point for below 1Km)	21	Corp.: Tacho Record Time (0~24). Driver No. Private: Tacho Record Time (HH.MM.SS)
2	Total Sales Distance (Unit: Km, Display Decimal Point for below 1Km)	22	Vehicle #1: Area Zone (2). Government Office(2).Service(2)
3	Total Number of Sales Run	23	Vehicle #2
4	Total Number of Run after Sales	24	Residual Distance (m) Down - Count
5	Total Sales Income	25	Travel Distance (m) → USER - 12
6	Overspeed Limit (Beep on Overspeed)	26	Hr/Min/Sec from On-Board Time
7	Speed (Km/H, Up to One Decimal Place)	27	Surcharge Start Time
8	Date (YY.MM.DD)	28	Surcharge End Time
9	Time (HH.MM.SS) (24 Hours)	29	Alarm Time
10	Tacho Start Time (HH.MM.SS)	30	Indication of Private or Corporation
11	Total Tacho Travel Distance (Km)	31	Speed Reduction Ratio. Number of Pulse
12	Total Tacho Sales Distance (Km)	32	Travel Distance since Last Oil Change
13	Total Number of Tacho Sales Run	33	Current Driver Order
14	Total Number of Tacho Run after Sales	34	Automatic Return No.(2). Automatic Return Time(3)
15	Total Tacho Sales Income	35	Auto Print(1)+Residual Distance Indication(1) +Auto Surcharge(1)+Auto Blink(1) +Surcharge Notice(1)+Overspeed Warning(1)
16	Total Tacho Storage Time	36	Multiple Function(1)+Call Function(1) +Out-of-Town Function(1) +Freight Function(1)+Discount Function(1)+_user(1)
17	Total Tacho Surcharge Sales Distance	37	Tacho Port
18	Total Number of Tacho Surcharge Sales Run	38	
19	Total Number of Run after Tacho Surcharge Sales	39	
20	Total Tacho Surcharge Fare Sum	40	Version Indication

Other Menus: 41. Tacho

42. Port

43. Fare

44. Flag

45. USER

46. Test



3. Menu Number and Set-Up Procedure

A. General Instructions

- 1) Work on **VACANT** Mode when setting the MENU NUMBER up.
- 2) Press Menu Number on KEY PAD (1~40), and press # Button.
- 3) Check if the Menu Number is marked as orange color on VFD.
- 4) Press **SET** KEY to set up. Press **VACANT** or **CANCEL** KEY upon completion of Setting-up.

* Number of Menu increases by one when pressing **MENU** KEY.

B. Overspeed Limit Set-Up Procedure: Menu No. - 6

Content of Menu	Set-Up Procedure	Remarks
Overspeed	6 # (Display Current Speed on upper right area.) SET(설정) Enter desired speed on blinking area. #	

C. Year, Month & Date Set-Up Procedure: Menu No. - 8

Content of Menu	Set-Up Procedure	Remarks
Year, Month & Time	8 # (Display Current Year, Month & Date on upper right area. (ex.)06,03,28) SET(설정) Enter YY(2 digits (06,03,28)) on blinking area #, MM(2 digits (06,03,28)) on next blinking area # and DD(2 digits (06,03,28)) on next blinking area #.	Move to next step if contents displayed are correct with SET or #.

D. Hour, Minute & Second Set-Up Procedure: Menu No. - 9

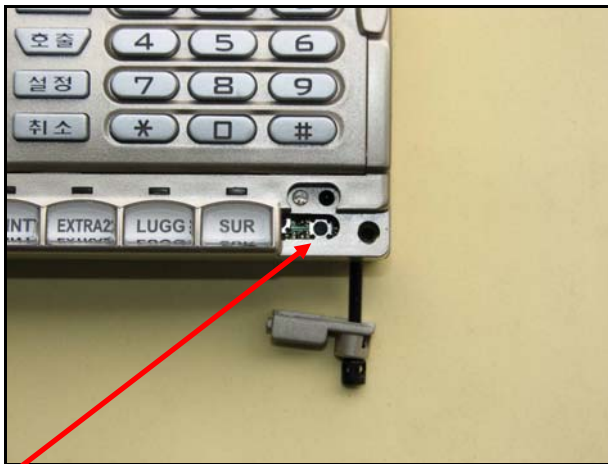
Content of Menu	Set-Up Procedure	Remarks
Hour, Minute & Second	<p>9 # (Display Current Hour, Minute & Second on upper right area. (ex.)14,36,28)</p> <p>SET(설정) Enter HH(2 digits (14,36,28)) on blinking area #, MM(2 digits (14,36,28)) on next blinking area # and SS(2 digits (14,36,28)) on next blinking area #.</p>	Move to next step if contents displayed are correct with SET or #.

E. Daily Income Deletion Procedure: Menu No. 10

Content of Menu	Set-Up Procedure	Remarks
Initialization of Sales Content	<p>10 # # (Display Current Hour, Minute & Second on upper right area. (ex.) 28.14.39)</p> <p>Use upon starting & after finishing the daily sales.</p> <p>SET (Display CLEAR) SET (Display 00,00,00)</p> <p>* Sales Report Print Out (K-Plus@)</p> <p>* Sales Content of Menu No. 10 through 20 to be deleted.</p>	

F. Additional Fare Handling Procedure

Content of Menu	Set-Up Procedure	Remarks
Additional Fare	<p>In case of Additional Fare occurrence, STOP * at RUN Mode, and enter the Additional Fare #.</p> <p>(Display the Total Fare with calculated Additional Fare included.)</p> <p>* Use when the toll fee & etc. are occurring.</p>	



G. Speed Reduction Ratio/Actual Distance Set-Up Procedure: Menu No. 31

Content of Menu	Set-Up Procedure	Remarks
Speed Reduction Ratio	<p>1) Common Speed Reduction Ratio Set-Up Procedure</p> <p>31 # SPEED REDUCTION RATIO S/W</p> <p>Pulse Value (Displayed at 0-1320)</p> <p>* Pulse Value: Use KEY PAD & #. (Enter # on blinking area.)</p>	<p>Base Pulse 1-1320</p> <p>HYUNDAI: 4-1320</p> <p>SAMSUNG: 2-1320</p> <p>DAEWOO: 4-3240</p>

Actual Distance	2) Actual Distance Set-Up Procedure 31 # SPEED REDUCTION RATIO S/W Vehicle Type SET(설정) or # Actual Distance(Pulse Display) SET(설정) or #	Vehicle Type Ex. HYUNDAI: 4-0000
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H. Taxpayer Identification Number Set-Up Procedure: Menu No. 45-1,2

Content of Menu	Set-Up Procedure	Remarks
Taxpayer Identification Number (Front)	1) USER 1 (3 Front Digits of Taxpayer Identification Number) Set-Up Procedure 45 -> SET(설정) (Display USER on left & 1.000-00 on right.) SET Enter 3 digits from front using KEY PAD while light blinking & SET(설정) or #. Enter 2 blinking digits using KEY PAD & SET or #.	Select 1,2 with MENU after 45 SET . Press VACANT or
Taxpayer Identification Number (Back)	2) USER 2 (3 Front Digits of Taxpayer Identification Number) Set-Up Procedure MENU (Display USER on left & 2.000-00 on right.) SET Enter 3 digits from back using KEY PAD while backlight blinks & SET or #. Enter 5 blinking digits using KEY PAD & SET or #.	CANCEL(취소) Keys to exit upon completion of set-up.

I. Telephone Number Set-Up Procedure: Menu No. 45 - 3,4,5

Content of Menu	Set-Up Procedure	Remarks
Telephone Number (Area Number)	1) USER 3(Telephone Number-Area) Set-Up Procedure 45 SET (Display USER on left & 1.000-00 on right.) Select (Display USER on left & 3.000-00 on right.) with MENU & SET . Enter Area Telephone Number using KEY PAD while backlight blinks & SET or #	Select 1,2,3,4,5 in order with MENU after 45 SET . (USER 6,7,8: Not Used)
Telephone Number (Numbers on Front)	2) USER 4(Telephone Number- Nos. on Front) Set-Up Procedure 45 SET (Display USER on left & 4.000-00 on right.) Select (Display USER on left & 3.000-00 on right.) with MENU & SET . Enter Front Telephone Numbers using KEY PAD while backlight blinks & SET or #	Press VACANT or CANCEL Keys to exit upon completion of set-up.
Telephone Number (Numbers on Back)	3) USER 5(Telephone Number- Nos. on Back) Set-Up Procedure Select (Display USER on left & 5.000-00 on right.) with MENU & SET . Enter Front Telephone Numbers using KEY PAD while backlight blinks & SET or #	

J. Vehicle Identification Number Set-Up Procedure: Menu No. 45-9,10

Content of Menu	Set-Up Procedure	Remarks																														
Vehicle Identification Number	<p>1) USER 9(Vehicle ID Number-Letter) Set-Up Procedure</p> <p>45 SET (Display USER on left & 1.000-00 on right.)</p> <p>① Select USER(on left & 9.02.12.BA on right) with MENU & SET .</p> <p>Enter 2 Digit Numbers of Vehicle ID Number using KEY PAD while backlight blinks & SET . (Display USER on left & 9.02.12.BA on right.)</p> <p>Enter Purpose Code using KEY PAD referring to below Purpose Type Table (Display USER on left & 9.02.12.BA on right.) while backlight blinks & SET .</p> <p>* MENU, CALL referring to the Area Code & Purpose Code of Vehicle ID Number from below Table.</p> <table border="1" style="width: 100%; text-align: center;"> <tr> <td>Area</td> <td>Seoul(SU)02</td> <td>Gwangju(GJ)62</td> <td>Chungnam(Cn)41</td> <td>Jeonnam(Jn)61</td> </tr> <tr> <td>Code</td> <td>Pusan(PU)51</td> <td>Daegu(dG)53</td> <td>Chungbuk(Cb)43</td> <td>Jeonbuk(Jb)63</td> </tr> <tr> <td>Table</td> <td>Incheon(IC)32</td> <td>Geonggi(GI)31</td> <td>Geongnam(Gn)55</td> <td>Jeju(JJ)64</td> </tr> <tr> <td>(Right)</td> <td>Daejeon(dJ)42</td> <td>Gangwon(Go)33</td> <td>Geongbuk(Gb)54</td> <td>Ulsan(US)52</td> </tr> </table> <p style="text-align: center;">Purpose Code Table (Below)</p> <table border="1" style="width: 100%; text-align: center;"> <tr> <td>0 라</td> <td>1 바</td> <td>2 사</td> <td>3 아</td> <td>4 자</td> </tr> <tr> <td>5 타</td> <td>6 하</td> <td>7 파</td> <td>8 차</td> <td>9 카</td> </tr> </table>	Area	Seoul(SU)02	Gwangju(GJ)62	Chungnam(Cn)41	Jeonnam(Jn)61	Code	Pusan(PU)51	Daegu(dG)53	Chungbuk(Cb)43	Jeonbuk(Jb)63	Table	Incheon(IC)32	Geonggi(GI)31	Geongnam(Gn)55	Jeju(JJ)64	(Right)	Daejeon(dJ)42	Gangwon(Go)33	Geongbuk(Gb)54	Ulsan(US)52	0 라	1 바	2 사	3 아	4 자	5 타	6 하	7 파	8 차	9 카	<p>Select 1,2,3,4,5,6,7,8,9 & 10 in order with MENU after 45 SET . (USER6,7,8: Not Used)</p> <p>Able to use 9 at ①. (Ex.) Letter of Vehicle ID No as 02 12 5 6789 for SU 12 타 6789.</p> <p>Press VACANT or CANCEL Keys to exit upon completion of set-up.</p>
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Vehicle Identification Number	<p>2) USER 10(Vehicle ID Number-Number) Set-Up Procedure</p> <p>Select USER(on left & 10.000 on right) with MENU & SET .</p> <p>Enter Numbers of Vehicle ID Number using KEY PAD while backlight blinks & SET .</p>																															

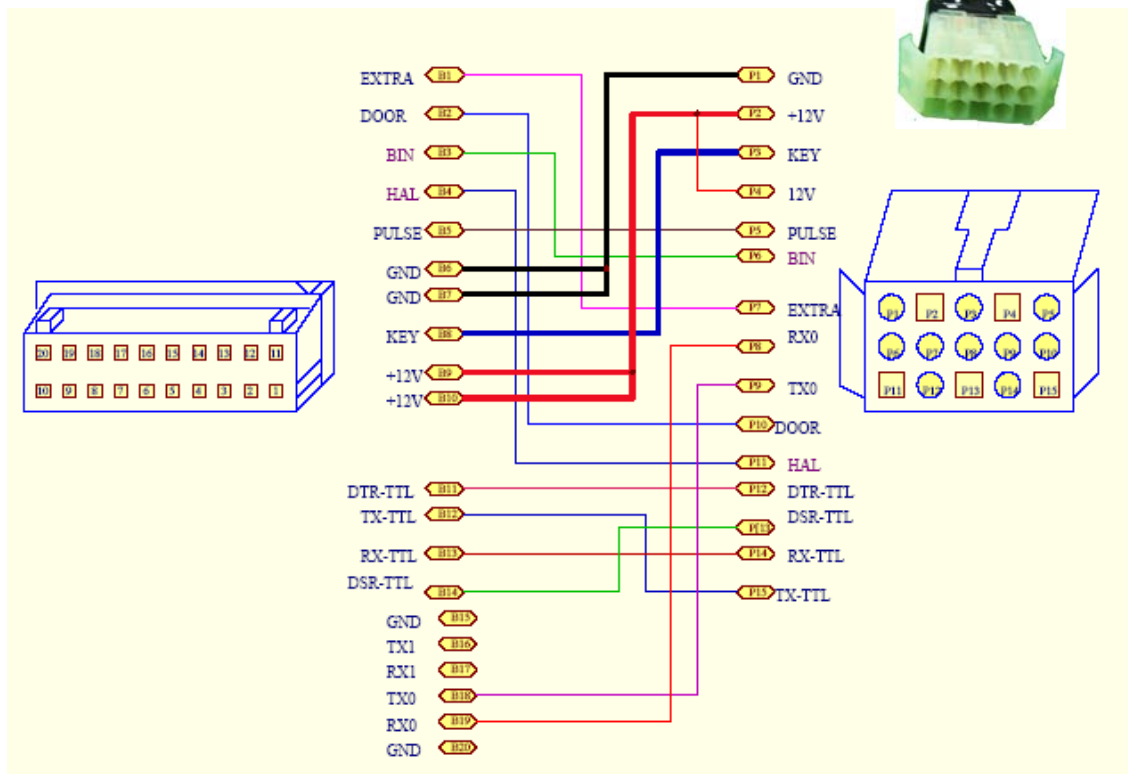
K. Tacho Port Set-Up Procedure: Menu Number 45-15

Content of Menu	Set-Up Procedure	Remarks
Tacho Port	<p>1) USER 15(Front Numbers of Vehicle ID Number) Set-Up Procedure</p> <p>45 # (Display USER on left & 1.0 on right.) Press 15 # or MENU several times to select (Display USER on left & 15.--- on right.) & SET .</p> <p>Enter 0~2 on the blinking area & SET or #. 0: Jack 1: IRDA 2: R/F</p>	<p>Press VACANT or CANCEL Keys to exit upon completion of set-up.</p>

L. Tacho Password Set-Up Procedure: Menu 45-16

Content of Menu	Set-Up Procedure	Remarks
Tacho Password	<p>1) USER 16(Front Numbers of Taxpayer ID Number) Set-Up Procedure Ex.) E3EB</p> <p>45 # (Display USER on left & 1.0 on right.) Pressing 16 # or MENU several times to position on (16.E3EB on right). Place blinking E on desired letter using MENU, CALL & # . Then select the desired letter with Upward/Downward Keys of (↑, ↓) by placing 3 & move to next blank and continue set-up in same manner. Press # to end the Input, and press SET to either blink or close.</p>	<p>Press VACANT or CANCEL Keys to exit upon completion of set-up.</p>

2. CABLE CONNECTOR DESCRIPTION



PORT NAME	I/O	Descriptions
P1 GND	-	
P2 +12V (CAR Battery+)	I	DC +8.0V~36V , 2A
P3 KEY (Ignition KEY)	I	DC +8.0V~36V , 500mA
P4 12V(Pluse)	O	+12V (P2 signal By-Pass)
P5 PULSE(Pluse)	I	High(3.5~25V, Low(0~1.0V)
P6 BIN(Vacant signal)	O	High(3.5~5V, 10mA), Low(0~0.5V)
P7 EXTRA	I	High(3.5~25V , Low(0~1.0V)
P8 Rx0(RS-232C)	I	RS-232C
P9 Tx0(RS-232C)	O	RS-232C
P10 DOOR	I	High(3.5~25V, Low(0~1.0V)
P11 HAL(night signal)	O	High(3.5~5V, 10mA), Low(0~0.5V)
P12 DTR-TTL	O	TTL (0-5V)
P13 DSR-TTL	I	TTL (0-5V)
P14 Rx-TTL	I	TTL (0-5V)
P15 Tx-TTL	O	TTL (0-5V)