
U N I C O R D E R
U - 8 4 1

S P E C I F I C A T I O N

PANTOS CO . , LTD	Drawing Number	Amendment
	8 4 1 - 0 0 - 0 0 0 1	E

Product number U - 8 4 1	Drawing name UNICORDER U - 8 4 1 SPECIFICATIONS
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1 . OUTLINE

The uni-corder U-841 is the recorder of a pen writing system, and is the series product of U-1641.
By 4-8 channels, the input part has adopted the unit system.

2 . SPECIFICATIONS

Basic Specifications

Model	:	U-841
Channel	:	4 to 8
Recording method	:	Auomatic balancing system (digital servo system)
Type or input unit	:	Plug-in type (2channels for 1unit)
Reference point	:	Right end of chart paper (Left end is also possible by changing the setting.)

Recording

Recording pen	:	Felt-tip pen (Recording length approx.5km)
Effective recording width	:	250mm
Pen interval	:	4mm
Pen name	:	NDL- * *
Accuracy	:	±0.25% of (measurement accuracy and effective recording width) (Including linearity and bead band)
Pen speed	:	Approx.1600mm / s
Synchronizer	:	ON, OFF 20date / 1mm
Measurement ON / OFF	:	Each channel individually
Chart paper	:	Roll paper [№25020P50 (50m)、 №2501P50 (20m)]
Chart speed	:	10 to 2400mm / min, / h Set at every 1mm
Resolution of time axis	:	0.05mm
Sampling speed	:	4msec
Rapid chart drive	:	2400mm / min (Reverse rotation not allowed)
Accuracy for chart drive	:	±0.1% (at a recording length over 1m)
Chart end detection	:	Provided (pen up, feed stop, signal OFF, end indication)
Swing-out protection	:	Signal limiter
Paper winding-up	:	Equipped (option)
Superimposed marker	:	Operate by operation switch. Operate by external remote. Link with ON / OFF of synchronizer. Amplitude : Approx.10mm ON time : Approx.50ms
Auto pen cap	:	Pen is automatically stored at the specifed position on power OFF and measurement OFF.

Drawing Number	Page	Amendment
8 4 1 - 0 0 - 0 0 0 1	1 / 6	E

Product number U - 8 4 1	Drawing name UNICORDER U - 8 4 1 SPECIFICATIONS
-----------------------------	--

Display

- Display : EL display 5inchs
320 × 256 dots
- Display mode : (1) Range display, Simultaneous display for all channels
(2) Digital measurement value display
6 digits (Mark, Measurement data, Decimal point)
Date, Chart speed
(3) Wave
(4) AUX (Optional screen)
Limiter, Chart feed trigger, Scaling (Physical amount) ,
Time, Tag name, Pen adjustment, Comment, ICard,
Interface (option)

Limit switch (Output is option)

- Number of level : 2-level (Each channel)
- Type : Maximum Minimum
- Alarm : The warning buzzer sounds if it exceeds the limit value. With ON/OFF function
- Output (option) : 2 contact point / ch, Photo-MOS output, Max 8channels
Capacity of contact : DC400V (DC + AC peak) 0.1A

Chart feed trigger

- Remote mode : Paper is fed by turning on the remote mode.
- Trend : Number of speeds : 3 (3stage are set.)

Operation

- Scaling : Range -10000 to +10000 (decimal point, arbitrary setup, arbitrary unit)

RS-232C interface (Option)

- Standard : Based on EIA RS-232C
- Mode : Both input and output of setting value and measured value.
- Transmission speed : 1.2K, 2.4K, 4.8K, 9.6K bps

IC memory card

- Function : Set value
- Capacity : 256Kbytes
- Model : JS256G3-CZ-15
- Battely : 2325 series
"NO BATTELY" is displayed when there is no battery.
Life More than 5 years

(at 25 °C, and state that the battery is removed from the mainframe. The BR2016 is used In this case.)

Drawing Number	Page	Amendment
8 4 1 - 0 0 - 0 0 0 1	2 / 6	E

Product number U - 8 4 1	Drawing name UNICORDER U - 8 4 1 SPECIFICATIONS
-----------------------------	--

External remote 1

Type of signal : TTL Level
: Transistor Switch
: Contact signal

Following functions can be operated from the external devices : operation panel and OR.

Chart paper feed : Start-up • Stop
Falling ↓ → Start-up
Rising ↑ → Stop (The signal for 3ms or less is not answered)

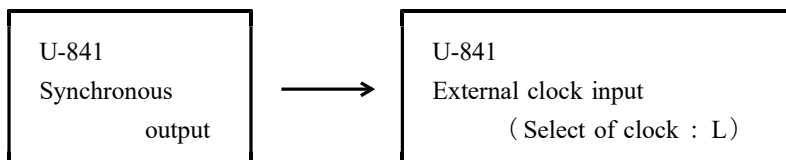
Chart paper rapid feed : Start-up • Stop (Feed)
L → Start-up
H → Stop

Select of clock for
chart paper feed : Select the external clock or internal clock
Chart paper can be fed in synchronization with the external clock.
L → External
H → Stop

External clock input : 50μm / 1clock TTL
Maximum frequency 800Hz
Minimum pulse width 10μs

Weight marker : Simultaneously for all channels
L ↓ → ON

Chart drive : Used when operating the units in parallel.
Synchronous output : 1clock / 50μm TTL



Manual printing : Prints the setting items for printing ON.
L ↓ → Print

Masurement ON/OFF : Simultaneously for all channels
Falling ↓ → Measurement ON
Rising ↑ → Measurement OFF
(Not respond to the signal for 5ms or less)

External remote 2 (option)

EXT. Chart speed ①
EXT. Chart speed ②

Drawing Number	Page	Amendment
8 4 1 - 0 0 - 0 0 0 1	3 / 6	E

Product number U - 8 4 1	Drawing name UNICORDER U - 8 4 1 SPECIFICATIONS
-----------------------------	--

Built-in clock

Accuracy : ± 4 sec.per (TYP.)
Record beam : NNyear NNmonth NNday NNtime NNpart NNsecond (A.D.)

Back-up

Item : Each setup, Built-in clock
Battery : TWO lithium batteries, Built-in the body
Memory time : Approx. 1 month (25 °C)

Operation

Pen lift : All pens move to pen rest when the power is turned OFF.
(All pen simultaneous operation type)
• Masurement ON / Off-switch
Masurement OFF → Pen up → Pen rest
(During this operation, pens other than the one that is in the measure OFF operation does not wave.)
Masurement ON → Pen up → Moves to recording position. → Pen down
(During this operation, pens other than the one that is in the measure OFF operation does not wave.)

General specifications

Voltage proof : Power supply pair Between chassis (GND) AC 1500V For 1 minute
Analog input pair Between chassis (GND) AC 500V For 1 minute
Between analog each input AC 500V For 1 minute
Insuration resistance : Power supply pair Between chassis (GND) Above 100MΩ
With DC500V megger
Control input-and-output pair Between chassis (GND) Above 20MΩ
With DC250V megger
Analog input pair Between chassis (GND) Above 100MΩ
With DC500V megger
Operating environment : Temperature 5 to 45 °C Hummidity 35 to 80 % RH
Storage environment : Temperature -5 to 50 °C Hummidity 35 to 80 % RH
Vibration : 5 to 50Hz Less than 0.1G
Shock : It does not approve.
Power supply : AC 90 to 265V
47 to 440Hz
DC 9V to DC 16V (Option)

Drawing Number	Page	Amendment
8 4 1 - 0 0 - 0 0 0 1	4 / 6	E

Product number U - 8 4 1	Drawing name UNICORDER U - 8 4 1 SPECIFICATIONS
-----------------------------	--

Power consumption : Max 4pen 250W typ.
6pen 250W typ.
8pen 250W typ.
At baamced 4pen 140W typ.
6pen 145W typ.
8pen 150W typ.
Maximum becomes 20% rise of typ value.

Dimension : Approx 438 (W) × 255 (H) × 440 (D) mm

Mass : 4ch 16.5kg (Including input unit)
6ch 18kg (")
8ch 19.5kg (")

Accessories

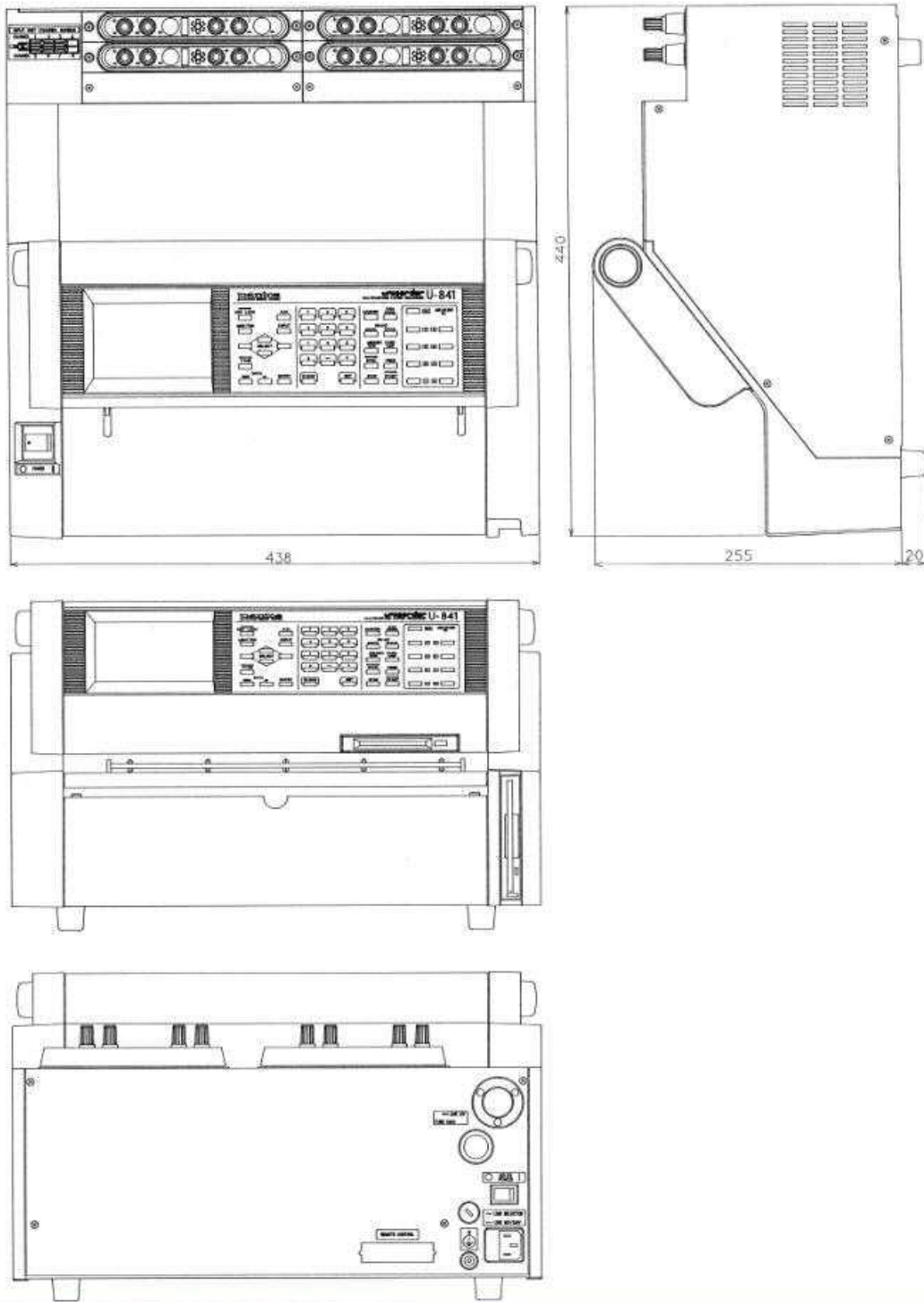
Power code	1
Paper (20m) №2501P50	1
IC memory card	1
Pen (each color) NDL-**	1
Dust cover	1
5A fuse (built in type)	1
Input cover	1
Input coverstay	2
Dropping pipet	1
Frounding adapter	1
External remote connector	1
Insutruction manual	1

Drawing Number	Page	Amendment
8 4 1 - 0 0 - 0 0 0 1	5 / 6	E

Product number
U - 8 4 1

Drawing name
UNICORDER U - 8 4 1 SPECIFICATIONS

3 . EXTERNAL VIEW



Drawing Number	Page	Amendment
8 4 1 - 0 0 - 0 0 0 1	6 / 6	E