

GCTR-1 TELEGRAPH RECORDER PRODUCT INSTRUCTION



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GCTR-1 type telegraph recorder is microcomputer intelligentized engine order automatic recording device designed for satisfying all classes of engine telegraph, and is used for recording engine order state in instead of manual work. Once sea damages or human element accidents occur, this record will be the import law base of arbitrament for maritime affairs.

Engine telegraph automatic recorder is composed of 1 set of host which is flush type construction and installed on wheel house console. And the host is composed of operation panel,microcomputer module,signal reception module power supply and printer.

A. Main Electric Parameter

1. Reliably work under the ambient condition between $-10\text{ }^{\circ}\text{C} \sim +55\text{ }^{\circ}\text{C}$.
2. Corking electro magnetic compatibility,microcomputer design has strictly anti-jamming measures.
3. Power supply is DC $24\text{V} \pm 20\%$ (2A)

B. Main input & output interface

1. Slave & master clock interface(422)
2. Main telegraph interface(485)
3. Power supply input interface(DC24V input)
4. Printer interface (RS232) built-in may be put outside according to clients' requirement.

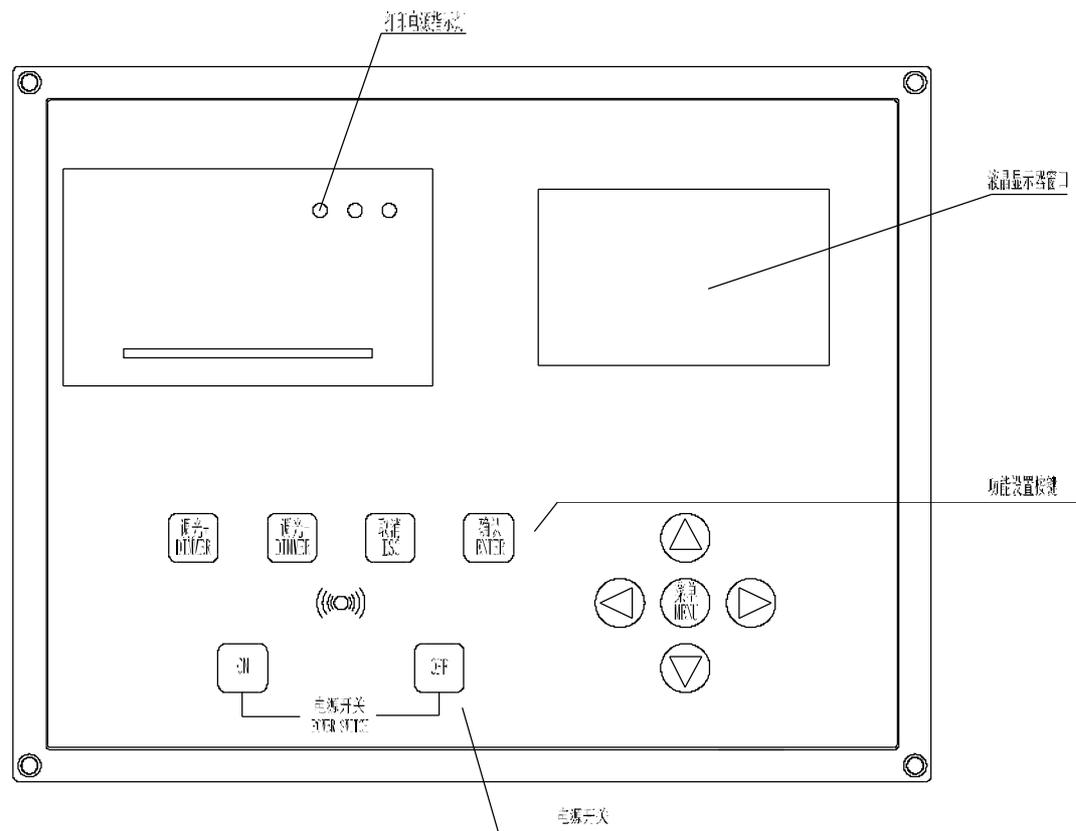
C. Main function

1. Clock is to be built in, year,month,day,hour, minute and second are to be displayed via LCD. Clock has automatic memory function, and it can reset date & time without re-correction after power cut.
2. Print:record of printing operation ,has print function and set function (instant printing and selective printing)
3. Automatic recording function: once there are new engine order sent out from wheelhouse, recording device will real-time record the time, content of new engine order,engine order record is to be in two kinds of menu(Chinese and English).
4. Real-time display function:can real-time display the states of current engine order on LCD.
5. Search for historic records function : can search for all records on the day.
6. Function set:can set the function of recorder via the function key on panel.
7. Power switch and dimmer with soft touch are able to change light for LCD, all key-press has lighting function so that the recorder can be installed in recorder.

8. Can receive the standard time signal of slave & master clock, and automatically calibrate the clock taken by itself , if receive the signal of slave & master clock, remote will be displayed on LCD, and if not, local will be displayed on LCD.

9. Language selection function,has two- language menu which may be set manually.

D. Panel abridged general view



E. Operating instruction for each function key:

1. Power switch: control power on-off for engine telegraph recorder
2. Dimmer +, dimmer - : regulate the back light brightness for LCD to make it convenient for night navigation.
3. Menu key: press the menu key which may proceed the function set.
4. Left & right, up & down page turn key: select the necessary function at function set.
5. Confirmation key: be used for confirming the function selected.
6. Cancel key: be used for exiting the function menu.

F. Main interface display

Main interface principally display current date and time, if receive the

signal of standard time clock, "remote" will be displayed, and if not, " local "will be displayed, intraday records may be browsed by press the up & down page turn key.

本地: 07/03/31
08/29/31

发讯器: 停车
收讯器: 停车

中文

Local:07/03/31
08/29/31

Send: Stop
Receiv: Stop

English

G. Operating instruction for function menu

Enter into function set menu interface by pressing menu key, pitch on necessary function by pressing up & down page turn key, then press the "Confirm" key may enter into the next menu,choose the necessary function at the next menu, and press the "Confirm" key to keep records, if want to exit from this menu, just press the "Cancel" key.

1. Search

Press "menu" key,then press "up & down page turn" key to pitch on" search data " menu, press" confirm" key, then all intraday records will be displayed.

→数据查寻
打印
时间设定
打印功能设定

中文

→ Search data
Srint
Set time
Set printer

English

Press" confirm" key, then " Input date" will be displayed on LCD.

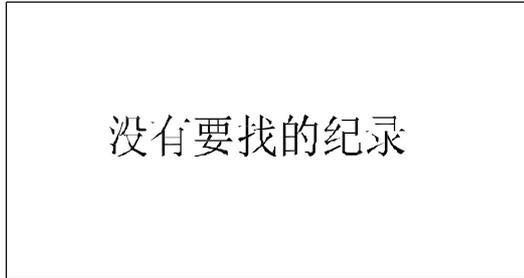
→请输入查询的日期
07/03/31

中文

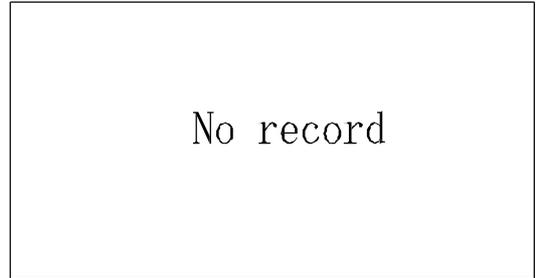
Input date
07/03/31

English

All intraday records will be browsed by pressing up & down page turn key, if the date has gone beyond the number of days which can be recorded, then "No record" will be displayed, and press "Cancel" can exit from this menu.



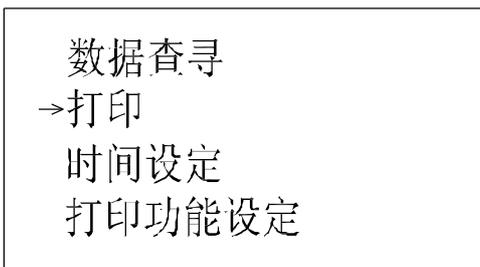
中文



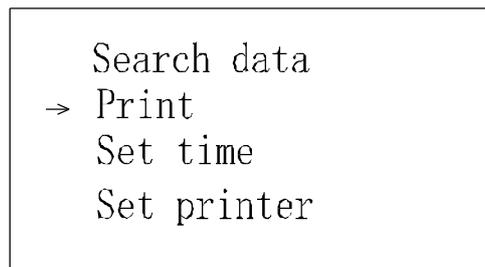
English

2. Printing

Press "menu" key, then press up & down page turn key to pitch on "print", then press "confirm" key to enter into printing set interface.

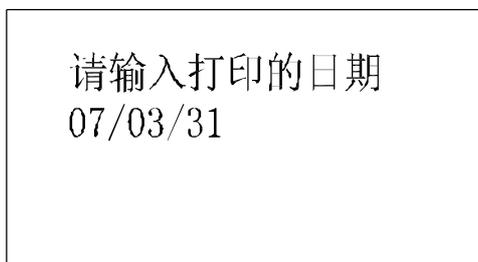


中文

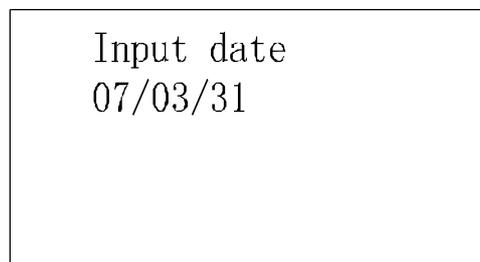


English

Press the left & right page turn key to select the date, and press up & down page turn key to adjust date, press "Confirm" key to select the data needed to be printed, press "Cancel" to exit from this menu.



中文



English

3. Time setting

Press "Menu" key, then press up & down page turn key and pitch on "Set time" menu, press "Conform" key to enter into "Set time" interface.

数据查寻
 打印
 →时间设定
 打印功能设定

中文

Search data
 Print
 → Set time
 Set printer

English

Press left & right page turn key to select year, month, day, hour, minute and second, press up & down page turn key to adjust year, month, day, hour, minute and second, press "confirm" key to select the date and time which have been set, press "Cancel" to exit this menu.

时钟设定
 07/03/31
 18/12/56

中文

Set time
 07/03/31
 18/12/56

English

4. Set printer

Press "Menu" key, then press up & down page turn key to pitch on" Set printer "menu, and press "Confirm" key to enter into "Set printer" interface.

数据查寻
 打印
 时间设定
 →打印功能设定

中文

Search data
 Print
 Set time
 → Set printer

English

LCD display" Instant Print "and " Choose Print", press up & down page turn key to select the necessary function, press "Confirm" key to select the

necessary function, and press "Cancel" key to exit from this menu.

→ 即时打印
选择打印

中文

→ Instant print
Choose print

English

Functional specification:" Instant print" means immediately print so long as there is operation, " Choose print " means print according to the date selected by the user.

5. Set language

Press" Menu" key, then press up &down page turn key to pitch on" Set Language", press "Confirm" key to enter into "Set Language" interface.

打印
时间设定
打印功能设定
→ 语言设定

中文

Print
Set time
Set printer
→ Set language

English

Press up & down page turn key to select "Simple Chinese "and "English", press "Conform" key to select the language has been set, press" Cancel" to exit from this menu.

→ 简体中文
英文

中文

→ Simple chinese
English

English

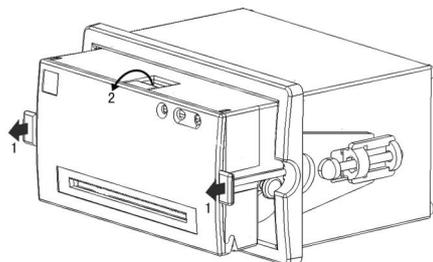
H. Operating instruction for printer



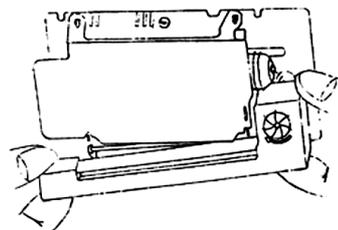
1. Installation of colour strip

Color strip box is to be installed when leaves factory, but it should be replaced after a period of using. Color strip box may be replaced according the following steps.

- ①. As per Table: the first step, draw out a part of the position in the picture , secondly button up position 2 in Table 1 and turn up the front panel;
- ②. Take off the old color strip box from printing head gently(referred to Table 1 - 4 - 5). Notice: please uplift the left side of the color strip box, then uplift the right side and take the color strip box off .
- ③. Replace a new color strip box. Firstly gently put the right end of the color strip box on the gear shaft which is located in the right end of nose, left end should be uplifted in some sort, don't put down. Here if find the right end hasn't befallen to the death, please press the rotary knob on the color strip box, Clockwise turn in some sort, don't the loose left end until right end befallen to the death. Please check whether the color strip has been pulled straight,or the color strip is still exposed outside, may revolve the rotary knob again, until color strip is pulled into the color strip box and pulled straight. When there is no paper in nose,replacing the color strip will be much easier.
- ④. Fit on the front cover board of printer or push up top cap;and thrust the cover,nose rack and paper bin into reset.



1



2

2. Scroll for installation

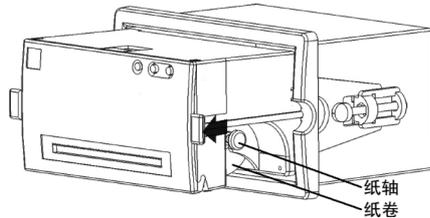
Printer paper's Max. Diameter is 30mm.

The printer is to be installed with scroll when leaves factory, but the

paper head hasn't be inserted into nose, this will avoid spoilage of nose or color strip during line-haul or long-term storage. Therefore, paper head must be inserted into nose before use.

General processes of paper loading are as follows:

①. Button up the concave position of cover from both sides, and draw out(As per Table 3),paper axes and scroll will be seen after drawing out.



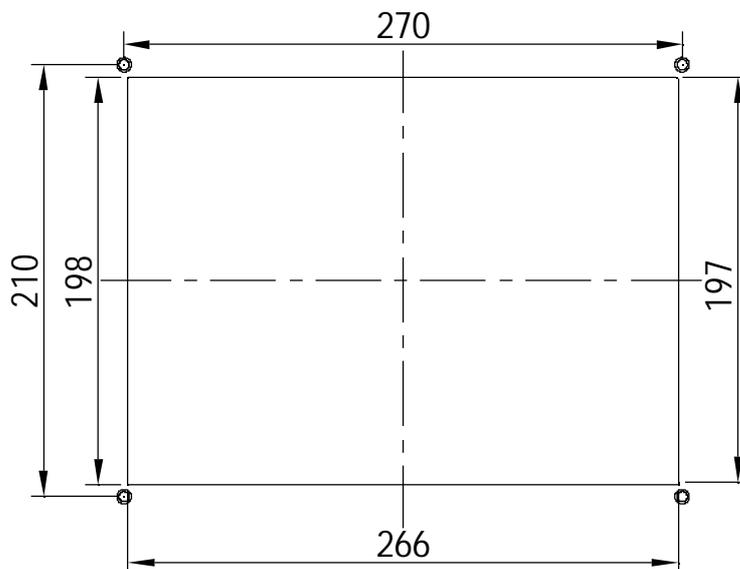
②. Take down the paper spool from printer (as per Table 1 -5 - 4).If there has been scroll in the printer, these step may be jumped over, directly to the fifth step.

③. Cover the new scroll over the paper spool, and press the paper spool into guided groove forcibly as per Table 1 - 5 -5.Be sure that the paper spool has been stay put, and won't drop out.

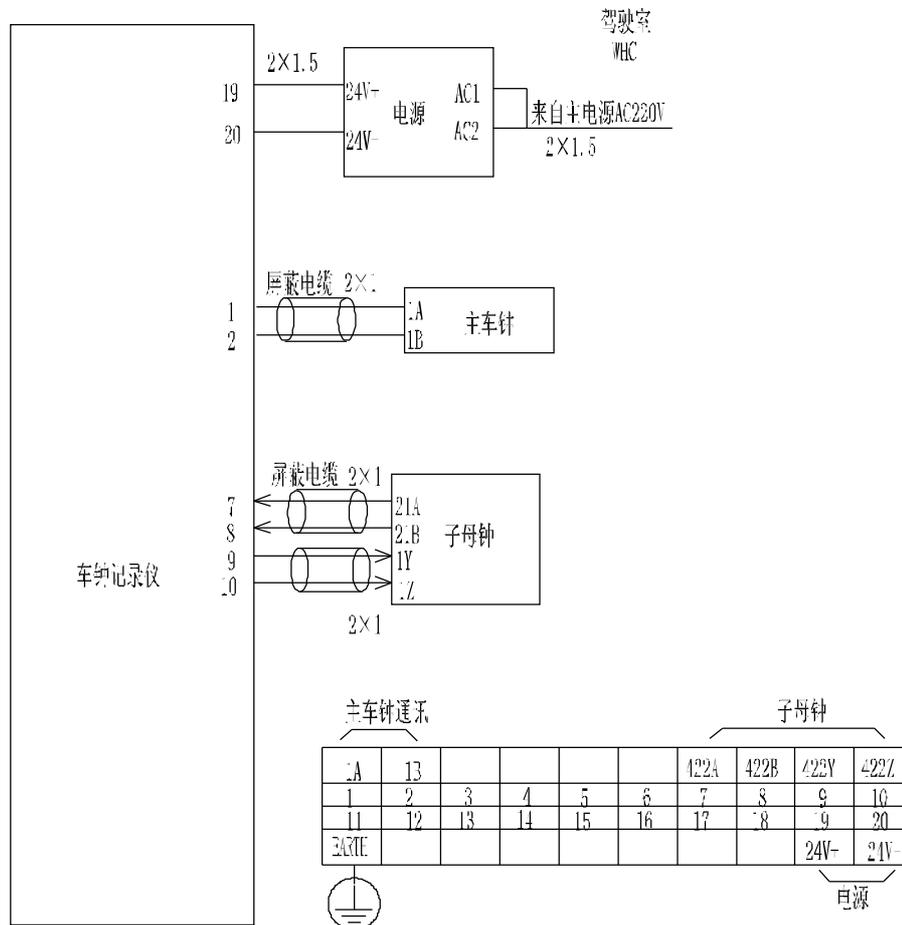
④. Paper's end should be cut into the pattern as per Table 4.

⑤. Switch on the printer's power supply, press SEL(P)key to make the SEL indicating lamp blackout, then press LF(S)key to make the nose turned. Here send the paper head into the exit slot below the nose by hand, the paper will enter into nose gradually, until bassets from the dead ahead of nose,the basset part should have a certainty length. Press LF key or SEL key,or switch off power supply. Cover the front cover board of printer, thread out the printer head from exit slot of front cover board.

I. Panel cut out dimension and outline drawing



J. External Wiring Diagram



K. Matters need attention on use and maintenance

1. This instrument should be reliable stay put, it is to be noted that whether the power's polarity coincides with the instrumentation's requirements at the time of installation.

2. Powered action test: switch-in 24V power supply, check whether its functions are normal.

3. Turn power off or set the printer into selective printing as far as possible when replace the color strip and printer paper, to avoid spoiling the typing head.

4. When need to open the instrument at the time of servicing, do cut off the power at first.

5. Fasteners of instrument are should be checked whether there is loose.

6. Installation of cable: sectional area is not less than 0.75mm², communication cables are adopted shield multiple twin communication cable, number of cores is referred to system wiring diagram. Sectional area of power cable is not less than 1mm². Please wire according to system wiring

diagram. Shielding layer should be connect with hull reliably.

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