

GCVDR-01

VDR DATA INTERFACE UNIT

PRODUCT INSTRUCTION



HENAN GUANGCAI ELECTRIC CO., LTD

Add: Sangqiang Industrial Park Taihang Rd.
Anyang Henan Province, China

Tel: +86-0372-3159500 (office)
+86-0372-3159512 (technical department)

Fax: +86-0372-3159506 (office)
+86-0372-3159511 (technical department)

P.C.: 455000

E-mail: gcdesign@aygcship.com

Http: www.aygcship.com

GCVDR-01 VDR DATA INTERFACE UNIT

PRODUCT INSTRUCTION

A. General

GCVDR-01 VDR data interface unit is interface circuit which connects our product and VDR product (as Beijing Highlander).The interface circuit adopts advanced current detection technique and MPU control technique, convenient and reliable for using, and it conforms with relative standard request of CCS.

GCVDR-01 VDR data interface unit has the merits as small, convenient for installation, beauty and reliable performance etc. It can be broadly used for all classes of marine.

B. Main Function and Characteristic

Provide RS-485 standard interface, used for connecting VDR.
Communication agreement conform with NMEA0183 agreement.

C. Technical Specification and Type INSTRUCTION

- 1, Working Voltage:DC24V
- 2, Work reliably under the ambient condition of -10℃~+55℃;
- 3, Relative Humidity:≤RH95%(+40℃);
- 4, Good Electro Magnetic Compatibility,microcomputer technique contains rigorous anti-interference measure;
- 5, Equipment has measures for vibration proof, moisture proof, salt mist proof and anti-fungus ;
- 6, Protection Grade:IP22

D. Equipment Composition And Data Format

GCVDR-01 VDR data interface unit can be divided into 3 kinds,VDR data interface of engine telegraph, engine order (remote control) and binary alarm.(32 routes)

1, Data format of engine telegraph VDR data interface

Data format from engine telegraph to VDR:

\$AYXDR,A,XX,,c--c,A,XX,,c--c*hh <CR> <LF>\$AYXDR, A head file

XX position code of engine telegraph
c--c channel number (1: 1st channel that is start sender bell; 2: 2nd countersign bell)
hh exclusive check and ASC code

2, Data format of engine order (remote control)VDR data interface

Data format from manipulator to VDR :

\$AYXDR,A,XX,,c--c,A,XX,,c--c*hh <CR><LF>\$AYXDR,A head file

XX position code of manipulator (0X: ahead; 1X:astern)

c--c channel number (1: 1st channel;2: 2nd channel)

hh exclusive check and ASC code

3, Binary alarm VDR data interface (32 routes)

Data format from binary alarm to VDR:

\$AYXDR,S,x.x,,c--c,S,x.x,,c--c*hh <CR><LF> head file (one head file with 4 routes alarm point)

x.x binary alarm (1: alarm;0: not alarm)

c--c channel number (01 is 1st channel)

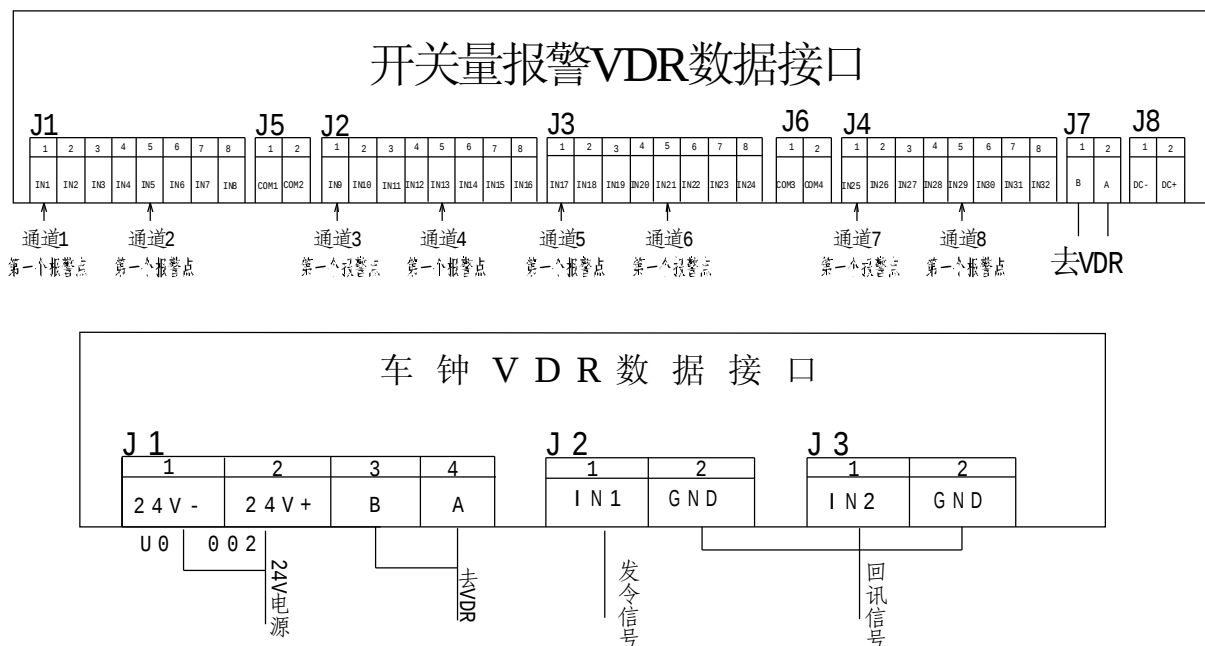
hh exclusive check and ASC code

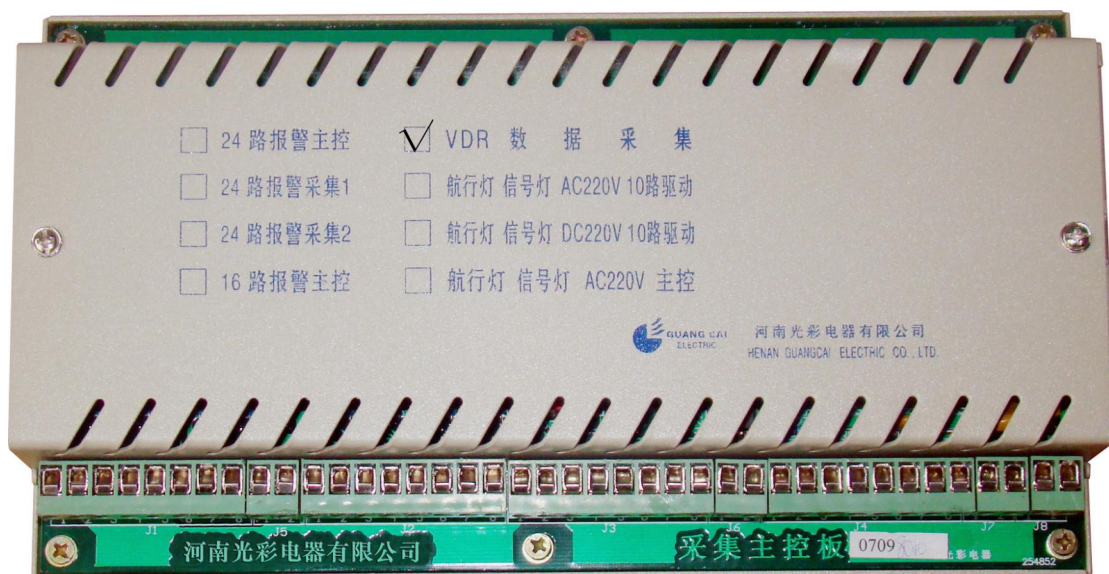
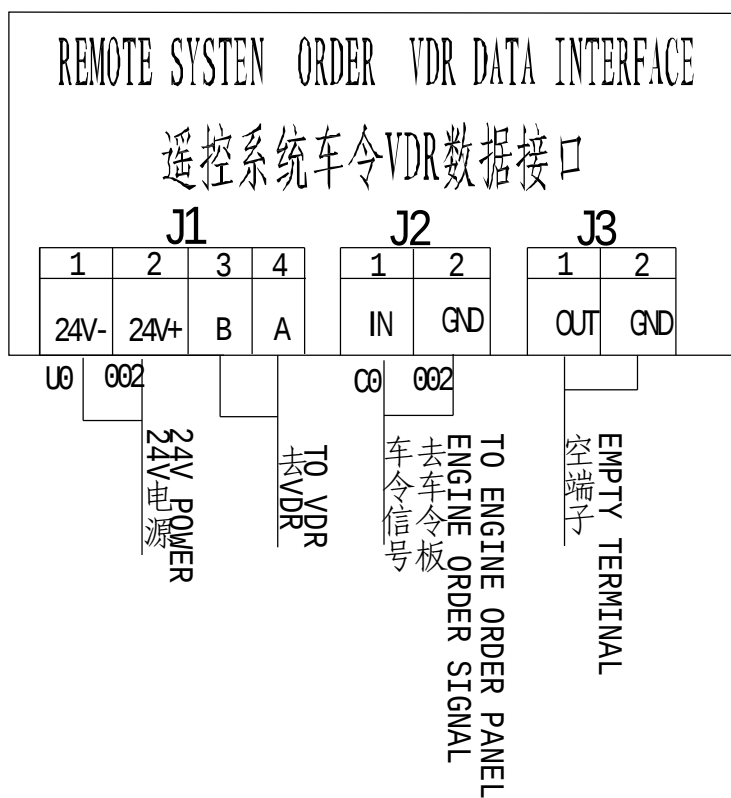
E. Matters Need Attention

1.As VDR data interface unit has manifold interface circuits,specific parameter should be stated at the time of order, we shall produce according to request.

2. Whether actual parameter accords with request should be checked carefully before connection .

Accompanied with external wiring diagram, panel drawing, installation dimension.





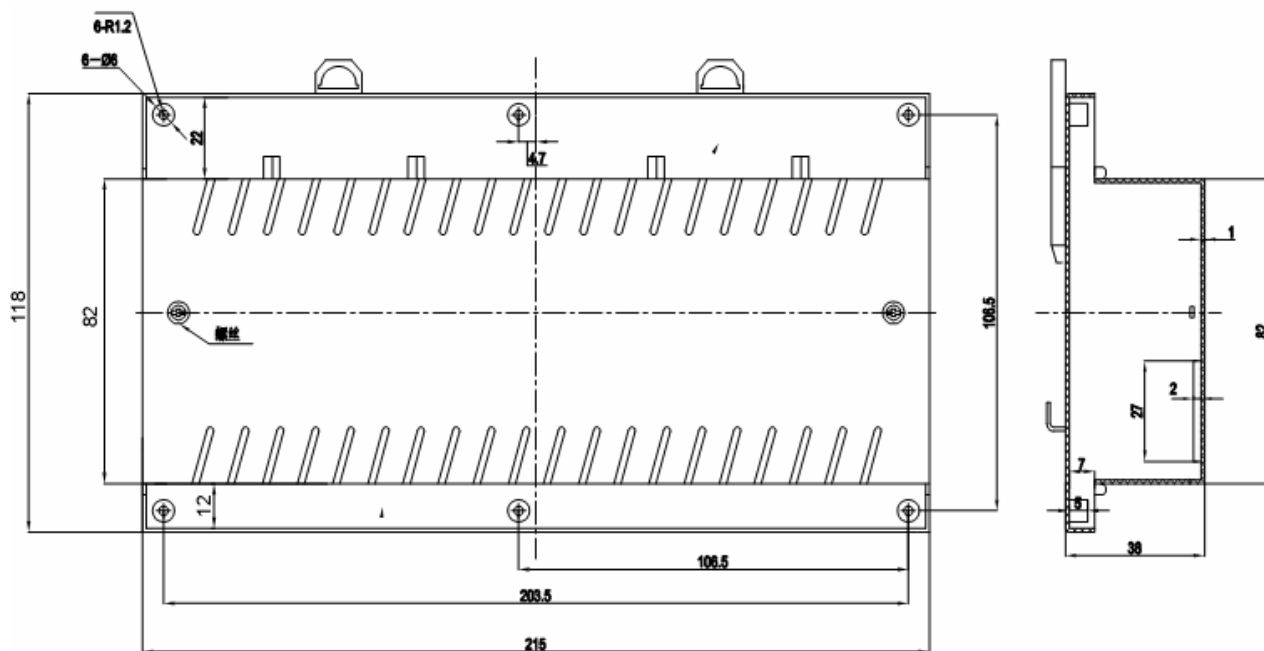
VDR interface module for binary alarm

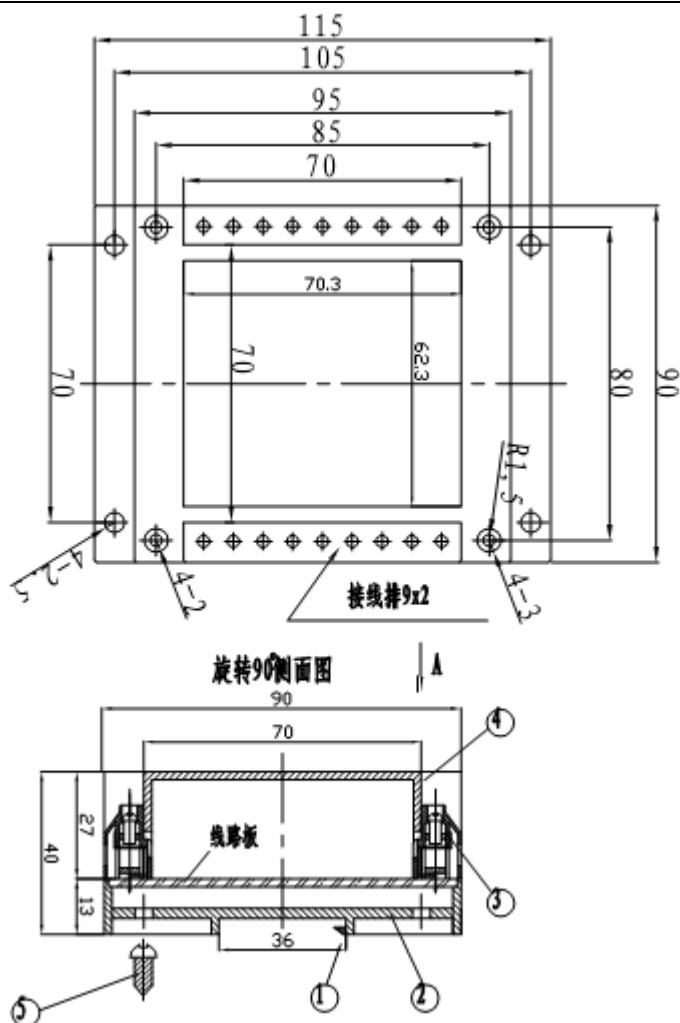


VDR interface module for engine order from remote control system



VDR interface module for main
telegraph system





These documentations are compiled by technical department of Henan Guangcai Co.,Ltd

Compiler:Mayu
Checker:Zhao Lijun
Approver:Zhang Songlin