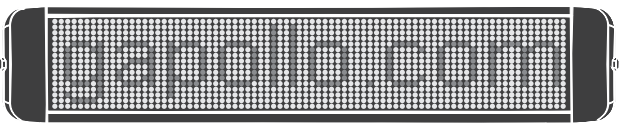
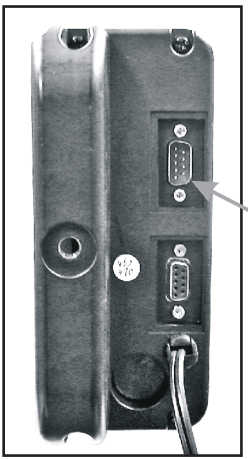
# • User Manual For LED Alpha Sign •




GOLD APOLLO CO.,LTD.

# Gold Apollo LED Sign Relay Output Pin Instruction



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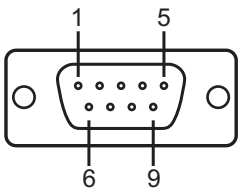
RS-232－DB9 Male as Relay Output Pins

| Pin No. | Signal |
|---|---|
| 1 | Normal Open |
| 2 | Normal Open |
| 3 | Normal Open |
| 4 | Common |
| 5 | Common |
| 6 | Common |
| 7 | Normal Close |
| 8 | Normal Close |
| 9 | Normal Close |

**The Total Max. Current <= 2A**



## LED sign's Control Commands V2.00 (use for LED sign firmware V6.0 up)

| Item | Features | Command | Parameters | Description |
|---|---|---|---|---|
| 1 | Timer display On/Off | **GALEDTM=** | **ON** or **OFF** | ON = Timer display enable , OFF = Timer display disable |
| 2 | Timer Date On/Off | **GALEDDT=** | **ON** or **OFF** | Date display ON or OFF |
| 3 | Timer Date Setting | **GALEDDATE=** | **YYMMDD** | YY= year from 0 to 99 , MM= month from 1 to 12, DD= day from 1 to 31 |
| 4 | Timer Date mode | **GALEDDTMD=** | **X** | 0 = DD-MMM-YY , 1 = MMMM DD,YY , 2 = MM/DD/YY , 3 = DD/MM/YY , 4= MM-DD-YY, 5 = DD-MM-YY, 6 = MM.DD.YY, 7 = DD.MM.YY, 8 = MM DD YY , 9 = DD MM YY |
| 5 | Timer Time Setting | **GALEDTIME=** | **HHmmSS** | HH= hour from 00 to 23 , mm = minute from 00 to 59 , SS = second from 00 to 59 |
| 6 | Timer Month language of Date | **GALEDLANG=** | **XXX** | ENG = English , FRA= France |
| 7 | Timer Display Mode | **GALEDTMD=** | **X** | This control command will not work on LED Sign Type = A or B mode.<br>1 = Timer display after every message ,<br>2=Timer display once after finished all messages |
| 8 | Timer Hour Type | **GALEDSHTM=** | **12 or 24** | 24= 24 hours type(default ) , 12=12 hours type with AM, PM indicator. |
| 9 | Timer display hold time | **GALEDSHTM=** | **XXX** | from 001 to 999 seconds |
| 10 | Buzzer On/Off | **GALEDBZ=** | **ON** or **OFF** | ON = Buzzer beep enable , OFF = Buzzer beep disable |
| 11 | Buzzer On Time | **GALEDBZTM=** | **XXX** | from 001 to 999 seconds |
| 12 | Buzzer music type | **GALEDBZTY=** | **X** | Music type from 0 to 9 |
| 13 | Scroll Speed control | **GALEDSPEED=** | **X** | X = 1 ( slowest ) to 5 ( fastest ) , this scroll feature only active the message length more then LED sign display's character length. It will be setting to default value when the LED Sign Type command is changed. |
| 14 | Default message | **GALEDMESG=** | **xxxxx...** | It keep 50 characters for message to replace default message of "Gold Apollo LED signs moving display" , If use "GALEDTIME=HHmmSS"as the default message then the default message will show time information on the LED sign. |
| 15 | Message Counter | **GALEDMGCT=** | **XX** | 01= only use one message slot for any capcode and function bits, 24 = each capcode and function will locate its message slot, AU= Auto can have 24 memory but does not care capcodes, this 24 memories will do FIFO action, it mean if It's memory full then oldest memory will move out memory. |

| | | | | |
|---|---|---|---|---|
| 16 | Auto Clear delay time | **GALEDCLRDY=** | **XXX** | 000= auto clear disable, delay time = 001 to 999 seconds, message will auto clear itself after delay time is time out. |
| 17 | Auto Clear Count times | **GALEDCLRCT=** | **XXX** | 000= auto clear disable, display how many times = 001 to 999 times, message will auto clear itself after display times is time out. |
| 18 | Clear by "Reset" command | **GALEDRESCM=** | **ON or OFF** | ON = if the message have header or trailer with "reset" and space words then the same message will be cleared. The header format is "reset"+" "(space), the trailer format is " "(space) +"reset" . And the "reset" will do not care the lower or upper caps. |
| 19 | Time Stamp Mode | **GALEDTMSM=** | **X** | 0 = Off , 1 = time stamp in the head of message , 2 = time stamp in the end of message , time stamp format is HH:MM ( 24 hours time format) |
| 20 | Non Scroll Hold time | **GALEDMGTM=** | **XXX** | from 001 to 999 seconds, this feature only active when the message length less then LED sign's character length , the default time is 3 seconds. |
| 21 | Delete All Messages | **GALEDDELALL** | | This command will clear all messages then it will show the default message on the LED sign. |
| 22 | *❷. LED Sign Type | **GALEDTYPE=** | **X** | 1= 1 line<br>2= 2 lines<br>A= 2 lines with timer and timer is on second line<br>B= 2 lines with timer and timer is on first line<br>a= 2 lines with default message and default message is on second line<br>b= 2 lines with default message and default message is on first line |
| 23 | Message Display Sequence | **GALEDSEQU=** | **X** | 0 = FIFO (First In First Out)<br>1 = LIFO (Last In First Out) |
| 24 | *❷. Appear Message Mode | **GALEDAPPM=** | **X** | This feature only work for LED Sign Type = 1 or 2.<br>0 = Fly to Left (default)<br>1 = Enter to Right<br>2 = Extended to Buttom<br>3 = FLY from Top<br>4 = FLY from Buttom<br>5 = Raining<br>6 = Snow Flakes<br>7 = Appear right away<br>8 = Animation 1 |

*❷. Only for AS112, AS122, AS212 or AS222.

| | | | | |
|---|---|---|---|---|
| 25 | *❷. Disappear Message Mode | **GALEDDISM=** | **X** | This feature only work for LED Sign Type = 1 or 2.<br>0 = Continue (default)<br>1 = Run to Left<br>2 = Curtain Right<br>3 = Curtain Down<br>4 = Fly Away<br>5 = Sink<br>6 = Flash & Invert<br>7 = Vapor<br>8 = Dissolve<br>9 = Flash<br>A = Disappear right away<br>B = Animation 1 |
| 26 | *❸. Default Color | **GALEDDISM=** | **X** | Color definition : 1= Red color, 2= Green color. 3= Orange color |
| 27 | *❸. Priority Message Color | **GALEDDISM=** | **X** | Color definition : 0: Disable, 1= Red color ,2= Green color. 3= Orange color<br>If priority color is disable then it will display default color. |
| 28 | *❸. Capcode Color Group A | **GALEDDISM=** | **XXX** | Color definition : 0: Disable, 1= Red color ,2= Green color. 3= Orange color<br>XXX is capcode 1, 2, 3, 4 for flex system<br>XXX is function code A, B, C, D of capcode 1 for POCSAG system |
| 29 | *❸. Capcode Color Group B | **GALEDDISM=** | **XXX** | Color definition : 0: Disable, 1= Red color ,2= Green color. 3= Orange color<br>XXX is capcode 5, 6, 7, 8 for flex system<br>XXX is function code A, B, C, D of capcode 2 for POCSAG system |
| 30 | *❸. Capcode Color Group C | **GALEDDISM=** | **XXX** | Color definition : 0: Disable, 1= Red color ,2= Green color. 3= Orange color<br>XXX is capcode 9, 10, 11, 12 for flex system<br>XXX is function code A, B, C, D of capcode 3 for POCSAG system |

*❸. Only for AS210(R), AS220(R), AS212(R), orAS222(R).

| | | | | |
|---|---|---|---|---|
| 31 | *❸. Capcode Color Group D | **GALEDDISM=** | **X** | Color definition : 0: Disable, 1= Red color ,2= Green color. 3= Orange color<br>XXX is capcode 13, 14, 15, 16 for flex system<br>XXX is function code A, B, C, D of capcode 4 for POCSAG system |
| 32 | *❸. Capcode Color Group A | **GALEDDISM=** | **XXX** | Color definition : 0: Disable, 1= Red color ,2= Green color. 3= Orange color<br>XXX is unused for flex system<br>XXX is function code A, B, C, D of capcode 5 for POCSAG system |
| 33 | *❸. Capcode Color Group B | **GALEDDISM=** | **XXX** | Color definition : 0: Disable, 1= Red color ,2= Green color. 3= Orange color<br>XXX is unused for flex system<br>XXX is function code A, B, C, D of capcode 6 for POCSAG system |
| 34 | *❸. Message Color Command | **GALEDDISM=** | **ON or OFF** | If Message Color Command is ON then message color can be changed in the message specific date. **<*CG1*>**= Red color, **<*CG2*>**= Green color, **<*CG3*>**= Orange color. The message will change color after Message Command Color. And this color changed only work on this message. |
| **LED Sign Priority Message features V1.12** | | | | |
| 35 | *❶. Priority Message | **GALEDPRIM=** | **X** | 0 : Off |
| | | | | 1 : Priority Message On without Relay and Priority Message Capcode without Relay |
| | | | | 2 : Priority Message On with Relay On and Priority Message Capcode without Relay |
| | | | | 3 : Priority Message On without Relay and Priority Message Capcode with Relay On |
| | | | | 4 : Both Priority Message and Priority Message Capcode with Relay On |

*❶ Only for AS110R , AS112R , AS120R , AS122R, AS210R, AS212, AS220R, AS222R.

| | | | | |
|---|---|---|---|---|
| 36 | *1. Priority Message Relay On time | **GALEDRLYTM=** | **XXX** | 0 – 999 seconds |
| 37 | *1. Priority Message Capcode selection | **GALEDPRICAP=** | **XXXXXX** | 000000 –FFFFFF , this code is only valid 0 - 9 and A-F, that will be a hex code for thecapcode select for priority message. And the bit = 1 then the priority message is enabled. |
| | | | | Flex system will only work four codes for the 16 capcodes, and POCSAG system will work for six codes for 24 capcodes. |
| | | | | Flex system : Highest bit will be a capcode 1, next highest bit is capcode 2 ... so the capcode 16 is fourth code lowest bit. |
| | | | | POCSAG system : Highest bit will be a capcode 1 function code = 00, next highest bit is capcode 1 function code = 01, next highest bit is capcode 1 function code = 10, next highest bit is capcode 1 function code = 11 ... so capcode 6 function code = 11 is the lowest bit. |
| 38 | *1. Mail Drop Capcode selection | **GALEDMDCAP=** | **XXXXXX** | 000000 – FFFFFF , this code is only valid 0 - 9 and A-F, that will be a hex code for the capcode select for Mail Drop message. And the bit = 1 then the Mail Drop message is enabled. |
| | | | | Flex system will only work four codes for the 16 capcodes, and POCSAG system will work for six codes for 24 capcodes. |
| | | | | Flex system : Highest bit will be a capcode 1, next highest bit is capcode 2 ... so the capcode 16 is fourth code lowest bit. |
| | | | | POCSAG system : Highest bit will be a capcode 1 function code = 00, next highest bit is capcode 1 function code = 01, next highest bit is capcode 1 function code = 10, next highest bit is capcode 1 function code = 11 ... so capcode 6 function code = 11 is the lowest bit. |
| | | | | If Mail Drop capcode is enabled one then the message counter will be decreased one. |

*1. Only for AS110R , AS112R , AS120R , AS122R, AS210R, AS212, AS220R, AS222R.

| | | | | |
|---|---|---|---|---|
| 39 | *1. Mail Drop Time Out Off | **GALEDMDTOOF=** | **ON** or **OFF** | ON = Mail Drop Time Out off<br>OFF = Mail Drop Time Out is same as normal message |
| 40 | *1. Priority Message Counter | **GALEDPRICT=** | **X** | X=1 to 5 , it can be selected priority message can display and store from 1 to 5 messages |
| 41 | *1. Priority Message Clear | **GALEDPRICLR=** | **ON** or **OFF** | ON = Priority message clear command is enabled then it will accept “CLEAR” air command to clear all priority messages. And the “CLEAR” will do not care the lower or upper caps. |
| 42 | *1. Automatic Message Counter | **GALEDAUCT=** | **XX** | X=01 to 24, it allow user to select message counter at automatic message mode. |
| 43 | *1. Priority Message auto clear delay time | **GALEDPCLRDY=** | **XXX** | 000= Priority Message auto clear disable, delay time = 001 to 999 seconds, Priority Message will auto clear itself after delay time is time out. |
| 44 | *1. Message Number of Sequence | **GALEDMGNO=** | **ON** or **OFF** | Message Number disaplay = On or Off |
| 45 | *1. Timer Hour Type | **GALEDTMHR=** | **12** or **24** | 24= 24 hours type ( default ) , 12 = 12 hours type with AM , PM indicator. |

*1. Only for AS110R , AS112R , AS120R , AS122R, AS210R, AS212, AS220R, AS222R.

## *Control command instruction and Examples:*

**1: Timer display On/Off**
GALEDTM=ON
Description: Timer display enables.

**2: Timer Date On/Off**
GALEDDT=OFF
Description: Date disable at timer display.

**3: Timer Date Setting**
GALEDDATE=061025
Description: The timer's date will set to 2006, Oct, 25

**4: Timer Date mode**
GALEDDTMD=5
Description: If the timer set to 2006, Oct, 25 then it will show **25-10-06** on the display.

**5: Timer Time Setting**
Timer Time Setting=061025
Description: The timer's time will set to 06:10AM 25 seconds

**6: Timer Month language of Date**
GALEDLANG=ENG
Description: If the timer set to 2006, Oct, 25 and Date mode set to DD-MMM-YY then it will show **25-OCT-06** on the display.

**7: Timer Display Mode**
GALEDTMD=1
Description: There are three messages then it will show as following,
Message 1 → timer display → Message 2 → timer display
→ Message 3 → timer display → Message 1... (repeat)

GALEDTMD=2
Description: There are three messages then it will show as following,
Message 1 → Message 2 → Message 3 → timer display
→ Message 1... (Repeat)

**8: Timer Hour Type**
GALEDTMHR=12
Description: The timer's hour type can be selected 12 hours.
The default type is 24 hours.

**9: Timer display hold time**
GALEDSHTM=005
Description: The timer's time will show and hold 5 seconds.

**10: Buzzer On/Off**
GALEDBZ=ON
Description: The Buzzer's Beep is enabled.

**11: Buzzer On Time**
GALEDBZTM=008
Description: The Beep time is selected to 8 seconds.

**12: Buzzer music type**
GALEDBZTY=0
Description: The Beep type is selected to 0.

**13: Scroll Speed control**
GALEDSPEED=5
Description: The Scroll Speed is selected to fastest. Please note the scroll feature only work when your message more LED sign's character length. If you LED sign's length is 20 characters then your message must more 21 characters then scroll feature will work otherwise the message will be hold and the hold time define by command item 19 (Non Scroll Hold time).

**14: Default message**
GALEDMESG=Gold Apollo default message
Description: The default message will be replaced to "**Gold Apollo default message**". This message will show when you delete all messages.

GALEDMESG=GALEDTIME=HHmmSS
Description: The default message will be replaced to time information "**16:24:35**". This time information will show when you delete all messages.

**15: Message Counter**
GALEDMGCT=XX
Description: If the LED sign is deleted all messages and do a following paging examples : ( it is used Message Display Sequence = LIFO )

**Step 1.** Paging capcode 1 tone A : message 1
**GALEDMGCT=01** (this is the command's selection)
**GALEDMGCT=24** (the last message will show first)
**GALEDMGCT=AU** (the last message will show first)
message 1 → ... repeat ( this is the message display on the LED sign )

**Step 2.**Paging capcode 1 tone B : message 2
**GALEDMGCT=01**
message 2 → ... repeat
**GALEDMGCT=24**
**GALEDMGCT=AU**
message 2 → message 1 → ... Repeat

**Step 3.**Paging capcode 1 tone C : message 3
**GALEDMGCT=01**
message 3 → ... repeat
**GALEDMGCT=24**
**GALEDMGCT=AU**
message 3 → message 2 → message 1 → ... repeat

**Step 4.**Paging capcode 1 tone D : message 4
**GALEDMGCT=01**
message 4 → ... repeat
**GALEDMGCT=24**
**GALEDMGCT=AU**
message 4 → message 3 → message 2 → message 1 → ... Repeat

**Step 5.**Paging capcode 1 tone A : message 5
**GALEDMGCT=01**
message 5 → ... repeat
**GALEDMGCT=24**
message 5 → message 4 → message 3 → message 2 → ... repeat
**GALEDMGCT=AU**
message 5 → message 4 → message 3 → message 2 →
message 1 → ... repeat

**Step 6.**Paging capcode 1 tone B : message 6
**GALEDMGCT=01**
message 6 → ... repeat
**GALEDMGCT=24**
message 6 → message 5 → message 4 → message 3 → ... repeat
**GALEDMGCT=AU**
message 6 → message 5 → message 4 → message 3 →
message 2 → message 1 → ... Repeat

**16: Auto Clear delay time**
GALEDCLRDY=030
Description: The receiving message will show 30 seconds then it will be clear itself.

**17: Clear Count times**
GALEDRESCM=030
Description: The receiving message will show 30 times then it will be clear itself

**18: Clear by "Reset" command**
GALEDRESCM=ON
Description: The Clear by "Reset" command is enabled. So you can do clear message as following,
Example 1: Message content is “this is a test”
reset this is a test
This head reset command will clear the message.

Example 2: Message content is “this is a test”
this is a test RESET
This reset command at trailer will clear the message.

**19: Time Stamp Mode**
GALEDTMSM=1
Description: The receiving message will be added time stamp in the head of message.
Example: Message content is “this is a test” , Time is 17:58.
LED Sing will show it as 17:58 this is a test.

**20: Non Scroll Hold time**
GALEDMGTM=005
Description: The non scroll message will show and hold 5 seconds. Please also refer command item 12 (Scroll Speed control).

**21: Delete All Messages**
GALEDDELALL
Description: It will delete all messages and it will show the default message on LED sign. Please also refer command item 13 (Default message).

**22: LED Sign Type**
GALEDTYPE=2
Description: The LED Sign type will change to 2 lines display mode.

**23: Message Display Sequence**
GALEDSEQU=1
Description: The LED Sign will display message as first in first out mode.

**24: Appear Message Mode**
GALEDAPPM=8
Description: The LED Sign will display an animation first then display the message.

**25: Disappear Message Mode**
GALEDDISM=B
Description: The LED Sign will display an animation follow the message.

**26: Default color Type**
GALEDCOLOR=1
Description: The LED Sign will display message in Red color.
The number 1= Red color, 2= Green color, 3= Orange color.

**27: Priority message color Type**
GALEDPCOLOR=1
Description: The LED Sign will display priority message in Red color.
The number 1= Red color, 2= Green color, 3= Orange color.

**28: Capcode A color Type**
GALEDCAPCLA=0123
Description: The LED Sign will display message color by sapcode ID.
The number sequence use for ID 1, 2, 3, 4, The number 0= disable(use default color) ,1= Red color, 2= Green color, 3= Orange color.So this case will display ID 1 as default color, ID 2= red color, ID 3= green color, ID 4= orange color.

**29: CapcodeB color Type**
GALEDPCOLOR=1123
Description: The LED Sign will display message color by sapcode ID.
The number sequence use for ID 5, 6, 7, 8, The number 0= disable(use default color) ,1= Red color, 2= Green color, 3= Orange color.So this case will display ID 5 as red color, ID 6= red color, ID 7= green color, ID 8= orange color.

**30: Capcode C color Type**
GALEDPCOLOR=1111
Description: The LED Sign will display message color by sapcode ID.
The number sequence use for ID 9, 10, 11, 12, The number 0= disable(use default color) ,1= Red color, 2= Green color, 3= Orange color.So this case will display ID 9 as red color, ID 10= red color, ID 11= green color, ID 12= orange color.

**31: Capcode D color Type**
GALEDPCOLOR=2222
Description: The LED Sign will display message color by sapcode ID.
The number sequence use for ID 13, 14, 15, 16, The number 0= disable(use default color) ,1= Red color, 2= Green color, 3= Orange color.So this case will display ID 13 as green color, ID 14= green color, ID 15= green color, ID 16= green color.

**32: Capcode E color Type**
GALEDPCOLOR=3333
Description: The LED Sign will display message color by sapcode ID.
The number sequence use for ID 13, 14, 15, 16, The number 0= disable(use default color) ,1= Red color, 2= Green color, 3= Orange color.So this case will display ID 13 as green color, ID 14= green color, ID 15= green color, ID 16= green color.

**33: Capcode F color Type**
GALEDPCOLOR=0000
Description: The LED Sign will display message color by sapcode ID.
The number sequence use for ID 21, 22, 23, 24, The number 0= disable(use default color) ,1= Red color, 2= Green color, 3= Orange color.So this case will display ID 21-24 asdefault color.

**34: Message color command**
GALEDPMSGCL=NO
Description: The LED Sign Message color command is turned on then the color can be selected by specific message command.

Example 1 : Default color= Red color, message="This is a test <*CG2*> Message color command"
The LED Sing display will show → This is a test Message color command

Example 2 : Default color= Orang color, message="This is a test <*CG2*> Message <*CG3*>color<*CG3*> command"
The LED Sing display will show → This is a test Message color command

**35: Priority Message**
911 as Priority Message prefix code. it will not show 911 on the display. but it also can be used the RESET control command to cancel this priority message in the AS control commands. The other way is used a new "CLEAR" priority message air command to clear it or a message time out feature be implemented. The non-priority message auto clear timer/counters are on hold while priority messages are being displayed.

**36: Priority Message Relay On time**
Both Priority Message and Priority Message Capcode features also can be enabled an external relay ON for a duty time.

**37: Priority Message Capcode selection**
Priority Message by Capcode will be accepted for the AS110R , AS112R , AS120R , AS122R.

**38: Mail Drop Capcode selection**
Mail Drop capcode selection. it can be selected capcode as a mail drop and it only has one message for the capcode. and this feature only can be used for the Message Counter = Auto.

**39: Mail Drop Time Out Off**
Mail Drop message can be selected a Time Out feature off. that will can used same time out as normal capcode or it will turn off the time out feature !

**40: Priority Message Counter**
Priority Message can be extended to 5 messages.

**41: Priority Message Clear**
Priority Message also support an easy “CLEAR” air command for user to use.

**42: Automatic Message Counter**
Add a selection of 1 to 24 number for automatic message mode.

**43: Priority Message auto clear delay time**
Priority Message auto clear feature will have an independent time out.

**44: Message Number of Sequence**
Message Number can be selected on or off.

**45: Timer Hour Type**
Timer hour type can be selected 12 or 24 hours.

## MEMO

GOLD APOLLO CO.,LTD.

# User Manual For LED Alpha Sign