

N31电机RS-485/RS-232通讯控制

公司保留更改产品设计与说明书的权利，届时将不另行通知，图片仅供参考，具体以实物为准。A/1 H12198

通讯参数设置、数据格式

通讯协议控制指令为7个字节的16进制表示的指令，PC采用16进制发送，
232\485端口参数设置:波特率9600,无校验位,8位数据位,1位停止位
数据包格式：0x55, D1, D2, D3, Cmd, Parm1, Parm2, Parm3, checksum

字节1（数据头码）：

标志码：	取值范围：
0x55	固定值

字节2、3（默认地址：FEFE）：

地址码：	取值范围：(字母、数字组合,如：C3B6)	备注：
D1	0x01~0xFE	地址H
D2	0x01~0xFE	地址L

字节4（通道）

频道值：	取值范围：	备注：
D3	0x01~0xFE	0x05为广播公共频道，广播时不反馈数据

字节5（Cmd）：

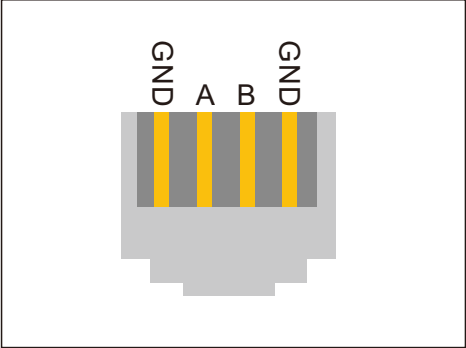
功能：	命令值：	备注：
写设备地址	0xAA	需要先给电机接通电，然后按一下电机SET1按键进入写设备地址状态，再发送写入命令
	0xBB	用命令直接写入设备地址
开合方向打开	0xDD	控制电机开合方向运行
开合方向关闭	0xEE	
左点动	0xD1	运行一小段距离
右点动	0xE1	
开合停止	0xCC	开合方向停止命令值
开合方向百分比	0x67	开合方向百分比控制，必须设置好开合行程才能百分比控制
开合方向换向	0xCD	开合电机运行方向换向
查询	0x98	开合方向百分比、电机状态。注意：查开合百分比电机必须有行程才可以查询
氛围灯	0xC1	氛围灯开关
氛围灯静态设置	0x55	滑车运行，灯光随亮或不随亮

字节6(Parm1)：

字节5：	字节6(Parm1)值	备注：Parm1
0x67	0---0x64	控制开合百分比值
0xCD	00或者01	设置开合方向值，00默认方向，01反向
0x98	0---0x64	为查询指令返回时，Parm1表示为开合的百分比值
xxxx	00	字节5是其他命令时，此参数值0
0xC1	00或者01	开关氛围灯 00关闭氛围灯 01打开氛围灯
0x55	00或者01	氛围灯静态设置 00动态氛围灯 01静态氛围灯

字节7(Parm2)：

字节5：	字节7(Parm2)值	备注：
0x98	00	此数值为0



字节8(Parm3):

字节5:	字节8(Parm3)值	备注:
0x98	00、01、02 或10、11、12	Parm3表示为查询电机当前处于某种状态, 00停止、01打开中、02关闭中（高四位为灯光状态, 0为关, 1为开, 10停止、11打开中、12关闭中, 灯光开启状态）, 如果字节5是其他指令, 此数值为0

举例：氛围灯控制：55 FE FE 03 C1 01 00 00 16 Parm1=00 关闭灯光 01打开灯光

举例：设置灯光模式：55 FE FE 03 55 01 00 00 AA Parm1值为0x00设置灯光动态模式，0x01设置灯光静态模式

字节9:

字节9:	备注:
Checksum	Checksum = 55+FE+FE+…….+00, 取低字节。(参考举例说明)

举例说明（16进制表示）: 地址=FEFE，通道=03

写设备地址：只存一个地址码,再重复对码即覆盖之前的，默认地址和通道：FEFE03，强烈建议使用字母、数字组合(如:C3B6)，地址禁用头码55。

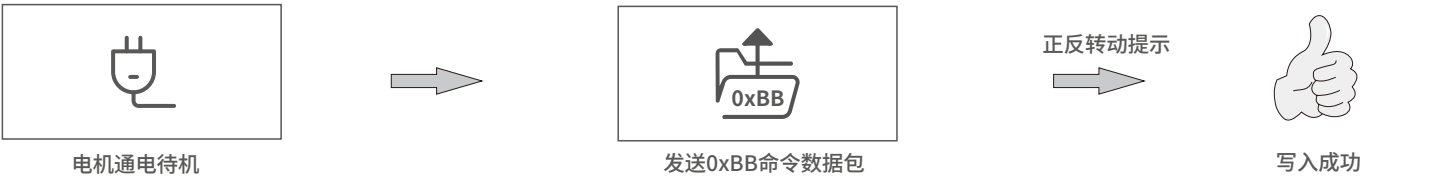
方式一：按下电机的SET键，电机正反转停止后10秒内发送0xAA命令数据包，电机正反转提示，写入成功。

	头码	地址H	地址L	通道	Cmd	Parm1	Parm2	Parm3	checksum
主机发送	55	FE	FE	03	AA	00	00	00	FE
电机反馈	55	FE	FE	03	AA	00	00	00	FE



方式二：在电机通电待机状态下，直接发送0xBB命令数据包，电机正反转提示，写入成功。

	头码	地址H	地址L	通道	Cmd	Parm1	Parm2	Parm3	checksum
主机发送	55	FE	FE	03	BB	00	00	00	0F
电机反馈	55	FE	FE	03	BB	00	00	00	0F



控制窗帘打开：（如果窗帘运行方向不对，则执行一次开合换向动作）

	头码	地址H	地址L	通道	Cmd	Parm1	Parm2	Parm3	checksum
主机发送	55	FE	FE	03	DD	00	00	00	31
电机反馈	55	FE	FE	03	DD	00	00	00	31

控制窗帘关闭：（如果窗帘运行方向不对，则执行一次开合换向动作）

	头码	地址H	地址L	通道	Cmd	Parm1	Parm2	Parm3	checksum
主机发送	55	FE	FE	03	EE	00	00	00	42
电机反馈	55	FE	FE	03	EE	00	00	00	42

控制窗帘开合停止命令值:

	头码	地址H	地址L	通道	Cmd	Parm1	Parm2	Parm3	checksum
主机发送	55	FE	FE	03	CC	00	00	00	20
电机反馈	55	FE	FE	03	CC	00	00	00	20

向左点动:

	头码	地址H	地址L	通道	Cmd	Parm1	Parm2	Parm3	checksum
主机发送	55	FE	FE	03	D1	00	00	00	25
电机反馈	55	FE	FE	03	D1	00	00	00	25

向右点动：

	头码	地址H	地址L	通道	Cmd	Parm1	Parm2	Parm3	checksum
主机发送	55	FE	FE	03	E1	00	00	00	35
电机反馈	55	FE	FE	03	E1	00	00	00	35

氛围灯开关：(Parm1=00氛围灯关，Parm1=01氛围灯开)

	头码	地址H	地址L	通道	Cmd	Parm1	Parm2	Parm3	checksum
主机发送	55	FE	FE	03	C1	00	00	00	15
电机反馈	55	FE	FE	03	C1	00	00	00	15

氛围灯静态设置：(Parm1=00动态灯光，Parm1=01静态灯光) 静态灯光时,只能主动点亮氛围灯不再随滑车运行点亮

	头码	地址H	地址L	通道	Cmd	Parm1	Parm2	Parm3	checksum
主机发送	55	FE	FE	03	55	00	00	00	A9
电机反馈	55	FE	FE	03	55	00	00	00	A9

*先发送控制指令33设置，电机抖动后，10秒内发送指令55。

开合百分比控制(100%):

	头码	地址H	地址L	通道	Cmd	Parm1	Parm2	Parm3	checksum
主机发送	55	FE	FE	03	67	64	00	00	1F
电机反馈	55	FE	FE	03	67	64	00	00	1F
	55	FE	FE	03	67	FF*	00	00	BA

*当电机没有设置开合行程时，反馈FF，电机不动作无法进行百分比控制。FF代表是没有行程。

开合方向换向(Parm1=00默认正向，Parm1=01反向，换向前请先开合一次记忆好行程)

	头码	地址H	地址L	通道	Cmd	Parm1	Parm2	Parm3	checksum
主机发送	55	FE	FE	03	CD	01	00	00	22
电机反馈	55	FE	FE	03	CD	01	00	00	22

查询（Parm1—20%，Parm2—开合百分比00，Parm3—电机状态01）

	头码	地址H	地址L	通道	Cmd	Parm1	Parm2	Parm3	checksum
主机发送	55	FE	FE	03	98	00	00	00	EC
电机反馈	55	FE	FE	03	98	14	00	01*	01

*Parm3—00电机停止，01开合打开，02开合关闭；高四位为灯光状态，0为关，1为开，10停止、11打开中、12关闭中，灯光开启状态

进入设置

	头码	地址H	地址L	通道	Cmd	Parm1	Parm2	Parm3	checksum
主机发送	55	FE	FE	03	33	00	00	00	87
电机反馈	55	FE	FE	03	33	00	00	00	87

清除开合行程

	头码	地址H	地址L	通道	Cmd	Parm1	Parm2	Parm3	checksum
主机发送	55	FE	FE	03	44	00	00	00	98
电机反馈	55	FE	FE	03	44	00	00	00	98

设置开合行程步骤如下：

- 步骤1：发送0xDD窗帘打开命令数据包，开合帘运行打开，直到电机自动堵停止后才会自动产生打开行程。
- 步骤2：发送0xEE窗帘关闭命令数据包，开合帘运行关闭，直到电机自动堵停止后才会自动产生关闭行程。

氛围灯静态设置步骤如下：

- 步骤1：发送0x33进入设置命令数据包，电机抖动一次提示，电机进入设置状态，倒计时10秒。
- 步骤2：10秒内发送0x55氛围灯静态数据，电机抖动一次提示，设置成功。

清除开合行程步骤如下：

- 步骤1：发送0x33进入设置命令数据包，电机抖动一次提示，电机进入设置状态，倒计时10秒。
- 步骤2：10秒内发送0x44清除开合行程数据包，电机抖动一次提示，行程清除成功。

N31- Motor RS-485/RS-232 Communication Control

Company reserves the right to change product design and specifications without prior notice then ,photos are for reference only.

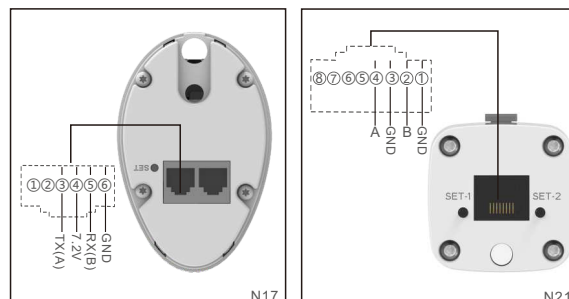
A/O H12198

Communication parameter setting, data format

Control instruction of the communication protocol is 7-byte hexadecimal.
The PC uses hexadecimal to send. 232\485 port parameter settings: baud rate 9600, no check digit, 8 data bits, 1 stop bit Packet format: 0x55, D1, D2, D3, Cmd, Parm1, Parm2, Parm3, checksum

Byte 1 (data header code):

Flag code	Range of values:
0x55	fixed value



Byte 2, 3 (default address: FEFE):

Address code:	Value range: (combination of letters and numbers, such as: C3B6)	Remarks:
D1	0x01~0xFE	Address H
D2	0x01~0xFE	Address L

Byte 4 (channel):

Channel value:	Value range:	emarks:
D3	0x01~0xFE	0x05 is broadcasting public channel, no feedback data when broadcasting

Byte 5 (Cmd):

Function:	Command Value:	Remarks:
Write device address	0xAA	Need to power on the motor first, then press the SET1 button of the motor to enter the state of writing the device address, and then send the write command.
	0xBB	Write the device address directly with the command.
Opening and closing direction: open	0xDD	Control motor opening and closing.
Opening and closing direction: close	0xEE	
Left Inching	0xD1	Run for a short distance.
Right Inching	0xE1	
Stop opening and closing , stop dimming	0xCC	Opening and closing stop command values.
Opening and closing percentage	0x67	Opening and closing percentage control. The opening and closing limit must be set firstly.
Opening and closing reversing	0xCD	Opening and closing direction reversing.
Query	0x98	Opening and closing percentage, motor status. Note: To check the percentage, the motor must have the related limit firstly.
Query	0xC1	Opening and closing percentage, motor status. Note: To check the percentage, the motor must have the related limit firstly.

Byte 6 (Parm1):

Byte 5:	Byte 6 (Parm1) Value	Remark: Parm1
0x67	0---0x64	Opening and closing percentage control value
0xCD	00 or 01	set opening and closing direction value, 00 default direction, 01 reverse
0x98	0---0x64	When query command is returned, Parm1 means percentage value of opening and closing
xxxx	00	When byte 5 is other commands, this parameter value is 0
0xC1	00or01	When byte 5 is other commands, this parameter value is 0

Byte 7(Parm2):

Byte 5:	Byte7 (Parm2) Value	Remark:
0x98	00	This parameter value is 0

Byte 8(Parm3):

Byte 5:	Byte 8(Parm3) Value	Remark:
0x98	00 or 01 or 02	Parm3 means to query motor state: 00 Stop, 01 Opening, 02 Closing. When byte 5 is other commands, this parameter value is 0

Byte 9:

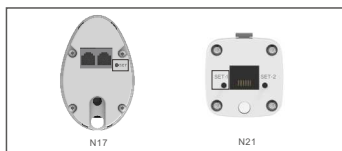
Byte 9:	Remark:
Checksum	Checksum = 55+FE+FE+.....+00, take the low byte. (Refer to example)

Example (hexadecimal representation): address = FEFE, channel = 03

Write device address: save only one address code, repeating pairing will overwrite the previous one. The default address and channel: FEFE03. It is strongly recommended to use a combination of letters and numbers (such as: C3B6), and the header code 55 is disabled for the address.

Method 1: Press motor SET button, and send a 0xAA command packet within 10 seconds after motor turns forward and reverse. Then motor will turn forward and reverse, this means the writing is successful.

	Header Code	Address H	Address L	Channel	Cmd	Parm1	Parm2	Parm3	checksum
Host sends	55	FE	FE	03	AA	00	00	00	FE
Motor Feedback	55	FE	FE	03	AA	00	00	00	FE



Press motor SET button

turns forward and reverse



send a 0xAA command packet within 10 seconds

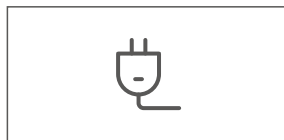
turns forward and reverse



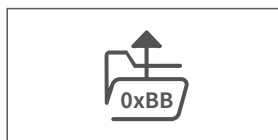
successful

Method 2: When the motor is powered on and in the standby state, directly send the 0xBB command packet, the motor will be forward and reverse, and the writing is successful.

	Header Code	Address H	Address L	Channel	Cmd	Parm1	Parm2	Parm3	checksum
Host sends	55	FE	FE	03	BB	00	00	00	0F
Motor Feedback	55	FE	FE	03	BB	00	00	00	0F



Motor is powered on and in the standby state



send the 0xBB command packet

turns forward and reverse



successful

Open the blinds: (if the blinds run in wrong direction, perform an opening and closing reversing action)

	Header Code	Address H	Address L	Channel	Cmd	Parm1	Parm2	Parm3	checksum
Host sends	55	FE	FE	03	DD	00	00	00	31
Motor Feedback	55	FE	FE	03	DD	00	00	00	31

Close the blinds: (if the blinds run in wrong direction, perform an opening and closing reversing action)

	Header Code	Address H	Address L	Channel	Cmd	Parm1	Parm2	Parm3	checksum
Host sends	55	FE	FE	03	EE	00	00	00	42
Motor Feedback	55	FE	FE	03	EE	00	00	00	42

Stop: Opening and closing stop command values

	Header Code	Address H	Address L	Channel	Cmd	Parm1	Parm2	Parm3	checksum
Host sends	55	FE	FE	03	CC	00	00	00	20
Motor Feedback	55	FE	FE	03	CC	00	00	00	20

Left Inching :

	Header Code	Address H	Address L	Channel	Cmd	Parm1	Parm2	Parm3	checksum
Host sends	55	FE	FE	03	D1	00	00	00	25
Motor Feedback	55	FE	FE	03	D1	00	00	00	25

Right Inching :

	Header Code	Address H	Address L	Channel	Cmd	Parm1	Parm2	Parm3	checksum
Host sends	55	FE	FE	03	E1	00	00	00	35
Motor Feedback	55	FE	FE	03	E1	00	00	00	35

Opening and closing percentage control (100%):

	Header Code	Address H	Address L	Channel	Cmd	Parm1	Parm2	Parm3	checksum
Host sends	55	FE	FE	03	67	64	00	00	1F
Motor	55	FE	FE	03	67	64	00	00	1F
	55	FE	FE	03	67	FF*	00	00	BA

*When there is no opening and closing limit, feedback FF and motor no action, can not do opening and closing percentage control. FF means no opening and closing limit.

Opening and closing reversing (Parm1=00 default forward, Parm1=01 reverse)

	Header Code	Address H	Address L	Channel	Cmd	Parm1	Parm2	Parm3	checksum
Host sends	55	FE	FE	03	CD	01	00	00	22
Motor Feedback	55	FE	FE	03	CD	01	00	00	22

Query (Parm1—00, Parm2—Dimming 20%, Parm3—Motor state 01)

	Header Code	Address H	Address L	Channel	Cmd	Parm1	Parm2	Parm3	checksum
Host sends	55	FE	FE	03	98	00	00	00	EC
Motor Feedback	55	FE	FE	03	98	00	14	01*	01

*Parm3—00 Motor stops, 01 open, 02 close

Enter setting

	Header Code	Address H	Address L	Channel	Cmd	Parm1	Parm2	Parm3	checksum
Host sends	55	FE	FE	03	33	00	00	00	87
Motor Feedback	55	FE	FE	03	33	00	00	00	87

Delete opening and closing limit (not dimming limit)

	Header Code	Address H	Address L	Channel	Cmd	Parm1	Parm2	Parm3	checksum
Host sends	55	FE	FE	03	44	00	00	00	98
Motor Feedback	55	FE	FE	03	44	00	00	00	98

Set opening & closing limit steps:

- Step 1: Send the 0xDD opening command packet, the dream blinds will open. Until the motor is automatically blocked and stopped, now the opening limit is done.
- Step 2: Send the 0xEE closing command packet, the dream blinds will close. Until the motor is automatically blocked and stopped, now the closing limit is done.

Delete opening & closing limit steps:

- Step 1: Send 0x33 command packet. The Motor will open and close once. Motor enters the setting state, and the countdown will be 10 seconds.
- Step 2: Send 0x44 data packet within 10 seconds to delete opening & closing limit. The Motor will open and close once. The opening & closing limit has been deleted.