

Explained

	Host Commands											Servo Respo nse Form at
	Byte0	Byte1	Byte2	Byte3	Byte4	Byte5	Byte6	Byte7	Byte8	Byte9	note	
	Frame header 1	Frame header 2	Servo ID 0 - 240	command code	Param eter 1 high byte (compu ting)	Parame ter 1 low byte	Parame ter 2 high byte (comput ing)	Parame ter 2 low byte	checksum	end of frame		
Rotate to the specifi ed angle	FA	AF	ID of the target servo, normal range: 1-240 If ID is 0, it is a broadcast command, valid for all servos.	01	target angle	exercise duration	lock time high byte (computi ng)	lock time low byte	Byte2 + Byte3 + Byte4 + Byte5 + Byte6 + Byte7 Cumula tive sum of the 6 bytes of data, lowest	ED	Target angle: 240 rms max Even if the given value is greater than 240 degrees, the servo will not be able to operate at all. It will only rotate to the 240- degree position. Motion Time: Controls how fast or slow the servo rotates, a value of 0 means the servo rotates at full speed; the value of 0 means the servo rotates at full speed; the value of 0 means the servo rotates at full speed.	
					Fetch value: 0-240 Unit: degree s	Fetch value: 0-255 Units: 20ms	Range: 16-bit unsigned integer 0 - 3270 (The servo converts this internally to ms. (It makes no sense to take a higher value.) units: 20ms				Lockout Time: Timed from the moment the servo receives a command to turn, the servo will not respond to a 01 command	
											Successful/ correct: reply only 1 byte of data 0xAA + Servo ID Failure/Err or: no data is returned	

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								byte		until the lockout time has expired.	
										Once in place, if the angle is shifted by an external force, the rudder is forced to adjust to maintain the angle.	
Forced suspension of rotation				01	FF	00	00	00		Regardless of whether or not the servo has rotated to the specified position, upon receipt of an abort command, the servo immediately stops rotating, and at the same time, the servo loses power and maintains its position only by the damping of the gear set.	
perspective reading				02	00	00	00	00		The servo loses power after returning angle data and maintains position only by gear train damping.	table below
Modify Servo ID				CD	00	New ID	00	00		ID changes take effect immediately. Try not to use broadcast mode unless there is only one servo on the bus.	table below

Servo

Setting the Angle Offset				D2	00	00	backward Offset high byte	backward Offset Low Byte			facing the rudder, positive values are offset clockwise, negative values are offset counterclockwise.	table below
					non-use	non-use	Range: 16-bit signed integers -90 - 90 Unit: 1/3 degree				The range of values is from -30 degrees to +30 degrees when converted to an angle. Don't set the offset beyond this range, although the servo will accept it, there will be unforeseen errors when adjusting the angle; and the servo will zero out the setting when it is re-powered. Note the way negative integers are encoded;the	
Reading Angle offset set up				D4	00	00	00	00				table below
Read Firmware version number			Target servo ID.	01	00	00	00	00				table below

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Upgrade Firmware		CF	Try to target only one servo, don't fill in 0	02	00	00	00	00			After the servo sends the response data, it immediately jumps to the bootloader to run, I haven't analyzed the bootloader code, so I don't know the specific download protocol.	table below
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Servo Communication Protocols Explained

	Servo response format (refer to the table above for single-byte response format)										
	Byte0	Byte1	Byte2	Byte3	Byte4	Byte5	Byte6	Byte7	Byte8	Byte9	note
	Frame header 1	Frame header 2	Servo ID	status code	Parameter 1 high byte (computing)	Parameter 1 low byte	Parameter 2 high byte (computing)	Parameter 2 low byte	checksum	end of frame	
perspective reading	FA	AF	Servo Actual ID	Success: AA Failure: EE	target angle high byte (computing)	target angle low byte	actual angle high byte (computing)	actual angle low byte	Byte2 + Byte3 + Byte4 + Byte5 + Byte6 + Byte7 The 6 bytes of data Accumulate the sum, taking the lower byte	ED	Both angles are positive integers, two values Differences indicate that the angle is not adjusted properly, or Errors in control Unit: degrees
Modify Servo ID					00	Rudder before modification Machine ID	00	00			Note that the ID in Byte2 has been modified. latter
Setting Angle offset					00	00	00	00			There's nothing to say.
Reading Angle offset					xx	xx	Backward offset school positive high byte	Backward offset school positive low byte			xx indicates uncertainty and is not concerned with the value. See the host command for the format of valid parameters "Set Angle Offset"
set up											
Read Firmware version number	FC	CF			Version 1	Version 2	Version 3	Version 4			It doesn't affect the servos, so I didn't turn it off. What format are the heart parameters?
											Don't worry about the response format, just know that the program

Servo Upgrade Firmware	Communicatio ols ed				xx	xx	xx	xx			Just jump to the bootloader already. (modal particle intensifying preceding clause)
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