✓ Disconnect				Release Fulse options ALF Release Rising (N=O Folar MF=I Folar MF FUNC FE OC open OC open Locked	D-O Polar FIND FUNC OC open In-Position	EEPECH Save EEPECH	Restore Factory Settings
	Basic parameters Tuning parameters Password	form Curve monitoring interface						
	Upload Bownload		STEP	PERONLINE	9		Import	Export
Under voltage	Hane	Present value		Setting value	Value range	Read	Write	^
tion Under tion voltage ke Dver cwrent	3 - Pulse smoothing filter parameters							
	4 Input pulse smoothing filter	512		512	1-1024	Read	Vrite	> A
	5 = Filter parameters							
	6 Speed stage 1 filter bandwidth 7 Speed stage 2 filter bandwidth	100		300	0-65535	Read Read	Vrite Vrite	_
	8 Acceleration filter bandwidth	500		500	0-65535	Read	Vrite	
	9 Position-loop output filter bandwidth	1000		1000	0-65535	Read	Vrite	
1	10 = Current parameters							
	11 Pesk current 12 Close-loop current percentage	5600		5600	1000-7000 0-100	Read Read	Vrite Vrite	
	13 Locking current percentage	50		50	0-100	Read		> '
	14 Looking ourrent time	200		200	0~65535	i.cau	Write	
	15 Close-loop max current percentage	100		100	0-100	Read	Vrite	
	16 Open-loop nax current percentage 17 = Signal function paremeters	100		100	0-100	Read	Vrite	
	18 ALM output polarity	0			o	Read	Vrite	
	19 MV input polarity	0	5	<	0-1	Read	Vrite	
	20 197 FUSIC	1		\leq	0-2	Read	Vrite	
	21 PEND output polarity 22 PEND FUNC	0	\leq	~~	0-1	Read	Vrite Vrite	> D
	22 PEND FUNC 23 Positioning complete range	5			1-100	Read	Vrite	
	24 Positioning complete time	10		10	0~65535	Read	Vrite	
	25 Position deviation alars threshold	4000		\$000	1-65535	Read	Write	
	26 = Microstep and encoder para.) E
	27 Enable electronic gear ratio 28 Encoder resolution	0 4000		\$000	0-1 1000-6000	Read	Vrite Vrite	
	29 Electronic gear numerator	1000		1000	1-60000	Read	Vrite	_
	30 Electronic gear denominator	4000		\$000	1-60000	Read	Vrite	
	31 Microsteps when turn all switches ON	400		100	0-65535	Read	Vrite	
	32 = Input pulse parameters 33 Options of input pulse edge	0			0-1	Read	Vrite	
	34 Input pulse frequency limit	11		, 11	1-16	Read	Vrite	
	35 - Motor parameters							
rive cols Option Langua	36 Motor model selection	0	ļ	1	0-1	Read	Vrite	•
rive cols Option Langua Connect Disconnect	30 Noter model selection		(Beleves Piles options All Beleves Binng (0-1 R-0 Folge 19-1 Folge 190 F100 17 gen 10 rane Looked		1	Bestore Factory Settings
rive pols Option Langua V Cennet V Disconnet	30 Noter nodel selection ge(1521) Help Basic parameters Tuning parameters Passerd		I	Roberts Palar options All Roberts Riving of	RODAR WEINar WINK 19 Wigen Wigen Laded		EEFRER Sure EEFRER	Restore Factory Settings
rive sols Option Langue V Creasert V Disconsert	30 Noter model selection		STEP	PERONLINE	Prid Palae 199-1 Palae 199 PBE 172 00 sym 00 sym Ladved 197		EEFRER Sure EEFRER	
Clear	36 Meter nodel selection ge(图2) Help Basic parameters Tuning parameters Passored Upload Domined	i Pars Curve smitering interfore	STEP	Roberts Palar options All Roberts Riving of	RODAR WEINar WINK 19 Wigen Wigen Laded	Red Educe 1780-798 Red E	EITER Save EITER	Restore Factory Settings
Clear sols Option Langua Consect Disconcet	30 Meter model selection gel(EZ) Help Basic parameters Toming parameters Passed Face 1 Correct toget primeters 2 Correct toget primeters	l Fore Ourse solitoring interface Present value D	STEP	Setting rulu	NO Dide Wet Table We THE IT Copyon Copyon Deviat	DO Date THE THE Real I	ZZ732R Sere ZZ732R Import Write Write	Restore Factory Settings
Clear rive Consect Consect Siscassect Signar Value Over	Noter modil salection ge(ER) Help Basic parameters Tuning parameters Passed Booleed Face I I Carrent typed parameters 2 Carrent typed pains one 3 Carrent typed pains one	l Pers Curve sositering interface Present value 3 15	STEP	Stine Short Start	Mode Failure Mode	Read State	IIIIII Sore IIIIII Iiport Vrita Trite Trite	Restore Factory Settings
Clear rive acls Option Langue Consect V Consect V Second Value Overver Coverver	30 Meter nodil salestion get(ER) Help Basic parameters Tuning parameters Para Decalesi Fave 1 2 Correct typed print as 3 Correct typed print two 3 Correct typed print two	l Fore Ourse solitoring interface Present value D	STEP	Setting rulu	NO Dide Wet Table We THE IT Copyon Copyon Deviat	Read	ZZ732R Sere ZZ732R Import Write Write	Restore Factory Settings
Clear rive sols Option Langua Niscenset Viewer Viewer Overwe	30 Meter model selection ge(IER) Help Basic parameters Tuning parameters Paraleed Personal Para 1 2 Corrent logs point no 3 Corrent logs point no 4 Corrent logs point no 5 Corrent logs point	i Fere Ourve existerize interface Freesh value 3 15 4096 512 1866	STEF	Edux Situ gita 32 Edux Situ gita 32 PPERONLINE Settiag value 3 5 5 6 70 100	PO Palee W-1 Palee W PHE 72 07 ppm V-1 Palee W PHE 72 0 ppm V-1 Palee Palee 0 +50 1 +50 1 +50 4 400+18384 0 +4555 0 +4555	Read Product P	Inpert Prite	Restore Factory Settings
Clear the bols Option Langue V Censent V Biscensent Weder events Overlase	Noter modil salection ge(EE) Help Basic parameters Tuning parameters Passend Dealest 1 Correct large parameters 2 Correct large parameters 3 Correct large parameters 4 Correct large parameters 5 Correct large parameters 6 Correct large parameters	i Para Curve amitering interface Present value 3 15 4006 512 1066	STEP	Adverse Provention of Adverse Provide a statement of Adverse Provide a statement of Adverse Ad	Pick Fields	Red State TEE DOC Red State St	EITHE Sere EITHER Import Voita Frita Frita Frita Frita Frita	Restore Factory Settings
Clear rive sols Option Langue V Canaset V Niscence veltage Over evertage Overland	Noter model selection get(HE) Help Basic parameters Toming parameters Paraload Basic parameters Corrent loop too	l Pers Ourse scaltering interface Present value 3 15 4006 512 1066 10 1000	STEF	Setting value	Mod John	Read Product P	ZZYDAN Seve ZZYDAN Z Zegort Vice Vice Vice Vice Vice Vice Vice	Restore Factory Settings
Clear rive cols Option Langue V Canset V Siscence Over and Over and O	Noter modil salection ge(EE) Help Basic parameters Tuning parameters Passend Dealest 1 Correct large parameters 2 Correct large parameters 3 Correct large parameters 4 Correct large parameters 5 Correct large parameters 6 Correct large parameters	i Para Curve amitering interface Present value 3 15 4006 512 1066	STEF	Adverse Provention of Adverse Provide a statement of Adverse Provide a statement of Adverse Ad	Pick Fields	Red State TEE DOC Red State St	EITHE Sere EITHER Import Voita Frita Frita Frita Frita Frita	Estors Factory Settings
Clear rive Source Langua V Consert V Bisconcet Water Overlase Overlase tit	Noter nodi salestion getEll) Help Batic parameters Tuning parameters Parameters Tuning parameters Parameters Consolidation 2 Current typed point two 3 Current typed point two 4 Current typed point two 5 Current typed point two 6 Current type type 7 Current type type 8 Current type type 9 Type for the type	l Fore Ourse emitoring interface Present value 3 15 4006 512 1966 10 100 0	STEF	Stars Starsging St PP=RONLINE Setting value 3 15 40% 10 0	PO Fall PO Fall PO FIND PO C open C open Do FIND PO Value range 0-50 1-60 00555 0-60555 0-60555 0-60555 0-60555	Red Test	Isport Seve Ispan Isport Veite Frite Frite Frite Frite Frite Frite	Restore Factory Settings
Clear the bols Option Langue V Censent V Biscensent Weder events Overlaad oral State.	Noter addi salection pec(H2) Help Basic prometers Twing presenters Passed Dealed Doc General Log presenters 1 Corrent logs Presenters 2 Corrent logs Presenters 3 Corrent logs Presenters 4 Corrent logs Presenters 5 Corrent logs Presenters 6 Corrent logs Presenters 7 Corrent logs Presenters 9 -By France 9 -By Corrent logs Presenters 10 -By Engle Logic Ingenter 11 Corrent Logs Log Log	l Pere Curve emitering interface Present vilus 3 15 4096 512 106 10 10 0 0 2000	STEF	Balance Pain optime Pain optime Pain optime PPERONLINE Satting value 3 15 4996 72 100 0 0 0 2560	Prior Palate Mod Palat Mod Palat Mod Pal	Red Red Red Red Red Red Red Red	IIIIIII IIIIIII IIIIIII IIIIII IIIIII IIII	Estors Factory Settings
Clear rive So Option Longue V Consett V Biscenset Overlead Overlead So over Overlead So over So over	Mater nodi salection ge(152) Help Basic parameters Tuning parameters Para Personnel Pa	I Fore Curve existencing interface Freest value 3 4006 512 1066 100 00 0 0 14 14	STEP	Davas Pass optime All Davas Pass optime All Davas Pass optime All	Model Palar	Boo Dalee Street FUE Or part Street FUE Bood Bood Bood Bood Bood Bood Bood Boo	2220.R Sure 1223.RR	Estors Factory Settings
Clear the Sols Option Langue Visconset Visconset Grant States Coverlast Coverlast States Coverlast	Noter model valuetion per(HET) Help Basic parameters Tuning parameters typicat Bealand 1 = Correct type parameters 2 - Correct type parameters 3 - Correct type parameters 4 - Correct type parameters 5 - Correct type parameters 6 - Correct type parameters 7 - Correct type parameters 8 - Correct type parameters 9 - Correct type parameters 10 - Correct type parameters 11 - State laperithe parameters 12 - Angle algorithe parameters 13 - Angle algorithe parameters	I Para Curve emitering interface Present vilus 3 3 405 512 106 10 10 10 0 0 0 14 2560	STEP	Balance Pain optime Pain optime Pain optime PPERONLINE Satting value 3 15 4996 72 100 0 0 0 2560	Pick False Pick Fa	Red Red Red Red Red Red Red Red	IIIIIII IIIIIII IIIIIII IIIIII IIIIII IIII	Estors Factory Settings
Clear rive Source Consert V Co	Mater nodi salection ge(152) Help Basic parameters Tuning parameters Para Personnel Pa	I Fore Curve existencing interface Freest value 3 4006 512 1066 100 00 0 0 14 14	STEP	Balance Pain optime Pain optime Pain optime PPERONLINE Satting value 3 15 4996 72 100 0 0 0 2560	Model Palar	Boo Dalee Street FUE Or part Street FUE Bood Bood Bood Bood Bood Bood Bood Boo	EITHE Seve EITHER	Estors Factory Settings
Clear rise Second S	Noter model relation Perform Participation Paritipation	i Fere Ourse scaituring interface Freesat value 3 4096 512 1066 10 100 0 0 2560 114 2560 114 2560 114 2560 114 2560 114 2560 114 2560 114 2560 114 2560 114 124 2560 114 124 2560 114 124 2560 114 124 2560 114 124 2560 114 124 2560 114 124 2560 114 124 2560 114 125 12	STEP	Balance Pain optime Pain optime Pain optime PPERONLINE Satting value 3 15 4996 72 100 0 0 0 2560	Montham Montham <t< td=""><td>BOO Bales Proc 1999 V proc 200 Proc 1999 Read Bade</td><td>EXTRA Sure EXTRA Toport Vita Frita Frita</td><td>Estors Factory Settings</td></t<>	BOO Bales Proc 1999 V proc 200 Proc 1999 Read Bade	EXTRA Sure EXTRA Toport Vita Frita	Estors Factory Settings
Clear rive Solo Option Langua Niconacti	Noter model valuetion Sector parameters Tended Paraled Paraled <tr< td=""><td>I Fore Ourse secilaring interface Present value 3 10 3 15 3 16 3 17 3 18 3 19 3 10 10 100 0 200 114 2500 114 102 102 114 250 12 10 12 10 13 10 14 250 102 10 103 10 104 10</td><td>STEP</td><td>20000 200000 200000 200000 2000000 2000000 200000 200000 2000000 2000000 200000 200000 200000000 20000000 20000000 2000000000 2000000000000000000000000000000000000</td><td>No Pole North Pole</td><td>Red I Red I</td><td>EITHE Sove EITHER Import Vite Frite</td><td>Estors Factory Settings</td></tr<>	I Fore Ourse secilaring interface Present value 3 10 3 15 3 16 3 17 3 18 3 19 3 10 10 100 0 200 114 2500 114 102 102 114 250 12 10 12 10 13 10 14 250 102 10 103 10 104 10	STEP	20000 200000 200000 200000 2000000 2000000 200000 200000 2000000 2000000 200000 200000 200000000 20000000 20000000 2000000000 2000000000000000000000000000000000000	No Pole North Pole	Red I Red I	EITHE Sove EITHER Import Vite Frite	Estors Factory Settings
Clear rive source of the conservation of the	Noter model relation 20 Noter model relation 21 Help 22 Dealed 2 Gerrant loop parameters 2 Gerrant read point two 3 Gerrant loop parameters 2 Gerrant loop parameters 3 Gerrant loop parameters 4 Gerrant loop parameters 5 Gerrant loop parameters 6 Gerrant loop parameters 7 Gerrant loop parameters 8 Gerrant loop parameters 9 -Sp for looking noter 10 -Kis for looking noter 11 Adge algorith parameters 12 Adge algorith parameters 13 Adge algorith parameters 14 -Adge algorith parameters 15 Adge algorith parameters 16 Hodge algorith parameters 17 -Adge algorith parameters 18 Hodge algorith parameters 19 -Adge algorith parameters 10 -Adge algorith parameters 11 -Adge algorith parameters 12 -Adge algorith parameters 13 -Adge algorith parameters 14 -Adge algorith parameters 15 -Adge algorith parame	 I Pere Curve emittering interface Present value 3 15 3796 512 106 10 10 10 100 0 0 14 2500 104 0 0 0 0 	STEF	23.000 23.000 23.000 23.000 23.000 PPERONLINE 3 3 3 3 15 400 3 3 3 16 400 400 400 400 400 10 0 0 0 400	Pice Field Rich State Rich State Rich Field Rich Field <thrich field<="" th=""> Rich Field Rich Fie</thrich>	Red 2 Red 2 Red 2 Red 2 Red 3 Red 4 Red 4 Re	IIIIIII Seve IIIIIII IIIIIIII IIIIIII IIIIIII IIIIII	Estors Factory Settings
Clear rive Sourcest V Conset V C	Noter model valuetion Sector parameters Tended Paraled Paraled <tr< td=""><td>I Fore Ourse secilaring interface Present value 3 10 3 15 3 16 3 17 3 18 3 19 3 10 10 100 0 200 114 2500 114 102 102 114 250 12 10 12 10 13 10 14 250 102 10 103 10 104 10</td><td>STEP</td><td>20000 200000 200000 200000 2000000 2000000 200000 200000 2000000 2000000 200000 200000 200000000 20000000 20000000 2000000000 2000000000000000000000000000000000000</td><td>No Pole North Pole</td><td>Red I Red I</td><td>EITHE Sove EITHER Import Vite Frite</td><td>Estors Factory Settings</td></tr<>	I Fore Ourse secilaring interface Present value 3 10 3 15 3 16 3 17 3 18 3 19 3 10 10 100 0 200 114 2500 114 102 102 114 250 12 10 12 10 13 10 14 250 102 10 103 10 104 10	STEP	20000 200000 200000 200000 2000000 2000000 200000 200000 2000000 2000000 200000 200000 200000000 20000000 20000000 2000000000 2000000000000000000000000000000000000	No Pole North Pole	Red I Red I	EITHE Sove EITHER Import Vite Frite	Estors Factory Settings
Clear rive South Control Langua V Consert V Consert	Noter model relation Performance Participant Participant <	I Fere Curve exituring interface Freest value 3 15 4076 512 166 10 10 10 200 200 114 200 104 104 200 104 104 104 104 104 104 104 104 104 1	STEP	200000 Pairs optime 20 PDETONLINE 20 Setting value 20 3 20 15 4060 100 0 500 500 500 500 500 500 500 500 51 500 500 500 51 500 51 500 51 500	Mod Pales Mod Pales <t< td=""><td>BOD Diales 2005 7000 2005 2005 2005 2005 2005 2005</td><td>22202.R Sere 122202.R Sere 122202.R Sere 122202.R Sere 122202.R Sere 122202.R Sere 12220.R Sere 12200.R Sere</td><td>Estors Factory Settings</td></t<>	BOD Diales 2005 7000 2005 2005 2005 2005 2005 2005	22202.R Sere 122202.R Sere 122202.R Sere 122202.R Sere 122202.R Sere 122202.R Sere 12220.R Sere 12200.R Sere	Estors Factory Settings
Clear free Source Langues Subservations Subservations Subservations Coverland Subservations Subservatio	Noter model relation Performance Particle Particle Parallel Paralle	Fore Curve emittring interface Present value 3 3 16 4096 10 10 10 10 10 10 10 10 10 10 10 100 0 2600 114 2600 104 104 200 1034 0 1030 0 1034 0 1030 0 1034 0 1035 0	STEP	200000 2000000000000000000000000000000000000	Bit of Palate Bit of P	Image: second	EITOR Sere IITOR IITOR Sere IITOR E	Estors Factory Settings
Clear rive sources Consect Sistemation Signature Consect Signature Signature Consect Signature Signature Consect Signature Signature Consect Signature Signatur	Noter model relation Participation Partic	i Fere Ourse exituring interface Freent value	STEP	Educe Pice of the Education of the	Month Parket Month Parket<	000 Diales (1) gran 200 Statu (1) gran 200	EXTACL Surve EXTACL Toport	Estors Factory Settings
There is a second secon	Noter addi saletian getEE) Help Baie parameters Toning parameters Paissed bale Dealest Paissed i Correct large parameters Paissed i Correct large parameters Paissed i Correct large parameters Correct large parameters i Correct large tarrect large parameters Correct large tarrect large tarrect i Correct large tarrect large tarrect large tarrect Correct large tarrect large tarrect i Forter large tarrect large tarrect Correct large tarrect large tarrect i Adde clarithe paritien tarrect Correct large tarrect i Adde clarithe paritien tarrect Correct large tarrect i Adde clarithe paritien tarrect Correct large tarrect i Adde clarithe paritien tarrect	Fore Curve emittring interface Present value 3 3 16 4096 10 10 10 10 10 10 10 10 10 10 10 100 0 2600 114 2600 104 104 200 1034 0 1030 0 1034 0 1030 0 1034 0 1035 0	STEP	200000 2000000000000000000000000000000000000	Bit of Palate Bit of P	Image: second	EITOR Sere IITOR IITOR Sere IITOR E	Estors Factory Settings
Clear rive sources Consert	Noter model relation Participation Partic	Fore Curve sesituring interface Present value 3 15 3 16 3 17 3 18 3 19 3 19 3 100 0 2000 0 114 2600 114 2600 114 2600 1024 10 1000 0 1024 10 103 0 104 0 105 0 104 0 105 0 106 0 107 0 108 0 109 0 1000 0 1000 0 1000 0 1000 0 1000 0 1000 0 1000 0 1000 0 1000 0	STEF	200000 2000000 2000000 2000000 2000000 200000 200000 200000 2000000 200000 200000 200000 2000000000 200000 200000 200000 2000000000000000000000000000000000000	100 75.000 100 75.000 100 75.000 100 0 75.000 000 75.000 100 100 0 75.000 100 75.000 100 100 0 75.000 100 75.000 100 100 0 75.000 100 75.000 100 100 0 750.000 100 75.000 100 100 0 750.000 100 75.000 100 100 0 750.000 100 75.000 100 100 0 750.000 100 75.000 100 100 0 750.000 100 75.000 100 100 0 750.000 100 75.000 100 100 0 750.0000 100 75.000 100 100 0 750.0000 100 75.000 100 100 100 0 750.0000 100 75.0000 100 100 100 100 0 750.00000 100 75.0000 100 100 100 100 100 0 750.000000 100 75.00000 100 100 100 100 10	100 Abade 200 Abade 200 Abade Red 100 Abade Red Red Red	EIDER Sere EIDER	Estors Factory Settings
Clear rive sources Consert	20 Reter model valuetion 20 Reter model valuetion 20 Reter 20 Desclose 21 Desclose 2 Gerrat los parameters 2 Gerrat los parameters 2 Gerrat los parameters 3 Gerrat los parameters 4 Gerrat los parameters 5 Gerrat los parameters 6 Gerrat los parameters 7 Gerrat los parameters 8 Gerrat los parameters 9 Torrat los parameters 9 Gerrat los parameters 10 Expected los facts 11 Bode algorithe parameters 12 Adal algorithe parameters 13 Adal algorithe parameters 14 Adal algorithe parameters 15 Made algorithe parameters 14 Adal algorithe parameters 15 Vector algorithe parameters 16 Vector algorithe parameters 17 Vector alagorithe parameters 18	E Pere Curve emitering interfece Present value Present value 15 47 16 16 10 10 10 10 10 10 10 10 10 10	STEF	230000 2300001 23 PPERONLINE 2 Sating vdus 3 15 3 16 3 17000000000000000000000000000000000000	Red Field Red Field <thred field<="" th=""> <thred field<="" th=""> <thr< td=""><td>Image: set of the se</td><td>IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII</td><td>Estors Factory Settings</td></thr<></thred></thred>	Image: set of the se	IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	Estors Factory Settings

A Input pulse smoothing filter: Filter time= (x) *50us When the load is heavier and there are higher requirements for speed and acceleration, increase this value. Increasing the response of this parameter will reduce the response, but

the load acceleration and deceleration will be longer. When you need to draw a circle, the number of X and Y axis should be the same.

- B Peak current: Driver output maximum current
- C Percentage of closed-loop base current: The base of the current loop proportional gain section adjustment
- D Locking current percentage: The motor locks current when the motor is stopped, and the magnitude of this current is related to the output and heat of the

motor when the motor is locked.

E Locking current time: The motor enters the lock current time when it stops (ms)

- F Current loop KP: The current loop proportional gain, when the load is heavier, and the speed requirement is high, increase by 100 each time on the original basis. When the load is lighter and the sound requirement is higher, the original basis is reduced by 100 each time.
- **G Position loop proportional gain KP1:**Increasing this value can increase the rigidity. This parameter can be increased when the response and positioning are required to be faster.

Suggest 2560-5560 adjustment.

- H Position loop proportional gain KP2: Increasing this value can increase the rigidity. This parameter can be increased when the response and positioning are required to be faster.
- It is recommended to adjust 2560-5560. (Note: G and H need to be debugged together, the parameters can be the same, or H can be 5% larger than G)
- I Speed loop proportional gain KV1 : Suggested range: 114-2000, I and J are recommended to be adjusted at the same time. Increasing this value can increase the rigidity, increasing by 100 each time.
- JSpeed loop proportional gain KV2: Suggested range: 1024-8000, I and J are recommended to be adjusted at the same time. Increasing this value can increase the rigidity, increasing by 500 each time.