

Alpha 600 Series

Function Setting Editor V 3.6



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【Alpha 600 Function Setting Editor】

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【Alpha 600 Function Setting Editor】

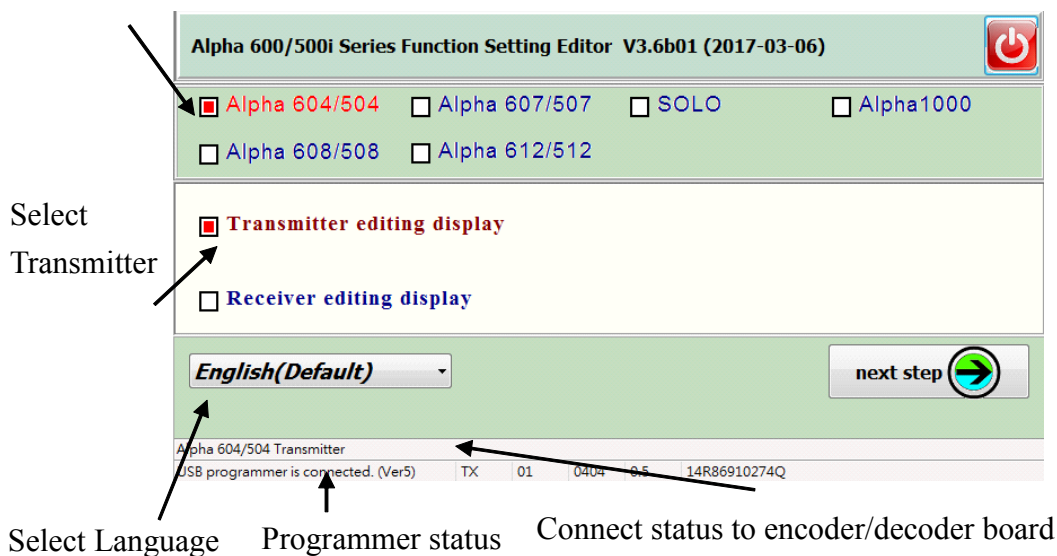
1. Transmitter Editing Display

1.1 Function Setting Editor

Step 1:

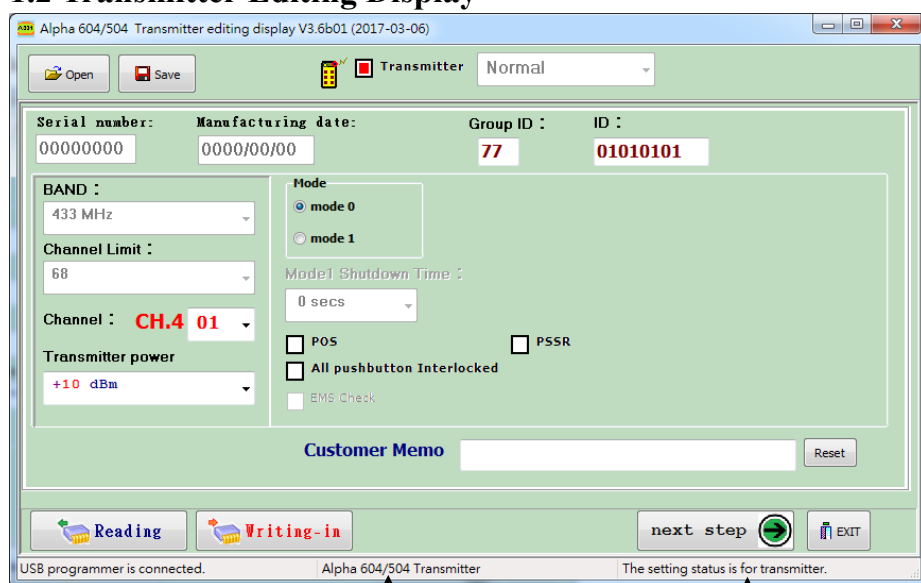
- Left-click on alphatools.exe file
- Enter Alpha 600 Series Function Setting Program
- Select Alpha 604 on main menu, and then click Transmitter Editing Display. For other system types, follow the same setting steps as Alpha 604.

Selection of system type



Step 2:

1.2 Transmitter Editing Display



USB programmer status:

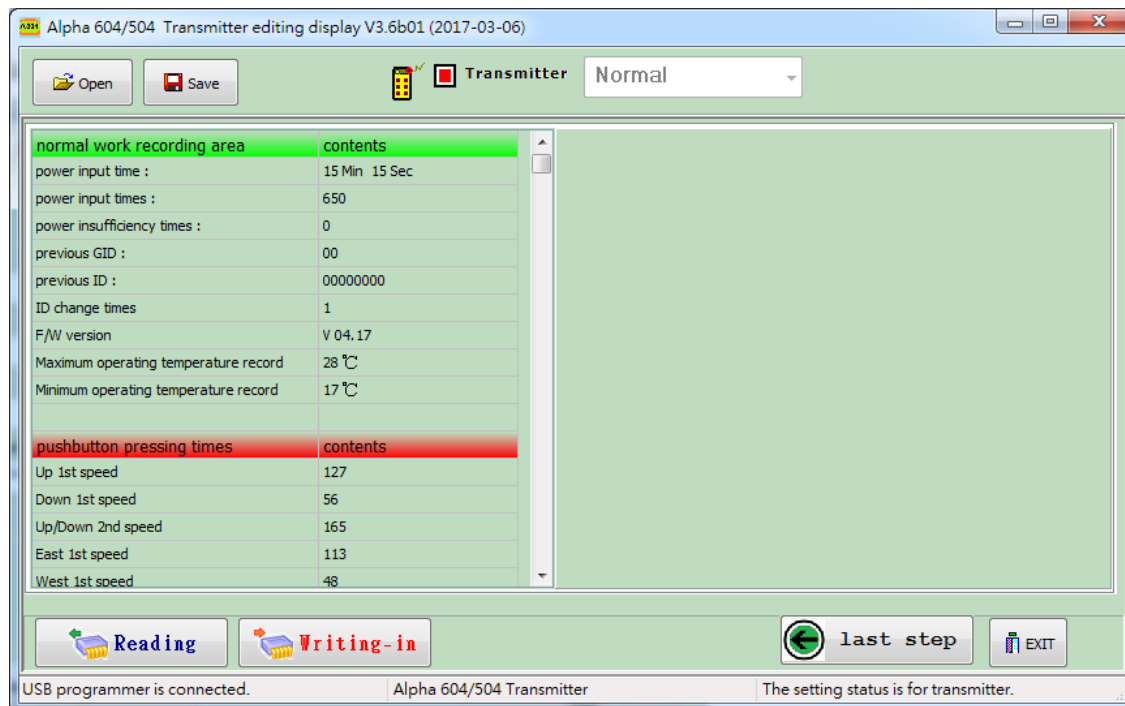
If USB programmer is connected to computer, the message column on display bottom-left corner will show “USB programmer is connected”; if not, the message will show “USB programmer disconnected.”

Encoder/Decoder board status:

It shows the system type of the encoder or decoder board USB programmer is connecting. If neither encoder board nor decoder board is connected, this column will be blank. If Alpha 608 transmitter is connected, this column will show “Alpha 608 transmitter”. If Alpha 607 transmitter is connected, this column will show “Alpha 607 transmitter”. If Alpha 612 transmitter is connected, this column will show “Alpha 612 transmitter”. If the connecting system type is not the current editing one, for example: Alpha 604 transmitter is connected and the current editing one is Alpha 608 transmitter, the column will show “Not Alpha 608 transmitter”.

Step 3:

Click “next step” on the “Alpha 608/508 Transmitter editing display”, transmitter recording area and repair date will display.



■ Transmitter recording items:

- Power input time
- Power input numbers
- ID changes times
- Previous working GID (Group ID)
- Previous working ID
- Insufficient power times
- Pushbutton depressed times.
- Pushbutton locked times

1.3 Function Description

Menu description



⊙ Open file

Open Alpha 600 series program setting file.

⊙ Save file

Save Alpha 600 series program setting file.

⊙ Transmitter/ Receiver

Switch to Transmitter/ Receiver Editing Display

⊙ Exit

Exit the current editing display and back to main menu.

Serial number:	Manufacturing date:	Group ID :	ID :
00000000	0000/00/00	77	01010101

Serial number: Manufacturing serial number of encoder board & decoder board.

Manufacturing date: Manufacturing date of encoder board & decoder board. (Note: It will be set as READ ONLY in factory.)

Group ID (GID) and ID Code :

Transmitter / receiver ID code has to be identical to operate normally. (including Group ID)

ID code and Group ID have to be either odd or even numbers.

That is: When the group ID is binary with even number of 1, then ID code should also be even number of 1.

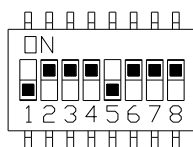
When the group ID is binary with odd number of 1, then ID code should also be odd number of 1.

The setting of ID code: Press '↓' or '+' on the keyboard to increase the number.

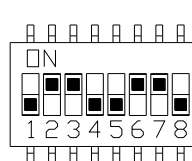
Press '↑' or '-' on the keyboard to decrease the number.

Example:

GID: 77

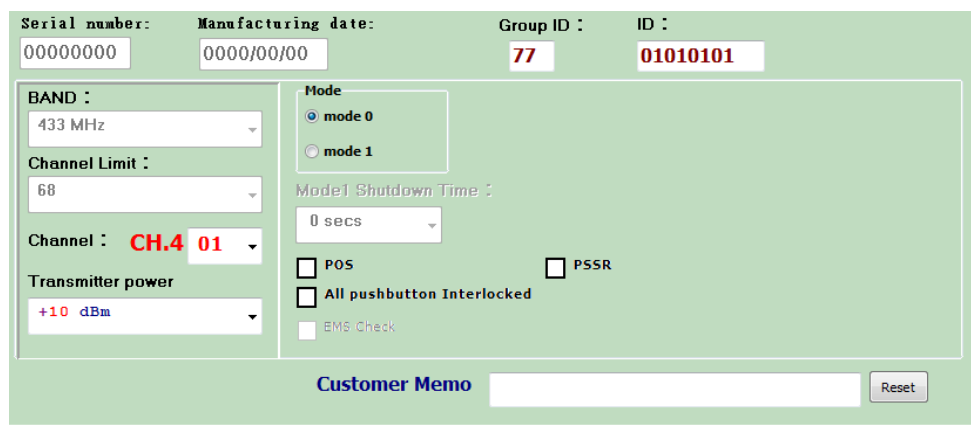


ID: 66



MODE 0 & 1

Mode 0 :



Mode 1 :

Serial number:00000000

Manufacturing date:0000/00/00

Group ID :77

ID :01010101

BAND :433 MHz

Channel Limit :68

Channel :CH.4 01

Transmitter power+10 dBm

Mode

mode 0

mode 1

Mode1 Shutdown Time :3 mins

Mode1 transmitting rechargeable

POS

PSSR

All pushbutton Interlocked

EMS Check

Customer Memo

Reset

Selection of power startup method:

Power switch / START pushbutton (7th pushbutton for Alpha 608 and 11th pushbutton for Alpha 612)

If the system is started by START pushbutton (AUX1), AUX1 button position PS7 will be the START button for standard type pushbutton configuration; AUX1 button position PS6 will be the START button for straight type pushbutton configuration.

POS: When power is off, the emergency stop will be activated automatically for 3 seconds.

PSSR: When emergency stop button is elevated, the power will be started automatically. (Note: this function is only available under Mode 0 with system started by power switch.)

Pushbutton configuration :

Standard-type		Straight-type	
D	U	N	U
W	E	S	D
S	N	AU	E
AD	AU	AD	W

All the pushbuttons are interlocked: Only one pushbutton functions at one time, over two pushbuttons will not be functioning.

EMS Check: (Check emergency stop before system is started.) After power is ON and emergency stop button is elevated, then press START button within 3 minutes of time.

【Band selection】:

BAND :

433 MHz

410 MHz

433 MHz

447 MHz

480 MHz

301 MHz

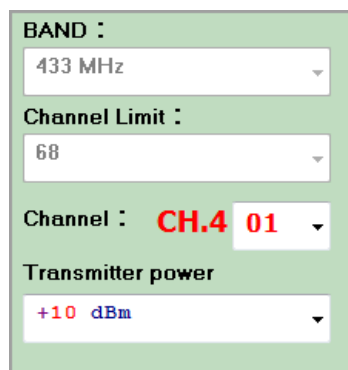
- Maximum number of 418 MHz = 68
- Maximum number of 433 MHz = 68
- Maximum number of 447 MHz = 68
- Maximum number of 480 MHz = 68
- Maximum number of 301 MHz = 68

P.S. BAND selectable might be different with different version of programming software.

As the transmitter band should match the antenna board with the same band, to avoid any wrong setting made by customers, the Band selection can only be made in factory.

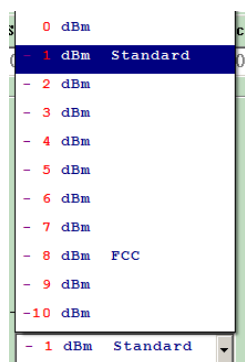
【Channel limit】：Maximum channel selectable

The maximum number of channel limit is based on the band read back from the transmitter or receiver.



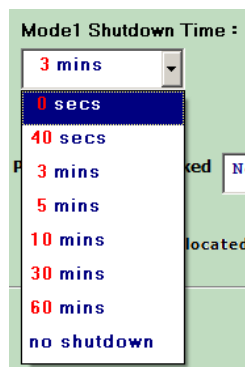
BAND :
433 MHz
Channel Limit :
68
Channel : CH.4 01
Transmitter power
+10 dBm

【Transmitting strength setting】： +10dBm ~ -10dBm



0 dBm
- 1 dBm Standard
- 2 dBm
- 3 dBm
- 4 dBm
- 5 dBm
- 6 dBm
- 7 dBm
- 8 dBm FCC
- 9 dBm
- 10 dBm
- 1 dBm Standard

【Mode 1 shutdown time】：



Mode1 Shutdown Time :
3 mins
0 secs
40 secs
3 mins
5 mins
10 mins
30 mins
60 mins
no shutdown

*Mode 1: Safety mode

After all the pushbuttons are released, transmitter starts the countdown and sends signals continuously. When the countdown time is up, the transmitter power will be off and stop sending signals to receiver. The receiver will be shut down immediately when no more signals are received.

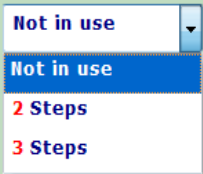
【Mode1 transmitting rechargeable】

☐ Mode1 transmitting rechargeable

Please refer to Alpha 600 series operation manual for the operation.

1.4 Transmitter Select Switch

【Alpha 607 select switch function】



Selector Area

Selector total step :

- Not in use
- Not in use
- 2 Steps
- 3 Steps

Select the step base on each select switch. (Not in use, 2 steps & 3 steps are available)



Selector Area

Selector total step : 2 Steps

Reset Step1 Step2

I II

☐ safety pb7 for selector(SS1)



Selector Area

Selector total step : 3 Steps

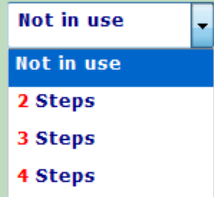
Reset Step1 Step2 Step3

I II I+II

☐ safety pb7 for selector(SS1)

Each step selectable: I, II or I+II.

【Alpha 608 select switch function】 (transmitter firmware version >=4.16)



Selector Area

Selector total step :

- Not in use
- Not in use
- 2 Steps
- 3 Steps
- 4 Steps

Select the step base on each select switch. (Not in use, 2 steps, 3 steps & 4 steps are available)



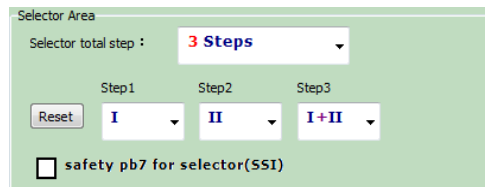
Selector Area

Selector total step : 2 Steps

Reset Step1 Step2

I II

☐ safety pb7 for selector(SS1)



Selector Area

Selector total step : 3 Steps

Reset Step1 Step2 Step3

I II I+II

☐ safety pb7 for selector(SS1)



Selector Area

Selector total step : 4 Steps

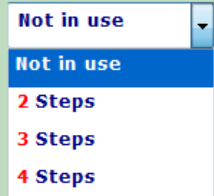
Reset Step1 Step2 Step3 Step4

I II I+II None

☐ safety pb7 for selector(SS1)

Each step selectable: I, II, I+II or None. (None means not in use.)

【Alpha 612 select switch function】



Selector Area

Selector total step :

- Not in use
- Not in use
- 2 Steps
- 3 Steps
- 4 Steps

Select the step base on each select switch. (Not in use, 2 steps, 3 steps & 4 steps are available)

Selector Area
Selector total step : 2 Steps

Step1
Step2

I
II

☐ safety/horn pb11 for selector(SS1)
☐ MSS1/FSI

Selector Area
Selector total step : 3 Steps

Step1
Step2
Step3

I
II
I+II

☐ safety/horn pb11 for selector(SS1)
☐ MSS1/FSI

Selector Area
Selector total step : 4 Steps

Step1
Step2
Step3
Step4

I
II
I+II
None

☐ safety/horn pb11 for selector(SS1)
☐ MSS1/FSI

Each step non-selectable: I, II, I+II or None. (None means not in use.)

☐ MSS1/FSI

For MSS1/FSI, please refer to the operation manual for more details.

Reading:

Connect transmitter programming port and click “Reading”, the setting functions will be read back to transmitter.

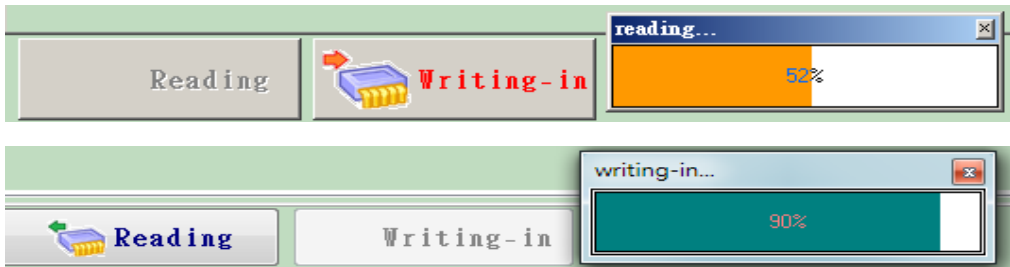
Writing-in:

Connect transmitter programming port and click “Writing-in”, the setting functions will be written into the transmitter.

Before “Reading” or “Writing-in” is clicked:



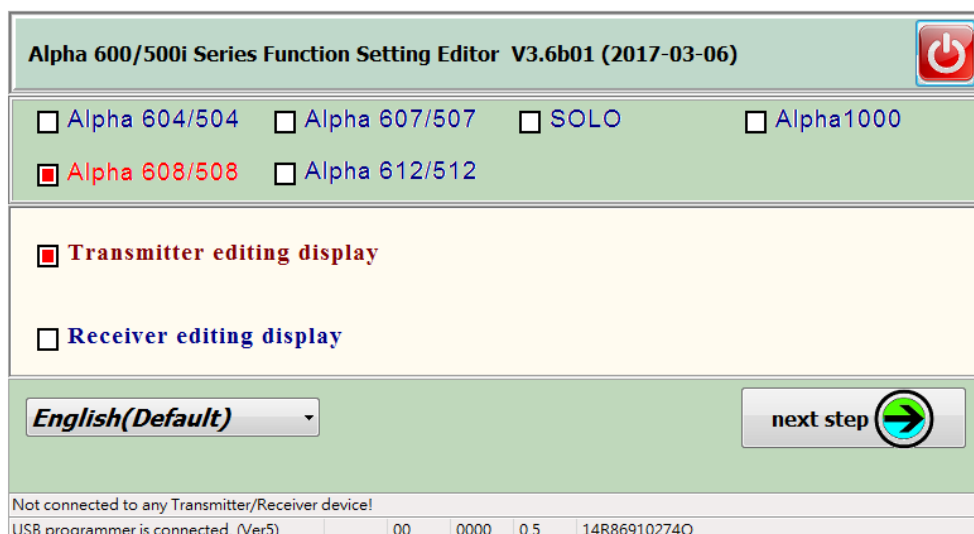
When “Reading” or “Writing-in” is clicked, reading or writing-in will be processed. To stop, click  on the upper right corner of the display.



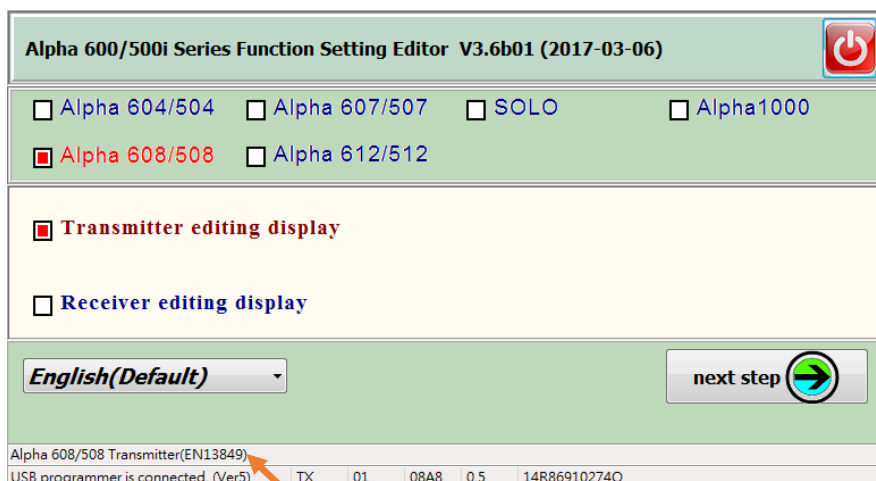
P.S. Before writing-in, the programming software will confirm if the system type and serial number is correct then the writing-in will be proceeded.

1.5 EN 13849 System Types

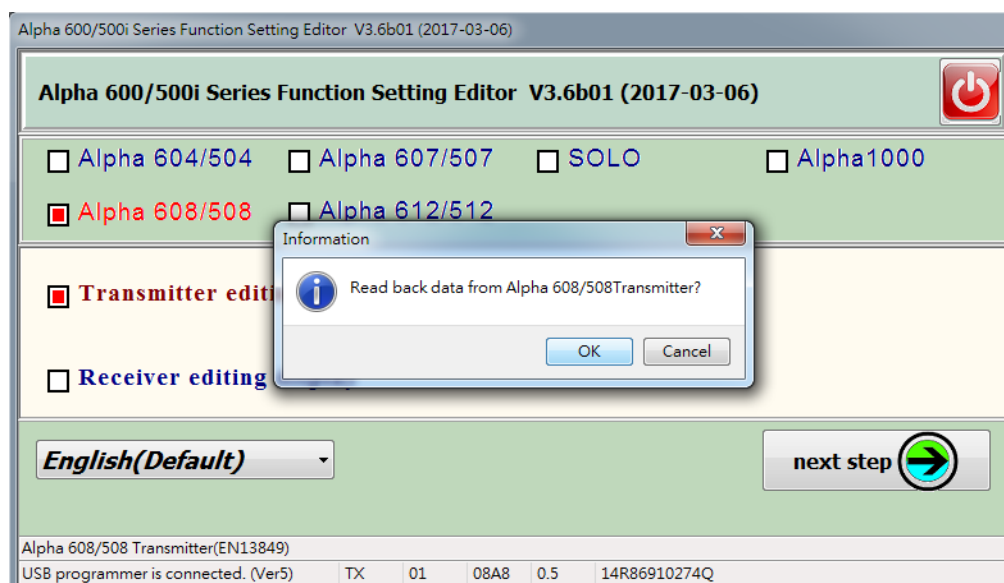
The programmer does not plug into the encoder board.



The programmed does not plug into the encoder board.



Transmitter marked with EN 13849.



Alpha 600/500i Series Function Setting Editor V3.6b01 (2017-03-06)

☐ Alpha 604/504
 ☐ Alpha 607/507
 ☐ SOLO
 ☐ Alpha1000

☒ Alpha 608/508
 ☐ Alpha 612/512

☒ Transmitter editing display
 ☐ Receiver editing display

English(Default)

next step

Alpha 608/508 Transmitter(EN13849)

USB programmer is connected. (Ver5)

TX	01	08A8	0.5	14R86910274Q
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Alpha 608/508 Transmitter editing display V3.6b01 (2017-03-06)

Open Save

Transmitter

EN13849

Serial number: 00000000 Manufacturing date: 0000/00/00 Group ID: 00 ID: 00000000

BAND: 433 MHz

Channel Limit: 68

Channel: CH.4 01

Transmitter power: -1 dBm Standard

Mode:

mode 0

mode 1

activate method:

☒ power start

☐ 7th pushbutton activated(power start)

Model Shutdown Time: 3 mins

Model1 transmitting rechargeable: ☐

Pushbutton interlocked: Not in use

☐ pushbuttons allocated in straight line

Customer Memo

Reset

Reading Writing-in

next step EXIT

USB programmer is connected. Alpha 608/508 Transmitter(EN13849) The setting status is for transmitter.

Transmitter

EN13849

The basic functions for the Alpha 604 transmitter with EN 13849 version and regular one are the same. A607/608/612 is also available for all pushbutton 1~6 interlocked.

Pushbutton interlocked: Not in use

☐ pushbuttons allocate

PBs 1~6 only (U,D,E,W,N,S)

All PBs

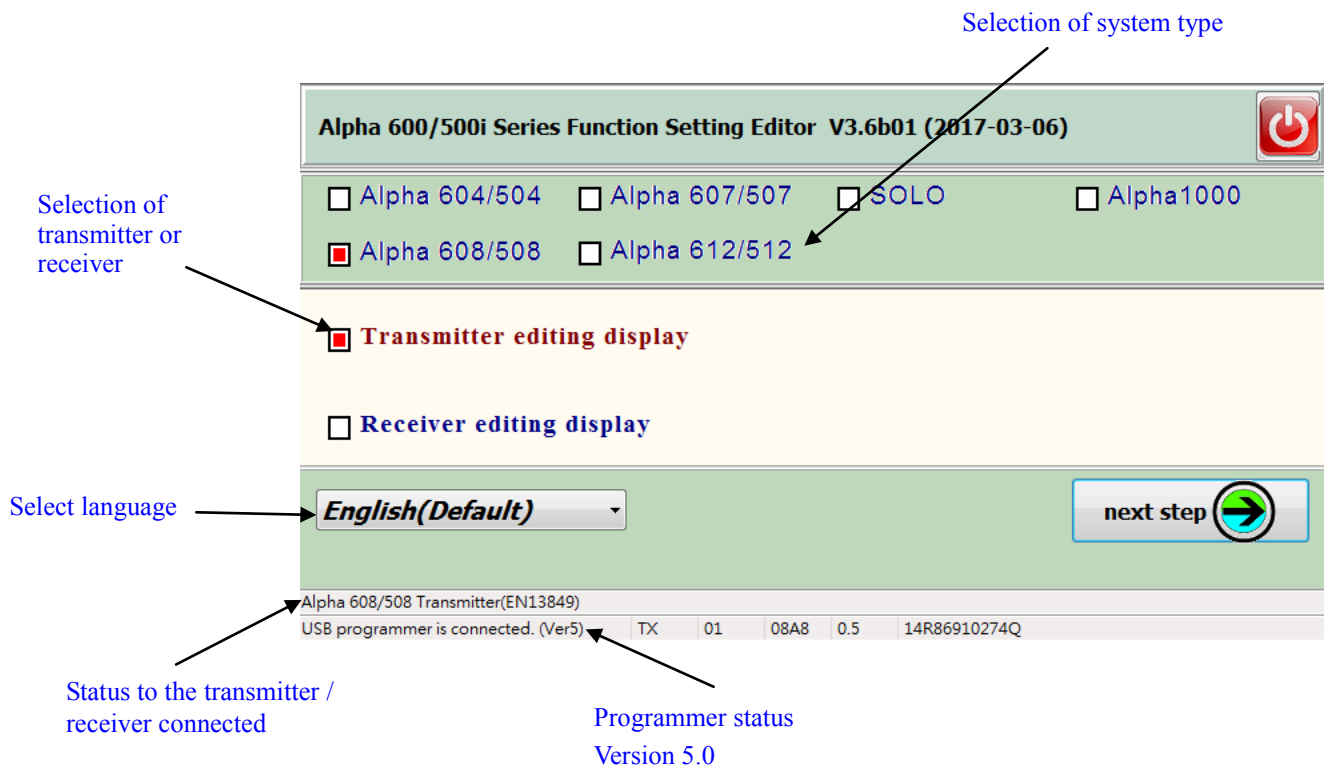
PBs 1~6, one pb can operate at a time

2. Receiver Editing Display

Step 1:

Please refer to page 3 for editing display.

- Left-click on alphatools.exe file
- Enter Alpha 600 Series Function Setting Program
- Select “Alpha 608” on main menu, and then click “Receiver editing display”. For other system types, follow the same steps as Alpha 608.



【Programmer status】:

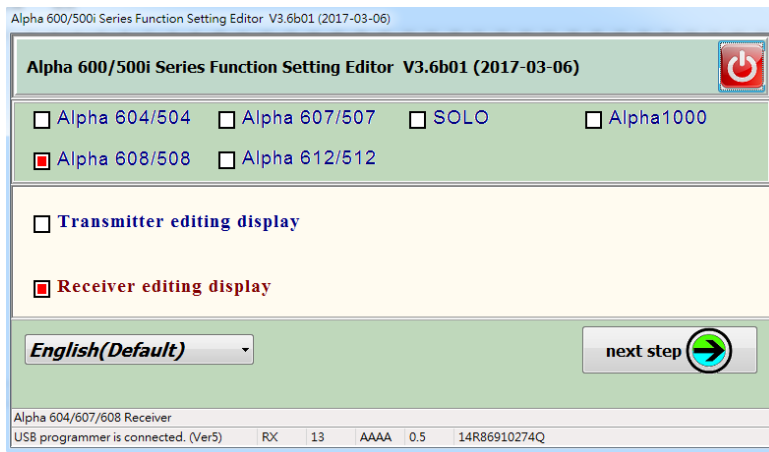
If USB programmer is connected to computer, the message column on display bottom-left corner will show “USB programmer is connected”; if not, the message will show “USB programmer disconnected.”

【Status to the encoder/decoder board connected】:

It shows the system type of encoder/decoder board USB programmer is connecting. If neither encoder board nor decoder board is connected, this column will be blank. If Alpha 608 transmitter is connected, this column will show “Alpha 608 transmitter”. If the connecting system type is not the current editing one, this column will show as “Not Alpha 608 transmitter”.

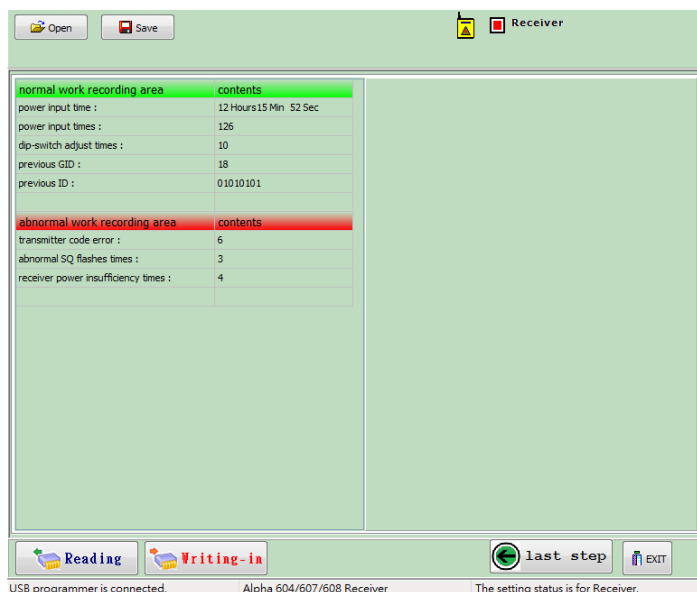
Step 2:

Enter Alpha 608 receiver editing system and edit the functions.



Step 3:

Receiver recording area and repair date display



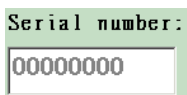
■ 【Receiver recording items】:

Power input time
Power input numbers
Insufficient power times
Dip switch changes times
Previous GID (Group ID)
Previous working ID
2003 incorrect times
Transmitter wrong ID times
Abnormal SQ function times
Insufficient receiver power times

【Menu Description】



- ◎ Open file
Open the Alpha 608 file
- ◎ Save file
Save the Alpha 608 current setting
- ◎  Transmitter/  Receiver
Switch to Transmitter/ Receiver Editing Display
- ◎ Exit
Exit the current editing display and back to main menu display.



Serial number: Manufacturing serial number of encoder board & decoder board.

Manufacturing date: Manufacturing date of encoder board & decoder board. (Note: It will be set as READ ONLY in factory.)

Group ID (GID) and ID Code :

Transmitter / receiver ID code has to be identical to operate normally. (including Group ID)

ID code and Group ID have to be either odd or even numbers.

That is: When the group ID is binary with even number of 1, then ID code should also be even number of 1.

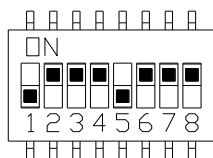
When the group ID is binary with odd number of 1, then ID code should also be odd number of 1.

The setting of ID code: Press '↓' or '+' on the keyboard to increase the number.

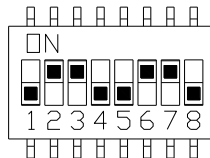
Press '↑' or '-' on the keyboard to decrease the number.

Example:

GID: 77



ID: 66



【Pushbutton function setting】:

***pushbutton function setting:**

Function Code:

Left click the mouse



Enter the Pushbutton Function Setting display. Left click the mouse “SET” to start pushbutton function setting.

PushButton Function Setting

POWER STCP

D U
W E
S N
AUX AUX

Alpha
608/508

OK Cancel

Normal Normal
Normal Normal
Normal Normal
Aux Aux

☐ Straight type

SET
SET
SET

Left click the mouse



Enter the Up/Down Pushbutton Function Setting display

PushButton Function Setting

PushButton D PushButton U

☒ InterLock

Normal
Toggle
Toggle controlled by E-stop

Normal
Toggle
Toggle controlled by E-stop

OK Cancel

PushButton Function Setting

PushButton D PushButton U

☐ InterLock

Normal
Toggle
Toggle controlled by E-stop
OFF
Safe-OFF

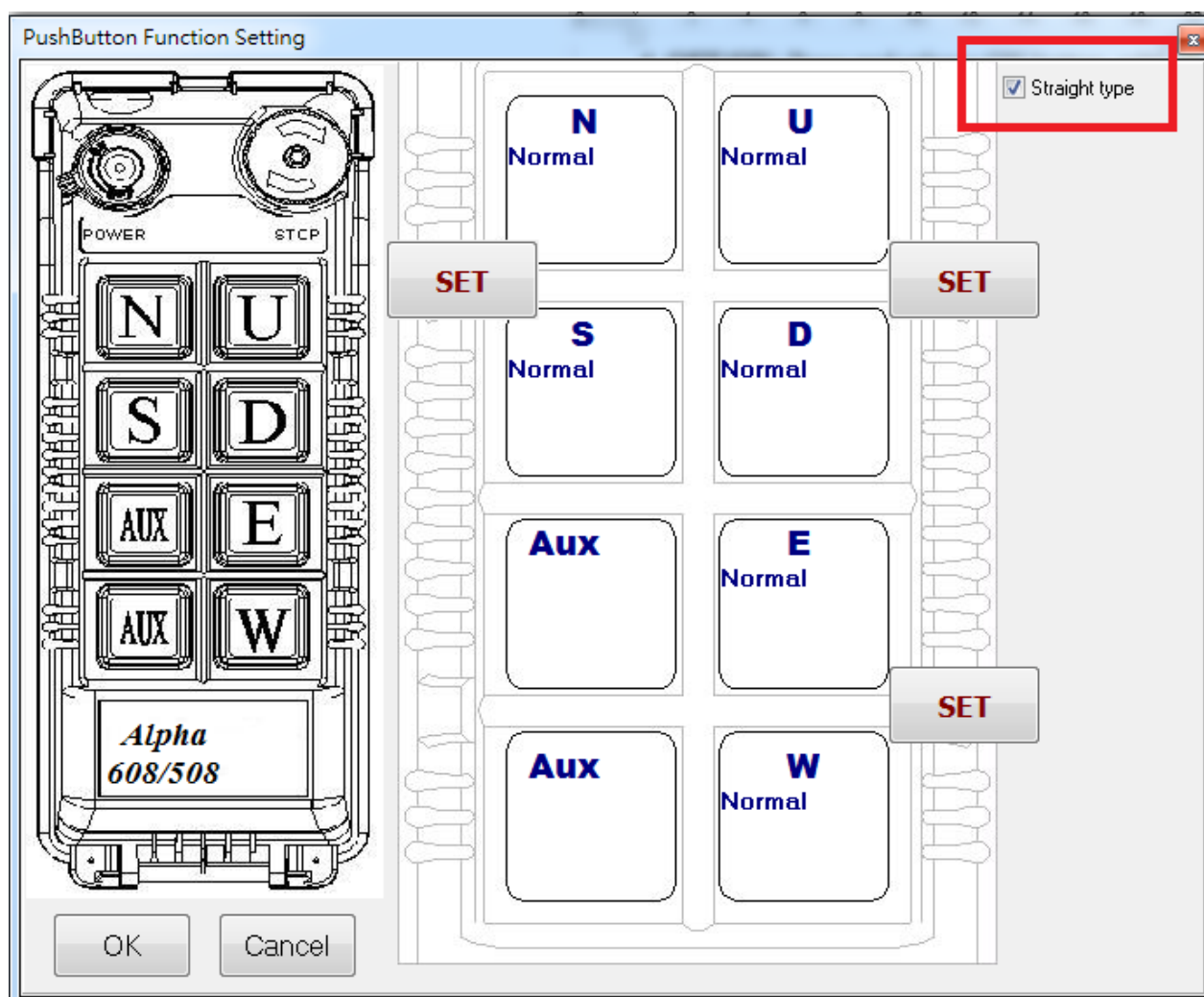
Normal
Toggle
Toggle controlled by E-stop
ON
Safe-ON

OK Cancel

Select the function and click OK to correct pushbutton functions.

1. **Normal:** Press the pushbutton, relay latched. Release the pushbutton, relay unlatched.
2. **Toggle:** Press and release the pushbutton, relay latched. Press and release the pushbutton again, relay unlatched. Pushbutton relay status remains unchanged when MAIN relay is off.
3. **Toggle controlled by E-stop:** Press and release the pushbutton, relay latched. Press and release the pushbutton again, relay unlatched. Pushbutton relay is unlatched when MAIN relay is off.
4. **OFF/ON:** Press and release ON button, ON relay latched. Press and release OFF button, ON relay unlatched.
5. **Safe-OFF/Safe-ON:** Press and release ON button, ON relay latched. Press ON and then OFF button at the same time, ON relay unlatched.

With pushbutton function setting display, when “Straight type” is selected, the pushbutton configuration: Up(U), Down(D), East(E), West(W), South(S) & North(N) is in different sequence as below.



- ☐ North and South relays exchange
- ☐ (Up, Down mode) 1st relay is not activated when it's on 2nd speed

MO Shut Down Timer

5 mins

8 secs

1 mins

3 mins

5 mins

10 mins

15 mins

20 mins

25 mins

30 mins

MO Shut Down Timer

5 mins

Customer Memo

Reset

Customer Memo: 16 alphabets in English

Exmple 2:

*pushbutton function setting:

Function Code: 111111

SET

PushButton Function Setting

POWER

STCP

D

U

W

E

S

N

AUX

AUX

Alpha

608/508

OK

Cancel

D

Normal

U

Normal

Interlock

W

Normal

E

Normal

Interlock

S

Normal

N

Normal

Interlock

Aux

Aux

☐ Straight type

SET

SET

SET

Reading:

Connect the programmer with the transmitter/receiver programming port and click “Reading”, the setting functions will be read back from the transmitter/receiver.

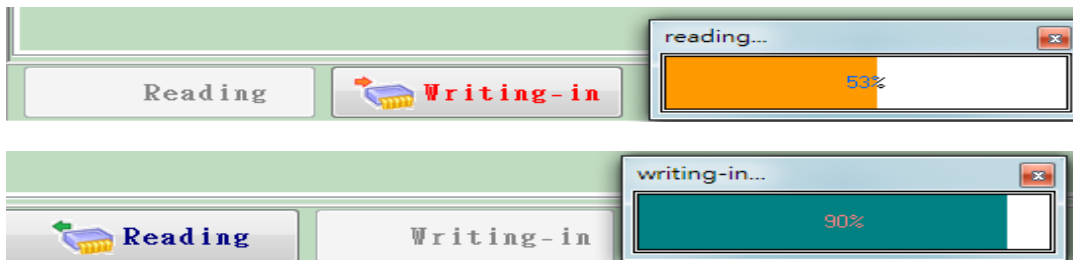
Writing-in:

Connect the programmer with the transmitter/receiver programming port and click “Writing-in”, the setting functions will be written into the transmitter/receiver.

Display before “Reading” or “Writing-in” is clicked:

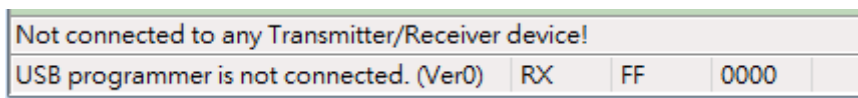


After “Reading” or “Writing-in” is clicked, reading or writing-in status will be started. To stop, click  on the upper right corner of the display..



3. Programmer and Programming Ports

Programmer is not connecting the USB A to B programming wire.



After the computer is connected to the programmer USB, under regular status, the LED status light will be green flash on every 500ms (on-off blink). In case of any error, the LED status light will be red on.

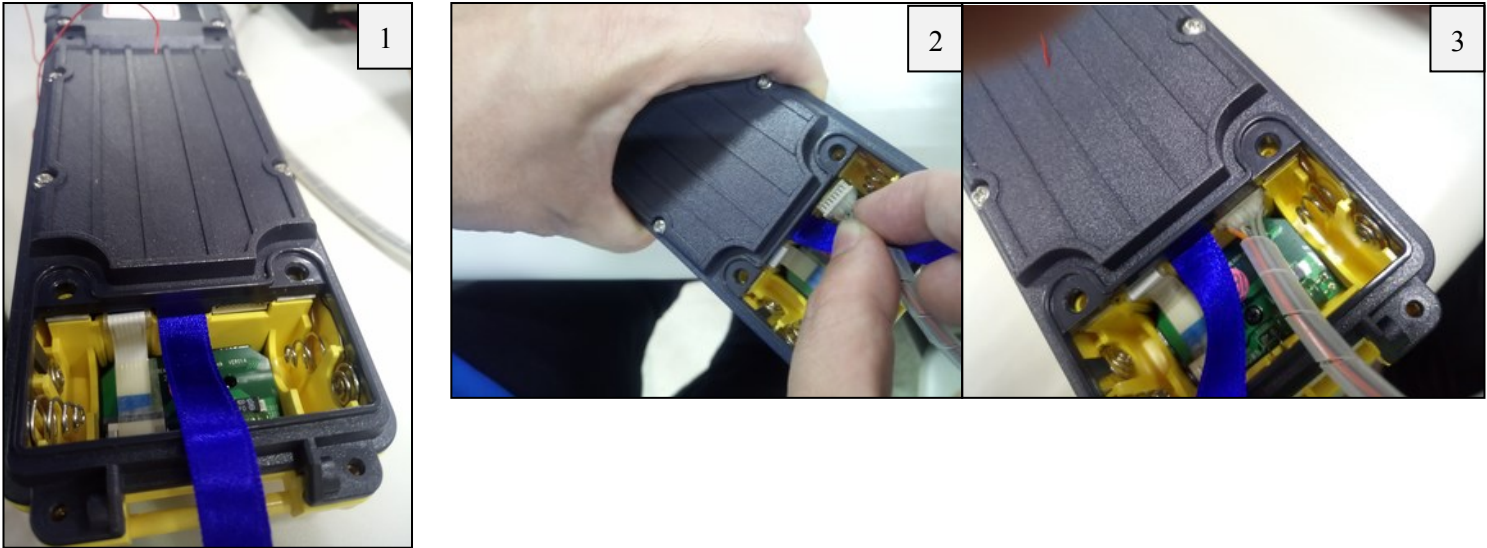
Connecting the programmer with the encoder board or the decoder board when the software is on, the LED status light will be constantly green on.



When the software is on but the programmer is not connected to the encoder board or the decoder board, the LED status light green flashes every 500ms.

Not connected to any Transmitter/Receiver device!	
USB programmer is connected. (Ver5)	

Connect the programmer to the programming port of the encoder board.



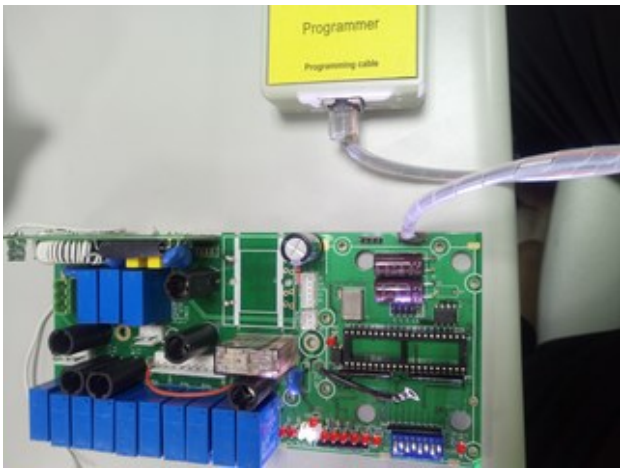
Programmer green LED constantly on and the software status display shown as “programmer USB connected”.

Alpha 608/508 Transmitter(EN13849)					
USB programmer is connected. (Ver5)	TX	01	08A8	0.5	14R86910274Q

Receiver



Not connected to any Transmitter/Receiver device!			
USB programmer is not connected. (Ver0)	RX	FF	0000



Alpha 604/607/608 Receiver					
USB programmer is connected. (Ver5)	RX	13	AAAA	0.5	

Receiver with EN 13849 version (two ports to be programmed with identical data)

A604/607/608 decoder board



A612 decoder board

