

The driver debugging
software instructions

Contents

1 the software introduction and description	2
1.1 the Software introduction	2
1.2 the Software function description	2
2 Detailed description of each function	3
2.1 Device connection	3
2.2 Edit	3
2.3 Window	5
2.4 Help	5
2.5 Left navigation bar function	7
3 Troubleshooting	13
4 Connect new devices	14
5 Others	14

1 the software introduction and description

1.1 the Software introduction

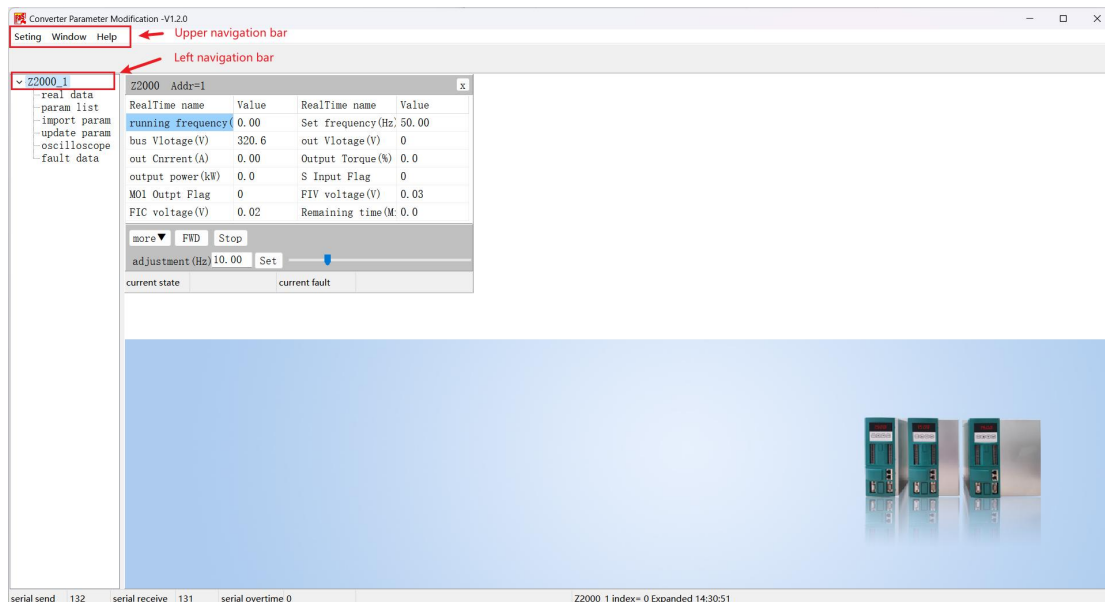
The operating environment of the software is Windows 7 and Windows 10 operating system. It is suitable for all kinds of series inverters, used to debug inverters, easy to modify parameters, and oscilloscope function to check the bus voltage, output current and other parameters. This manual takes PH300 series inverter as an example to explain each function item.

1.2 the Software function description

Open the folder where the software is located in [Inverter1.2.0], which contains two folders and [InverterP.exe] software. The Data folder stores data, and the Lst folder stores configuration files and images used in the program.

名称	修改日期	类型	大小
Data	2023-04-06 11:35	文件夹	
Lst	2023-04-06 13:40	文件夹	
InverterP.exe	2023-03-21 11:42	应用程序	6,921 KB

1) Open the [InverterP.exe] software main interface as follows:

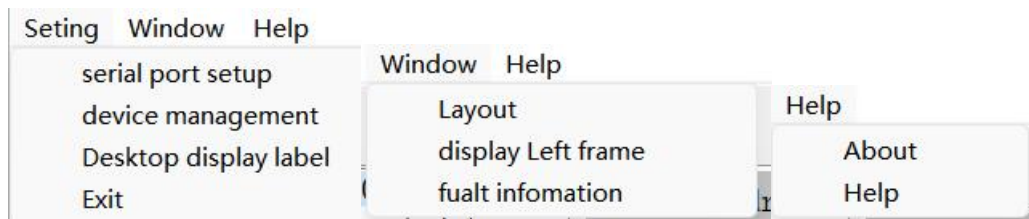


2) Top navigation bar function preview:

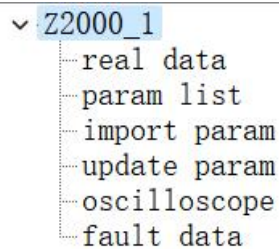
In [Edit], there are [serial port setup], [device management], [Desktop display label], and [Exit].

In [Window], there are [Layout], [display Left frame], [fault Information].

In [Help], there are [About] and [Help].



Preview on the left navigation bar, the left navigation bar can perform real-time monitoring, view parameter list, import parameters, operate keyboard, oscilloscope, and fault record. The function is as follows:



2 Detailed description of each function

2.1 Device connection

Use the 485 serial cable to connect the device, the device is connected to the RS+ and RS- ports, and the other end is connected to the computer via USB.

2.2 Edit

2.2.1 When using the software for the first time, you need to open the [serial port setup] and modify the serial port number. If you do not know the serial port number, you can view it in [My Computer] -> [Device Manager] -> [Port (COM and LPT)]. After confirming the port, Baud, modify it in the software and click [Open]. If the button is displayed as [Off], you need to click twice.

Port Baud

☐ show receive data. overtime(ms)

☒ send not interval. set time(ms)

☐ show send data receives 14484

☐ Send Dec

☒ CRC chec:

Use the lower left display to determine if the connection is successful. When the connection is successful, the serial send and serial receive are increasing. The connection is fail if serial overtime is increasing.

serial send 15483 serial receive 15482 serial overtime 0 SysSet file Close 14:31:12

2.2.2 Select a matching device type

Switch the device type in [Edit] -> [device management]. You can also modify the device name here. After the modification is completed, click the [Modify] button to save. After modifying the device type, you need to restart the software.

device management

device name ☐ move the locati

Modbus Add

device type

☒ Enable this device

display gif

Panel display button

☐ display REV

☐ display P_RE

☐ display P_FW

☐ free stop

☒ set frequenc

gif position

Left:

Top:

Height:

Width:

Modify the gif to be show path in Lst/animat(1..5).gif

After completing the above settings and modifications, you can use the software to view the parameters, compare the actual values with the default values, and modify the parameter values.

2.3 Window

2.3.1 Modify layout

Click [Window] -> [Layout], you can place the background image you want to switch in the folder Lst, and fill in the name of the picture in the layout window. You can also modify the desktop background color and switch between Chinese and English. After editing, click [Save]. After saving, you need to restart the software to implement the modification.

2.3.2 Click [Window] -> [display Left frame] to hide/show the left navigation bar.

2.3.3 Click [Window] -> [fault information] to check whether the inverter is currently faulty. If it is faulty, display the fault information.

2.4 Help

2.4.1 If there are any problems during the use, you can click [Help] -> [About] to call the software service.



2.4.2 Click [Help] -> [Help] to view the applicable environment and usage of the software.

你我携手
共赢未来



Operating environment: Windows 7, Windows 10 operating system.

Connection steps:

Step 1 Connect the serial port.

Step 2 Add the device and select the device type.

Change the interface picture, save the picture under Lst BK.jpg, replace it

Replace the application name: open SysSet.dll file with Notepad, modify the name of Company="XXXXXXXX company"


The current version 1.0.1, latest time 2019-05-11. You can contact our company staff to get the latest version.

1. Support various types of inverters (requires modify database files).
2. Support serial port MODBUS RTU protocol.
3. Support monitoring of multiple units and multiple inverters. That is to support the use of one computer to monitor multiple and multiple inverters at the same time.
4. Support function code parameter upload and download, parameter file import and export.

2.5 Left navigation bar function

2.5.1 View real-time parameters

The display is as follows:

Z2000 Addr=1 X			
RealTime name	Value	RealTime name	Value
running frequency (0.00	Set frequency (Hz)	50.00
bus Vlotage (V)	324.3	out Vlotage (V)	0
out Cnrrent (A)	0.00	Output Torque (%)	0.0
output power (kW)	0.0	S Input Flag	0
MO1 Outpt Flag	0	FIV voltage (V)	0.03
FIC voltage (V)	0.02	Remaining time (M:	0.0
<div>more ▼ FWD Stop</div> <div>adjustment (Hz) 10.00 Set </div> <div>current state current fault</div>			

You can modify the displayed real-time parameters, double-click the parameter name, and set the parameters that the user needs to display. As shown in the figure below, refer to the manual to change the title name, receive address, and decimal places displayed.

update monitor parameter X

title name

running frequency (Hz)

read modbus address

28672

display dot

2

Save

2.5.2 View param list

You can select the parameter group, or click the left and right buttons to view the parameters of the adjacent parameter group. red indicates that the current value of the parameter does not match the default value.

Update parameter Z2000 device type:Z2000E Address=1								
<div> <div><<<</div> <div>PB Swing Frequency, Fixed Lengthl ▾</div> <div>>>></div> <div>Find</div> <div>OutputData</div> </div>								
F. Code	ParametName	Value	Unit	Default	Max	Min	Property	ParametTyp
PB.00	Swing frequencysetting mode	0	Hz	0	1	0	write	
PB.01	Swing frequency amplitude	0.0	%	0.0	100.0	0.0	write	
PB.02	Jump frequency amplitude	0.0	%	0.0	50.0	0.0	write	
PB.03	Swing frequency cycle	10.0	%	10.0	3000.0	0.1	write	
PB.04	Triangular wave rising time c	50.0	%	50.0	100.0	0.1	write	
PB.05	Set length	1000	m	1000	65535	0	write	
PB.06	Actual length	0	m	0	65535	0	write	
PB.07	Number of pulses per meter	100.0		100.0	6553.5	0.1	write	
PB.08	Set count value	1000		1000	65535	1	write	
PB.09	Designated count value	1000		1000	65535	1	write	

The parameter value can be modified by clicking on the current value of the parameter. The modification takes effect after closing the window for modifying the parameters.

Operation panel Z2000 device type:Z2000E Address=1

F. Code **PB. 01** <<< >>>

param value ☆ **0.0** % **modifiable**

Max: **0.0** Min: **100.0** **edit database**

0.0%~100.0%

Swing frequency amplitude default : 0.0

Click [edit database] to modify the parameters of the parameters and modify the default values, units, maximum values, and minimum values. Click [Refresh] after modification.

update database record

F. Code **PB. 00** short name **Swing frequencysetting mode**

Address **64256** ☐ HEX unit **Hz**

default **0** dot place **0**

Max: **1** ☐ study param

Min: **0** ☐ model dependen

☐ factory corr

property

☒ modified

☐ Shutdown cha

☐ only read

☐ only write

detailDesc: **delete** **update add**

0: Relative to the central frequency1: Relative to the maximum frequency

2.5.3 Import param

When you need to modify multiple parameters at the same time, you can organize the parameters into a txt file. Place the file in the Data folder,click [open file], and select the file you want to import. After importing, click execute].

Z2000E When Read number is less than the total, please wait

output ZC format ☐ Output modified parameters

Parameter total: 364 Read number: 245

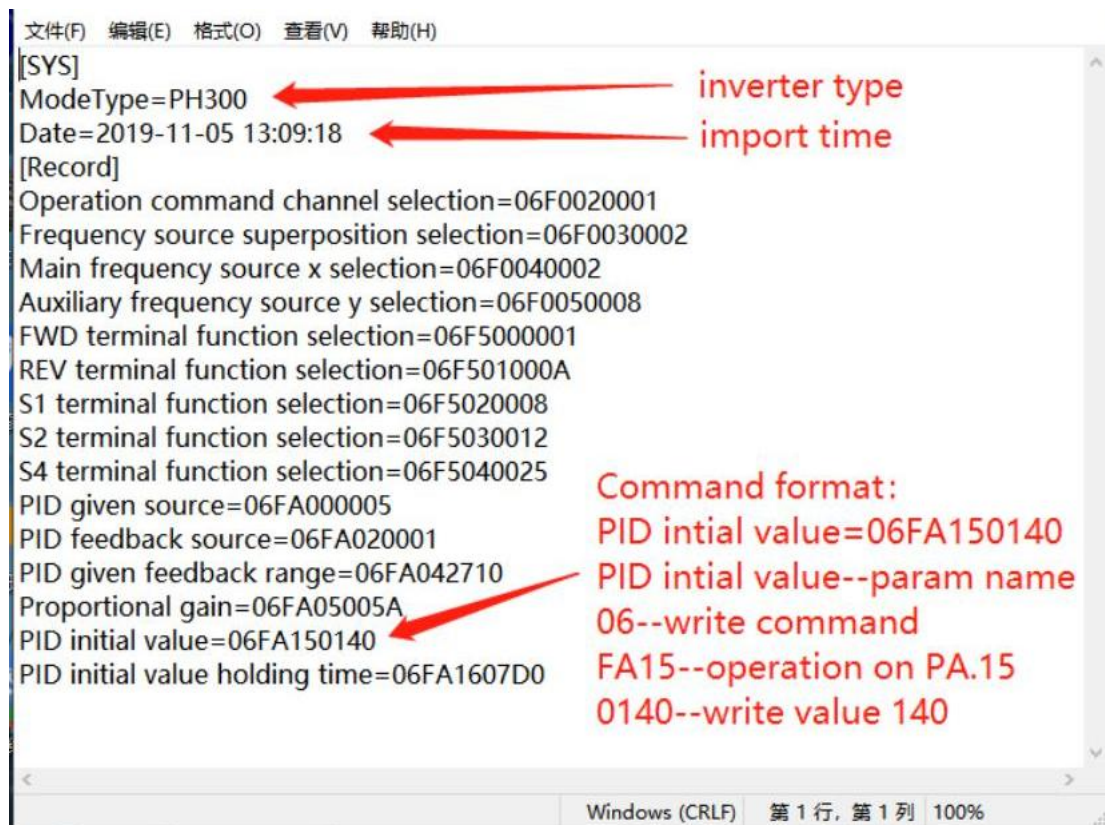
☒ study param: 5

☒ factory corrected: 0

☒ model dependent: 17

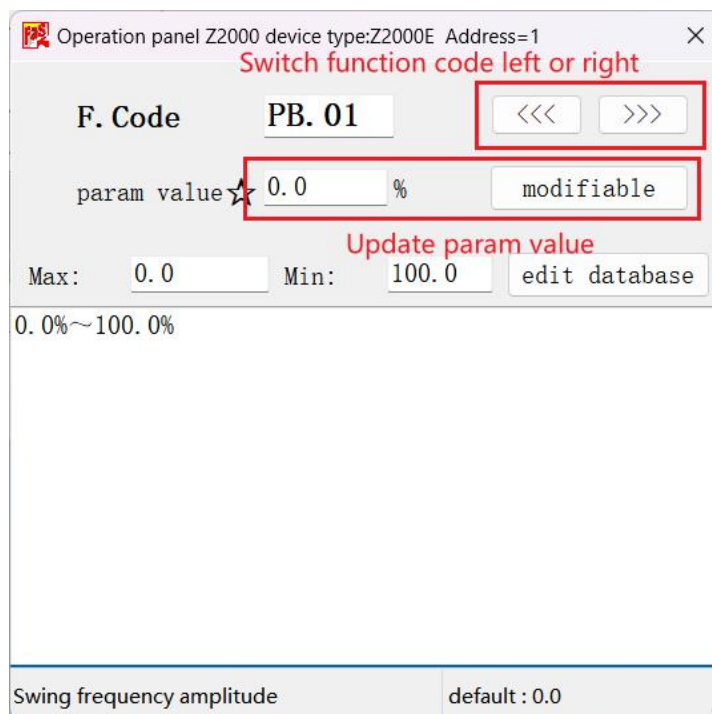
Rec	F. Code	ParameterName	Value	Default	Uni	Max val	Min val	Property	ParametTy	output
1	C0.00	Speed/Torque control sele	0	0		1	0	stopWrite		✓
2	C0.01	Torque setting source int	0	0		7	0	stopWrite		✓
3	C0.03	Torque digital setting in	-.-	150.0	%	200.0	-200.0	write		
4	C0.05	Forward maximum frequency	-.-	50.00	Hz	320.00	0.00	write		
5	C0.06	Reverse maximum frequency	-.-	50.00	Hz	320.00	0.00	write		
6	C0.07	Acceleration time in torq	-.-	0.00	s	650.00	0.00	write		
7	C0.08	Deceleration time in torq	-.-	0.00	s	650.00	0.00	write		
8	C5.00	PWM switchover frequency	8.00	8.00	Hz	15.00	0.00	write		✓
9	C5.01	PWM modulation mode	0	0		1	0	write		✓
10	C5.02	Dead zone compensation mo	1	1		2	0	write		✓
11	C5.03	Random PWM depth	0	0		10	0	write		✓
12	C5.04	Rapid current limit enabl	1	1		1	0	write		✓
13	C5.05	Current detectioncompensa	105	0		100	0	write		✓
14	C5.06	Undervoltage threshold se	350.0	70.0	V	140.0	60.0	write		✓
15	C5.07	SFVC optimization mode se	0	2		2	0	write		✓
16	C6.00	FI curve 4 minimum input	0.00	0.00	V	10.00	0.00	write		✓
17	C6.01	Corresponding setting of	0.0	0.0	%	100.0	-100.0	write		✓
18	C6.02	FI curve 4 inflexion 1 in	3.00	3.00	V	C6.04	0.00	write		✓
19	C6.03	Corresponding setting of	30.0	30.0	%	100.0	-100.0	write		✓
20	C6.04	FI curve 4 inflexion 2 in	6.00	6.00	V	10.00	0.00	write		✓

File template description:



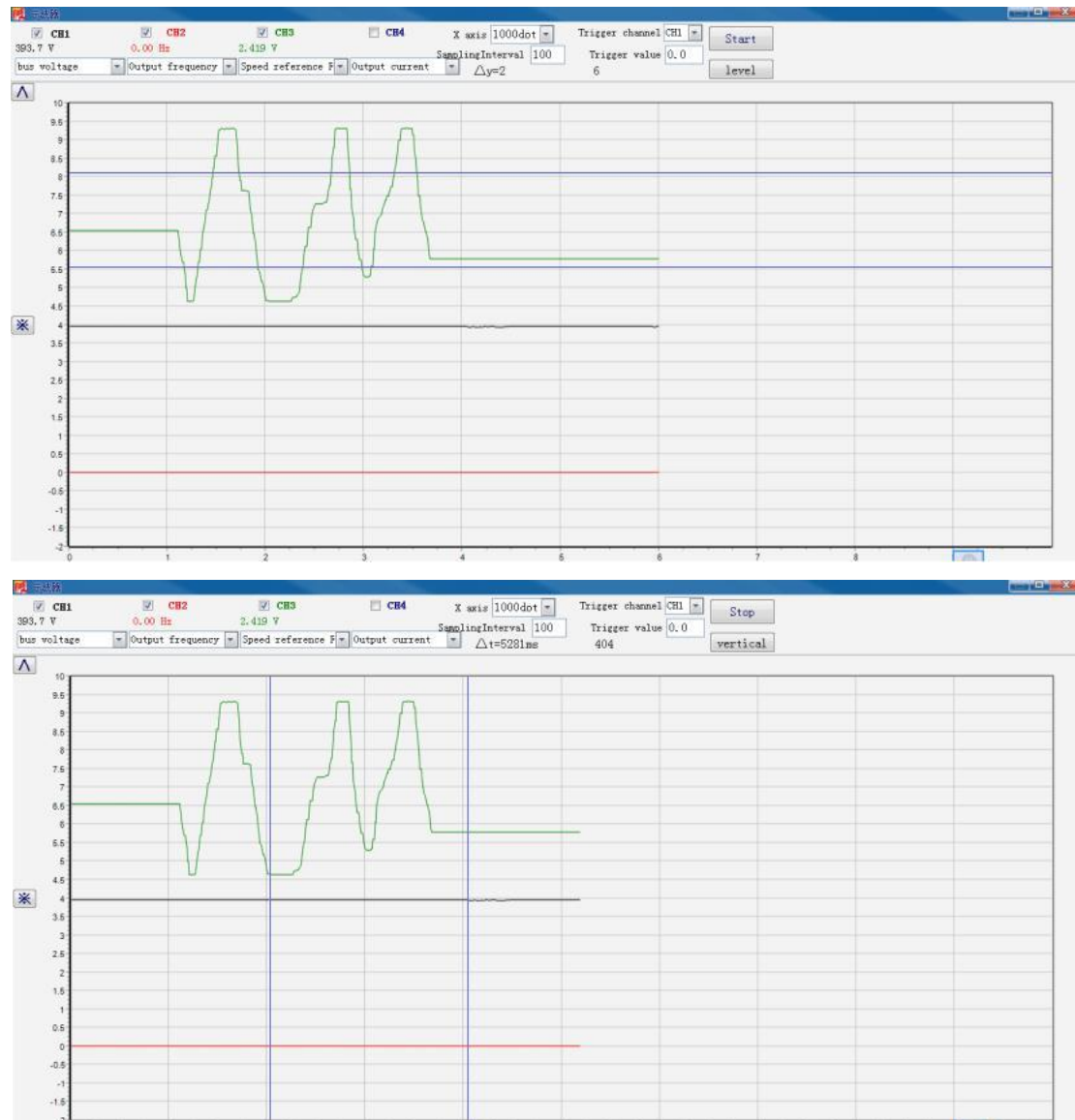
2.5.4 update param

Simulate keyboard operation, select or fill in the function code, fill in the value to be modified in the parameter value box, click the [Modify parameter] button, the modification is completed, and the modification will take effect after the window is closed.



2.5.5 oscilloscope

Select the parameters and gains to be displayed. A maximum of four parameters can be displayed. Click CH1, CH2, CH3, and CH4 to select the channel for recording. Modify the unit length, sampling interval, trigger channel, and trigger value of the x axis as required. Then click [Start], and the parameter change will start to be displayed in the coordinate axis. Select the curve by frame to enlarge the curve. Select [Cursor] to draw two vertical scales in the picture or switch to horizontal scales. The scale difference is displayed on each channel. Click [Stop] to record gain.



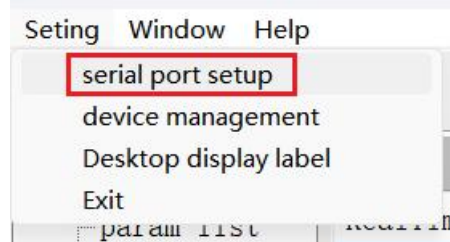
2.5.6 fault data

You can view the fault log, read the current fault of the drive, and clear all faults.

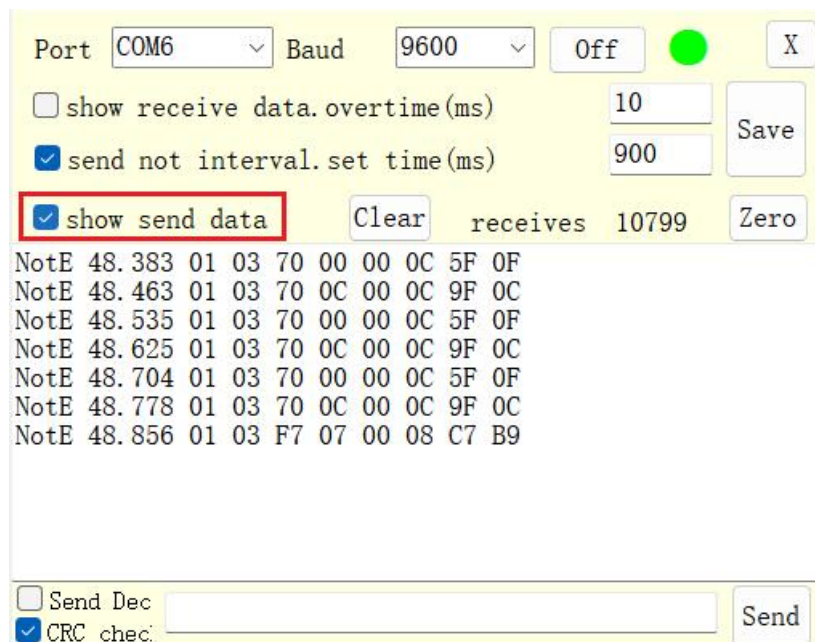


3 Troubleshooting

If the debugging software fails, reconnect the serial cable to the computer. If it still does not work properly, open [Monitor Serial Port] in [Settings].



Check the display serial port to send data, view the data sent and received, and find out the solution to the problem.



4 Connect new devices

To connect to a new series, you need to switch the device type in [Edit] -> [device management], click [Add] then restart the software.

5 Others

If you can't solve the problem, please contact the supplier or manufacturer for processing, or call the software service phone in [Help]->[About]. Thank you!