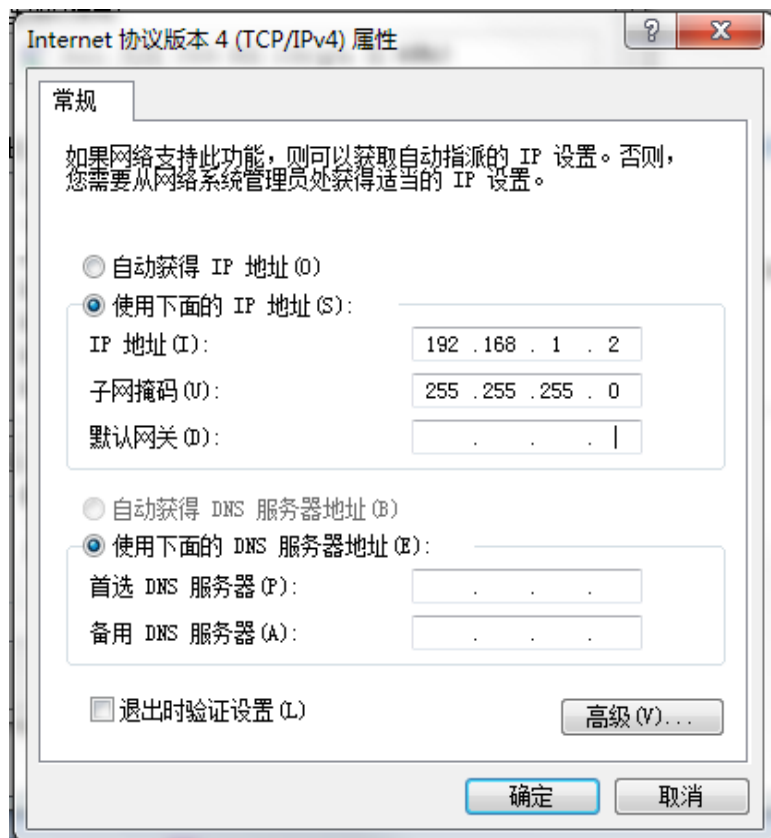




## Unidrive M Connect 软件操作介绍

# 设置PC网口IP地址

- 与驱动器IP地址在同一网段

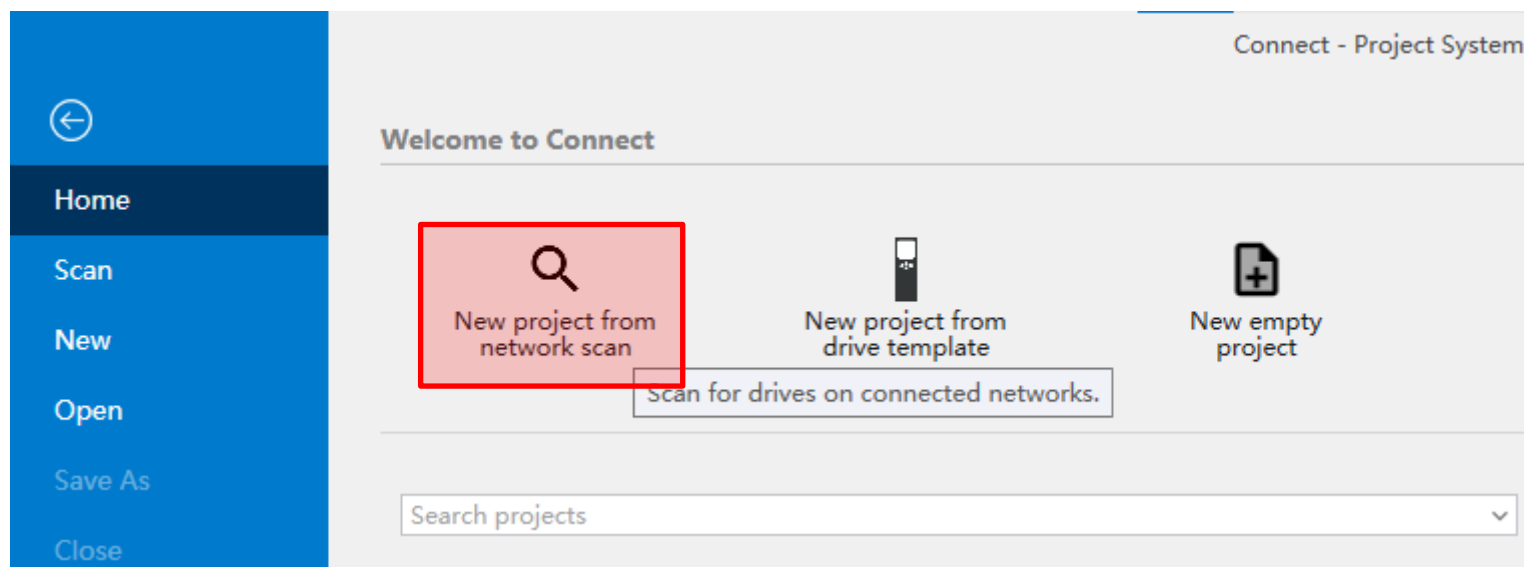


# 新建工程

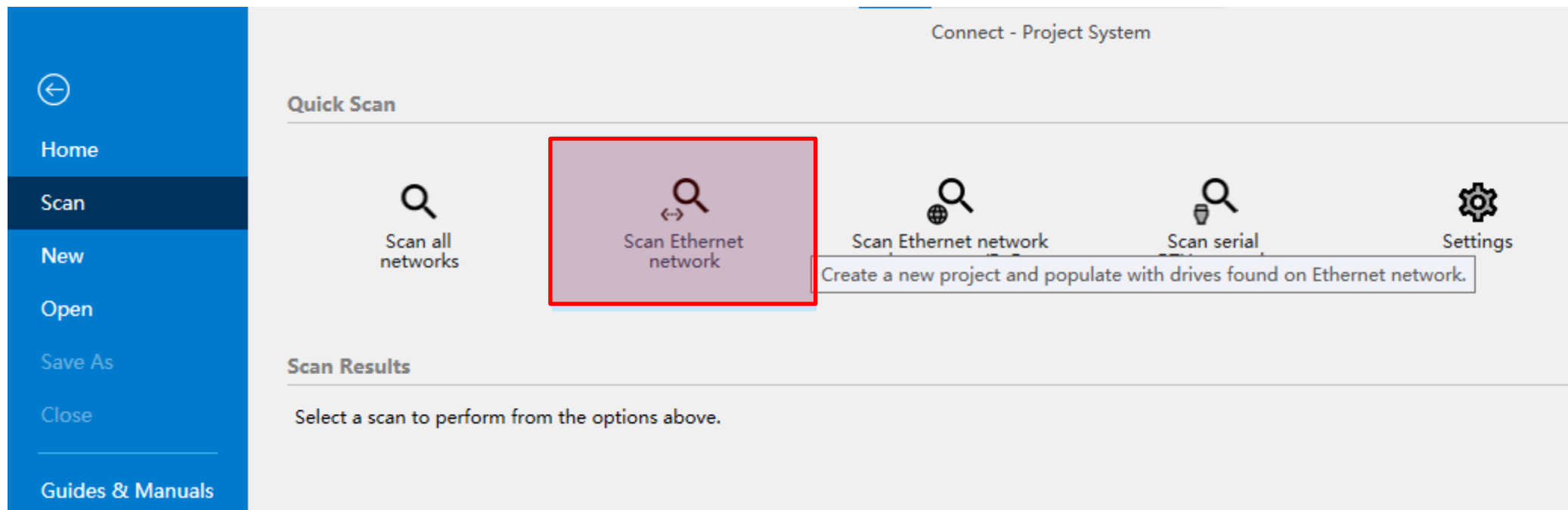
新建工程可选择扫描网络新建工程，或者直接新建空工程。

新建空的工程需要手动添加驱动器。

扫描新建的工程会直接添加驱动器，以下首先以扫描添加为例



# 选择从以太网扫描



## 配置驱动器的IP地址

扫描到的驱动器如下图所示，如果IP地址不对，可以点击Configuration修改。

注：要区分不同的驱动器，可以点击□□Wink 按钮，驱动器的面板及Ethernet灯会闪烁。

✓ Scanning Ethernet networks - 2 devices found (with 2 unreachable)

⚠ **Unreachable devices detected**  
These are devices that have been detected but cannot be fully communicated with by your PC.

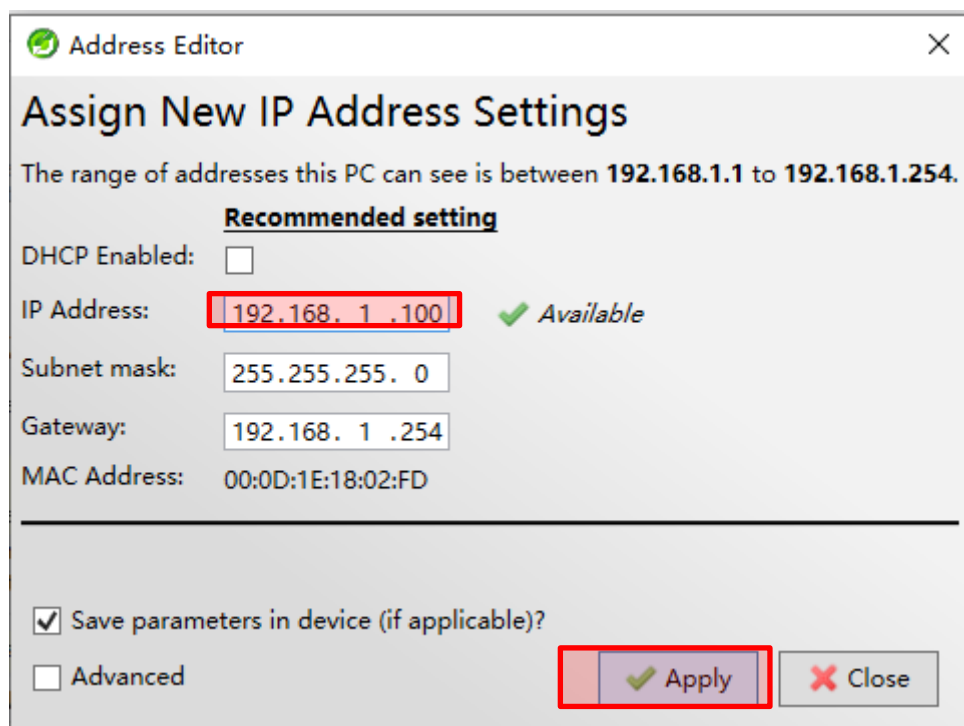
| IP Address     | MAC Address       | Identifier           | Actions                                                                                                   | Possible Cause                                                                       |
|----------------|-------------------|----------------------|-----------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| 169.254.83.167 | 00:0D:1E:02:72:4F | Factory Fit Ethernet | ■ ■ Wink  Configure... | Device is set to get address from DHCP server but PC isn't. DHCP should be disabled. |
| 0.0.0.0        | 00:0D:1E:18:02:FD | Factory Fit Ethernet | ■ ■ Wink  Configure... | Device is configured to use DHCP but PC is set to a static IP address                |

☒ Address Type Name Serial number

## 配置驱动器的IP地址

下图分别设置两台驱动器地址

192.168.1.100和192.168.1.101



The screenshot shows the 'Address Editor' window titled 'Assign New IP Address Settings'. It displays the IP range 192.168.1.1 to 192.168.1.254. The 'Recommended setting' section shows 'DHCP Enabled' as an unchecked checkbox. The 'IP Address' field is set to 192.168.1.100, which is highlighted with a red box and marked as 'Available' with a green checkmark. The 'Subnet mask' is 255.255.255.0 and the 'Gateway' is 192.168.1.254. The 'MAC Address' is 00:0D:1E:18:02:FD. At the bottom, the 'Save parameters in device (if applicable)?' checkbox is checked, and the 'Advanced' checkbox is unchecked. The 'Apply' button is highlighted with a red box.

Address Editor

### Assign New IP Address Settings

The range of addresses this PC can see is between 192.168.1.1 to 192.168.1.254.

**Recommended setting**

DHCP Enabled: ☐

IP Address: 192.168.1.100 ✓ Available

Subnet mask: 255.255.255.0

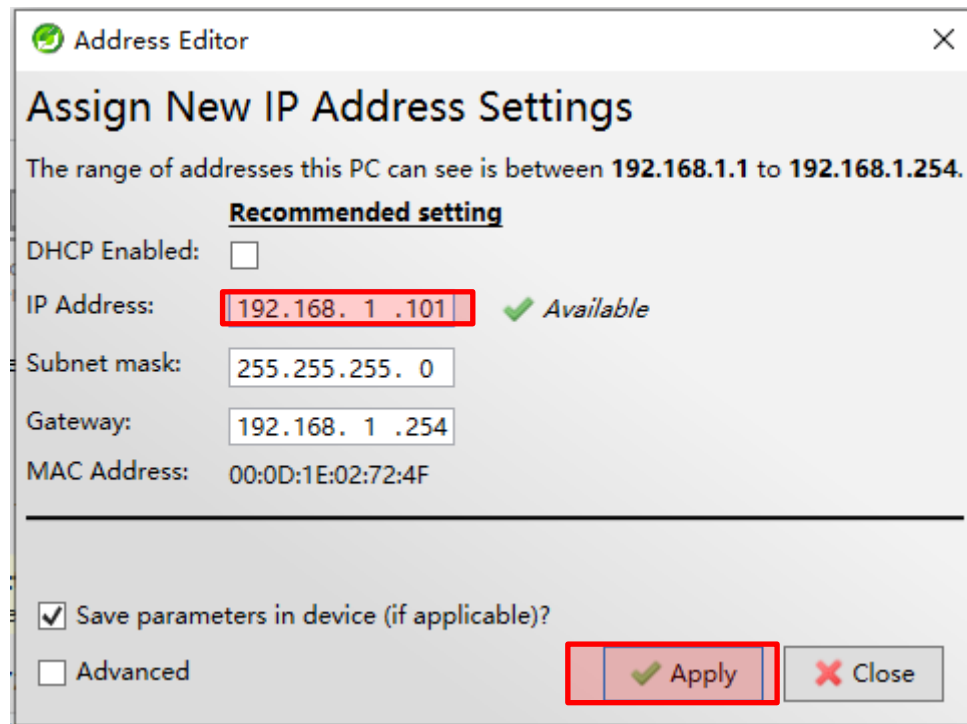
Gateway: 192.168.1.254

MAC Address: 00:0D:1E:18:02:FD

☒ Save parameters in device (if applicable)?

☐ Advanced

✓ Apply ✗ Close



The screenshot shows the 'Address Editor' window titled 'Assign New IP Address Settings'. It displays the IP range 192.168.1.1 to 192.168.1.254. The 'Recommended setting' section shows 'DHCP Enabled' as an unchecked checkbox. The 'IP Address' field is set to 192.168.1.101, which is highlighted with a red box and marked as 'Available' with a green checkmark. The 'Subnet mask' is 255.255.255.0 and the 'Gateway' is 192.168.1.254. The 'MAC Address' is 00:0D:1E:02:72:4F. At the bottom, the 'Save parameters in device (if applicable)?' checkbox is checked, and the 'Advanced' checkbox is unchecked. The 'Apply' button is highlighted with a red box.

Address Editor

### Assign New IP Address Settings

The range of addresses this PC can see is between 192.168.1.1 to 192.168.1.254.

**Recommended setting**

DHCP Enabled: ☐

IP Address: 192.168.1.101 ✓ Available

Subnet mask: 255.255.255.0

Gateway: 192.168.1.254

MAC Address: 00:0D:1E:02:72:4F

☒ Save parameters in device (if applicable)?

☐ Advanced

✓ Apply ✗ Close

## 选择需要添加到此工程的驱动器

选择已更改IP地址的两台驱动器添加到新的工程

2

**Scan Results**

  
New project with selected drives

  
Add selected drives to current project

Project 'My Project 35' will be created in 'D:\Control techniques\Connect\M881 ENCODER 210830'

Finished scanning for devices. (2 found.)

Scanning Ethernet networks - 2 devices found (with 1 unreachable)

| <input checked="" type="checkbox"/> | Address       | Type          | Name | Serial number      |      |
|-------------------------------------|---------------|---------------|------|--------------------|------|
| <input checked="" type="checkbox"/> | 192.168.1.101 | Unidrive M700 |      | 000000004619462042 | Wink |
| <input checked="" type="checkbox"/> | 192.168.1.100 | Unidrive M880 |      | 000000067221901066 | Wink |

1

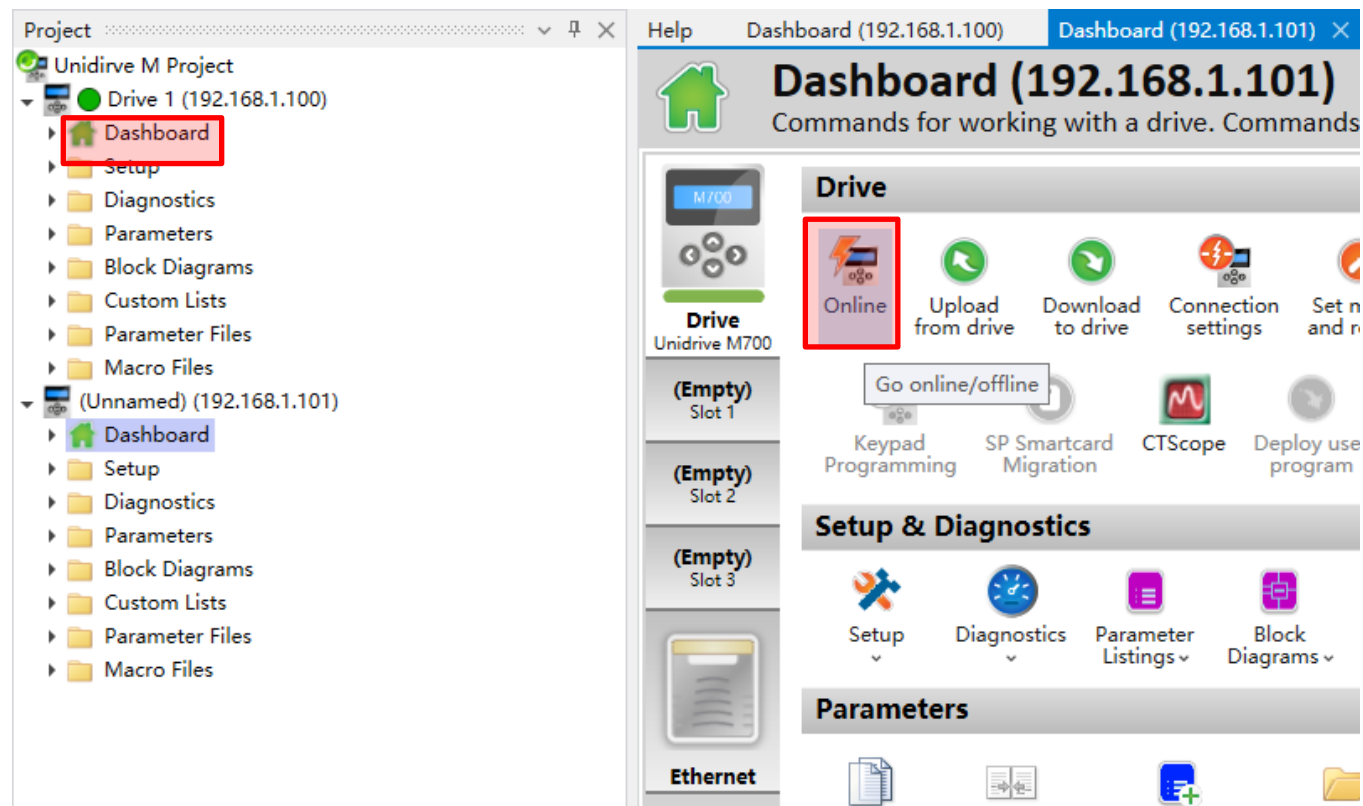
## Online连接驱动器

-打开相应的驱动器列表下的Dashboard

-点击Online.

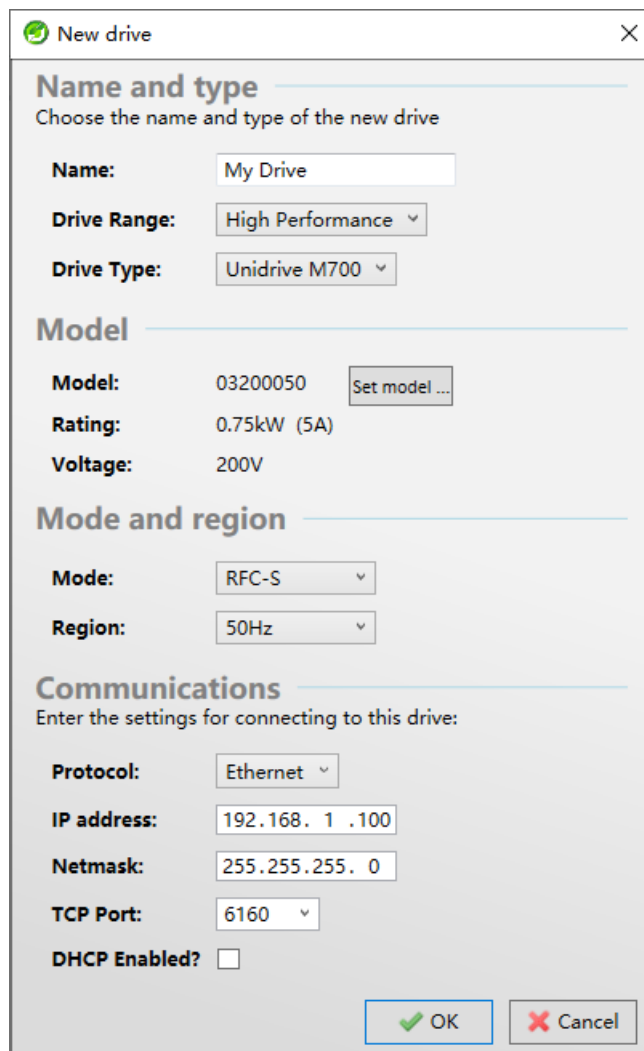
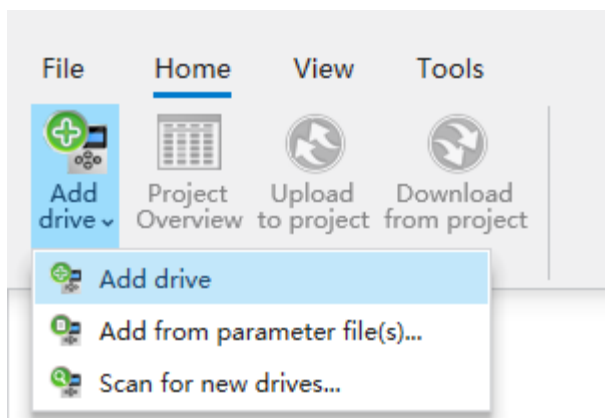
驱动器名称左侧的绿色圆形表示驱动器已Online.

此时查看Parameters中的参数为驱动器内的实时参数。



# 手动添加的驱动器

- 通过手动方式也可以在工程文件中手动添加驱动器



A screenshot of a 'New drive' configuration dialog box. The dialog is titled 'New drive' and contains the following sections and fields:

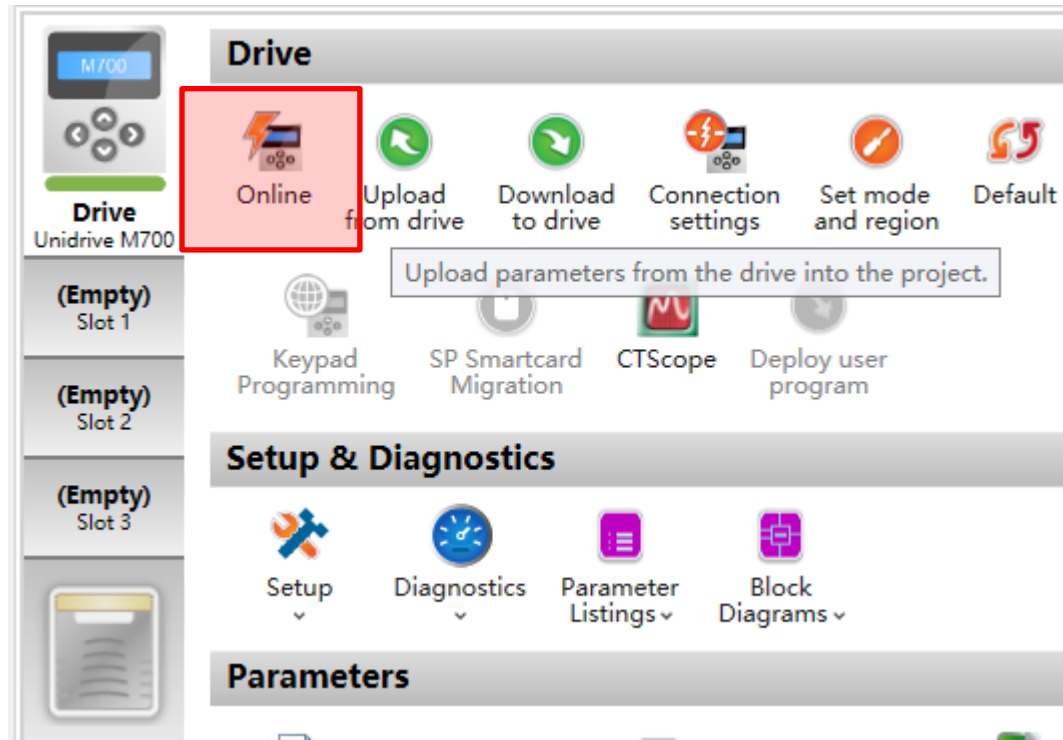
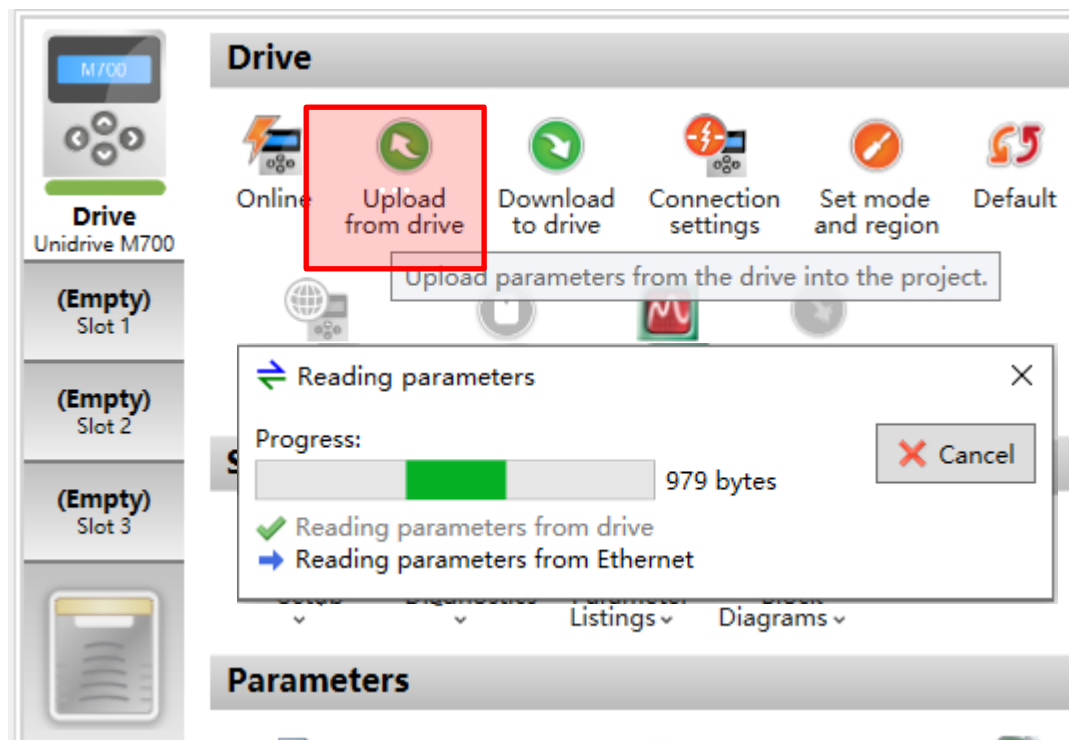
- Name and type**
  - Choose the name and type of the new drive
  - Name: My Drive
  - Drive Range: High Performance
  - Drive Type: Unidrive M700
- Model**
  - Model: 03200050 (with a 'Set model ...' button)
  - Rating: 0.75kW (5A)
  - Voltage: 200V
- Mode and region**
  - Mode: RFC-S
  - Region: 50Hz
- Communications**
  - Enter the settings for connecting to this drive:
  - Protocol: Ethernet
  - IP address: 192.168.1.100
  - Netmask: 255.255.255.0
  - TCP Port: 6160
  - DHCP Enabled? ☐

At the bottom right, there are 'OK' and 'Cancel' buttons.

# 手动添加驱动器

- 手动添加的驱动器Online

- 首先需要Upload form drive, 从驱动器上载驱动器配置情况
- 然后点击Online。



# Dashboard 常用功能介绍

The dashboard interface is divided into several sections, each with various functional icons. Green arrows and text boxes provide detailed explanations for specific functions:

- Drive Section:**
  - Upload from drive:** 从驱动器上载参数至软件 (Upload parameters from the drive to the software).
  - Download to drive:** 下载软件中的参数至驱动器 (一般不使用) (Download parameters from the software to the drive (generally not used)).
  - Reset:** 复位驱动器 (Reset the drive).
  - Save parameters in drive:** 保存参数至驱动器 (Save parameters to the drive).
  - Change Firmware:** 更改固件 (Change firmware).
  - Deploy user program:** 部署用户程序 (Deploy user program).
- Setup & Diagnostics Section:**
  - Icons for Setup, Diagnostics, Parameter Listings, and Block Diagrams.
- Parameters Section:**
  - Compare with file...:** 参数与参数文件对比 (Compare parameters with parameter file).
  - Compare with defaults...:** 参数与默认值对比 (Compare parameters with default values).
  - Upload to a file:** 保存驱动器参数至文件 (参数备份-建议使用) (Save drive parameters to file (parameter backup - recommended)).
  - Download file to drive:** 参数文件下载至驱动器 (参数下载-建议使用) (Parameter file download to drive (parameter download - recommended)).
- Parameter Help Section:**
  - Parameter Reference Guide:** 参数与默认值对比 (Parameter Reference Guide).

On the left side of the dashboard, there are four slots for hardware components: Drive (Unidrive M880), (Empty) Slot 1, (Empty) Slot 2, and MCi200 Slot 3, followed by an Ethernet port.

# Dashboard 常用功能介绍-参数上载至软件界面

从驱动器**所有参数**上载参数至软件的**临时界面**中，然后通过目录‘parameter’打开并查看。

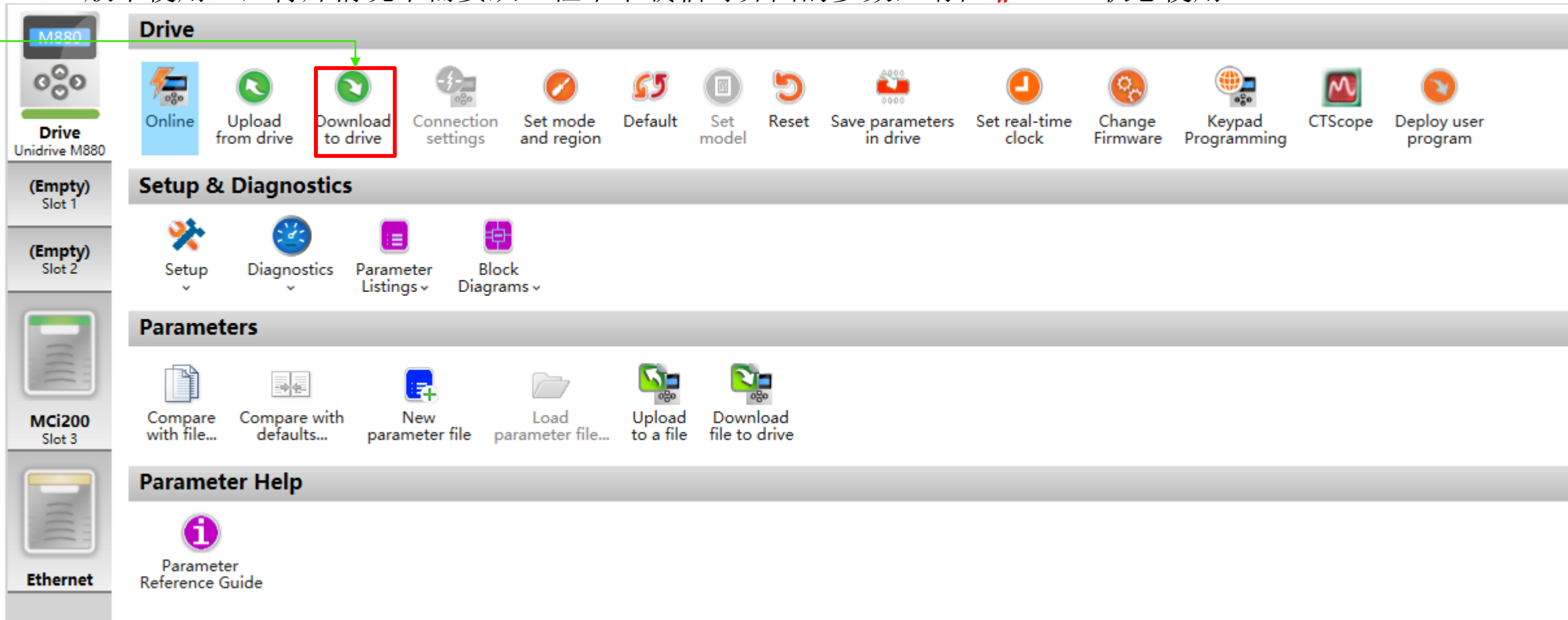
The screenshot displays the Unidrive M880 software interface. On the left sidebar, there are icons for 'Drive' (Unidrive M880), 'Slot 1' (Empty), 'Slot 2' (Empty), 'Slot 3' (MCI200), and 'Ethernet'. The main area is divided into three sections: 'Drive', 'Setup & Diagnostics', and 'Parameters'. The 'Drive' section contains a row of icons, with 'Upload from drive' highlighted by a red box. A green arrow points from this icon to the 'Parameters' folder in the 'Setup & Diagnostics' section, which is also highlighted by a red box. The 'Parameters' section shows a list of parameters, including 'Menu 00 : Quick Setup', 'Menu 01 : Speed References', 'Menu 02 : Speed Ramps', 'Menu 03 : Speed Control and Position Feedback', 'Menu 04 : Torque and current control', 'Menu 05 : Motor Control', 'Menu 06 : Sequencer and Clock', and 'Menu 07 : Analog I/O'. On the right side, there is a table titled 'Compare with Defaults' showing a list of parameters and their values.

| Parameter | Caption                                      | Value              |
|-----------|----------------------------------------------|--------------------|
| 05.000    | <b>Parameter mm.000</b>                      | <b>0</b>           |
| 05.001    | Output Frequency                             | 0.0 Hz             |
| 05.002    | Output Voltage                               | 0 V                |
| 05.003    | Output Power                                 | 0.000 kW           |
| 05.005    | D.c. Bus Voltage                             | 0 V                |
| 05.007    | <b>Rated Current</b>                         | <b>1.600 A</b>     |
| 05.008    | <b>Rated Speed</b>                           | <b>3000.00 rpm</b> |
| 05.009    | <b>Rated Voltage</b>                         | <b>230 V</b>       |
| 05.011    | <b>Number Of Motor Poles</b>                 | <b>8 Poles</b>     |
| 05.012    | <b>Auto-tune</b>                             | <b>None</b>        |
| 05.013    | <b>Minimal Movement Phasing Test Mode</b>    | <b>Free</b>        |
| 05.014    | <b>Phasing Test On Enable</b>                | <b>Disabled</b>    |
| 05.015    | <b>Minimal Movement Phasing Test Current</b> | <b>1%</b>          |

# Dashboard 常用功能介绍

下载软件中的参数至驱动器

（一般不使用），特殊情况下需要从工程中下载临时界面的参数，请在**非online**状态使用。



注：参数修改，建议在Online状态下修改，修改完即刻写入驱动器，不需要其它操作。

# Dashboard 常用功能介绍

修改驱动器为开环，闭环感应，闭环同步模式

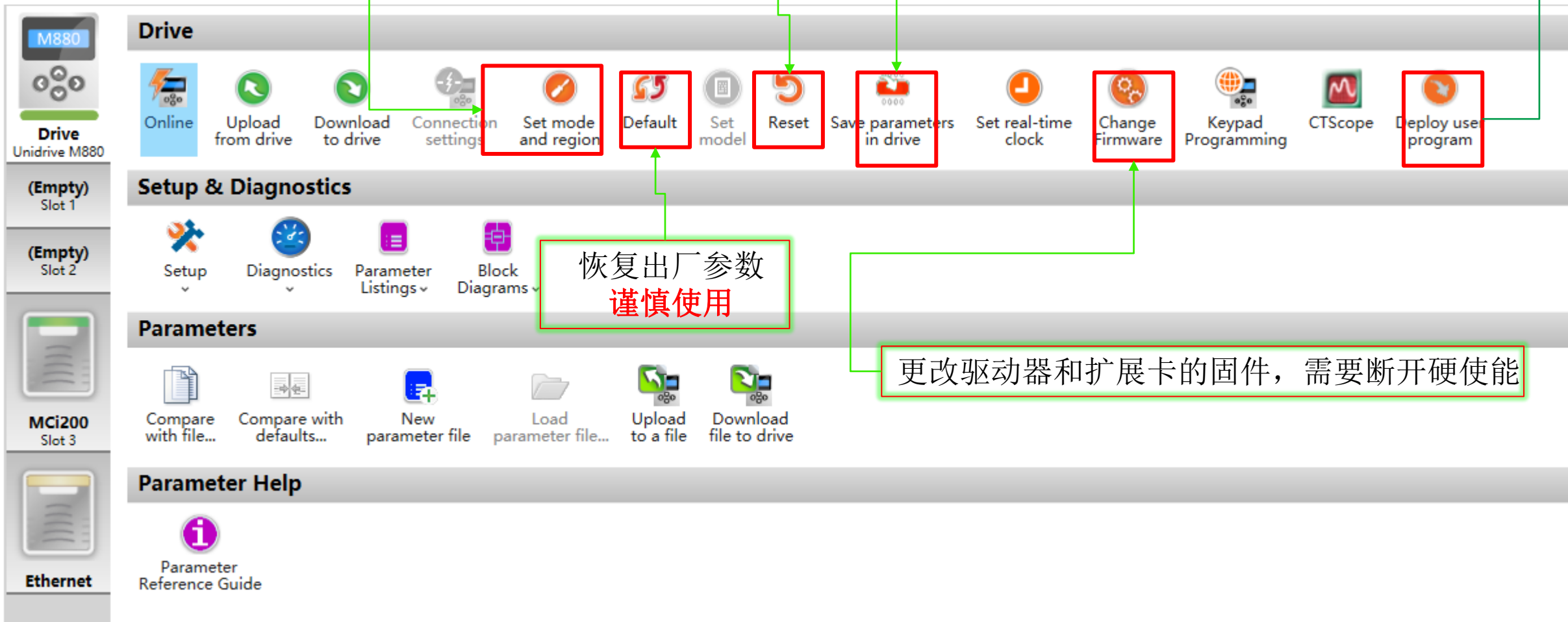
复位驱动器

保存参数至  
驱动器

部署用户程序：  
下载MCS 板载用户程序

恢复出厂参数  
谨慎使用

更改驱动器和扩展卡的固件，需要断开硬使能



# Dashboard 常用功能介绍

The screenshot shows a dashboard with a left sidebar and a main content area. The sidebar contains icons for 'Drive' (M880), 'Slot 1' (Empty), 'Slot 2' (Empty), 'Slot 3' (MCI200), and 'Ethernet'. The main content area is divided into four horizontal sections: 'Drive', 'Setup & Diagnostics', 'Parameters', and 'Parameter Help'. The 'Drive' section contains 14 icons for various functions. The 'Setup & Diagnostics' section contains 4 icons. The 'Parameters' section contains 6 icons, with the first two and the last two highlighted with red boxes. The 'Parameter Help' section contains 1 icon. Annotations with green arrows point from the highlighted icons to text boxes explaining their functions.

**Drive**

Online, Upload from drive, Download to drive, Connection settings, Set mode and region, Default, Set model, Reset, Save parameters in drive, Set real-time clock, Change Firmware, Keypad Programming, CTScope, Deploy user program

**Setup & Diagnostics**

Setup, Diagnostics, Parameter Listings, Block Diagrams

**Parameters**

Compare with file..., Compare with defaults..., New parameter file, Load parameter file..., Upload to a file, Download file to drive

**Parameter Help**

Parameter Reference Guide

驱动器当前参数与默认值对比  
**建议多使用**

驱动器当前参数与参数文件对比  
**建议多使用**

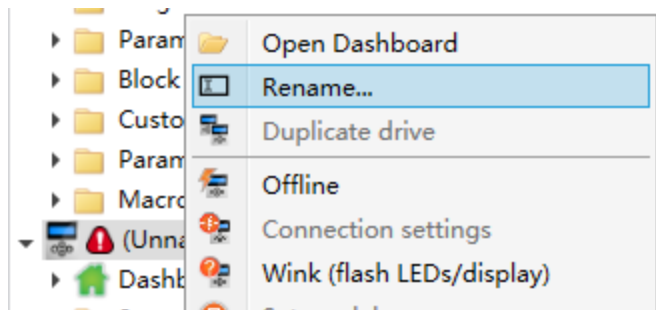
保存驱动器参数至硬盘文件  
(参数备份-**建议多使用**)  
方便传递或备份参数

参数文件下载至驱动器  
(将备份的参数下载至驱动器时-建议使用)



## 修改驱动器名称

- 修改驱动器名称







Dashboard (Demo case) X



## Dashboard (Demo case)

Commands for working with a drive. Commands can also be found in the ribbon a



**Drive**

Unidrive M700

(Empty)  
插槽1



**SI-EtherCAT**  
插槽2



**MCi200**  
插槽3



### Drive



Online



Upload  
from drive



Download  
to drive



Connection  
settings



Set mode  
and region



Default



Set  
model



Reset

Save



Keypad  
Programming



SP Smartcard  
Migration



CTScope



Deploy user  
program

### Setup & Diagnostics



Setup  
▼



Diagnostics  
▼



Parameter  
Listings ▼



Block  
Diagrams ▼

### Parameters

联机，与默认值参数对比



Compare  
with file...



Compare with  
defaults...



New  
parameter file



Load  
parameter file...

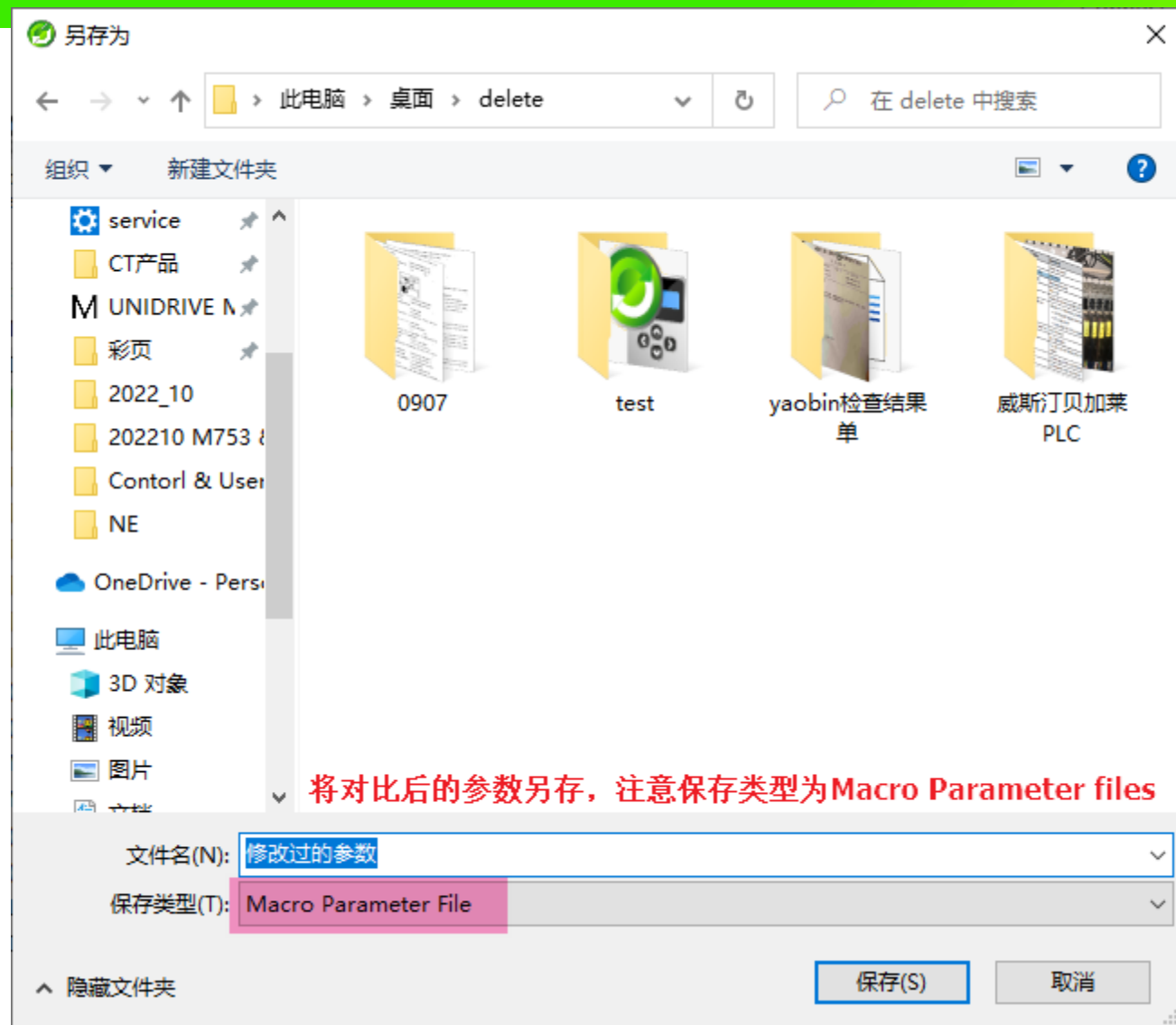


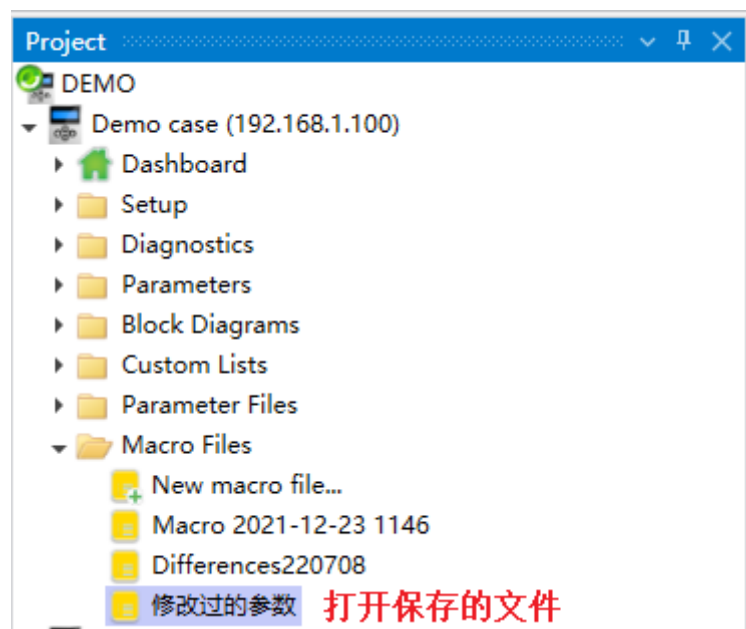
Upload  
to a file



Download  
file to drive

### Parameter Help





Dashboard (Demo case)
Differences From Def....:53 (Demo case)
修改过的参数.macro(Demo case) X

Save
Save As
Delete All Parameters
Print
Print preview
PDF export
Load Values
Download

3 保存

Properties

Notes

Parameters

Options

插槽1 : Empty

插槽2 : SI-EtherCAT

Parameters

插槽3 : MCi200

Parameters

Onboard : Ethernet

Parameters

Available parameters:

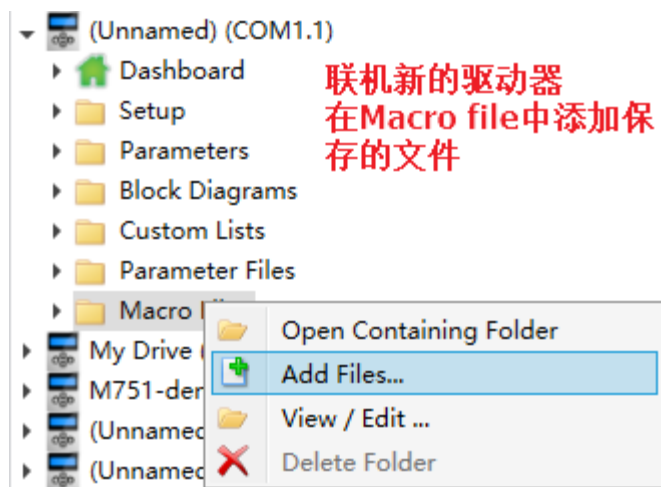
Menu 01 : 速度参考

| #      | Caption   |
|--------|-----------|
| 01.000 | 参数 mm.000 |
| 01.001 | 给定选择      |
| 01.002 | 跳频前滤波给定值  |
| 01.003 | 斜坡前给定     |
| 01.004 | 给定偏置      |
| 01.005 | 点动给定      |

2 移除

| Parameter | Caption                    | Categories | Value                                  |
|-----------|----------------------------|------------|----------------------------------------|
| 03.023    | 硬性速度给定选择                   |            | <input checked="" type="checkbox"/> On |
| 03.025    | 位置反馈相角                     |            | 8.4 °                                  |
| 03.033    | P1旋转换位                     |            | 0                                      |
| 03.034    | P1旋转每转线数                   |            | 16                                     |
| 03.035    | P1通讯位                      |            | 18                                     |
| 03.038    | P1设备类型                     |            | EnDat                                  |
| 03.060    | P1计算时间                     |            | 8 μs                                   |
| 03.073    | P1 绝对函数恢复使能                |            | <input checked="" type="checkbox"/> On |
| 03.085    | 编码器仿真源                     |            | 3.029                                  |
| 03.087    | 编码器仿真采样周期                  |            | 4 ms                                   |
| 03.088    | 编码器仿真模式                    |            | 每转线数                                   |
| 03.123    | P1热电阻故障检测                  |            | 无操作                                    |
| 04.007    | M1对称电流限定                   |            | 100.0 %                                |
| 04.011    | 转矩模式选择                     |            | 4                                      |
| 04.013    | Current Controller Kp Gain |            | 323                                    |
| 04.014    | 电流控制器Ki                    |            | 3740                                   |
| 05.007    | 额定电流                       |            | 1.600 A                                |
| 05.011    | M1电机极数                     |            | 5 极数                                   |
| 05.017    | M1定子阻抗                     |            | 7.545969 Ω                             |
| 05.024    | Ld                         |            | 27.840 mH                              |
| 05.042    | 反向输出相序                     |            | <input checked="" type="checkbox"/> On |
| 05.072    | 空载Lq                       |            | 30.007 mH                              |
| 06.001    | 停机方式                       |            | 减速停机                                   |

1 选择不需要



Dashboard (Demo case) Differences From Def...53 (Demo case) 修改过的参数.macro(Demo case) X

Save Save As Delete All Parameters Print Print preview PDF export Load Values Download

Properties  
Notes  
**Parameters**

Options

- 插槽1 : Empty
- 插槽2 : SI-EtherCAT
  - Parameters
- 插槽3 : MCi200
  - Parameters
- Onboard : Ethernet
  - Parameters

Available parameters:

Menu 01 : 速度参考

| #      | Caption   |  |  |
|--------|-----------|--|--|
| 01.000 | 参数 mm.000 |  |  |
| 01.001 | 给定选择      |  |  |

| Parameter | Caption                    |  |                                        |
|-----------|----------------------------|--|----------------------------------------|
| 03.023    | 硬性速度给定选择                   |  | <input checked="" type="checkbox"/> On |
| 03.025    | 位置反馈相角                     |  | 8.4 °                                  |
| 03.033    | P1旋转换位                     |  | 0                                      |
| 03.034    | P1旋转每转线数                   |  | 16                                     |
| 03.035    | P1通讯位                      |  | 18                                     |
| 03.038    | P1设备类型                     |  | EnDat                                  |
| 03.060    | P1计算时间                     |  | 8 μs                                   |
| 03.073    | P1 绝对函数恢复使能                |  | <input checked="" type="checkbox"/> On |
| 03.085    | 编码器仿真源                     |  | 3.029                                  |
| 03.087    | 编码器仿真采样周期                  |  | 4 ms                                   |
| 03.088    | 编码器仿真模式                    |  | 每转线数                                   |
| 03.123    | P1热电阻故障检测                  |  | 无操作                                    |
| 04.007    | M1对称电流限定                   |  | 100.0 %                                |
| 04.011    | 转矩模式选择                     |  | 4                                      |
| 04.013    | Current Controller Kp Gain |  | 323                                    |
| 04.014    | 电流控制器Ki                    |  | 3740                                   |
| 05.007    | 额定电流                       |  | 1.600 A                                |
| 05.042    | 反向输出相序                     |  | <input checked="" type="checkbox"/> On |

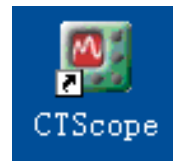
打开该文件，点击download  
将文件下载到新驱动器

Download the file values to the attached

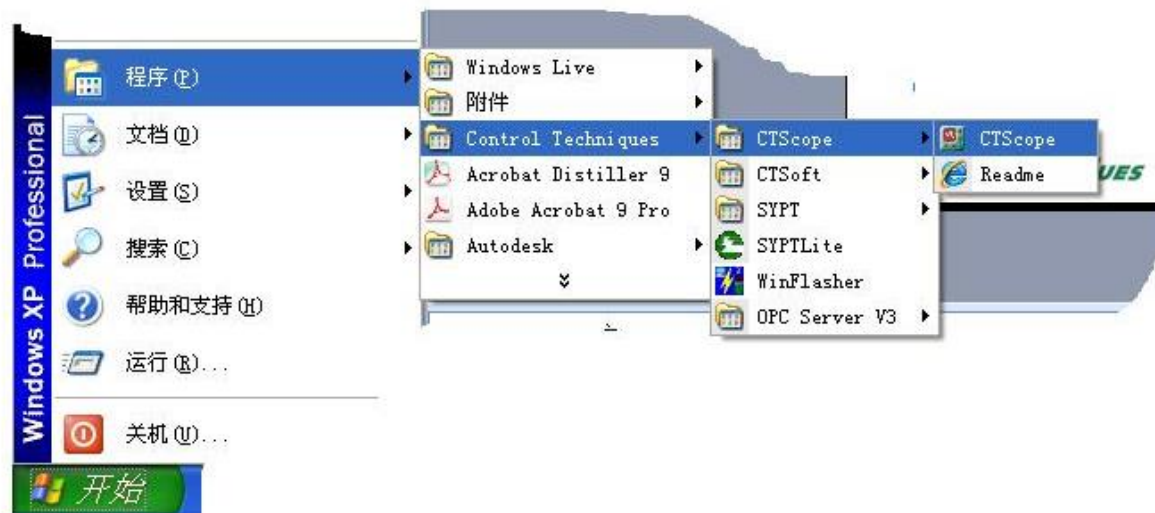


# CTScope 打开

- 可以通过双击桌面快捷图标

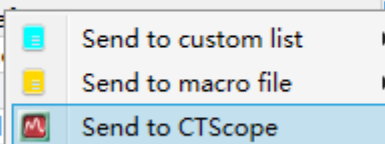


- 或者从开始菜单中选择



- 也可在connect软件中选择相应参数，邮件发送到CTSCOPE

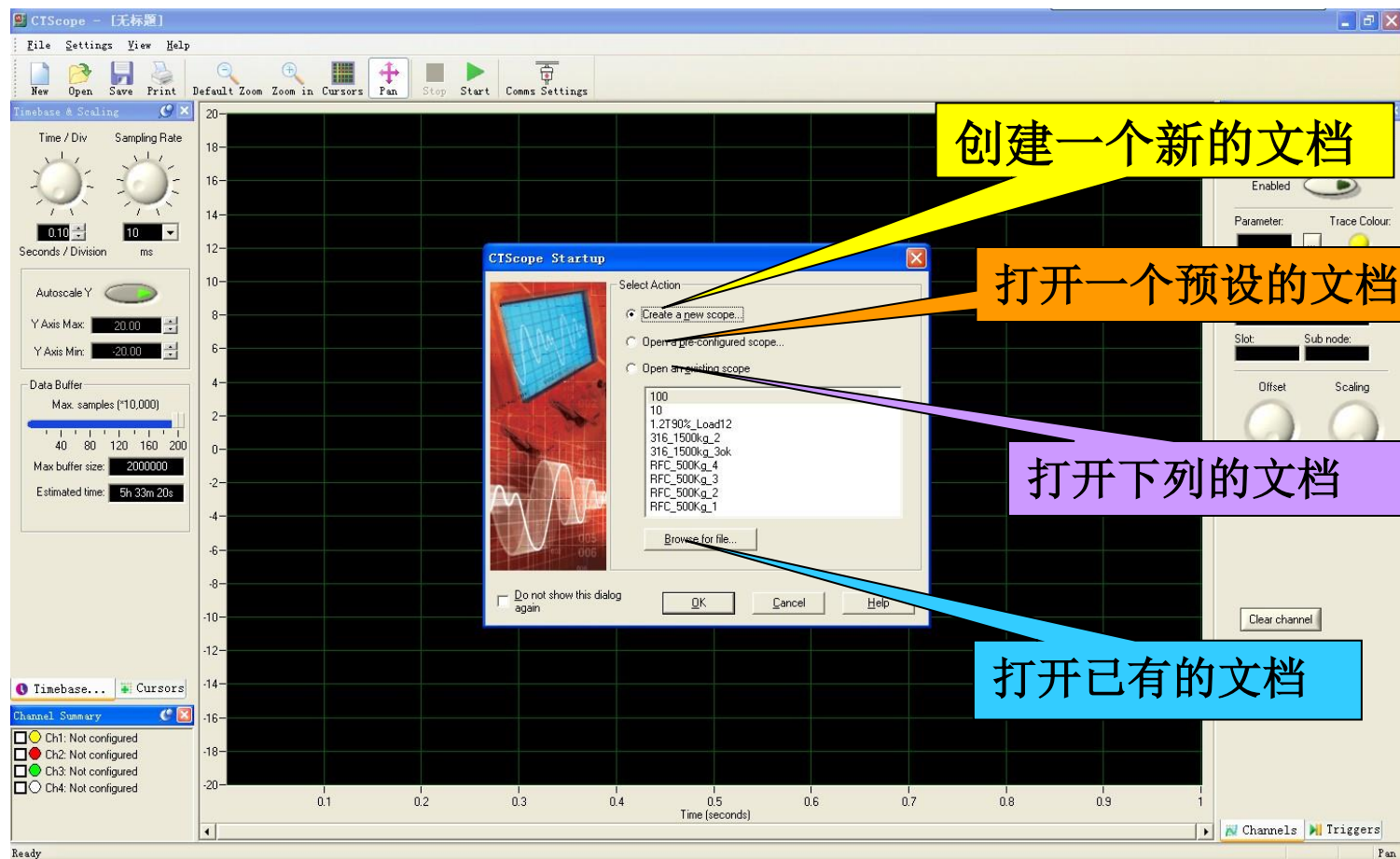
| Parameter | Caption                     | Value        |
|-----------|-----------------------------|--------------|
| 03.000    | <b>Parameter mm.000</b>     | <b>0</b>     |
| 03.001    | Final Speed Ref             | 0 rpm        |
| 03.002    | Speed Feedback              | 0 rpm        |
| 03.003    | Speed Error                 | 0 rpm        |
| 03.004    | Speed Control               | 0 %          |
| 03.005    | <b>Zero Speed Threshold</b> | <b>5 rpm</b> |
| 03.006    | At Speed Limit              | 5 rpm        |

A context menu is open over the '03.001 Final Speed Ref' row. It contains three options: 'Send to custom list', 'Send to macro file', and 'Send to CTScope'. The 'Send to CTScope' option is highlighted with a mouse cursor.

安装后第一次运行需要注册，也可不注册，点击continue直接使用

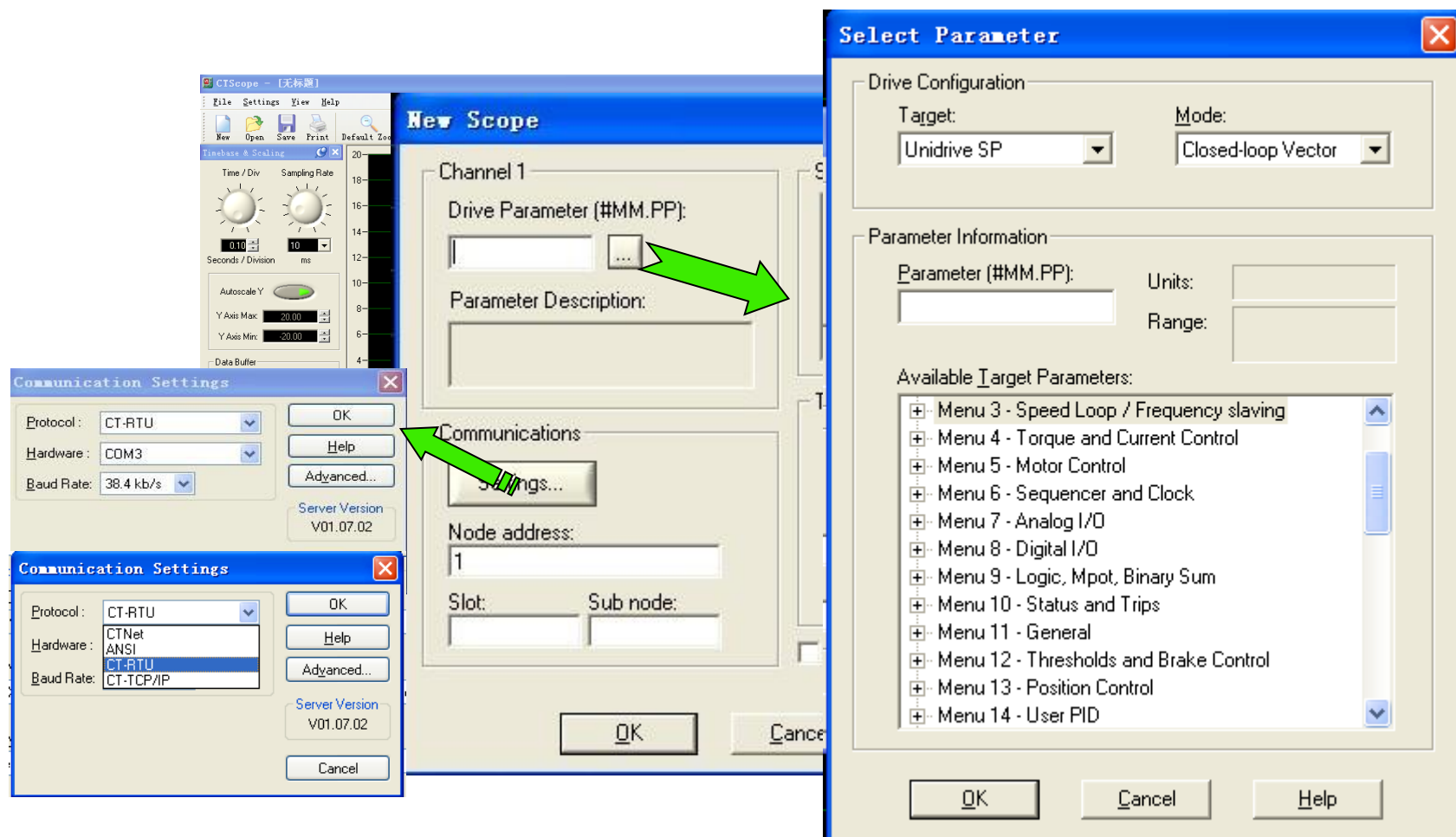
# CTScope 运行

- CTScope 提供4个运行选项



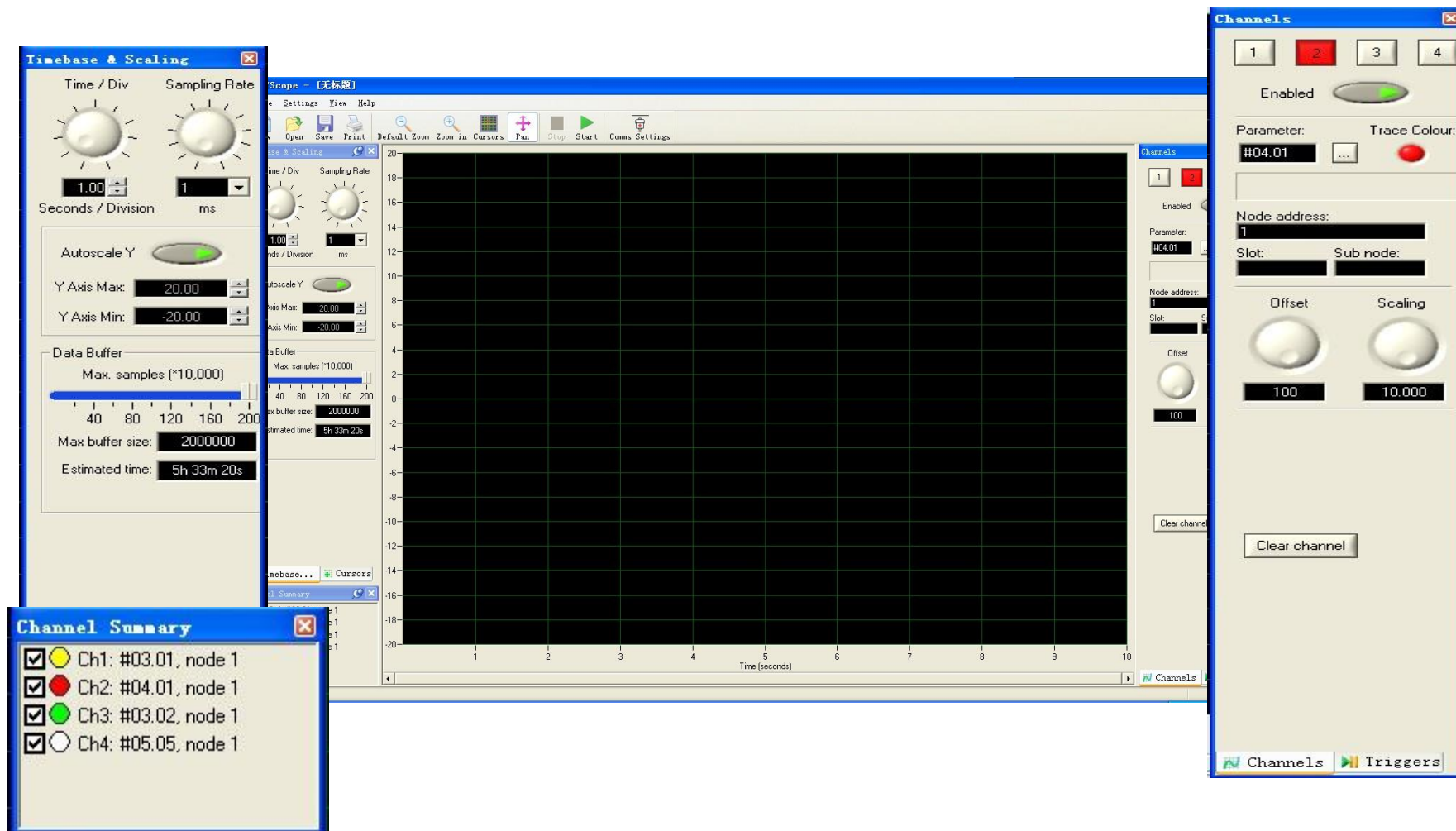
# CTScope 运行

- 选择创建一个新的文档

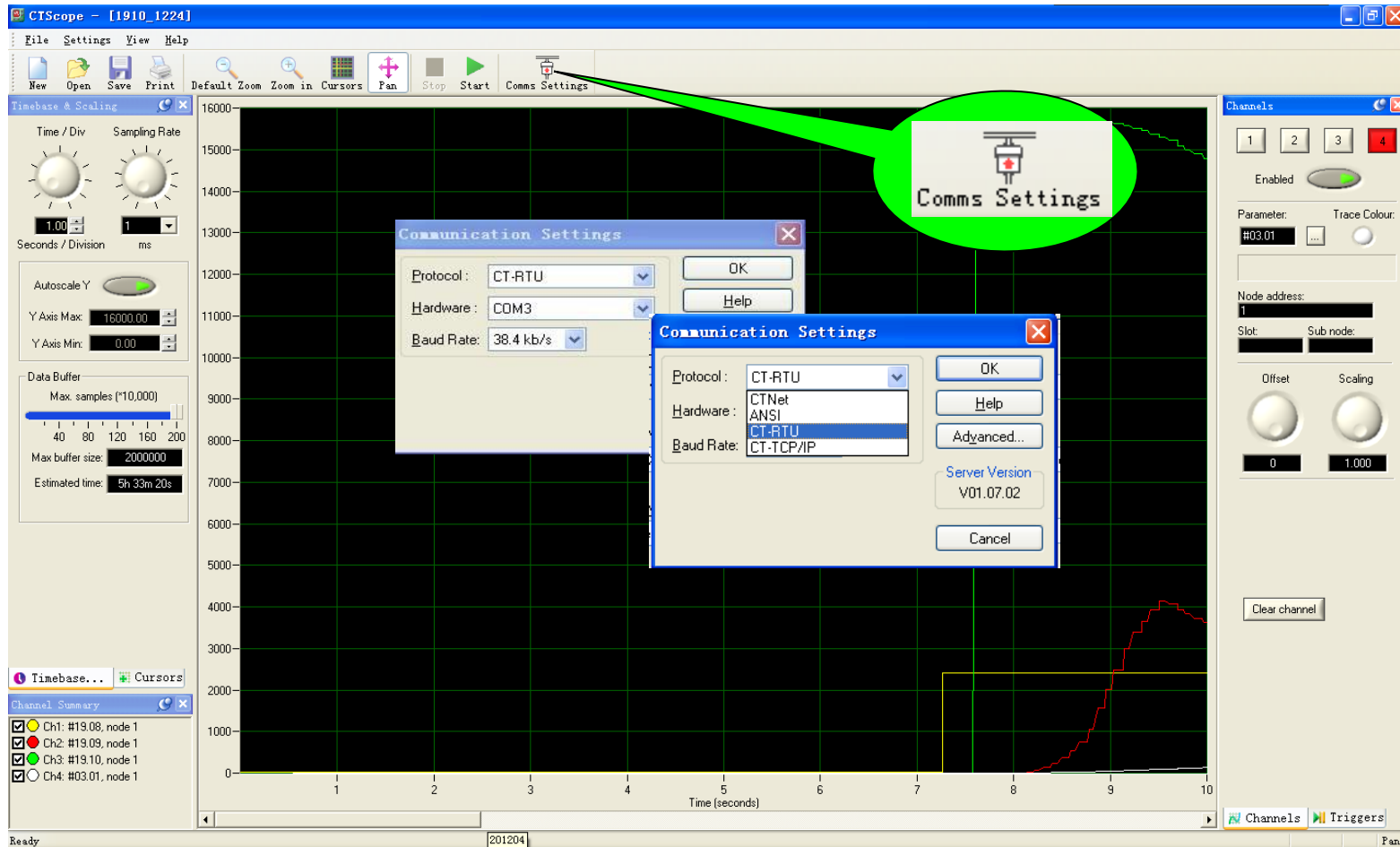


# CTScope 运行

-设定通讯数据，检测通讯状态



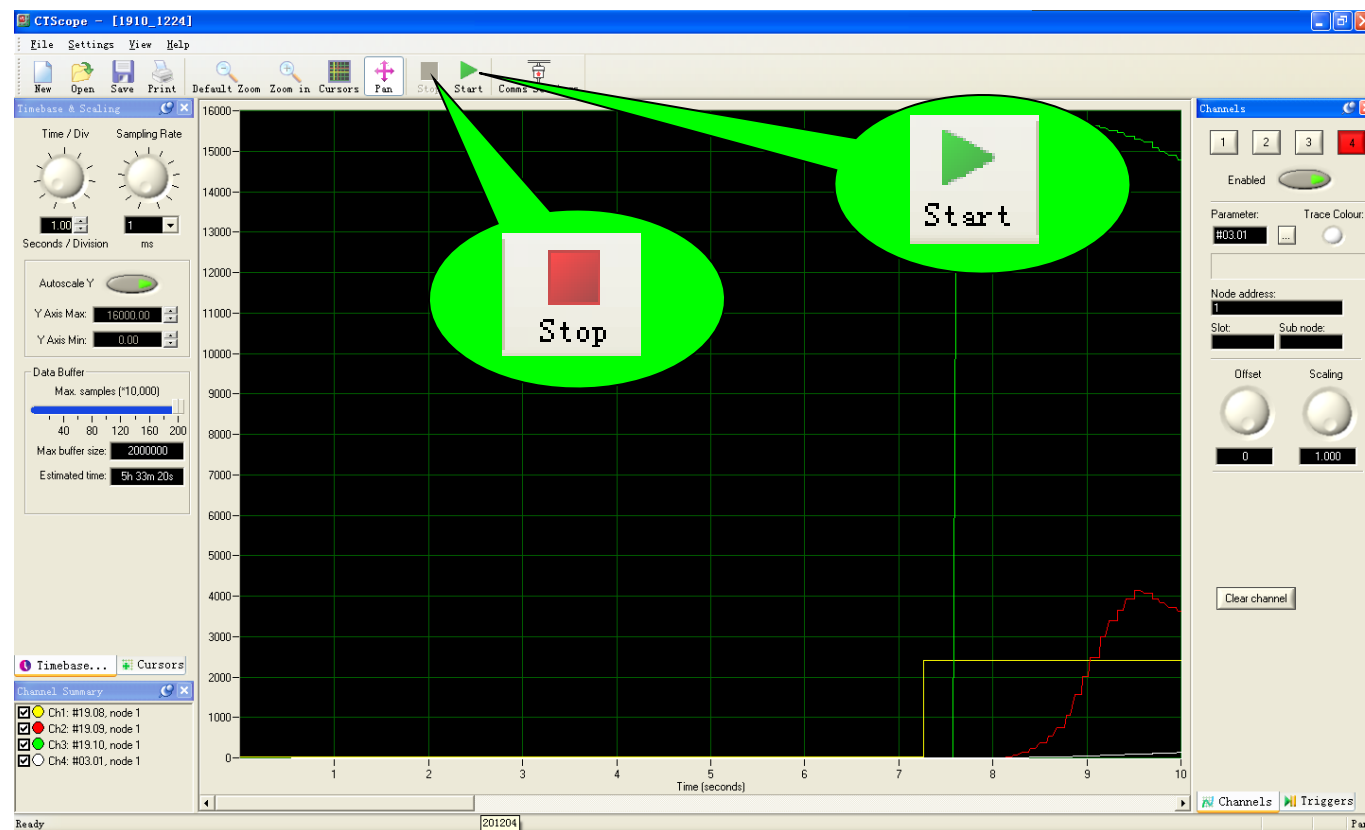
# CTScope 运行



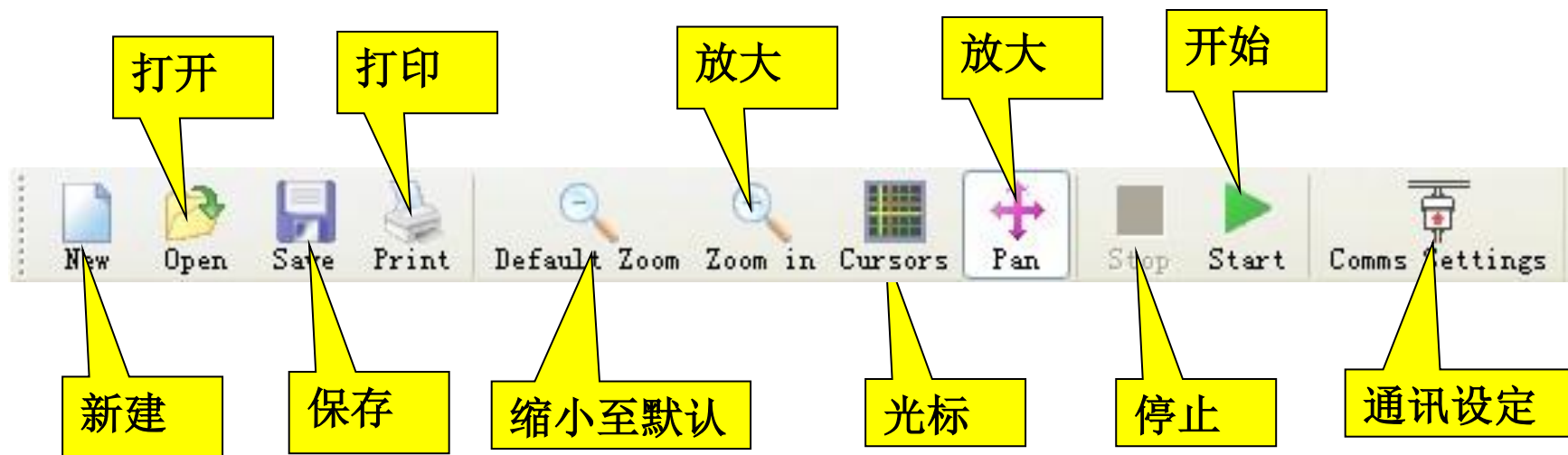
# CTScope 运行

示波器启停

支持实时 曲线监视

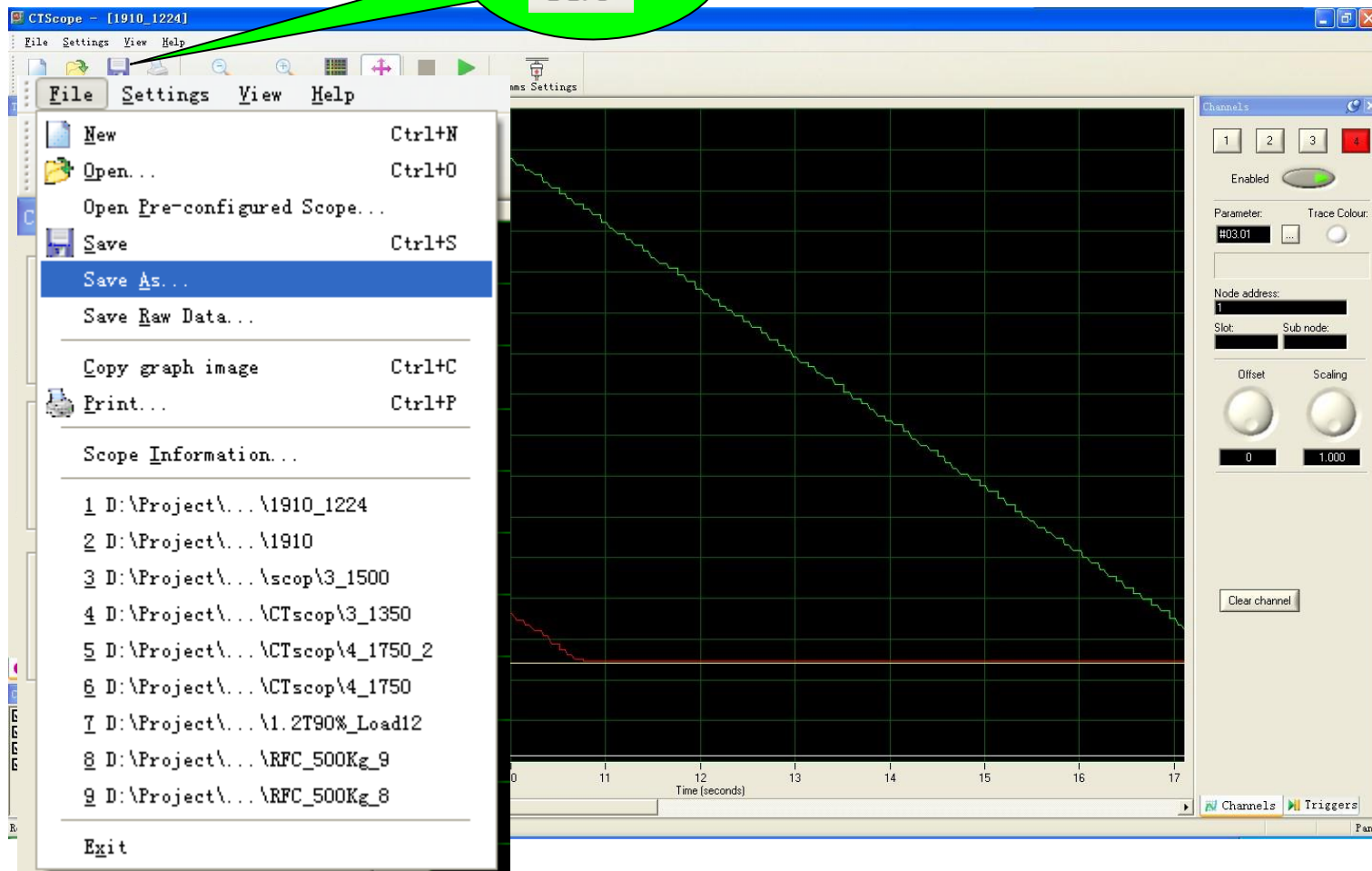
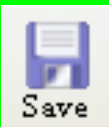


# Scope 运行



# CTScope 运行

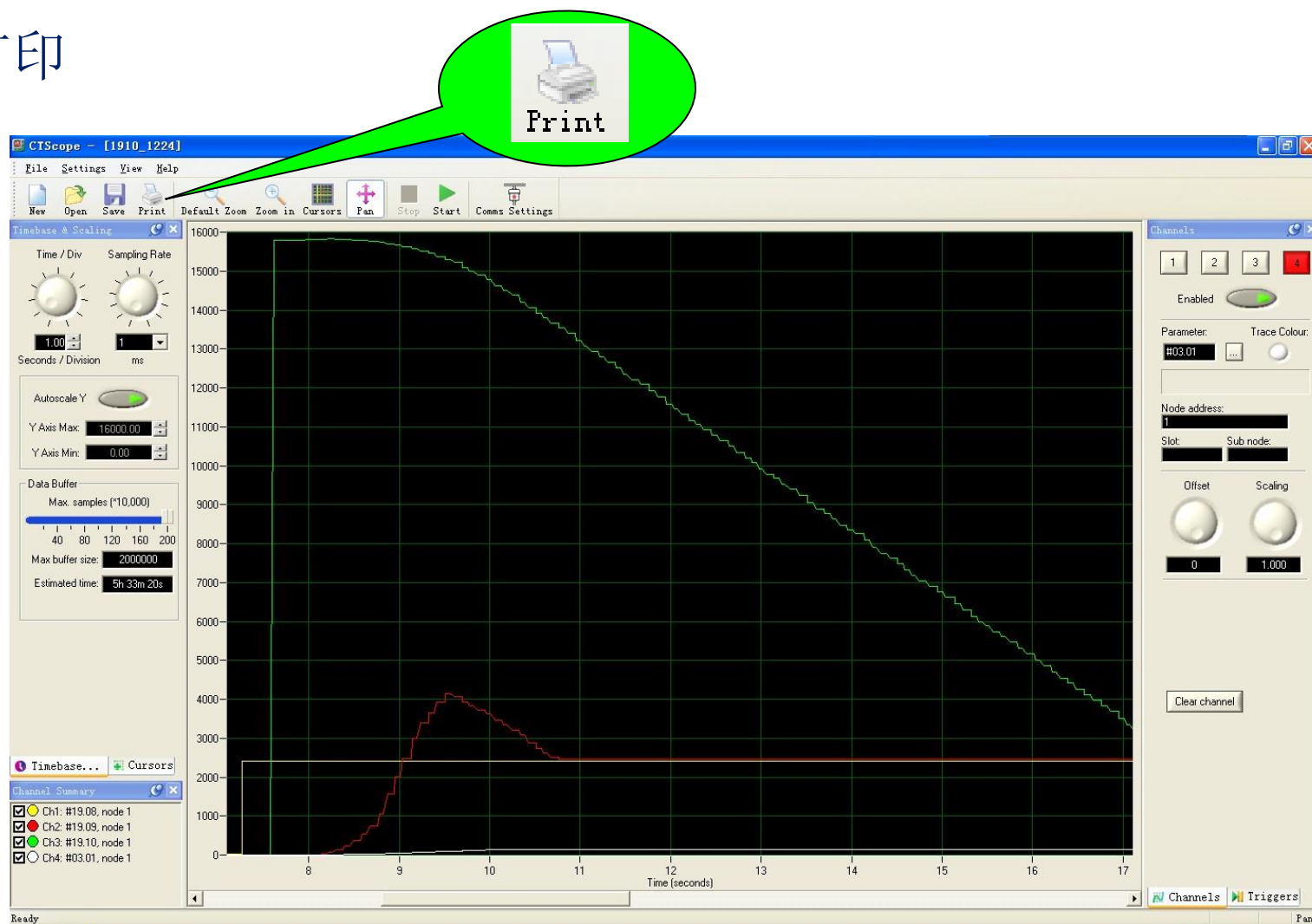
- 曲线保存



曲线打印

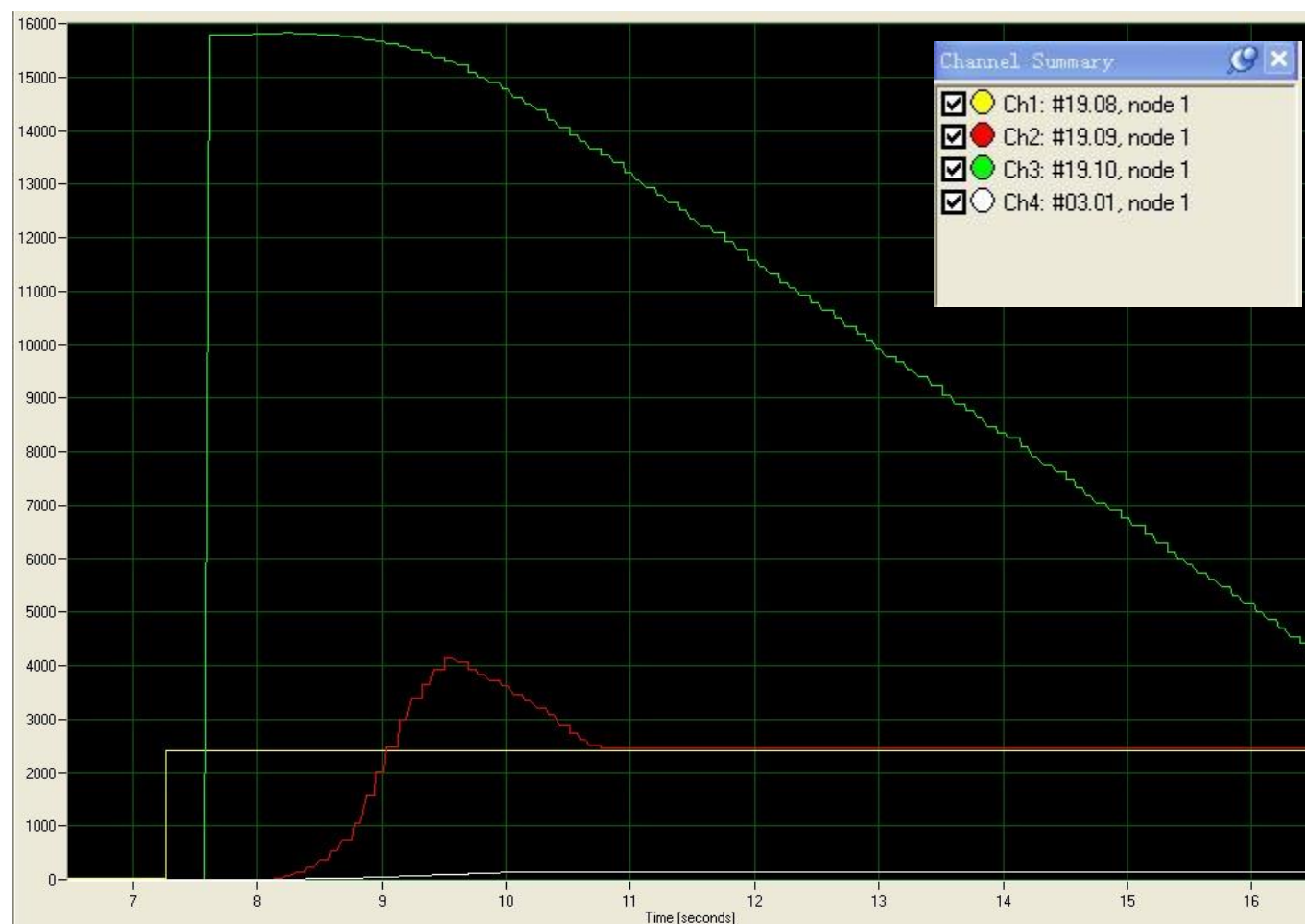
# CTScope 运行

- 曲线打印



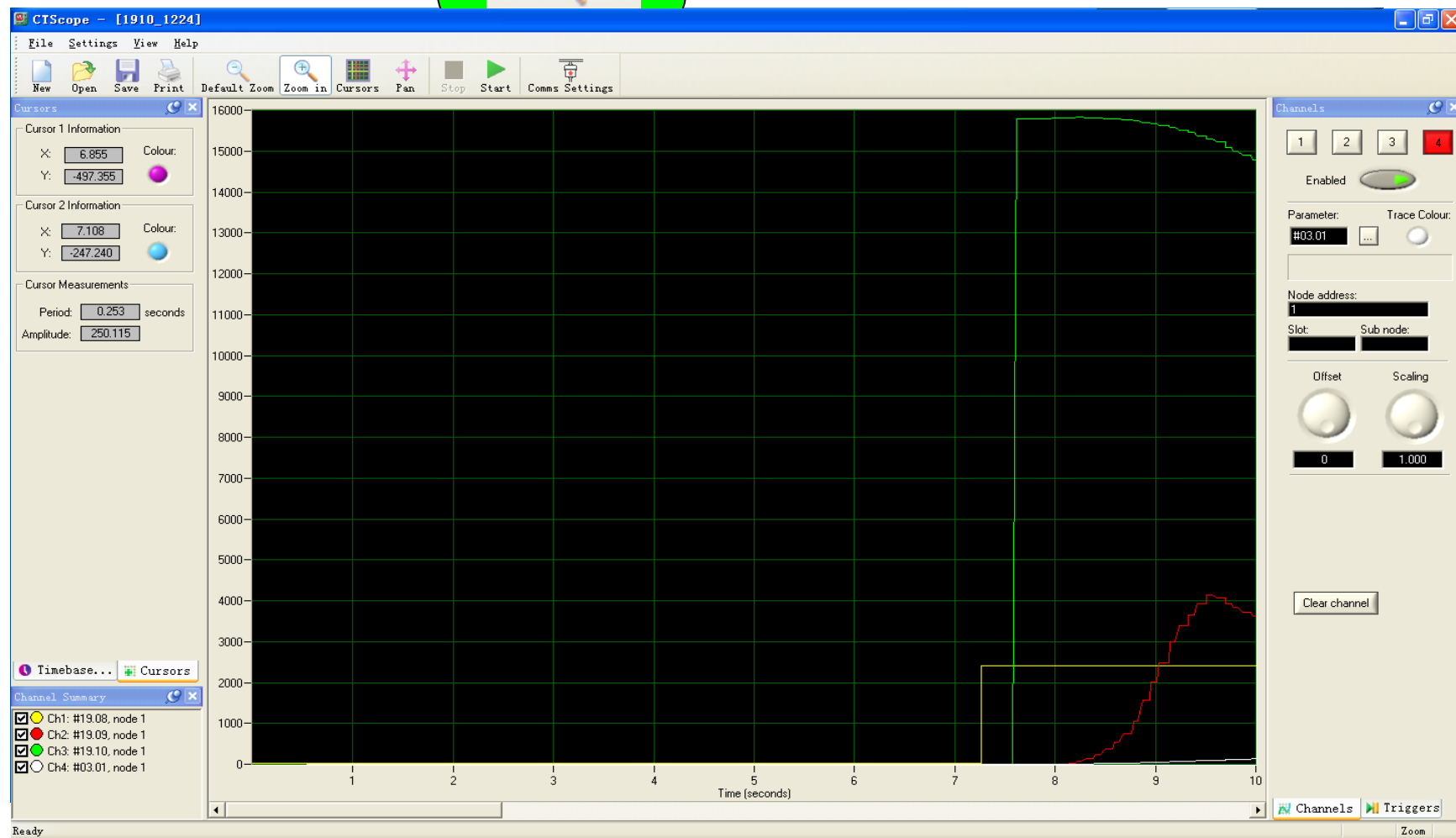
# Scope 运行

- 曲线打印



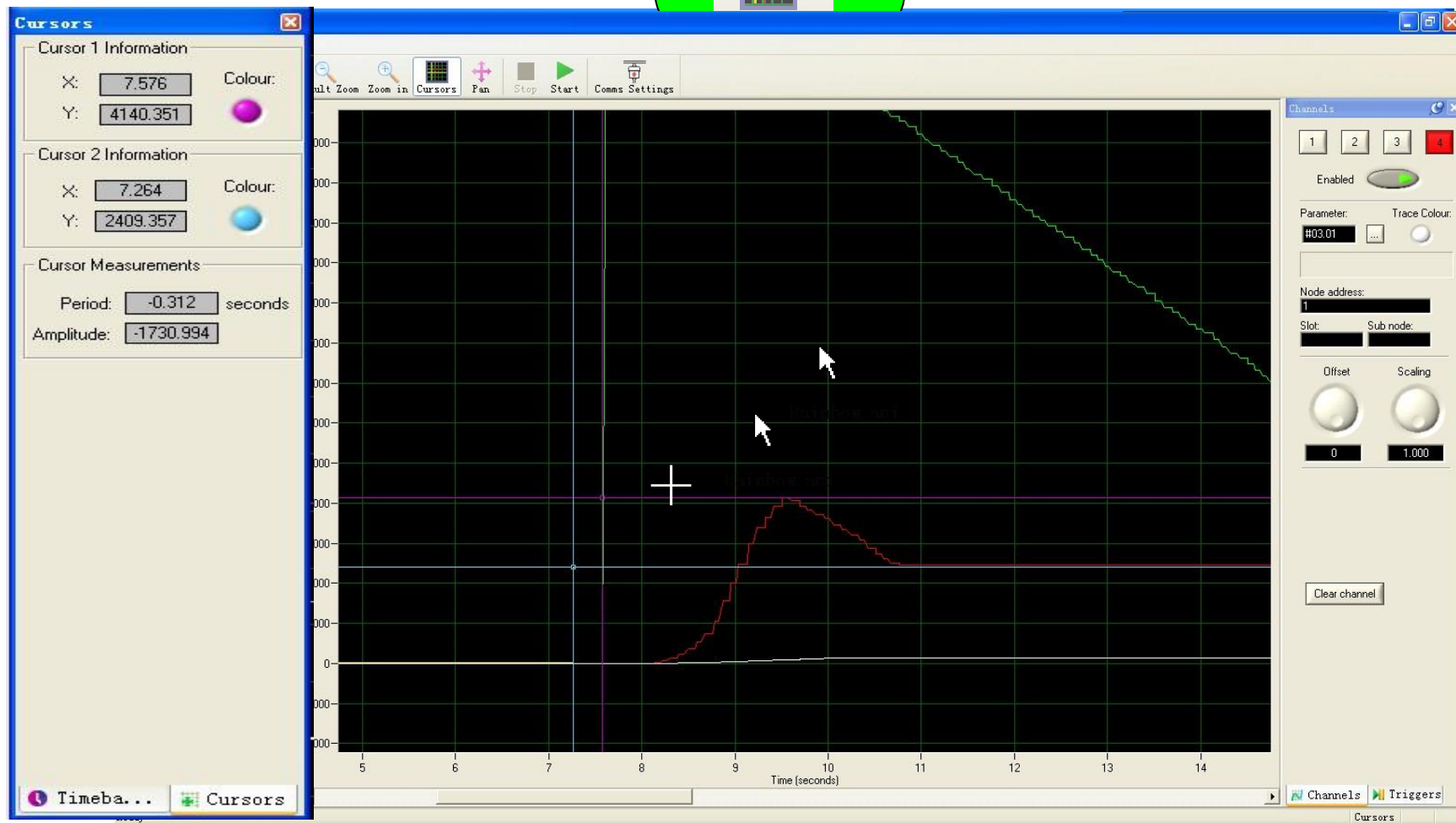
# CTScope 运行

- 曲线缩放



# Scope 运行

- 波形分析



# CTScope 运行

## 曲线画面移动

