

NSM_77 Tools Management System User Manual



Hunan Nanoradar Science and Technology Co.,Ltd.

Version History

Date	Version	Version description
2019-07-24	1.0.1	Corresponding Software v1.0.9
2019-09-18	1.0.2	Corresponding Software v1.1.0
2019-12-20	1.0.3	Corresponding Software v1.1.2
2019-12-31	1.0.4	Corresponding Software v1.1.3
2020-02-25	1.0.5	Corresponding Software v1.1.4
2020-03-16	1.0.6	Corresponding Software v1.1.5

Content

1 NSM_77 Tools Starting Up	1
1.1 Login.....	1
1.2 Radar Connection (CAN).....	1
1.3 Radar Connection (COM).....	3
2 Function Introduction	4
2.1 System Setting	4
2.1.1 Modify Login Password	4
2.1.2 Text Configuration.....	4
2.1.3 Data Preservation.....	5
2.2 Radar Setting	6
2.2.1 Paramter Setting.....	6
2.2.2 Area Setting.....	8
2.3 Radar Upgrade.....	9
2.4 Radar Alive.....	10
2.5 Video	11
2.6 Help	11
3 System Configuration Requirements	12
3.1 Software.....	12
3.2 Hardware.....	12
3.3 USBCAN Adapter.....	12

1 NSM_77 Tools Starting Up

1.1 Login

Account: admin, initial password: 123456

The default language of the system is Simplified Chinese. The small triangle button is the language selection(Chinese/ English), and the small love button can set the program interface color.

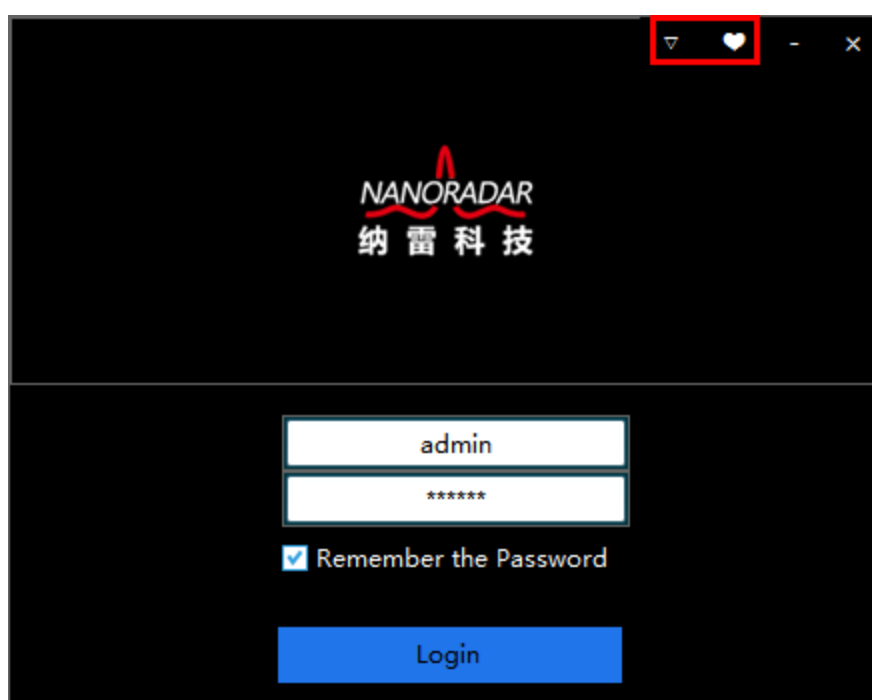


Fig1- 1 Login Interface

1.2 Radar Connection (CAN)

Step 1: Click the [Connect] button. The radar scanning area will display the targets detected by the radar. The system selects the Object mode by default, and the target data output by this mode is analyzed by the radar's own algorithm. The radar mode is selected according to the radar's own mode. If the selected mode does not match the radar, no target will be presented.

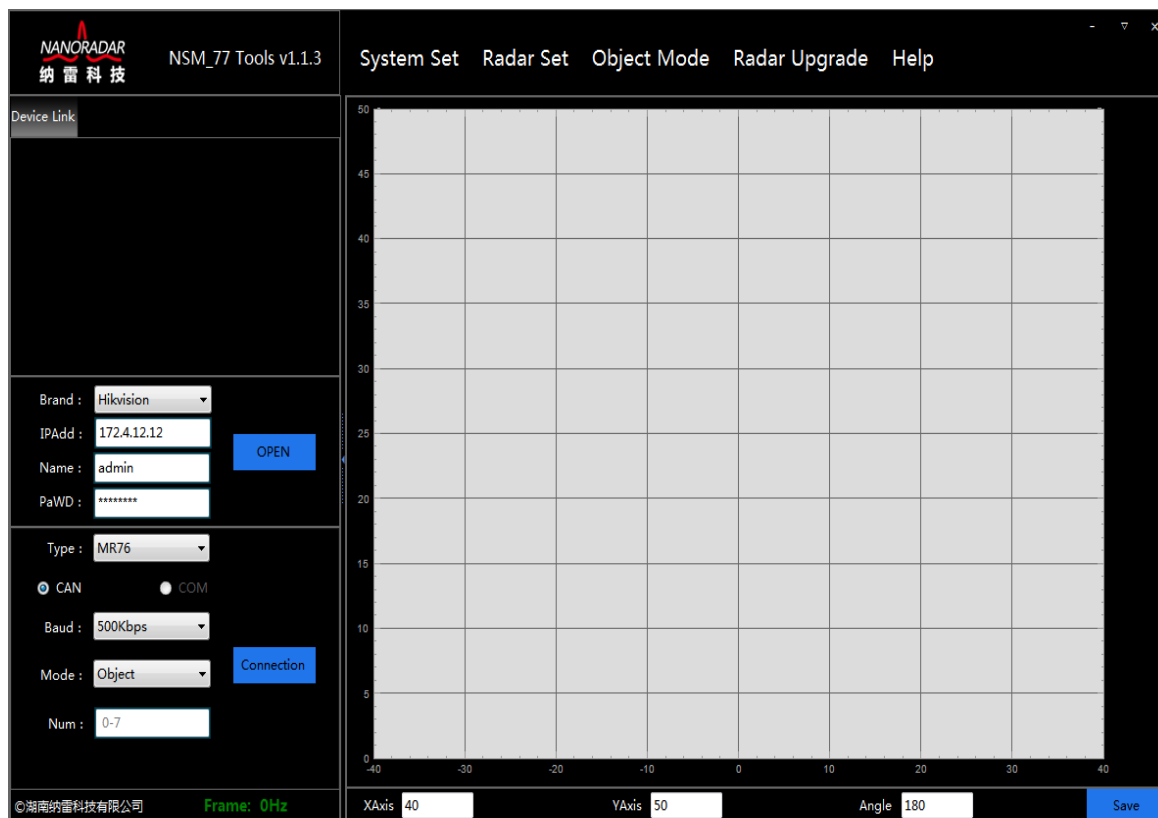


Fig1- 2 Radar Connection (CAN)

When a CAN device cascades multiple radars, you can enter the corresponding radar number to view only the targets of the corresponding radar.



Fig1- 3 CAN Data Display

Step 3: Set the display coordinates. Fill in the X-axis range and Y-axis range on the main interface, and the angle range is [0-180]. After completing, click the [OK] button.



Fig1- 4 Coordinate Settings

1.3 Radar Connection (COM)

Select the radar model and check COM, select the corresponding serial port number, and click the [Connect] button.

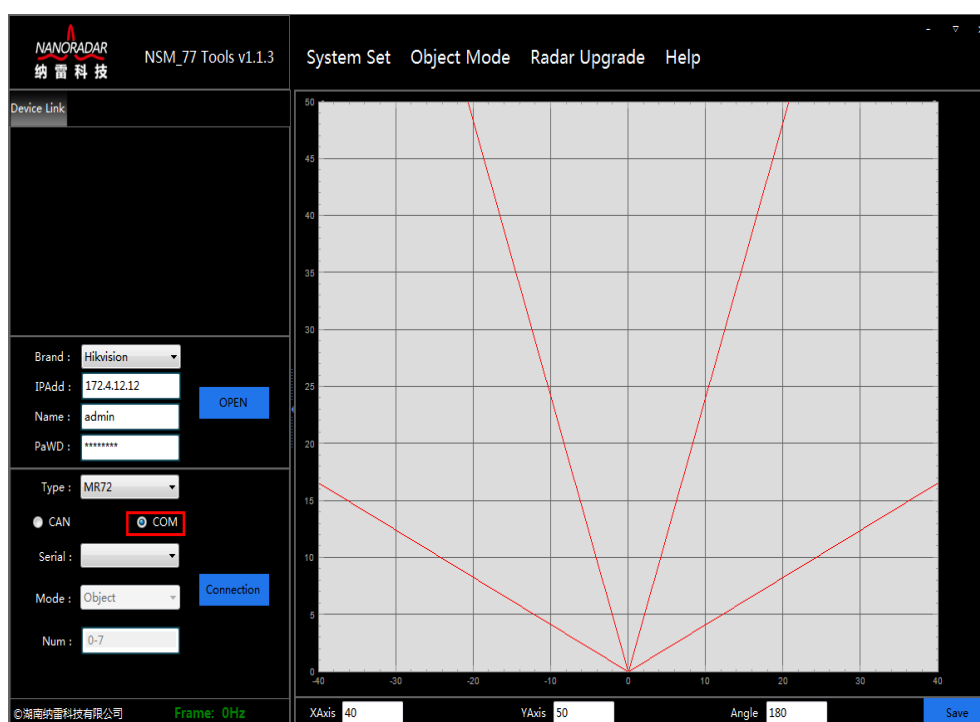


Fig1- 5 COM Data Display

2 Function Introduction

2.1 System Setting

2.1.1 Modify Login Password

Click System settings and select modify password option, dialog box display as in Fig 2-1. Put in Current Password, New Password, Repeat Password, then click **【Confirm】**; The system will restart after successful if password modified successful.

The password can be combination of Arabic numerals and alphabet of 6 to 15 digits.

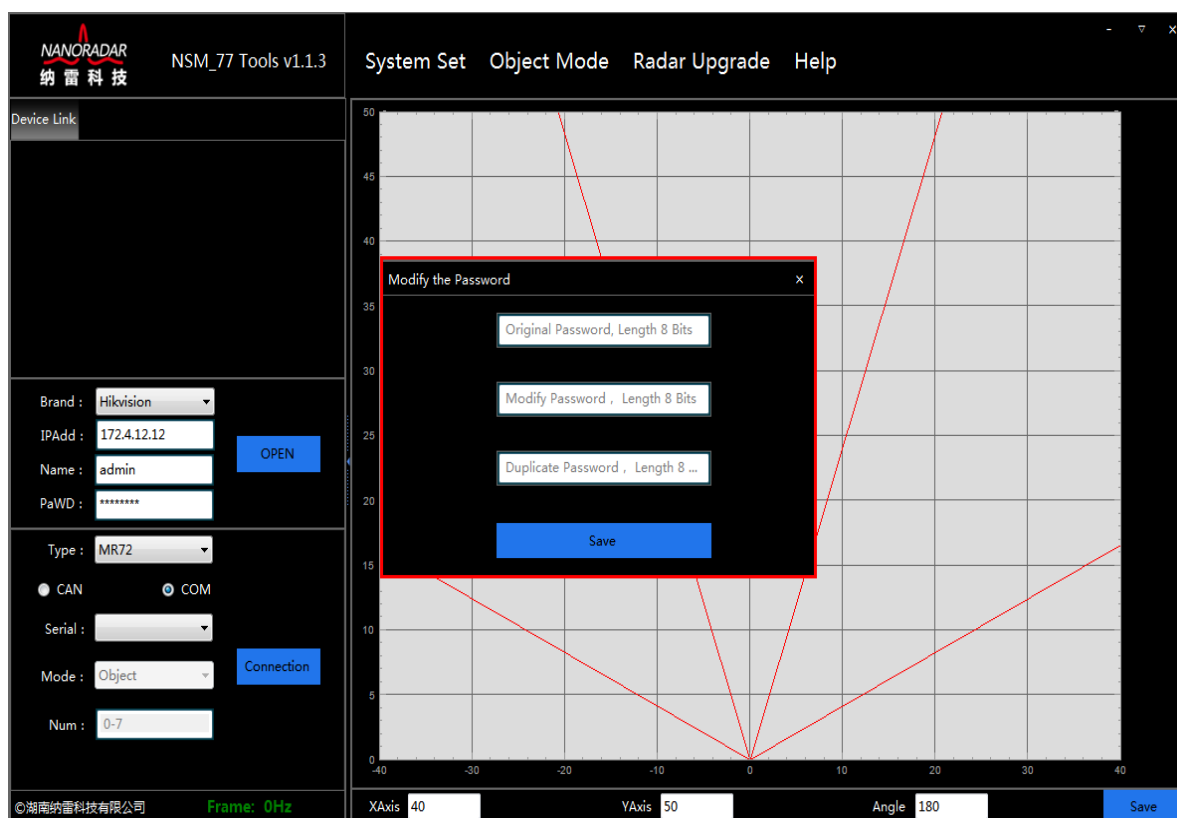


Fig2- 1 Modify Password

2.1.2 Text Configuration

Click the **[Text Configuration]** option in the drop-down menu of the **[system set]** menu to pop up the dialog box. The options are unchecked by default. The user can check the corresponding option according to different needs. The program will display the data corresponding to the target in real time.

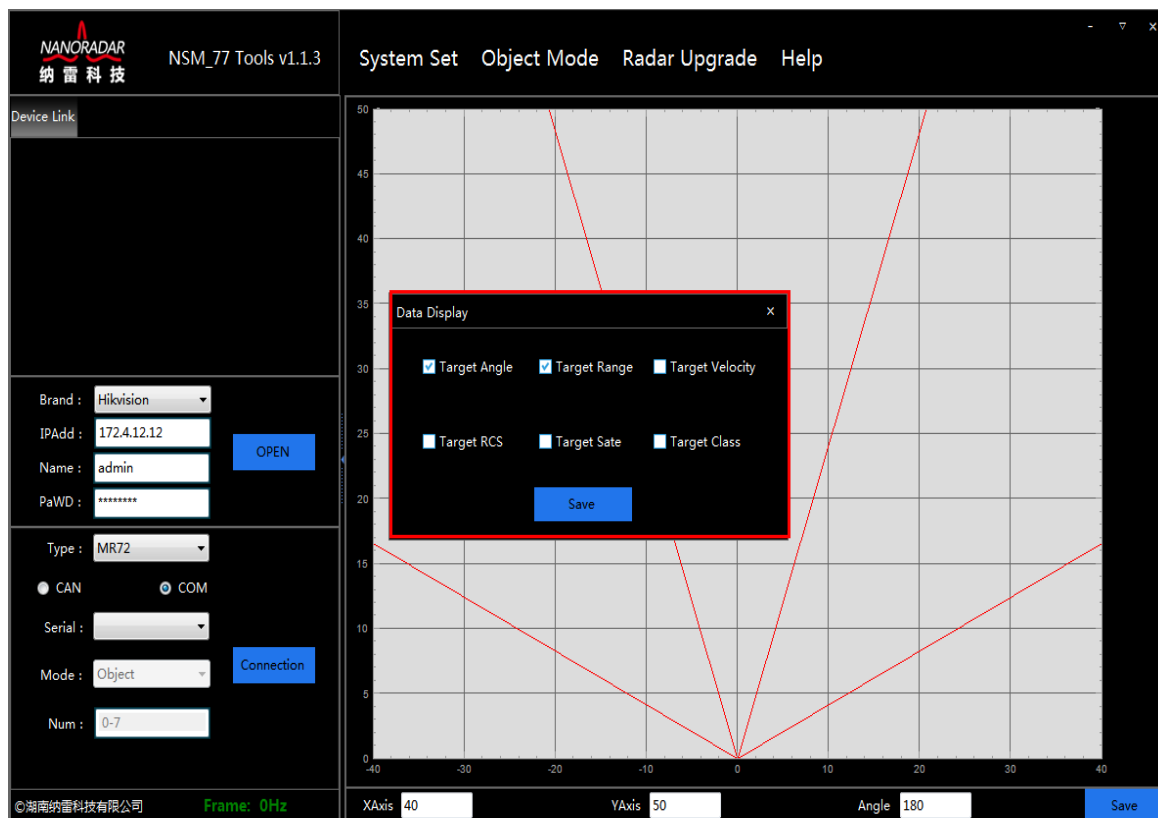


Fig2- 2 Text Configuration

As shown in the figure below, the target angle and range are checked, then the main interface displays the corresponding data in real time:

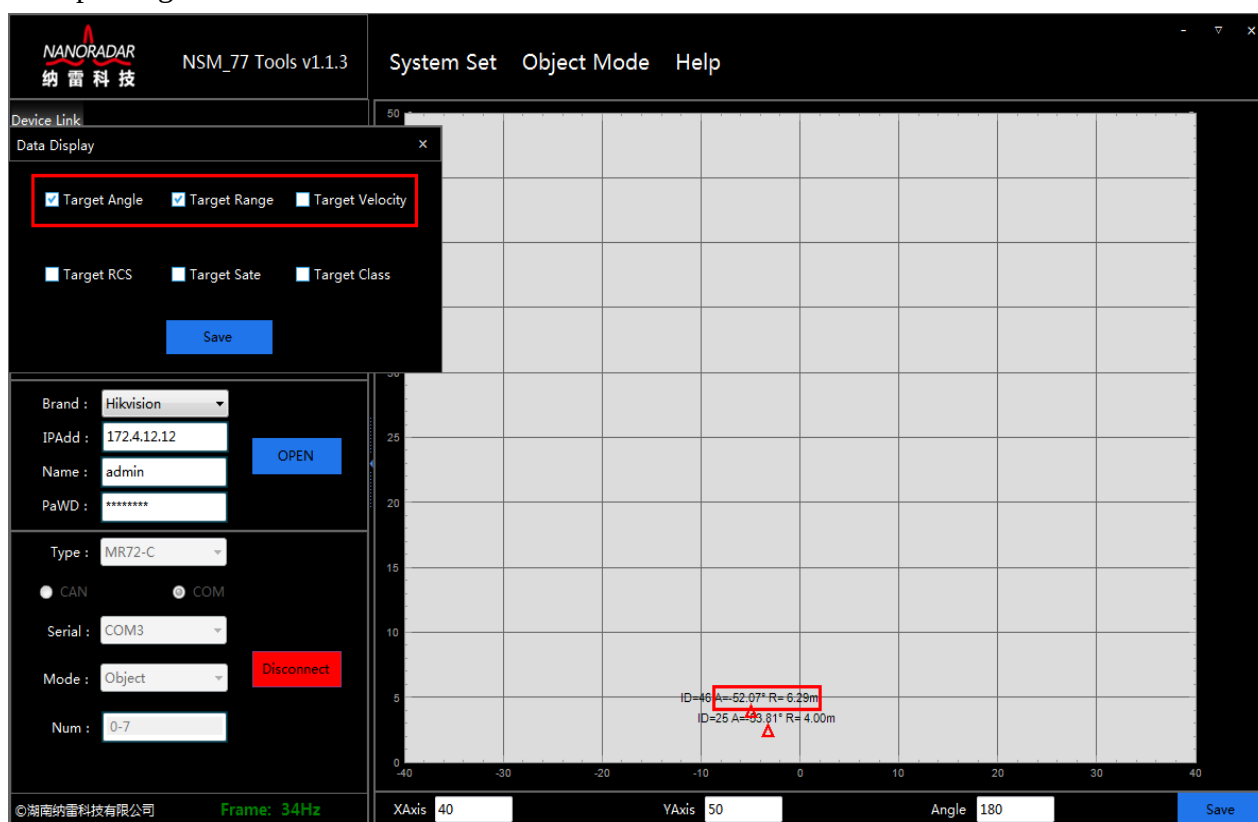


Fig2- 3 Text Display

2.1.3 Data Preservation

Click System settings and select target save option , dialog box display as in

Fig 2-4. Tick Save Target Data if you demand. File size set interval is 【1-1500】 . Please do not set the large file size to avoid opening the file for too long.

Target data is saved in NSM_77_Data file under storage path by default.

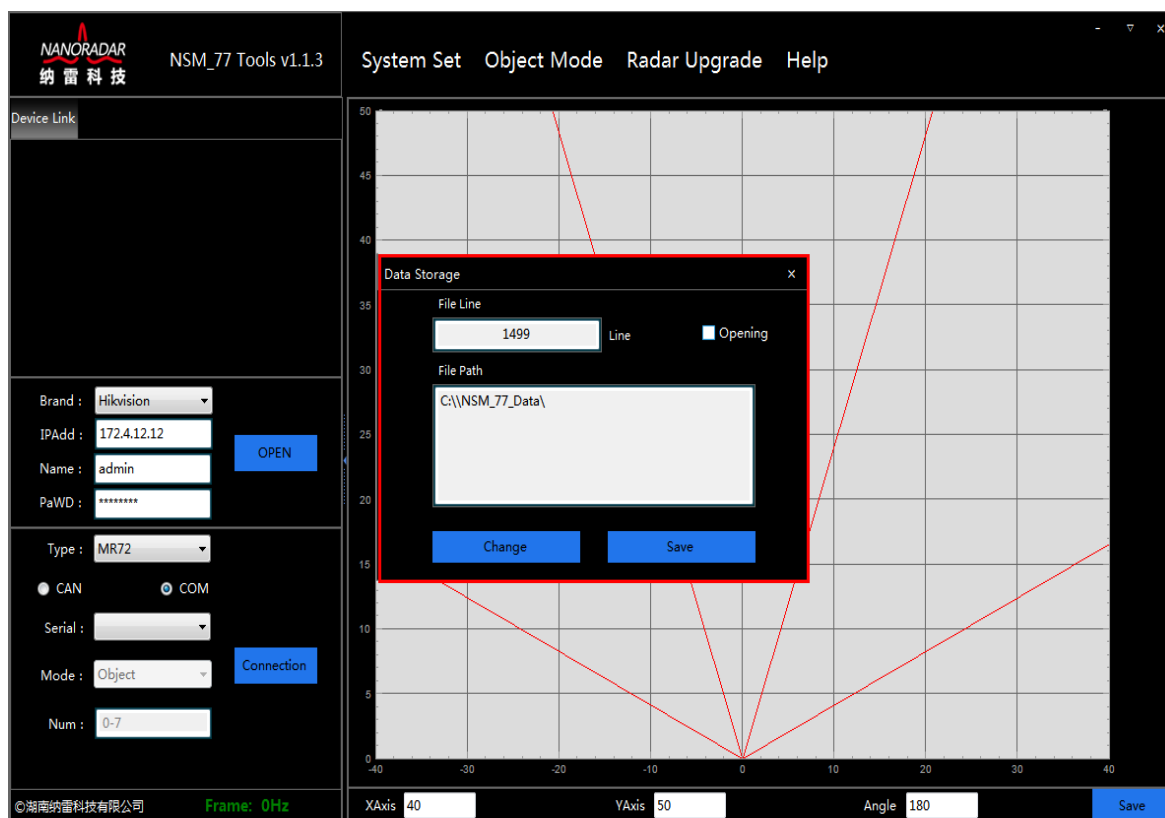


Fig2-4 Save Data Setting

2.2Radar Setting

2.2.1 Paramter Setting

Click [Params Set] in [Radar Set] to pop up the parameter setting interface (in the case of no device connected to the main interface, only CAN is supported, and the baud rate corresponds to the baud rate selected by the main interface).

Note:

1. Channel Calibration and Baudrate Setting only supported by specified radar model. Please make sure your radar model supports this function before modifying these two parameters.
2. Please restart the radar after parameter settings.

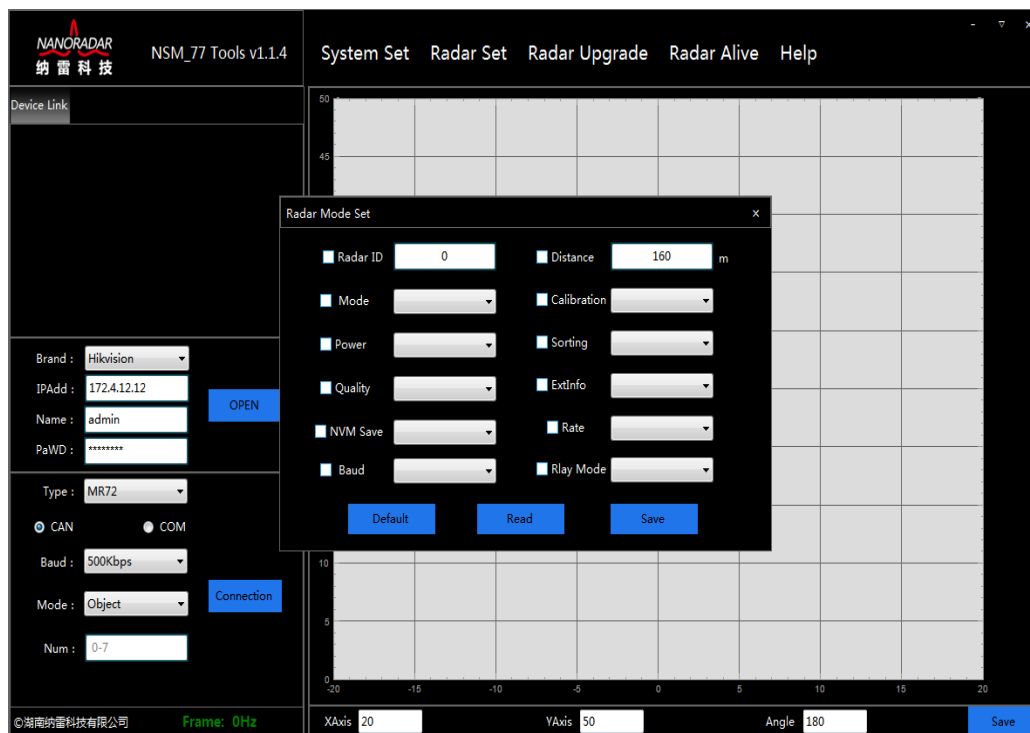


Fig2-5 Paramter Setting Interface

Tick and fill in the configuration parameters that need to be changed, and click the [Save] button to set the parameters. If you select NVM to save and the parameter option is Active, the parameter modification will be saved even after the radar is powered off; otherwise, the radar will recover the Parameter configuration before the modification. The pop-up window will close after setting(Fig2-6 For Eg Setting Baud).

Click the [Read] button to read the current parameter configuration of the radar

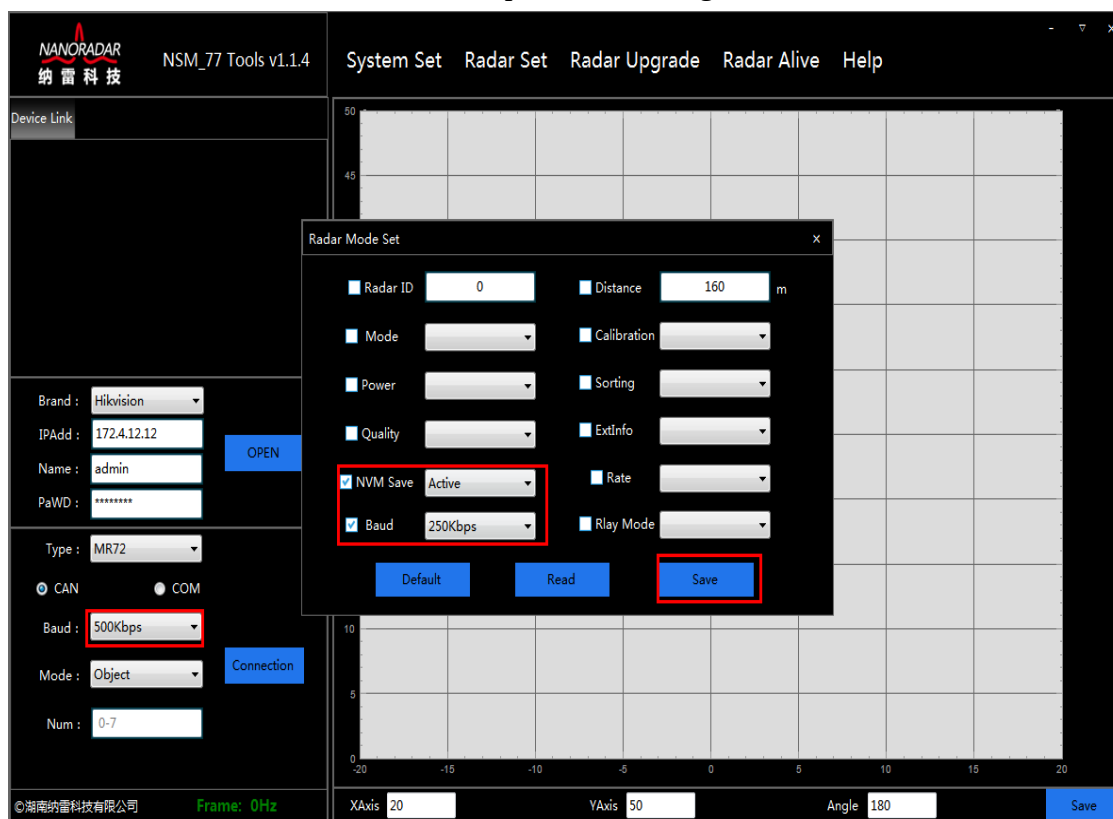


Fig2-6 Set Radar Paramter

2.2.2 Area Setting

This configuration is only applicable to SR73, MR72, and MR76 of CAN communication and SR60 of COM communication now. It is used to set the maximum output target number and its filtering area (requires radar firmware to support this function). Select communication type and communication params ,Click [Area Set] in the [Radar Settings] on the main interface to pop up the area configuration interface.

Click the [Read] button to read the current area configuration of the radar.

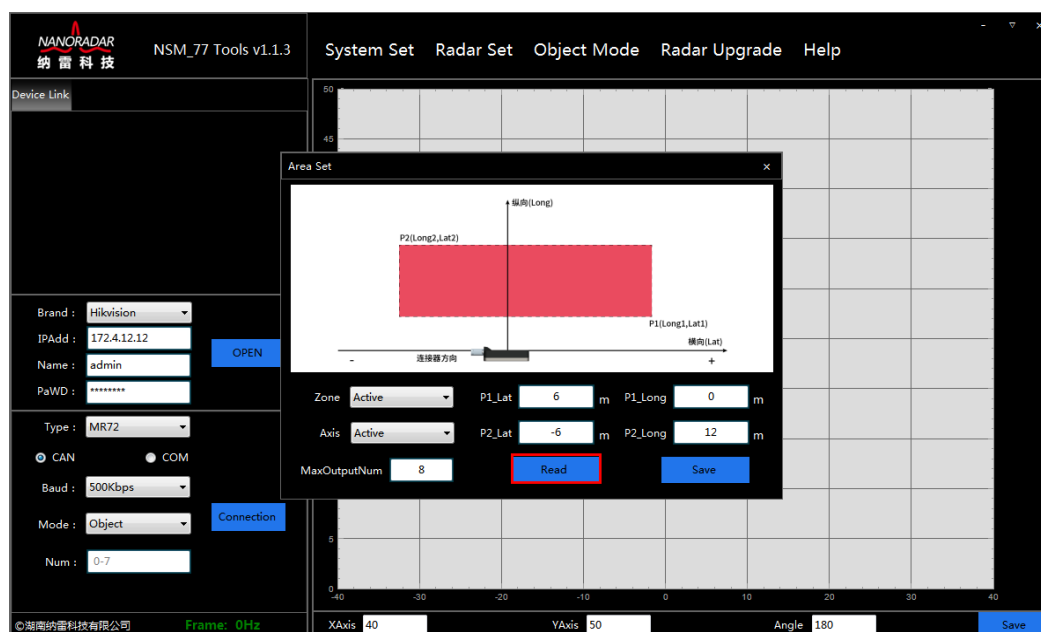


Fig2-7 Read Area Paramter

Enter the corresponding area configuration value and click [Save] to set. Read again after setting to see if the setting was successful.

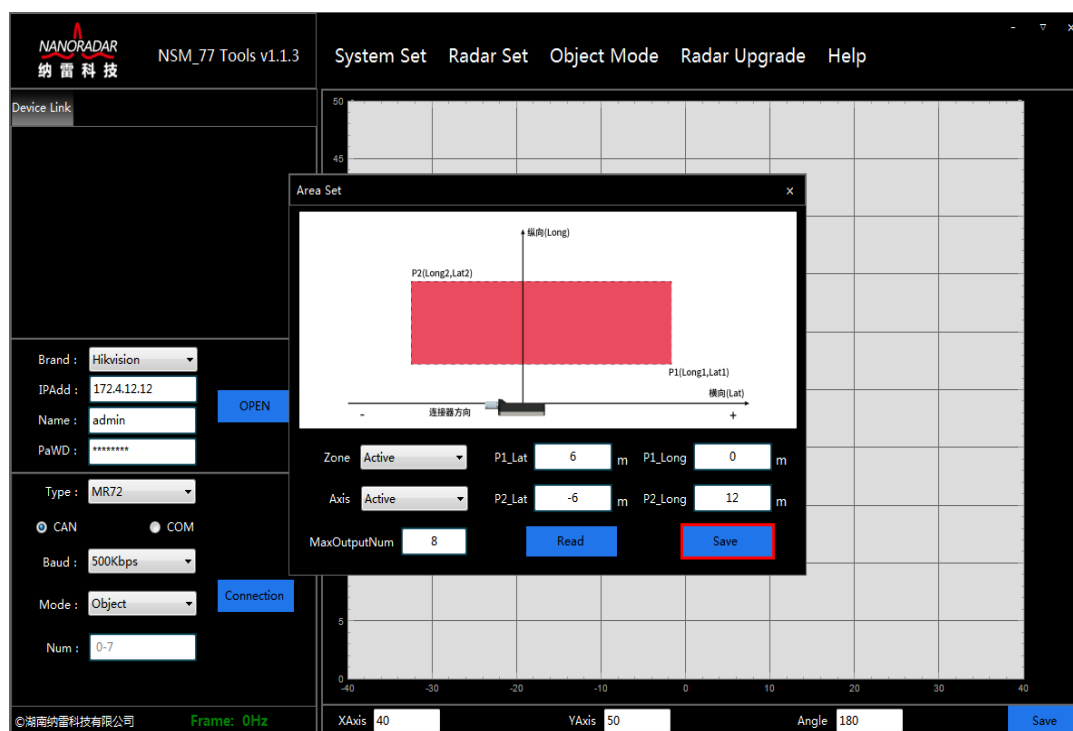


Fig2-8 Set Area Paramter

2.3 Radar Upgrade

Click the main interface [Radar Upgrade] to enter the radar upgrade interface

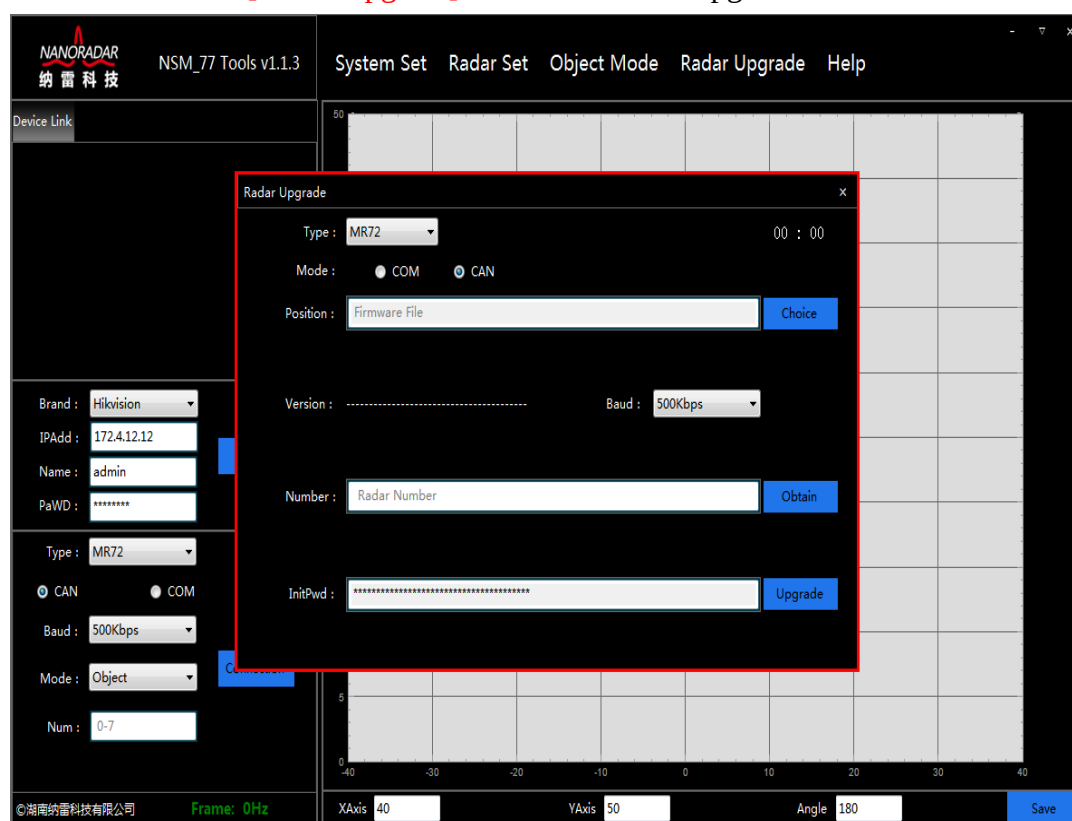


Fig 2-9 Radar Upgrade Interface

For the connected radar, select the radar model, connection method, and radar firmware; if the connection method is CAN, you need to fill in the correct radar number (also available through the [Obtain] button) and baud rate, and click the [Upgrade] button to upgrade .

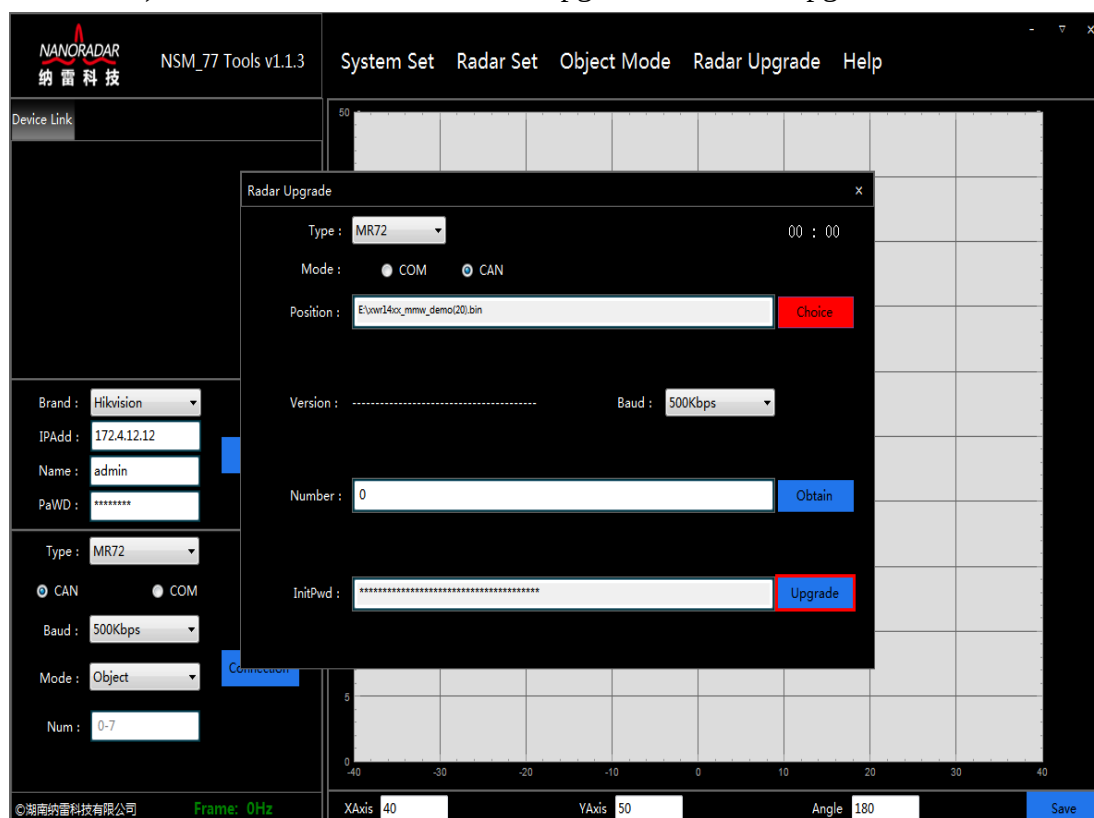


Fig 2-10 Radar CAN Upgrade

If the connection method is COM, you need to select the correct serial number and baud rate, and click the [Upgrade] button.

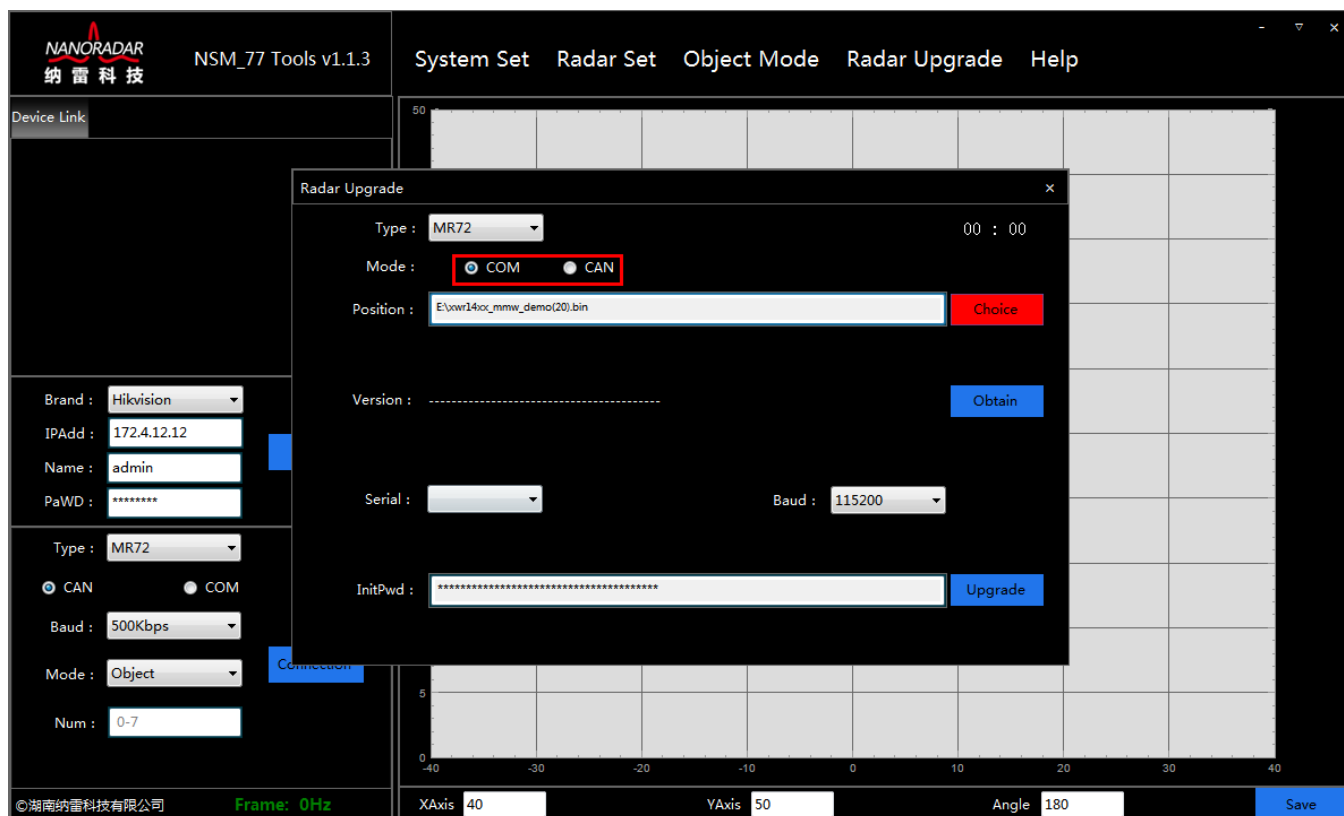


Fig 2-11 Radar COM Upgrade

2.4 Radar Alive

Click the main interface [Radar Alive] to enter the radar activation interface

Note: Please confirm whether the radar has activation function.

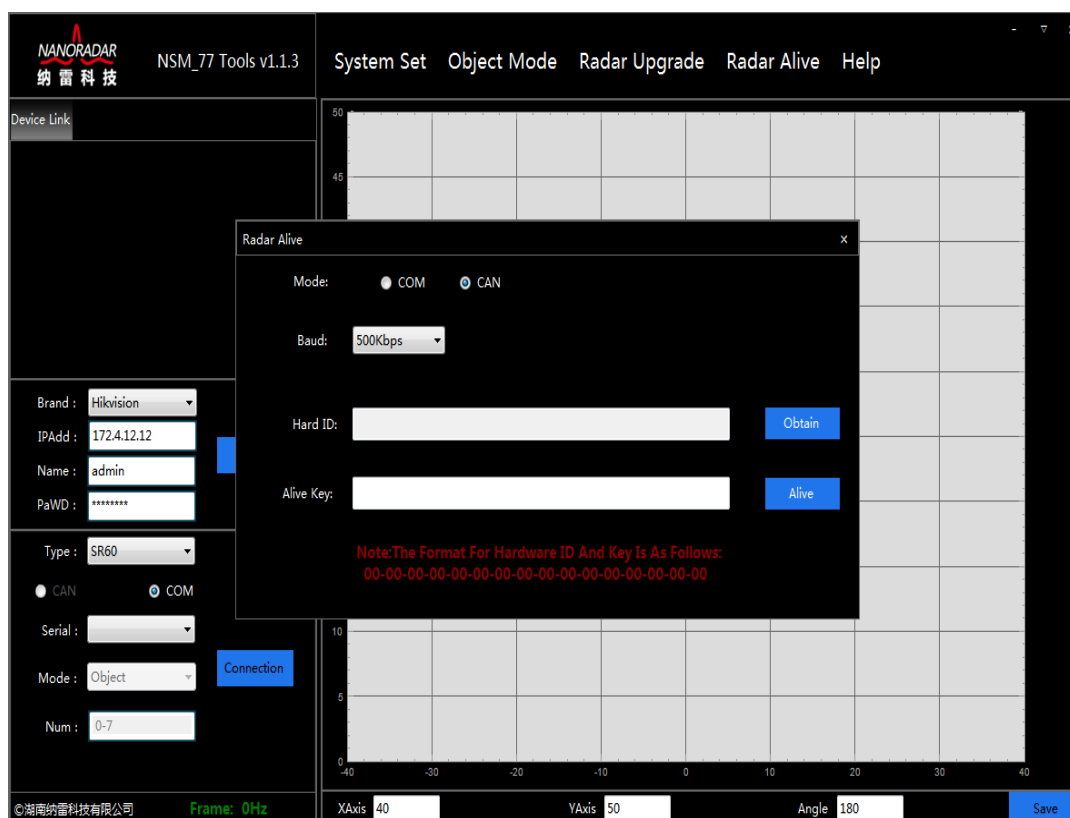


Fig 2-12 Radar Alive Interface

Activation method:

Step 1: Select the correct connection method. If it is COM, you also need to choose the correct COM port. The baud rate only supports 115200 temporarily. If it is CAN, the baud rate only supports 500Kbps.

Step 2: Click the [Obtain] button to get the radar hardware ID.

Step 3: Send the hardware ID to the salesperson to get the activation key.

Step 4: Assign the obtained activation key to the alive key text box and click the [Alive] button to complete the activation.

Note: The radar needs to be powered on again after activation.

2.5 Video

The system currently supports webcam and USB camera from Hikvision and Dahua. Select the camera manufacturer you purchased, fill in the camera IP address, username, password, and click the [Open] button.

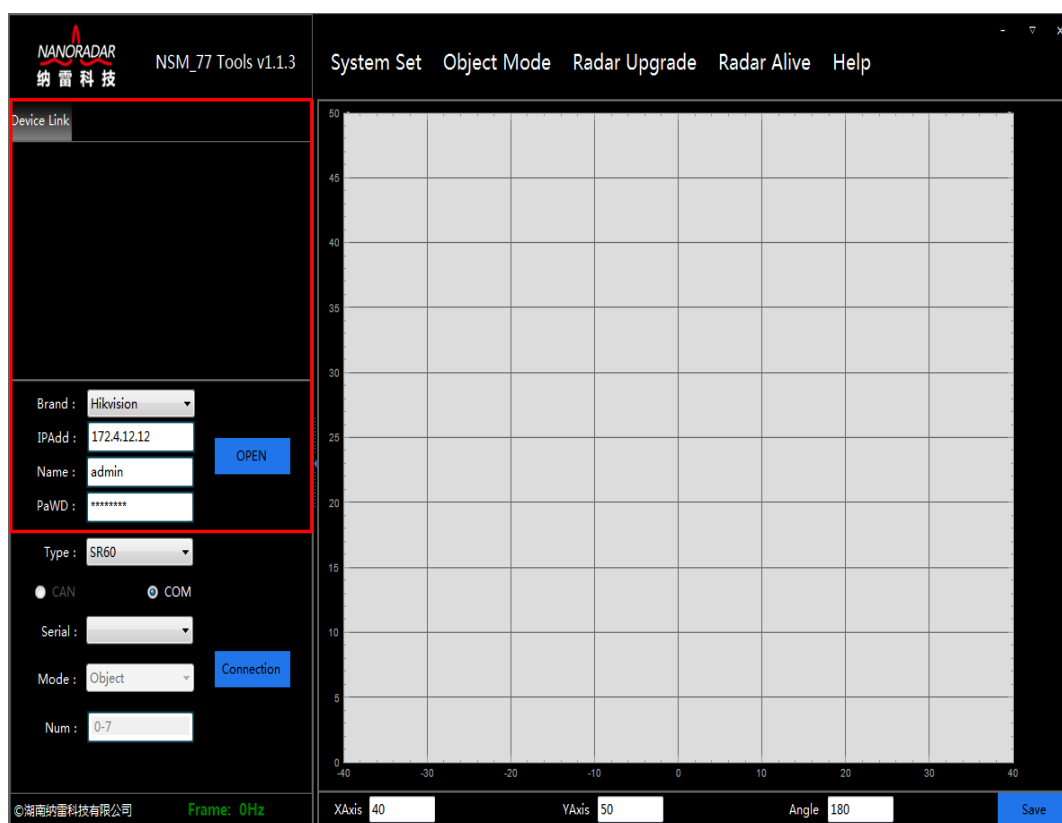


Fig 2- 13 Video Interface

2.6 Help

Click the help menu to get the corresponding version of the NSM_77 Tools Management System User Manual. This document version is 1.0.4

3 System Configuration Requirements

3.1 Software

Microsoft .Net Framework 4.0 and version above

The installation-free version requires manually installation. Net Framework 4.0 and version above.

3.2 Hardware

The system requires computer configuration as shown below. Low configuration will unable to start the system, or lead to stuck phenomenon.

Minimum Equipment		Recommended Configuration	
OS	Windows7 SP1 / 8 / 8.1 / 10	OS	Windows7 SP1 / 8 / 8.1 / 10
CPU	Intel Core i3530 / AMD Phenom II X4925	CPU	Intel Core i5 4590 / AMD FX8300
RAM	4GB	RAM	8GB
Hard Disk	8 GB	Hard Disk	8GB
GPU	NVIVIA GeForce 590 / AMD Radeon HD 6990 / Intel HD Graphics 4400	GPU	NVIVIA GeForce 1080Ti / AMD Radeon R9 295X2 / Intel HD Graphics 7000
Sound Card	DirectX compatible audio card	Sound Card	DirectX compatible audio card
DX	DirectX 9.0c	DX	DirectX 9.0c

Fig 3- 1 Hardware Configuration Requirement

3.3 USBCAN Adapter

When connect CAN interface radar with the system, please use specified USBCAN adapter, and install driver, as shown below:



Fig 3-2 USBCAN Adapter

Note:

NSM Tools installed, there are USBCAN adapter win2000_xp_win7-32 and win7-64 driver in the Driver folder.

1) It will display no driver if the USBCAN adapter connect to the computer first time, as shown below:

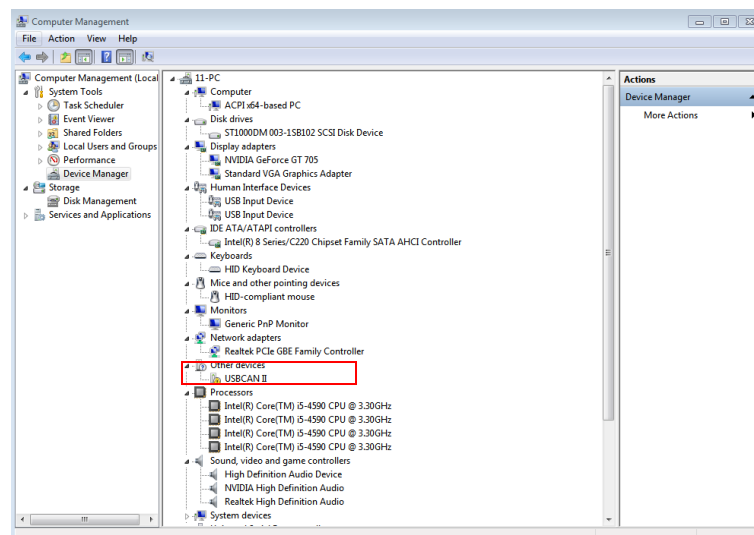


Fig. 3-3 No USBCAN Adapter Driver Interface

Click **USBCAN II**, dialog box displays as below, please click **Update Driver Software**.

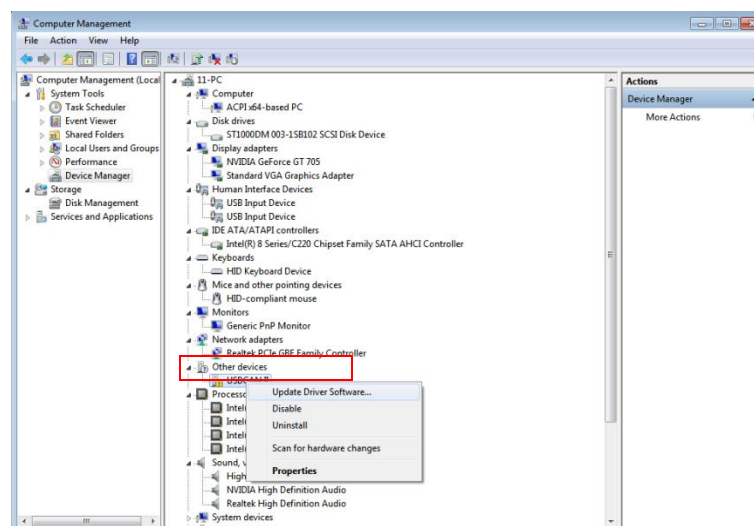


Fig. 3-4 Update Driver Software

3) Select **Browse my computer for drive software**.

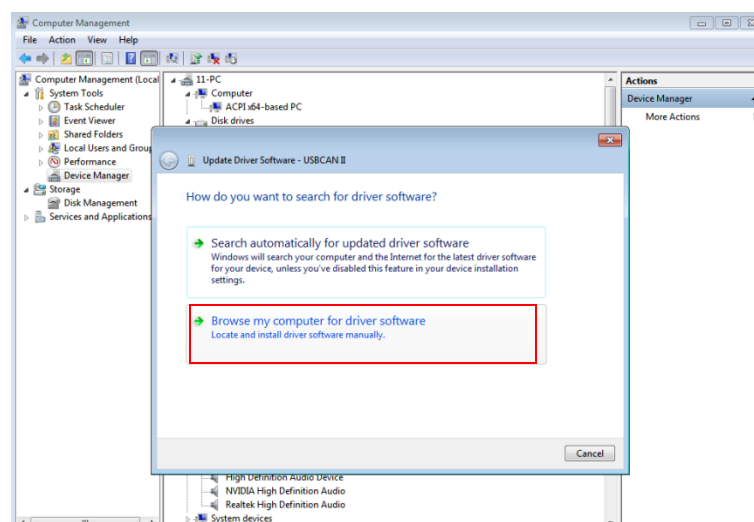


Fig. 3-5 Search Driver Software

4) Select corresponding driver software path, which is in **Driver folder** under NSM Tools installation path.

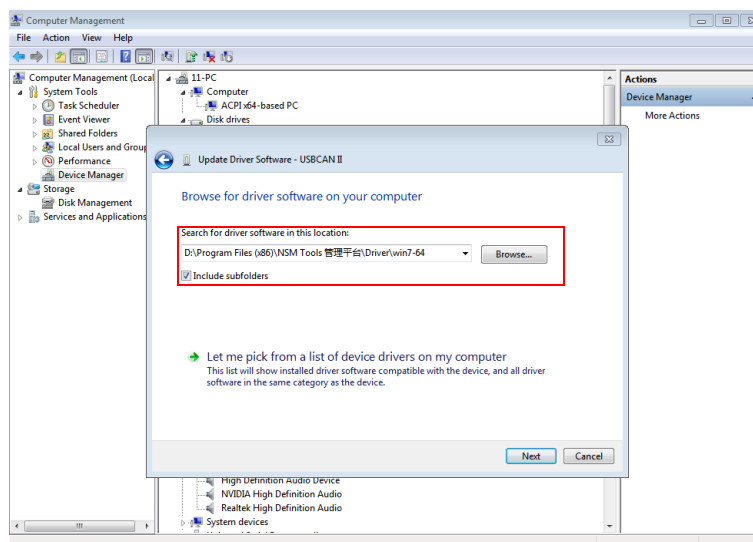


Fig. 3-6 Search Driver Software

4) Click **Next** until finish installation. Installation is finished when dialog box comes as below:

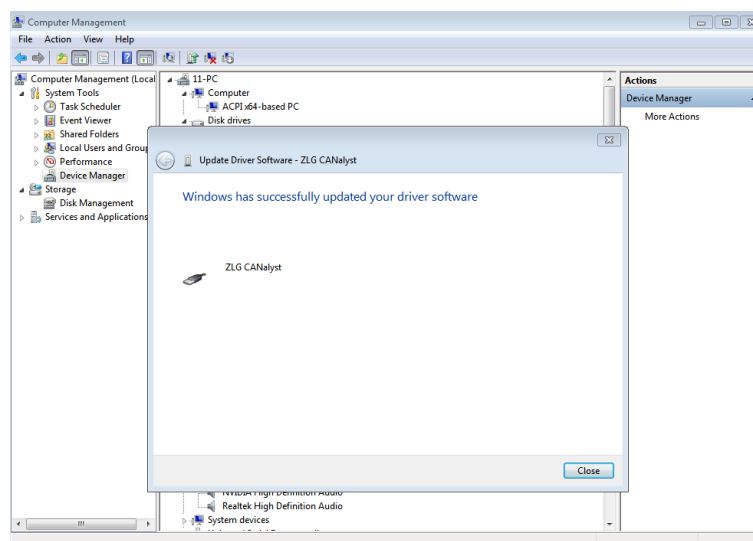


Fig. 3-7 Installation finished

Hunan Nanoradar Science and Technology Co., Ltd.

No.27 Wenxuan Road, Hi-tech District Changsha

B7 Lugu Compark

Tel.: +86(731)88939916

E-Mail: sales@nanoradar.cn

URL: www.nanoradar.cn

