ACU Integration Operation Guide

For

HVR Server

1.1   ACU Application

ILDVR Access Control System Integration (ACSI) supports Control Device (AC-215) and Management software (AS-215)

1.1.1   Connection between AC-215 and AS-215

1.1.1.1 RS232 Direct connection

Connect AC-215 device to the computer running AS-215 software through COM port directly. The definition of pins lists below. The PC Serial Port (COM port) should be assigned to AC-215 Device in the Network Properties of the AS-215 Software. The default setting uses standard RS232 interface with 9600 baud rate. The RS232 connection can be used for only one AC-215 Device. The RS232 cable length should be less than 150 feet (50 meters).

AC-215	AS-215 (Standard RS232 interface)	
DB9 Connector		**DB25 Connector**
GND	Pin 5	Pin7
TX	Pin 2	Pin 3
RX	**Pin 3**	**Pin 2**
DTR	Pin 4	Pin 20

1.1.1.2 IP connection

For multiple AC-215 Devices or more than 150 feet installation project, RS232 connection cannot fulfill the requirement. NC-60 Series I/O server is a kind of device that converts RS232 signal to TCP/IP signal for long distance communications. One NC-60 series I/O Server supports up to 32 AC-215 Devices. The definition of pins lists on below table.

The connection between I/O server and AS-215 (PC) is standard UTP interface.

AC-215	I/O Server(RJ45 RS232 interface)
GND	Pin 6
TX	Pin 2
RX	Pin 1
DTR	Pin 7

1.1.1.3 Connection between ACSI and AS-215

HVR Access Control System Integration (ACSI) monitors the communication between AC-215 and AS-215 and takes the data from AS-215. When a user swipes his ID card to establish the communication between AC-215 and AS-215, he is also creating communication between ACSI and AS-215.

Settings of RS232 Connection

In AS-215 management software **Menu bar→Options→General→Transmit Transactions** there is a setting to send data (characters) to selected COM Port. It means the Serial Port (COM) of ACSI get data from AC-215 device directly.

Settings IP connection

Refer to the operation guide of I/O server, run Internet Explorer to enter I/O server remote setup web page. Operation steps are:

On the left **Menu** click **"Mode"**, choose a port you wan to set. Select "TCP/UDP Socket" in the **Mode** drop down list, then set local port which will be used in LAN setup (please refer to Section 1.6.2.2 **LAN setup**). Choose "TCP client" or "TCP server" for Protocol.

If I/O Server works as server, select "TCP Server" for Protocol, ACSI should be running as client

If I/O Server works as client, select "TCP Client" for Protocol, ACSI should be running as server.

After finish Mode setup, click "**Submit**" to save settings.

Application mode

The connection between HVR System and Access Control System (AS-215 & AC-215) is flexible as above mentioned. But the maximum COM port connection is 16 and the maximum IP connection is 32.

1.1.2   Connection Setup in HVR ACSI System

1.1.2.1 COM Setup

In Connection Settings interface there is a tree-view in the left that lists all available COM ports in the HVR system. Select the COM port that you are going to setup.

 Grey color means this camera does not associate any COM port.

 Light blue color means this camera associates other COM port.

 Dark color means this camera associates current COM port.

After finish setup, please click "Test" button to test whether the POS device connection is successful. If connection OK the HVR system will pop up a similar dialog interface as below:

When a user swipe his ID card in save status, this user's detailed information will display in dialog, all the data which shown in dialog will be saved to path **C:\Program Files\HVR Server\Acupara\Data**, the file's suffix name is PUD. If the user's info does not show in dialog please check the settings and physical cable connection.
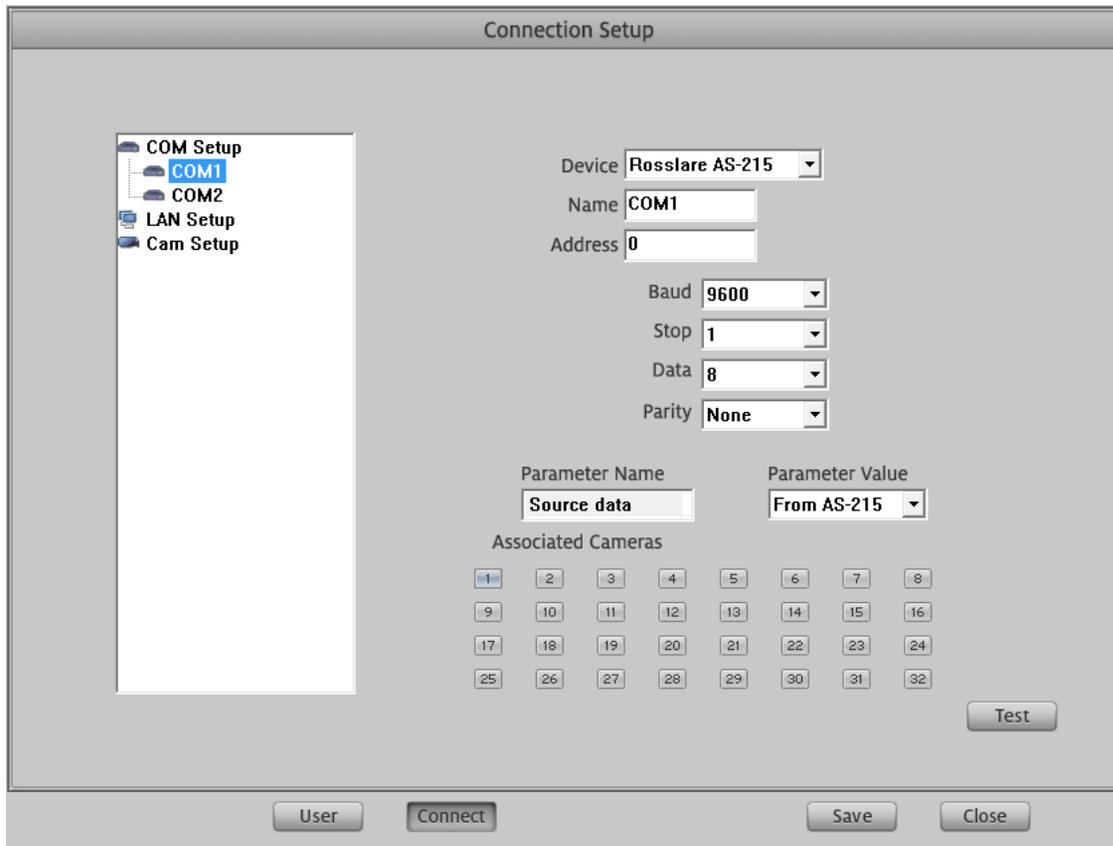
Device: Select the device connecting to this COM port.

Name: Name this connection

Address: AC-215 Device ID

Parameters: Set the parameters of this COM port, includes Baud Rate, Stop Bit, Data Bit and Parity.

Parameter Name: source data type

Parameter Value: Select data "From COM Port" or "From Network".

Associated Cameras: Choose the cameras that associate above selected device. The camera number button has three status colors:

1.1.2.2 LAN Setup

HVR system supports multiple AC-215 device connections through single TCP/IP connection (32 in total). But every AC-215 device must have an exclusive port number. To setup a LAN connection, please choose LAN from tree-view list firstly.

Grey color means this camera does not associate any LAN port.

Light blue color means this camera associates other LAN port.

3 Dark color means this camera associates current LAN port.

After finish setup, please click "Test" button to test whether the AC-215 device connection is successful. If not, please use PING command to test the network connection and change the port number to try again.

Device: Select the device connecting to this LAN port.

Name: Name this connection

Address: AC-215 Device ID

**Protocol:** Set network protocol (Supports TCP or UDP)

Run as a Server/Run as a Client: Select device work mode. Refer to section **1.6.1.3**

Listening Port/Connect Port: Set TCP or UDP port number.

Associated Cameras: Choose the cameras that associate above selected device. The camera number button has three status colors

1.1.2.3 CAM Setup

From left tree-view list, click a camera icon to configure its parameters as below.
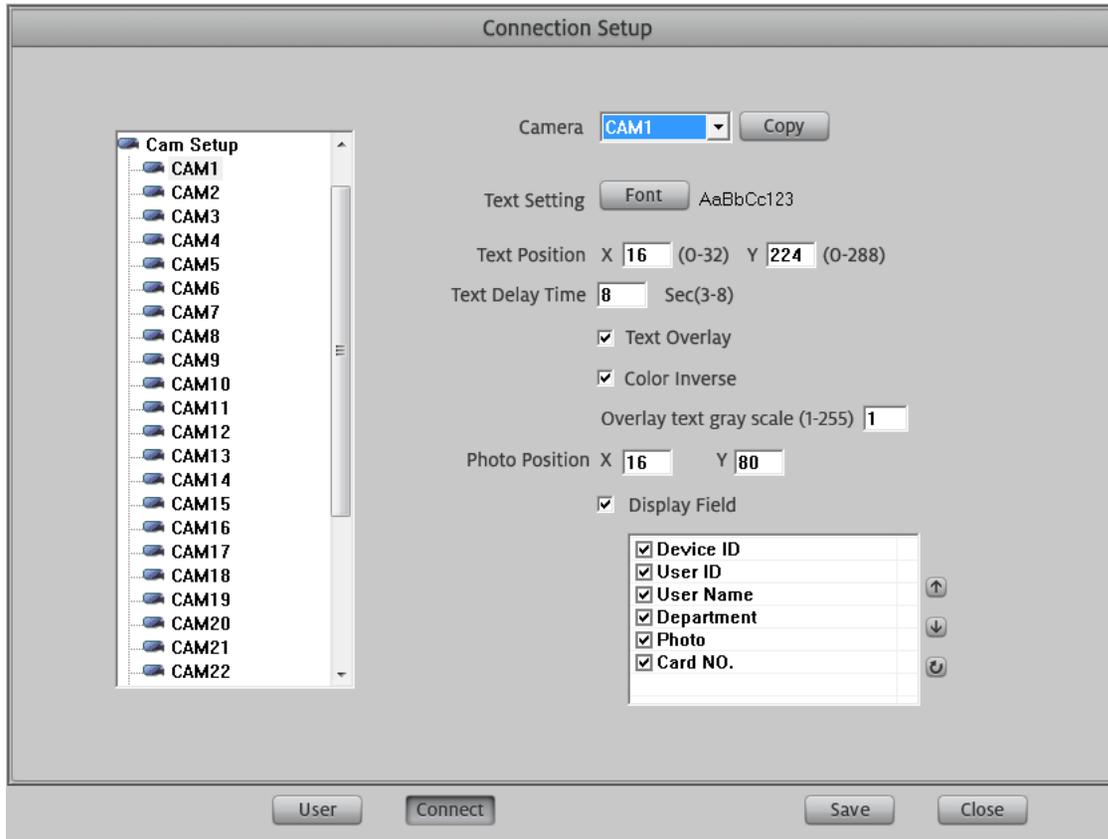
Font: Click "Font" button to change font

Text Position: Set the overlay text position on screen. Default value is X=16 -- Y=224

Text delay time: Set the idle time of overlay text shows on screen after a user swipe his ID card.

Text Overlay: Check it to enable on screen overlay feature. If not checked, it is still possible to view the overlay text in the Search and Remote Monitor.

Color Inverse: Set auto-change the darkness of font according to background picture.

Overlay Text Gray Scale: Set font gray scale.

Photo Position: Default value is X=16 -- Y=80

Display field: Display/hide field's content on screen. Selected fields will be displayed on screen. The maximum display fields are 7.

Field is a parameter name of Access database. It means a string of words or value of data.

1.1.3   User Management

Before using the ACSI system, please input all users ID card information. You have 2 ways to input ID card information. The first way is one by one input by click button "Add Item". The second way is import database from AS-215 software.

1.1.3.1 User Setup in HVR ACSI System

Add new ID card information

Click Add Item to enter following interface. You can input ID card number, user name and work department. Also you can add /delete the user's photo.

After finish ID card information inputs, all cards information will list on the table.

Lines: Display how many lines of user in the table.

Previous: Show previous page.

Next: Show next page.

Edit Item: Modify selected ID card information.

**Del. Item:**   Delete current selected user ID card

Del. Page: Delete all cards in current page

Del. All: Delete all pages. All cards information disappears.

Edit Field: Click this button to enter Edit Field interface as below. New added fields show in Enabled Field lists. All usable fields show in Selected Field lists and display in preview area. In this interface you can add new field or delete an existing field and change the displaying alphabet orders.

Ren. Field: Select a field then click this button to change its name.

1.1.3.2 Import card information

Export database

Run the Veritrax AS-215 program. Select "Card" in left tree view area, all cards information will list on the table.

Go to menu **Tool → Database** to open Database interface.
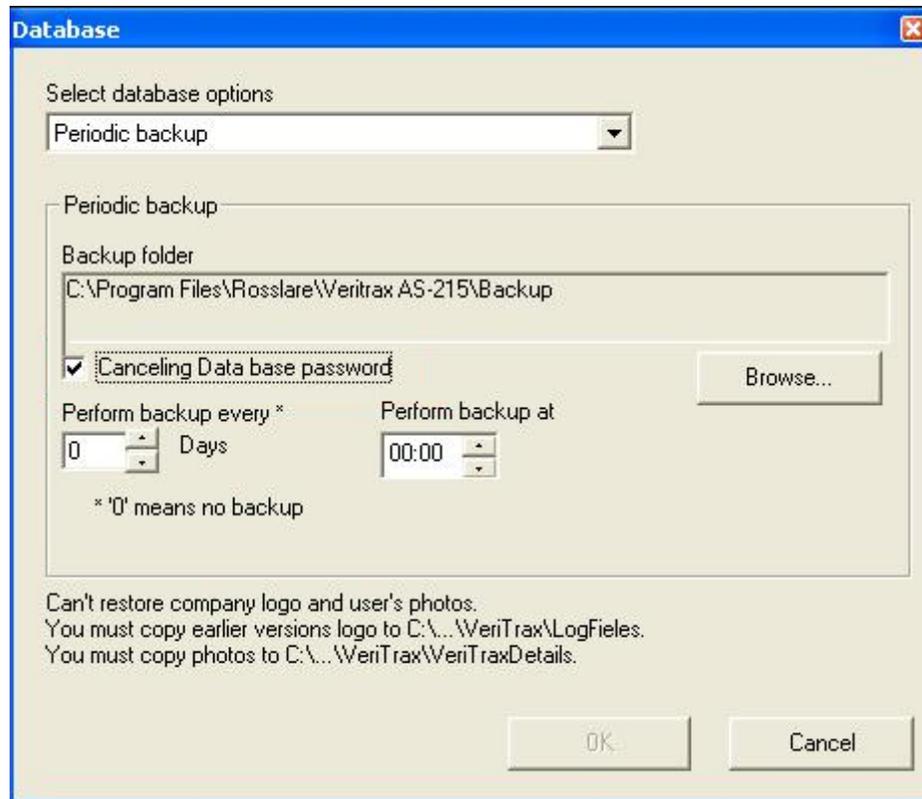
Please click the check option to select "Canceling Data base password" before backup database. You can click "Browse" button to save the backup database to any folder in disk drive.

Import database

In user information interface click "Import" button to enter "import database" interface. Click [···] to locate the database path. After finish import database all cards information will list in Original Database area. If you click "Default" button, all data will be imported and display with default value automatically.

Original Field: List all fields existing in database.

Comp. Field: Click button ">" to move original field into this field or click button "<" to remove from it.

Disp. Field: Actually displaying field name on screen.

Existent Field: Select a field in Comp. Field list you can rename it by choosing display name in drop down list

Notice: these original fields have the default names.

IEmployeeNum (User ID *)

tFullName (User Name*)

tFirstName,tLastName (User Name*)

1.1.4 ACU Event Monitor

In Tools Panel click button [icon] to open ACU event monitor interface. In ACU&POS Monitor interface you can read all connection details from the fight table. Click "Set ACU" button to enter "ACU&POS SETUP" interface as below.

ACU & POS Setup	

ACU&POS Parameter Setup

☑ Show ACU & POS Server

Max. Show Record Count [500] Max. Search Record Count [500]

Playback Settings

Forward Time [5] sec. Backward Time [5] sec.

[Save]

[Exit]
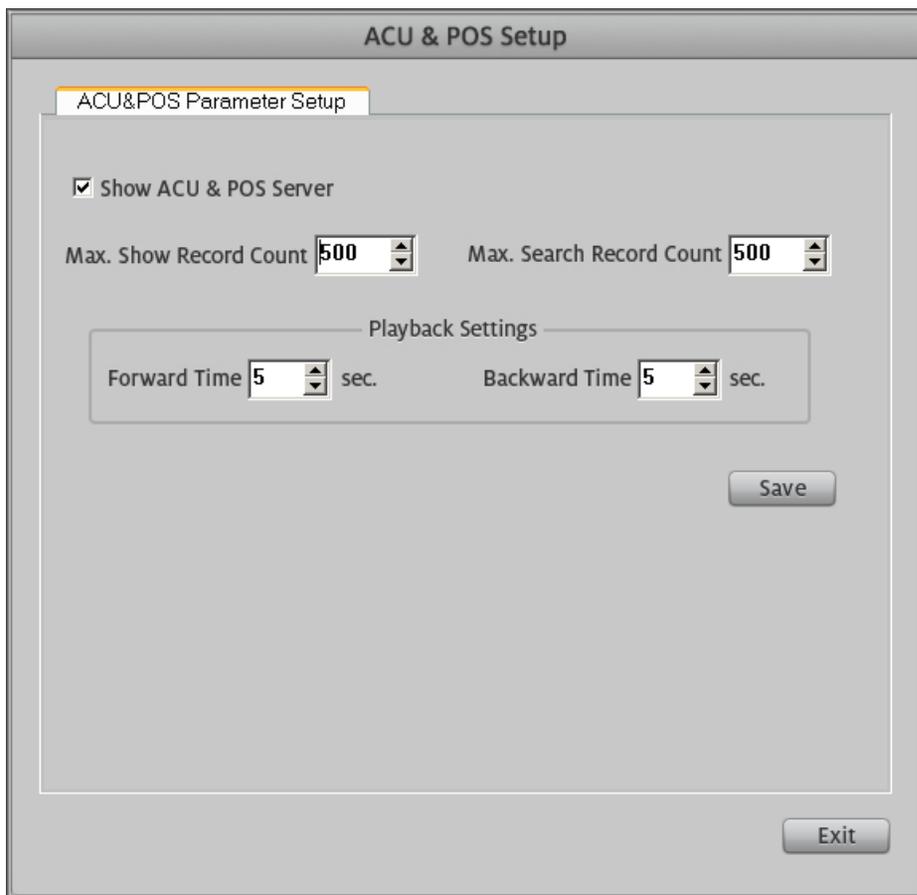
Show ACU&POS Server: Check this option to enable the ACU Event Monitor interface auto popup when ILDVR ACSI system startup

Max Show Record Count/ Max Show Record Count: Set the maximum record count number that shown on screen in one search.

Play Back Settings: Set the Playback start time and end time. Select a record and double-click, the video between the Forward Time and Backward Time will display on screen.