POS / ATM / Access Control

External Device Setup Guide

Ver 12.00.0

Digital Video Security System Digital Video Recorder

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*All contents of this document may change without prior notice, and actual product appearance may differ from depicted herein.

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1. Preface - Feature

Our POS application integration will be unique and distinct from other DVRs in the marketplace because we provide a UNIVERSAL interface. Any external devices that transmit ASCII code based text data, through RS-232 or TCP/IP port, is able to be connected to our DVR, and the DVR will be able to record and overlay transaction data simultaneously. Utilities to create or modify POS protocols also provided.

This feature allows connecting any type of machine transmitting ASCII code text data directly to the DVR without any extra devices, such as text inserter.

On the DVR software, it displays transaction data on top of the video display with customizable display format, including font, size, color, position, and duration of display.

Not only will it display the data, but it will also allow to search through recorded video data by recorded text using Smart Search, based on the text string, such as NO SALE or VOID. It will pull up all relevant transactions and image, and playback from that position will save time and effort. In addition, Smart Search allows user to save an AVI clip right away.

This guide book contains instructions how to setup and utilize the above feature.

For any question you have, please contact to the following address. When you are sending your concerned matter, please include your company name and phone number with detail description.

E-mail: support@cctvone.com Tel: 323-721-8999 Fax: 323-721-8599 www.cctvone.com

2. Device Connection

2-1. Direct Connection



Serial cable connection: Reach of serial cable (RS-232) is within 50ft.

If there are multiple POS, expand the serial ports by adding serial expansion card in the DVR.

TCP/IP connection: In case of TCP/IP connection, the data, which transferred from POS to DVR, must be Text (ASCII Code) data. Please refer to POS manufacturer for outgoing port number and IP address of POS. If there are multiple POS, use hub or switch and regular cat-5 network cable instead of crossover.

2-2. Connection with POS Converter



* This configuration only works with single device.

If the device, which using RS-232 port for data transmission, is located farther than 50ft from DVR, POS port converter is needed since serial cable (RS-232) is limited by its short distance range.

The POS port converter converts RS-232 to RS-485, which has greater range up to 4000ft.

However, computers only accept serial cable (RS-232) connections; RS-485 has to be converted back to RS-232, using PTZ port converter provided with DVR products.

POS (serial port) \rightarrow **POS** port converter (convert RS-232 to RS-485) \rightarrow **PTZ** port converter (convert RS-485 to RS-232) \rightarrow System (serial port) From POS, connect serial cable to the POS port converter shown in following picture.



Use 5v, 1~2amp, 5.5mm barrel plug power supply for POS port converter.

Notice that next to the serial connector there is "Baud rate" dip switch. Followings are different switch setup for different data transfer rate. Change the Baud rate according to according to the POS.



Following picture shows connection of RS-485 from POS port converter.



On the side of POS Converter, there are DIP Switches available to select the output signal type. SW1 and SW2 are used for Parallel port output, and SW3 and SW4 are for Serial port output



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Depending on the output signal type, Switches must be configured as following:



Following picture shows where the connection from POS port converter connects to the PTZ Port Converter.



The serial cable here connects to computer's com1 serial port.

The PTZ Port Converter can be replaced with secondary POS Converter, if the PTZ Port Converter is used for PTZ cameras or another device.

In order to import data from multiple devices, each device requires separate serial port (Com port).

3. DataScope

3-1. DataScope

DataScope is a software designed to capture text data from external devices. Captured data using DataScope is analyzed to define the protocol.

DataScope					
Connection	СОМ1 💌				
Baudrate	9600 💌				
Data bits	8 •				
Parity	No 💌				
Stop bits	1 •				
					2
Upen	Close	HEX		scii	Clear
Log file : c:\po	s.log		Brow	88	
Send data :				Send	Exit

Connection: Choose connection between POS and DVR system.

Baudrate, Data bits, Parity, Stop bits: Setup properties of the serial connection.

Type, Port: Setup properties of the LAN connection.

Open: Click Open to capture the data from POS.

HEX, ASCII: Choose form of the data from POS. (HEX or ASCII)

Clear: Clear the screen.

Log file: Assign a location to save the log file. DataScope will create a log file with the name of the file assigned from here (*filename*.log) and an unformatted raw data file (*filename*_data.dat). Both files need to be analyzed to create a protocol.

Note: In order to obtain accurate information, do not make any changes to .dat file once it is created.

Screen shot of captured data in ASCII.

Connection	LAN 💌	7-ELEVEN 1339 N VASCO RD LIVERMORE CA 945509287 9256067751 STORE#: 32266 USE YOUR 7-ELEVEN CONVENIENCE CARD
Туре	TCP -	TO MAKE ALL OF YOUR PURCHASES!
Port	7000	SUB TO TAL 5.69 SALES TAX ON 5.69 0.47 TO TAL DUE 5.16 CASH 6.16 THANK YOU FOR SHOPPING AT YOUR LOCAL 7-ELEVEN ***** REPRINT **** T#02 OP25 TRIN4986 04/04/06 02:00 pm

Screen shot of captured data in HEX.

		Addr				Hex				Ascii	
Connection	LAN 🔻	0000	20	20	20	20	20	20	20		
		0007	20	20	20	20	20	20	20		
		000E	20	20	37	2D	45	4C	45	7-ELE	
Turne	Tree	0015	56	45	4E	20	20	20	20	VEN	
Type		0010	20	20	20	20	20	20	20		
		0023	20	20	20	20	20	20	AU	1.12	
	2000	0024	20	20	20	20	20	20	20	12	
Port	1,000	0031	20	20	20	20	20	51	33	20 1 13	
		0030	53	12	10	20	52	30	20	SCO PD	
		0046	20	20	20	20	20	20	20	SCO RD	
		004D	20	20	20	20	20	0D	04		
		0054	20	20	20	20	20	20	20	2000	
		005B	20	20	4C	49	56	45	52	LIVER	
		0062	4D	4F	52	45	20	43	41	MORE CA	
		0069	20	39	34	35	35	30	39	945509	
		0070	32	38	37	20	20	20	20	287	
		0077	20	20	20	20	20	0D	OÅ	100	
		007E	20	20	20	20	20	20	20		
		0085	20	20	20	20	20	20	20		
		008C	20	39	32	35	36	30	36	925606	
		F	rev		1		N	ext		1	
Open	Close	F	IEX	0.6			AS	CII		Clear	
									13		
g file : c:₩p	os.log					B	rows	e			

Log file is another useful source to see the captured data.

📕 pos.txt - Notepad	
<u>File Edit Format View Help</u>	
[12/08 204302] 7-ELEVEN	^
[12/08 204302] 1339 N VASCO RD	
[12/08 204303] LIVERMORE CA 945509287	
[12/08 204303] 9256067751	
[12/08 204303] STORE#: 32266	
[12/08 204303] IISE YOUR 7-FLEVEN CONVENTENCE CARD	
[12/08 204303] TO MAKE ALL OF YOUR PURCHASES!	
[12/08 204304]	
[12/08 204304]== RETURN TRANSACTION ==	
[12/08 204304]1 TylenolPMXSGelcp24ct -5.69T	
[12/08 204304]	
[12/08 204304]SUBTOTAL -5.69	
[12/00 204305]SALES TAX ON 5.69 0.47	
[12/00 204005]REFUND DUE 6.16	
[12/08 204305]CASH -0.10	
[12/08 204305]	
[12/08 204305] THANK YOU FOR SHOPPING AT	
[12/08 204306] YOUR LOCAL 7-ELEVEN	
[12/08 204306] **** REPRINT ****	
[12/08 204306]T#02 OP25 TRN4987 04/04/06 02:00 pm	
[[12/08/204309] /-ELEVEN	
[[12/08/204310] 1339 N VASCU RD	
[[12/08/204310] LIVERMURE CH 945509287	
[[12/08/204310] 9256067751	
[12/08/204310] USE YUUK /-ELEVEN GUNVENIENGE GHKD	
[[12/08/204311] IU MHK /-ELEVEN	
12/08/204311 1339 M VH360 KD 12/08/204311 11EDMODE CA OFEE00207	
12/00/204311 LIVENHUNE 6H 943309207 13/80/2869311] 026667751	
[[12/00/204311] 7220007751 [19/00/204311] 9720007751	
112/06/2043111 STURE#. 32200	

Another way to see and analyze the data is to print the log file.

To create the protocol, run Device Setup program.

Usage of Device Setup program is described in section 4-1 and 4-2.

4. POS Setup

POS setup is available only if POS Patch is successfully installed. After installation of POS patch, "POS" button will be available on the setting, as following:



4-1. Device Setup

	Devices	Data	Data Base	Hem Search	XML	Connecting
vices						
[Devices	ŀ	J	Using	Devices	1.1
	Diebold ATM 1 Sharp PDS system		Name and Address of the			
	Diebold ATM 2	Nome	New Device			
	Finger007p/tcon100 access	E Porte T	ype		-	_
	(Paris Baguete) POS system	ignore P	eport			_
	ITDC access control (DTE	E Fight To	n			
	HPOS	Let Trim				
	BizMaster Retech POS	B 204.			-	_
	PAR POS	Sub Device				
_	Venta (Sharp POS)		OK	Cancel		
	TVS-2066 Samoung SPS-2000/SPS-1					-
	Samoung SER-7000/ER-52 Micross POAG 2010 Justices	- M00				-
1	Gilberco V80.4.4	"				-
	New Device	Dal		(I.)		1.4.1
	No. M. Martin	10 0000	1		50	data a

Select an appropriate POS devices or access controls and click ">>" button to register to the Map.

If the device is not listed, click on new and double click on the 'New Device' to change device name and properties.

4-2. Data Setup

0	evices Data Data Base Ben Search 20ML Connecting
Devices	NCR POS system
Line Break	Event
	Type Data Notify Setting []
Include	
	Seting 5
Invalid	New Edit Delete
	OK Cercel Setting P
Ewent	
LIVIN	Setting
	Noticeton Properties

Set rules to analyze data from a device that is in 'Map' list. Numbers in the box after each 'Setting' buttons are indicating the priority. Rules will be applied ascending order, and the priority of Line Break and Addition rules are not adjustable.

Followings are instruction for each section.

4-2-1. Line Break

Type Posi Offset Ope Len Data					
	Data Type	Hexa	~		
	Position	Start	~	Offset	0
	Operation	-	~	Length	0
New Edit Delete	Data.	10 00			
			-		. .

Set a rule for separating each line. Click 'Setting' on Line Break section to open the interface shown on left picture. The picture on the right is the interface for New or Edit.

Data type: Choose a type of data. Data types must be either 'Hexa' or 'Ascii'.

Position: Select a position to search the data string (ex. Start to search from the beginning)

Operation: Select an operator to be used when comparing 'Data' with data from POS.

Data: Set Data that will trigger the operation.

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4-2-2. Transaction Break



Set a rule for separating each Transaction. Editing procedure is similar to Line break (4-2-1).

4-2-3. Include

Туре	Posi	Offset	Ope	Len	Data	
	1					2

Set a rule for a line with a string or character to be displayed. Editing procedure is similar to Line break (4-2-1).

4-2-4. Exclude

Type	Posi	Offset	Ope	Len		Data	
							ľ
.1							
Ne	w) [E	dit		elete	ר	2

Set a rule for a line with a string or character to be concealed. Editing procedure is similar to Line break (4-2-1).

4-2-5. Invalid

Hexa Nor Hexa Nor	e O	>=	0	AD	1
Hexa Nor	-			1 FW	
	ie O	-	0	20 20 20 20 20 20 20 2	J.
				2	

Set a rule to discard a string or character.

Editing procedure is similar to Line break (4-2-1).

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4-2-6. Replace

Type Old data	Type New data		
lexa 1014	Hexa 20		
	T T	Data Type Hexa	
	_	Old Data 1014	
		Data Type Hexa	
		New Data 20	
New	it Delete	Position None 🛩 Offset	0

Set a rule to replace a word or character to another.

Data type: Choose a type of data. Data types must be either 'Hexa' or 'Ascii'.

Old data: Enter data string that needs to be replaced.

New data: Enter a new data string that will take a place of the Old Data.

Position: Select a position to search the data string (ex. Start to search from the beginning)

4-2-7. Event

Туре	Data	Notify			
				Data Type New Data	Hexa v
New	Edit	Delete OK	Cancel		OK Cancel

Set a rule to trigger a beep, mark or popup event.

Data type: Choose a type of data. Data types must be either 'Hexa' or 'Ascii'.

New data: Enter a new data string that will take a place of the Old Data.

Notification: Select a method of event.

4-2-8. Additional

Type	Posi	Offset	Оре	Len		Data		-
								-
								~
	1	_		_		_)	-
Ne	SW.	Ed	dit	1	Delete	-		

Set a rule to add a string or character.

Editing procedure is similar to Line break (4-2-1).

4-3. Database Setup

Database file(s) must be created for each devices registered under Device section.

Supported database type: Microsoft Access and SQL server, SQL Server 2005, MySQL

4-3-1. Microsoft Access

				_	
	Devices	Data Data Base	tem Search	XML.	Connecting
Devices					
	Devices	NCR POS system			
	Select Database	Microsoft Access		9	
Data Base					
	DB Pwb	_		-	
			(Put.	
		Create Database Ter	Database Com	aut Database	
		_			

Select folder to create DB and click Create Database, Test Database, Compact Database in order to create database and test it.

4-3-2. SQL Server, SQL Server 2005 and MYSQL

	Devices	Data	Data Base	hem Search	XML	Connecting
levices						
	Devices	NCR POS	system			
	Select Database	SQL Ser	er :		9	
	Server DB Nome User Possword					

Fill out SQL Server name, DB name, User name SQL server and, Password. Click in order: Create Database -> Test Database.

4-4. Item Search Setup

Item Search allows users to register keywords ahead of time and use these keywords to search recorded text data transmitted from the external device. When searching for a specific item, the range of the quantity and the cost of the item can be used. (Accuracy of this feature is completely depending on the data input format of the device used.)

			Pos Setu	,			
	Devices	Dela	Dala Base	Hem Search	XMI,	Connecting]
	Devices	LPOS system		T			
Item Search							
	-		tem Nome		-		
					Lat		
			New	Mody	Delete		
			-		Sever & Closer	0 00	çal

Devices: Select a POS Device.

New: Click to register an item.

Modify: Click to modify selected item.

Delete: Click to delete selected item.

The item registration window will appear as follows.

First Check	KNot Select	t Data>
O Text	Validate	Not Use
	Include	TOTAL DUE
	Exclude	
• XML	Element	
	Attribute	
User Table	Table	
	Field	
🔽 Treat as Number	First	
Pre-Defined Value		

Item Name: Enter the name of the item that will be used from Item Search.

First Check: Select to perform the search using previously registered Item before searching for the Item. However, if the type of the search is XML or User Table, then First Check Item must have a Pre-Defined Value.

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Text: Select to search item from text data input.

- Validate: Determines the validity of the text data input before searching for an item by checking whether the input data begins or ends with a specific character or number
 - -- Not Use: Select to disable this feature.
 - -- Start with Character: Select if the text data input starts with a character (including special characters.)
 - -- End with Character: Select if the text data input ends with a character (including special characters.)
 - -- Start with Number: Select if the text data input starts with a digit.
 - -- End with Number: Select if the text data input ends with a digit.
- Include: Enter the name of the item which will be searched.

- Exclude: If the text data contains the item, but it also contains undesired item, then enter the undesired item in order to exclude the text data from the search.

Note: The order in which items are searched is as follows: Validate -> Include -> Exclude.

XML: XML can only work if the data transmitted from POS is in XML format and uses SQL Server 2005.

- Element: Enter an element of XML data.
- Attribute: Enter the attribute of the element.

User Table: User Table can only work if the data transmitted from POS is in <u>XML format</u>, and Microsoft Access, SQL Server, or SQL Server 2005 can be used as the database. Note that "User Defined Table" from XML setting must be defined before using this feature.

- Table: Select a table that has been defined from XML setting.

- Field: Select a field of the selected table in which the search will look for the text data registered as Item Name.

Treat as Number: If a text data that contains the searching item also contains numerical data, then use the numerical data as a number.

- First: Select to use the first numerical data of the text line.

- Last: Select to use the last numerical data of the text line.

Note: Only Items that are registered as "Treat as Number" can be searched using a range of values. XML search does not support "First" and "Last", and it recognizes the value of fields as a numerical data.

Pre-Defined Value: Select to define a searching condition ahead of time.

The system will perform another search for another Item from the search result under the Text search method.

4-5. XML Setup

XML configuration is used to receive XML data from POS or Access Control.

Devices Data Data Base Hem Search XML Cennecting Devices XML PDS # Persing C:(Program Files(D)/VIS DVR(D/Vpri_sextrans.xi) Browse Validate Data Base C:(Program Files(D)/VIS DVR(D/Vpri_sextrans.xi) Browse Validate									
Devices XML POS Persing CIPtogrem Files(DMS DVPI(DMpm_sectems.xs) Browse Validate Data Base CIPtogrem Files(DMS DVPI(DMpm_dbtens.xs) Browse Validate	Devices	Data	Data Base	Nem Search	XML.	Connecting			
Parsing C:(Program Files)(DIVIS DVPI(DV)umLseuthans.xs) Browse Validate Validate Data Base C:(Program Files)(DIVIS DVPI(DV)umLstatems.xs) Browse Validate	Devices	XML POS							
Date Base C:Program Filed/DWIS DVP(DMyml_db/tens.xsl Boowse Validate	Parsing	C-IPhogram P	iles (DMS DVPs)	Memi_textrans.xsl	Browse				
	Data Base	C(Program F	iles/DMIS DVPhD	Myml_dbtrens.xsl	Browse				
User Defined Table Make		User Define	d Table		Make				

Devices: Select a POS Device (Only devices that support XML will be listed.)

Parsing: Select a XSL Transformation file which will be used to display only a desired field from the received XML data (Parsing is required for <u>XML Equipments.</u>)

- Validate: Checks to see if selected XSL Transformation file is valid.

Data Base: Select a XSL Transformation file which will be used to handle XML data as desired. (If database is disabled, the contents of the received data will stay the same as it was parsed by "Parsing".)

User Defined Table: Allows users to create a user-defined table from a desired XML formatted data that makes Item Search easier and faster.

- Make: Creates a Table. Please refer to the example on the next page.

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Example: Users can create a User-Table as the following screen-shot if the data can be formatted as below using Parsing or Data Base

Data formatted by Parsing
<html></html>
<transactiontype></transactiontype>
<timestamp></timestamp>
<param name="" value=""/>

Field Ty	pe	Root Element	Sub Element	Element Type	Element Len	
TOOL		TransactionType		TEXT	50	(=
TOOS	-	TimeStamp		TEXT	50	Element Add
TOOS	-	Param		TEXT		Element Delete
UB	-		Name	TEXT	50	
RUB .	-		Value	TEXT	50	Create
						Test
						Close
						Close
						Close
						Close
						Close
						Close
						Close
						Close
						Close
						Close
						Close
						Close
						Close
						Close
						Close
						Close
						Close
						Close
						Close
						Close
						Close
						Close

-- Element Add: Adds an element.

- -- Element Delete: Deletes an element.
- -- Create: When finished defining a Table, click "Create" button to create the User Table on the database.
- -- Test: Tests the validity of the selected table.

4-6. Connecting Setup

Communication with External device can be established by both Serial port and TCP/IP.

Note: "Com Setup" and "Lan Setup" cannot be accessed while the Main Application is running.

4-6-1. Com Setup

	Devices	Data	Data Base Ree	n Search XML	Connecting
Con Setup COM 1 COM 2	Devices	NCR	905 system		
Display Setup	Port Setter	19			
	1		Desire D	Not Colored and an	Not Colore
			Speed	9609	wit select []
			Drein bit	8	2
			Parity	Nane	(v)
			Stop bit	1	2
			Flow Control	Nane	2
	Connect T	est			
				6	Test data capturing

The list of the COM ports that can be used under the system will be listed on the left portion of the screen. Select the port where external device is connected to configure.

Note: If there are more External devices than available ports, COM port expansion card or USB to COM port converter may be used to add more ports.

Devices: Select a device that will be linked to.

Port Setting: Configure them the same way as the configuration of the external device. The default value displayed is a commonly used configuration.

- Device ID: Set the range of the ID in case that identical Access Controls are bundled together. This option is only available with certain Access Controls integrated with DVR products.

Connect Test: When all configurations are made, "Test Data Capturing" button can be used to check the data transmitted from the external device. If you are unable to check the transmission of date, make sure that the connection with external device and Port Setting are made correctly. (Test cannot be performed with Access Controls. The only way to verify the data is by running the Main Application.)

* If nothing comes up in Test data capturing, check the setting value and cable connection

4-6-2. Lan Setup

	Devices	Data	Data Base	Hem Search	XML.	Connecting
Con Setup Lan Setup © LAN 1 0 LAN 1	Devis	ans NCR F	105 system		Ð	
· LAN -	Port Se	rtting				
LANS LANS			Device ID Protocol Type Port Address	Nu UD	Select v - P 00	Net Select 💌
LAN 25 Depley Setup	Conne	st Test				
	Connor				C	Test data capturing

* Multiple external devices can be connected with a single TCP/IP connection.

Each device must be given a unique port number.

The connection with multiple external devices that support TCP/IP is possible using a single TCP/IP connection. Each external device must use different port number in case that multiple devices are connected to the system at the same time. Select an entry from LAN 1 to 16(32) from the list

Devices: Select a device that will be linked to.

Port Setting: Set this section same as the external device's configuration.

- Device ID: Set the range of the ID in case that identical Access Controls are bundled together. This option is only available with certain Access Controls integrated with DVR products.
- Protocol Type: Supports either TCP or UDP (if the external device supports both protocol types, UDP is recommended). Choose TCP Client for Access Controls, otherwise choose TCP Server.
- Port: Select the same port as the external device. If multiple external devices are connected through a
- LAN, then each device must use different ports.
- Address: Enter the IP address of the external device if TCP Client is selected.

Connect Test: When all configurations are made, "Test Data Capturing" button can be used to check the data transmitted from the external device. If you are unable to check the transmission of date, make sure that the connection with external device and Port Setting are made correctly. (Test cannot be performed with Access Controls. The only way to verify the data is by running the Main Application.)

* If nothing comes up in Test data capturing, check the setting value and cable connection

4-6-3. Display Setup

	Devices	Data	Data Bas	e Hem Search	XML	Connecting
	Conne	ct				
itup hup			Connect Type	Not Select	~	
y Setup M 1			Device ID	Not Select		
M 2 M 3			Sub device ID	Not Select	-	
14						
6	Font S	elect				
9			Text Font	Font		_
110				AaB	bCc123	
M 12 M 13						-
M 14	Display	Option				
116			Text Position	0		
			Text Duration	0 Millisecor	nd	
			Display Line	by transaction	0	ines
			Display Text	Screen Splite	Coptur	ed Image
			Use Overlay	Not Use 🗹		

Allows users to set the font and display option of each camera that are linked to an external device.

Connect: Select a device that will be linked to the camera.

- Connect Type: Select a previously configured COM/LAN device number.
- Device ID: Select the ID of the device if available.
- Sub device ID: Select the ID of the sub-device if available.

Font Select: Click "Font" button to change the font, size, color, etc of the text data.

Display Option

- Text position: Enter the vertical starting position of the output. Default is set to top of the screen. As number increases, text will be displayed further from the top.

- Text duration: Enter the duration of text to stay on screen in milliseconds (1/1000 second.)

- Display lines: Check "By transaction" to display text data until the transaction break is reached. Unchecking "By transaction" and entering a numerical value in "lines" will force the system to display only given number of lines, and next text output will be displayed after clearing the screen.

- Display Text: Select lines of text data to be displayed and recorded on the image when the number of lines to be displayed exceeds the available height of the image displayed on the screen.

-- Screen split – the number of lines to be displayed at once will be automatically reduced to fit into the image displayed and scroll. Recording will be kept in same manner. This option will override the "lines" assigned at "Display lines" section if necessary.

-- Captured image - the number of lines of text data will be displayed and saved based on the height of the image recorded. If a text overlaid channel is displayed smaller size than actual recording resolution, text lines displayed beyond the height of the displayed image will be invisible. To make all text lines visible under this option, the text overlaid channel should be displayed properly.

- Use overlay:
 - -- Not Use: Select to disable this feature (Recommended.)

-- Use: Select to combine text and video input into one single image. (The text data might be displayed after the overlaying process depending on the product.)

-- Hidden: Select to hide text data on main screen, but still record text data and make it searchable.

Note: Text outputs look clearer on data that do not use overlay feature.

5. Text Data Search (Smart Search)

Once External device setup is finished, the Main Application will display text transmitted from external devices as the above screenshot. Each video and text data are recorded instantly, and data transmitted from external device can be searched directly using Smart Search.

Sm	ort Search		
		Maxim TEXT Pram: To: Constant Condition1: Condition2: Condition2: Condition2: Condition2: Condition2: Condition3:	2401-2007 • 55555 PM ÷ 2401-2007 • 55555 PM ÷ 2401-2007 • 55555 PM ÷ 2401-2007 • Г No Select • Г • •
N 1234	Dete/Time C. Text 2007-01-02 17:58:00 1 1 Spin 2007-04-02 17:58:00 1 1 Spin 2007-04:02 17:58:00 1 1 Spin 2007-04:02 17:58:00 1 1 Spin 2007-04:02 17:58:00 1 1 Spin	Ar Big Ble 3/1 CM yr Big Ble 3/1 CM yr Big Ble 3/1 CM apProxCert27 by Big Ble 3/1 CM	Seach Prop
6 7 8 9 10 11 12	Totol 02:17:58:02 1 1 1 1 8 2 2007-01:02:17:58:02 1	925515000000000 1pP190C0x122 TOPE TO MEMO 8 PP25 TIPH0000 0 8 ULE 0TAL LDUE 0755 TIPH0809 0	A Stap France 0 2 4 5 1
13	2007-01-02175814 1 1 Sha 2007-01-02175816 1 cccT	Doge 1202	Close

Select a date, time, and camera to begin the search. (From, To, Camera)

All data within the given range will be retrieved if search is performed with all conditions set as "No Select" Images can be saved and printed.

Select "Full Text Search" and enter a text string as the following screenshot to search for data that corresponds to the text string.

Smart Search						
amil) 1/2/200	104	1257.02	11 12	Motion TEX	т	
a strategy be				From:	2-01-2007 • 6:00:00 PM	-
RECALL	10	R BRAY		Ter		-
10100	1		-1.79	10:	2-01-2007 • 6:05:00 PM	-
1.16.5		ASSET 11		Camera:	CAM1 *	
7 7 7 7 1 1 1 1 1	Y	20 CR	1000	0		
115				Condition1 :	Pull Text Seer • I I subtotal •	
	-		4851	Condition2 :	[No Select] •	
1 Contraction	- 11	18	4501	A		_
118	6.		0:001			
Deter/Time	C.	Terr):001			
Date/Time 7-01-02 18:00:05	C		123	Clear Area	Search Sto	op
Dete/Time 7-01-02 18:00:05 7-01-02 18:00:13	C. 1	Text SUBTOTAL SUBTOTAL	1.79	Clear Area Play	Search Sto	op
Dete/Time 7-01-02 18:00.05 7-01-02 18:00.013 7-01-02 18:00.20	C. 1 1	Text SUBTOTAL SUBTOTAL SUBTOTAL	1.79 0.00 0.00	Clear Area Play	Search Sto	op
Dete/Time 7-01-02 18:00:05 7-01-02 18:00:05 7-01-02 18:00:20 7-01-02 18:00:20 7-01-02 18:00:20	C. 1 1 1	Text SUBTOTAL SUBTOTAL SUBTOTAL SUBTOTAL	1.79 0.00 0.15	Clear Area Play	Search Sto	op
Dete/Time 7-01-02 18:00:06 7-01-02 18:00:13 7-01-02 18:00:27 7-01-02 18:00:27 7-01-02 18:00:27	C 1 1 1 1	Text SUBTOTAL SUBTOTAL SUBTOTAL SUBTOTAL SUBTOTAL	1.79 0.00 0.00 0.15 5.69	Clear Area Play	Search Sto	op
Dete/Time 7-01-02 18:00.06 7-01-02 18:00.13 7-01-02 18:00.20 7-01-02 18:00.38 7-01-02 18:00.38 7-01-02 18:00.46	C 1 1 1 1 1	Text SUBTOTAL SUBTOTAL SUBTOTAL SUBTOTAL SUBTOTAL	1.79 0.00 0.00 0.15 5.63 -5.69	Clear Area Play	Search Sto	op 3
Dete/Time 7-01-02 18:00:06 7-01-02 18:00:06 7-01-02 18:00:20 7-01-02 18:00:20 7-01-02 18:00:27 7-01-02 18:00:46 7-01-02 18:00:46 7-01-02 18:00:54	C 1 1 1 1 1 1	Text SUBTOTAL SUBTOTAL SUBTOTAL SUBTOTAL SUBTOTAL SUBTOTAL	1.79 0.00 0.00 0.15 5.69 5.69 5.69	Clear Area Play I	Search Sto	op 3
Dete/Time 7-01-02 18:00:05 7-01-02 18:00:05 7-01-02 18:00:27 7-01-02 18:00:27 7-01-02 18:00:28 7-01-02 18:00:28 7-01-02 18:00:58 7-01-02 18:00:58 7-01-02 7-01-02 7-01-02 7-01-02 7-01-02 7-01-02 7	C 1 1 1 1 1 1 1 1 1 1	Text SUBTOTAL SUBTOTAL SUBTOTAL SUBTOTAL SUBTOTAL SUBTOTAL SUBTOTAL	1.79 0.00 0.00 0.00 0.00 0.05 5.69 5.69 5.69	Clear Area Play	Skip Frame 0 🔹 🔹 🕨	op 3
Deter/Time 741-42 180003 741-42 180013 741-42 180020 741-42 180020 741-42 180020 741-42 180020 741-42 180046 741-42 180046 741-42 180054 741-42 180054 741-42 180151	C 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Text SUBTOTAL SUBTOTAL SUBTOTAL SUBTOTAL SUBTOTAL SUBTOTAL SUBTOTAL SUBTOTAL SUBTOTAL	2:001	Clear Area - Play 	Skip Frame 0	op 3
Dete/Time 7-01-02 18:00.05 7-01-02 18:00.13 7-01-02 18:00.13 7-01-02 18:00.27 7-01-02 18:00.28 7-01-02 18:00.54 7-01-02 18:00.54 7-01-02 18:00.54 7-01-02 18:01.02 7-01-02 18:01.03	C. 1 1 1 1 1 1 1 1 1 1 1 1	Text SUBTOTAL SUBTOTAL SUBTOTAL SUBTOTAL SUBTOTAL SUBTOTAL SUBTOTAL SUBTOTAL SUBTOTAL	2:001	Clear Area Play- '	Skip Frame 0 .	ор 3
Date/Time 7-01-02 180006 7-01-02 180013 7-01-02 180013 7-01-02 180020 7-01-02 180038 7-01-02 180038 7-01-02 180038 7-01-02 180132 7-01-02 180102 7-01-02 180121 7-01-02 180132	C 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Text SUBTOTAL SUBTOTAL SUBTOTAL SUBTOTAL SUBTOTAL SUBTOTAL SUBTOTAL SUBTOTAL SUBTOTAL SUBTOTAL	2:001 1.79 0.000 0.00 0.00 0.0000 0.000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.00000 0.0000 0.00000 0.00000 0.00000 0.00000 0.00000000	Clear Area Play ,	Skip Frame 0 .	ор 3
Dete/Time 701-02 180005 701-02 180005 701-02 180013 701-02 180027 701-02 180027 701-02 180027 701-02 180027 701-02 180054 701-02 180150 701-02 180121 701-02 180133 701-02 180150	C. 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Text SUBTOTAL SUBTOTAL SUBTOTAL SUBTOTAL SUBTOTAL SUBTOTAL SUBTOTAL SUBTOTAL SUBTOTAL SUBTOTAL SUBTOTAL SUBTOTAL SUBTOTAL	2:001 1.79 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00	Clear Area - Plav - I -	Skip Frame 0 . Save Phint	3
Dete/Time 7-01-02 18:00:05 7-01-02 18:00:13 7-01-02 18:00:20 7-01-02 18:00:20 7-01-02 18:00:38 7-01-02 18:00:38 7-01-02 18:00:54 7-01-02 18:01:52 7-01-02 18:01:52 7-01-02 18:01:52 7-01-02 18:01:52	C	Text SUBTOTAL SUBTOTAL SUBTOTAL SUBTOTAL SUBTOTAL SUBTOTAL SUBTOTAL SUBTOTAL SUBTOTAL SUBTOTAL SUBTOTAL SUBTOTAL	2:001 1.73 0.00 0.00 0.15 5.69 5.69 5.69 5.69 0.00 0.00 1.79 0.00 0.00	Clear Area Play- ,	Skip Frame 0 • • •	ор 3
Debs/Time 7-01-02 1800.05 7-01-02 1800.01 7-01-02 1800.20 7-01-02 1800.20 7-01-02 1800.20 7-01-02 1800.20 7-01-02 1800.40 7-01-02 1800.40 7-01-02 1800.50 7-01-02 1801.21 7-01-02 1801.21 7-01-02 1801.21 7-01-02 1801.21 7-01-02 1801.21 7-01-02 1801.50 7-01-02 1801.50 7-01-02 1801.50	C	Text SUBTOTAL SUBTOTAL SUBTOTAL SUBTOTAL SUBTOTAL SUBTOTAL SUBTOTAL SUBTOTAL SUBTOTAL SUBTOTAL SUBTOTAL SUBTOTAL SUBTOTAL SUBTOTAL	2:001 1.79 0.000 0.00	Clear Area Play I	Skip Freme 0 Seve Print	ор 3

Select "Full Text Search" and enter a text string for each condition (Condition1, Condition2, Condition3) to search for data that correspond to all condition text string. (AND Operation)

Make a double click on an entry of the table that contains items found from the search to display a popup window as follows.



The window can be resized by clicking and dragging the corner with mouse.

It supports searching features like frame by frame, playback, and AVI saving.

5-1. Item Search

If items were registered from the setting, then searches can be performed easily and quickly for each item. The following is an example of items set under Item Search.

		Pos Setup			
	Devices Devices NCR PO	Data Data Base	Rem Search	h XML Connecting	
			-		
Item Search		First Check	(Not Select	(Data)	
	Transaction No. Total	O Text	Validate	Not Use	
			Exclude		
		● ×3/E.	Element Attribute		
		User Table	Table Field	No Item	
		Treat as Number	First	<u> </u>	
		Pre-Defined Value		OK Cancel	
			_		
		Pos Setur)		
	Devices	Pos Setup Data Data Base	Rem Search	h XML Connecting	
	Devices Devices NCR PO	Pos Setup Data Data Base S system	Rem Search	h XML Connecting	
Hem Search	Devices NCR PO	Pos Setup Data Data Base S system Dam Name	Mem Search	h XXML Connecting	
Hem Search	Devices NCR PO	Pos Setup Data Data Base S system hem Name First Check	Mem Search	h XML Connecting	
Item Search	Devices NCR PO	Pos Setup Data Data Base S system Barn Name Finit Check O Text	Rem Search	A XML Connecting	
Item Search	Devices NCR PO	Pos Setup Data Data Base S system Mem Name First Check Q Text	Rem Search	h XML Connecting	
Item Search	Devices NCR PO	Pos Setu; Data Data Base S system Rem Name First Check O Text	Perm Search	A XML Connecting	
Item Search	Devices NCR PO	Pos Setup Data Data Base S system Mem Name First Check O Text S >>>4_	Rem Search	h XML Connecting Data> V Int Use V	
Hem Search	Devices NCR PO	Pos Setup Data Data Base S system Pert Check O Text S >>ML User Table	Volidate Include Exclude Element Attribute Field	No filem v	
Item Search	Devices NCR PO	Pos Setup Data Data Base S system Parr Name First Obeck O Text O Text User Table	Perm Search	No fitem	
Hem Search	Devices NCR PO	Pos Setup Data Data Base S system Rem Name First Check Text S to be check S to be chec	Rem Search	No Rem	
Hem Search	Devices NCR PO	Pos Setup Data Data Base S system Rem Name First Check Text Solution Text User Table Treat as Number Phe-Defined Value	Rem Search	No Rem	

If items are registered as above, then the following item search can be performed on Smart Search.

<u>www.cctvone.com</u>

Motion TEXT	1		
From:	2-01-2007	• 6 00 00 PM	-
Te:	2-01-2007	. 6.05.00 PM	-
Camora.	CAM1 .		
Condition1	(No Select)	~ [
Condition2	Tel Text Search		
Condition3	Transaction No.		
i i			-
	Skip Freme		
		Sove	Print
	Motion TEX Prom: Te: Camera Condition2 Condition2 Condition3	Motion TD/T Prom. 2-61-2007 T8: 2-61-2007 Centres. Constition? Co	Motion TEXT Prom. 2-01-2007

Registered items will be listed on the drop-down menu of each condition of the Smart Search.



If a search is performed using "**Transaction No.**", then the search will list all data that contains the currently registered T# value.

Motion TEXT
Pros. 241-2007 • 800-00 PM
Te: 2-61-2007 💽 6.05:00 PM 🕂
Camora. CAM1 .
Condition1 Transaction N IT 2000
Condition2: [No Salect] • [7] -
Condition3 [No-Select] Y IT ~
Clear Alea Stearth Stearth Stearth
Skip France 0 •
Seve Print

While performing search using "**Transaction No.**", a value (e.g. 4994) can be entered, which can be used to display data that contain 'T#' and '4994'

<u>www.cctvone.com</u>

	e 51		1.0	Motion TEXT	1	
And in the local division	14		1.1	From:	2-01-2007	• 60000 PM
tales as in			1.00	To:	2-01-2007	• 60500 PM
Sector Sector	-		1.00	Comerco	CAN1 -	
and las on y	án.			Constrant.	formit 2	Je fan
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	5		1.1	Condition1	Total	- I - I - I
		THE		Condition2 :	[No Select]	- F *
	in the		1/	Condition3 :	[No Select]	· · · · ·
Date/Time	C. 11	1941 (MA)				Com I in
Date/Time 007-01-02 18:00:97 007-01-02 18:01:40 007-01-02 18:03:19	C 1	TOTAL DUE TOTAL DUE TOTAL DUE	1.94 1.94 1.94	Clear Area Play		Search Sup
Data/Time 007-01-02 10:00:07 007-01-02 10:00:07 007-01-02 10:01 19 007-01-02 10:04 55		Tent Total DUE TOTAL DUE TOTAL DUE TOTAL DUE TOTAL DUE	1.94 1.94 1.94 1.94	Clear Area Play	Skip Frame	Search Sup
Date/Time 007-01-02 10 00:07 007-01-02 10 00:07 007-01-02 10 00:19 007-01-02 10 00:45		Tent Total DUE Total DUE Total DUE Total DUE	1.94 1.94 1.94 1.94	Clear Area	Skip Frame	Search Suc j 0 v 4 6 1
Date/Time 007-01-02 10:00:07 007-01-02 10:00:140 007-01-02 10:03 19 007-01-02 10:04 55		Ted TOTAL DUE TOTAL DUE TOTAL DUE TOTAL DUE	1.94 1.94 1.94 1.94	Clear Area Play	Skip Freme	Search Suo

If search is performed using "**Total**", then the search will list all entries with "Total Due" string.

* 6.05.00 FM
• Ø 0.15 = 2
- FI - FI
Ì
Ì
0 × + + =

While performing search using "Total", a value(e.g.1.94) can be entered which can be used to display data that contain both "total due" and "1.94"

Check the checkbox that is located next to "Total" to perform a search within a range of values. (e.g. Entering "0.15~2" will only search data that corresponds to the given range of values.)

If the checkbox, located next to "Total", is checked, entering only the value of: The first field will search any entries with equal to or higher value than the given value. The last field will search any entries with equal to or lesser value than the given value. (Net Remote Smart Search requires both values)

* The search was able to retrieve data from a range of numerical values by recognizing the first text input as a numerical value because "Total" item was registered with "Treat as Number" option enabled and set as "First." This is why check button is activated in Smart Search.

5-2. Item Search (XML)

POS, which transmits text based POS and XML data, has many different ways of setting up its behaviors with "Item Registration" and "Smart Search."

The use of SQL Server 2005 as a database can replace the need for "User Table" by manually entering "Element" and "Attribute" in XML Configuration; however, <u>User Table is required in the absence of the SQL Server 2005.</u>

In case of using XML POS, when User Table is created, and Items are registered as following screenshot:

	_	_		-		_	-	
Devices	Dat	•	()ata Base	Hem :	Search	XMI.	Connecting
Devices	XM	L POS					5	
	[Piekt Tut		Lost Element	Sub /Jenwy	Summer Trace	flement (en	
Parsing	22	ROOT	1	ransaction		TEXT	50	Element/
		ROOT	• P	aran aran		TEXT	50	Element Da
		5.8	•		Name	TEXT	50	Contraction
		5.6	•	_	Value	TEXT	50	Create
Deta Bese								Close
	•							

Parsing: Select a XSL Transformation file to make sure that only desired fields of XML data, transmitted from POS, will be displayed (<u>Parsing is required when dealing with XML devices.</u>)

Data Base is optional.

		Pos Se	etup	
	Devices	Data Data Ba	se Nem Search XXXI. Connecting]
	Devices XML	Item Name	Not Select Data>	
Item Search	Transaction Date Time Name Value Bern code	 Test XML Mus Table 	Validate Net Use Include Exclude Element Athibute Table	
	<u>a</u>	Treat as Number Fre-Defined Value	Field Concel	

Table and Field will be allocated automatically when "User Table" is created, and "Item Name" will become an alias of "Field." Data search performed by Smart Search will be retrieved from the given field.

	Devices	Data Data Bas	ie Item Se	carch XML Co	nnecting
	Devices XML	Nem Neme	CNot Select	Data>	
tem Search		• Test	Validate	NotUse	
	Transaction Date Time Name Value Rem code	6 XML	Exclude Element		
		O UserTable	Table Field	USR_PARAM30_1CD0AD5	3
		Treat as Number Pre-Defined Value	First		

"Treat as Number" field is checked to enable the use of numerical data in the "f_value" field for the search.

		Poss	Setup
	Devices	Data Data I	Base Item Search XML Connecting
	Devices X	Item Name	Parrocost
Item Search		First Check	(Not Select Data)
	Transation	Ted	Validate Validate v
	Date Time Name		Exclude
	Value Item code	0 304,	Element
		O Liber Table	
		Oser rable	Field Lame
		Treat as Number	First
		Pre-Defined Value	Rem code
			OK Cancel

Enable "Pre-Defined Value" to enter the data value directly into the selected field and retrieve result from it.

CHINOS 1/2/2017 HUM 20 9/10	Motion TEXT
	Prom: 2-01-2007 . 6:00:00 PM
	To: 2-01-2007 • 6:59:59 PM
	Camera CAM2 -
	Condition1 : Name · [ham code ·]
	Condition2 : [No Select] * F *
A A AND A A A A A A A A A A A A A A A A	Condina): Interested al C
Success/Tal Num: 13821 Mum Code Success/Tal Num: 13321 Mum Code Success/Tal Num: 13322 Name Code	Clear Area Serech State
Success Till Num: 1332 There Code Subscription BV (Success Till Num: 1332 There Code Subscription: BV Success Till Num: 1332 There Code Subscription: BV Success Till Num: 1332 There Code AtDiscoption BV Success Till Num: 1332 There Code AtDiscoption Success Till Num: 1332 There Code AtSDiscoption Success Till Num: 1332 There Code AtSDiscoption	Skip France 0 • • • •
Success Till Num : 13322 Mem Code : SDescription : Pre	
SuccessTill Num 1332 Zhen Code 282000869Deser	Busine
	LIOSE LIOSE

Retrieve "Item Code" from the field that corresponds to "Name."

XML Characteristics -

Search cannot be performed using partial keywords in the field.

(e.g. "Item code" cannot be retrieved using a keyword like "Item".)

Even if an Item does not have "Treat as Number" feature enabled, all characters (including numbers) can be retrieved from a range of ASCII Codes.

Cam02 4/2/2007/FUH92/07/17	Motion TEXT	
	From: 2-01-2007 • 6:00:00 FM	-
	To: 2-01-2007 . 659:59 PM	-
	Camera CAM2 -	
AND A REAL PROPERTY AND	Continut: Draw all han ends a	-
	Condition2: Value + P 50 - 60	
	Condition3: [No Setect] • F ~	
	Clear Area Search	
uccessTill Num: 13327 Rem Code: 540 esception: BAD uccessTill Num: 13322 Rem Code: 540 esception: BAD uccessTill Num: 13322 Rem Code: 540 esception: BAD	Play	
accessTill Nam: 13822 Rem Code: 540 esception: BAD accessTill Nam: 13322 Rem Code: 540 esception: DAG accessTill Nam: 13322 Rem Code: 540 esception: BAG accessTill Nam: 13322 Rem Code: 540 esception: BAG	Plav	_
access T ill Nam 1322 Rem Code 54 escription BAD uscess T ill Nam 13322 Rem Code 54 escription BAD uscess T ill Nam 13322 Rem Code 54 escription BAD uscess T il Nam 13322 Rem Code 54 escription BAD uscess T il Nam 13323 Rem Code 55 escription BAD uscess T ill Nam 13333 Rem Code 55 escription RED uscess T ill Nam 13335 Rem Code 55 escription RED uscess T ill Nam 13355 Rem Code 55 escription RED uscess T ill Nam 13355 Rem Code 55 escription RED uscess T ill Nam 13355 Rem Code 55 escription RED uscess T ill Nam 13355 Rem Code 55 escription RED	Play	
access Till Num 1332 Num Code 541 esception BAC access Till Num 1332 Nam Code 541 esception BAC access Till Num 1332 Nam Code 545 esception BAC access Till Num 1333 Nam Code 545 esception R46 access Till Num 1333 Nam Code 545 esception R46 access Till Num 1333 Nam Code 555 esception R46 access Till Num 1333 Nam Code 556 esception R46 access Till Num 1338 Nam Code 546 esception R46 access Till Num 1388 Nam Code 546 esc	Play	
Increas Tal Num 11322 Num Code 541 enception BAC uncess Tal Num 11322 Num Code 542 enception BAC uncess Tal Num 11323 Num Code 552 enception BAC uncess Tal Num 11323 Num Code 553 enception BAC uncess Tal Num 11323 Num Code 553 enception BAC uncess Tal Num 11323 Num Code 554 enception BAC uncess Tal Num 11323 Num Code 554 enception BAC uncess Tal Num 11323 Num Code 554 enception BAC uncess Tal Num 11323 Num Code 544 enception BAC uncess Tal Num 11320 Num Code 544 enception BAC uncess Tal Num 11320 Num Code 544 enception BAC	Play	-

After retrieving data with "Item Code" from the field that corresponds to "**Name**", perform a secondary search from the search result using another field that corresponds to "**Value**" to retrieve data that contains a value between 50 and 60. Here, "**Value**" Item has "**Treat as Number**" field enabled in order to activate the use of numerical data for the search.

If the field that corresponds to "**Value**" contains any other characters than numerics, then the search will not find any data and will display "Error, open recordset!" message.

Since "**Item code**" Item was registered with "Item code" string in Pre-Defined Value field, the search will retrieve data with "Item code" string in the corresponding field. And because Pre-Defined Value already contains a value, Smart Search will not accept a value for this particular case.

5-3. DVR-Net / DVR-Web

Execute Smart Search remotely from DVR-Net Application.

			totion Tent Prom 1 To 1 Campta 1 Candilion 11 Condition 21 Condition 31	2.8 610000 2.8 61059 CAM 01 Total Total Total Total Total Total	5earch	2
0007014401 010720174401 01142200001 01142200001 01142200001 01142200001 011420000000000000000000000000000000000	7074, 0.4 1074, 0.4	0.04 0.05 1.04 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0	j Silo Fra	ne (<u>0</u> _	<u> </u>	
	_			Save	Print	Cose

All Items registered from DVR are available, and its usage is identical to the Smart Search of DVR Main.

(Except that the Remote Search requires values in both fields $(0.15 \sim 2)$ when searching within a range of data, whereas DVR requires only one of them.)

All data that corresponds to "Total" Item with a value between 0.15 and 2 (that is, such data will contain "total due" string and a value between 0.15 and 2) will be retrieved from DVR.

There might be a transmission delay depending on the network status.

Run Search from DVR-Web

"Text Search" button will appear if DVR system has POS patch installed.

From		5:40:00 AM	÷		Search
To :		5:44:00 AM	*		Stop
Came	ra:	CAM 01	•		
Condi	ion 1 :	Total	• 0.15	~ 2	
Condit	tion 2 :	No Select	-	~	
Condil	tion 3 :	No Select	-	~ [End
No	Date/	lime	Camera	Text	
1	2007-0	6-04 05:40 56 093	01	TOTAL DUE	1.94
2	2007-0	6-04 05:41:12 281	01	TOTAL DUE	0.15
3	2007-0	6-04 05:42:10 109	01	TOTAL DUE	1.94
4	2007-0	6-04 05:42:26 375	01	TOTAL DUE	0.15
5	2007-0	6-04 05:43:24 187	01	TOTAL DUE	1.94
6	2007-0	6-04 05:43:40 421	01	TOTAL DUE	0.15

DVR All Items registered from DVR are available, and its usage is identical to the Smart Search of DVR Main.