
SYSTEM 500M Programming Manual - Rev. 4.1

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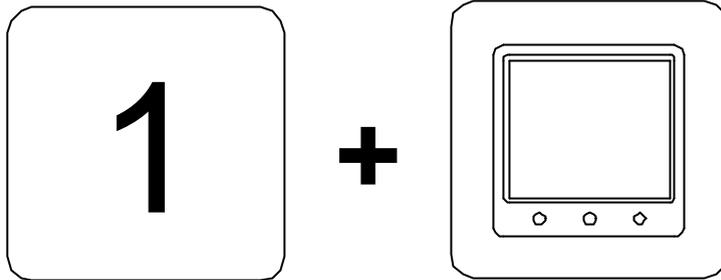
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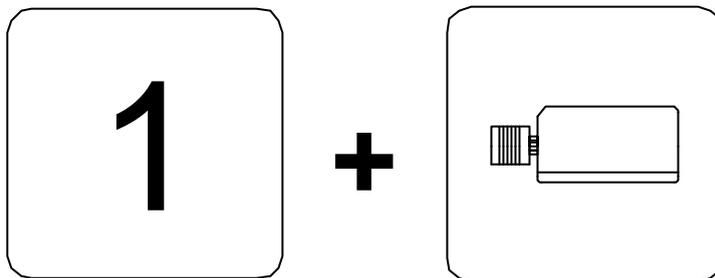
Please note:

Before programming of the SYSTEM 500M can start, a monitor and a camera has to be selected.

e.g.



and,



How to program?

Press the MENU key and a password menu will be displayed.

Password

Press the MONITOR key and enter the password. Press the MONITOR key again and the SYSTEM 500M SETUP menu will be displayed. Select the item to be programmed, from the SYSTEM 500M SETUP menu.

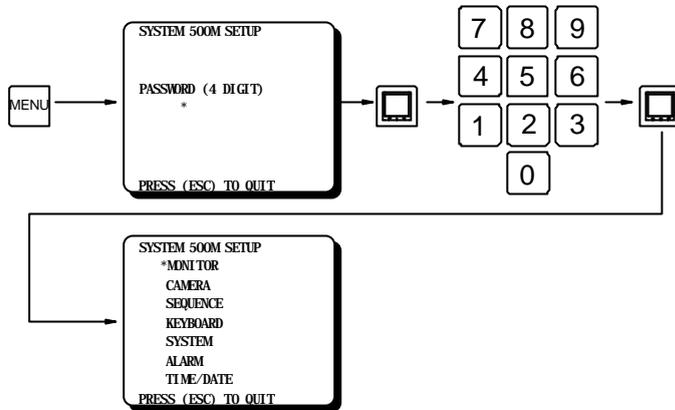


Figure 1, PASSWORD menu

If the password is incorrect, the system will return to normal operation. If no password (default) has been programmed, just press the MONITOR key twice.

Menu design

Figure 2 shows how the MONITOR menus have been designed, but all menu has been designed in the same format.

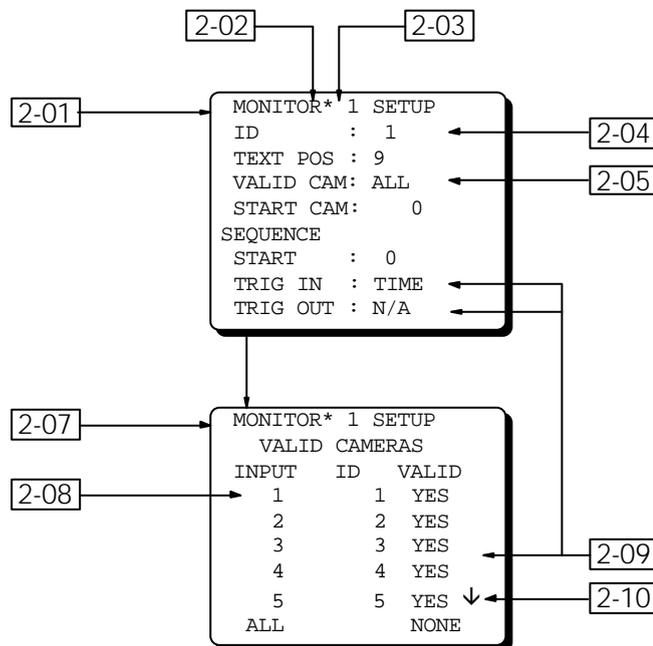


Figure 2, Menu design

The following is a short description of the different items in the menus:

Reference	Description
2-01	Monitor Setup Menu
2-02	Cursor: Used to point at a menu field to be edited. Use the MONITOR key to accept the field next to the cursor.
2-03	Index field: Used to select an alarm, camera, monitor and so on to program. The key 9 or the key 3 can be used to change the index, no matter where the cursor is positioned (refer to figure 3). The index field can also be changed by entering a new number directly (refer to figure 4).

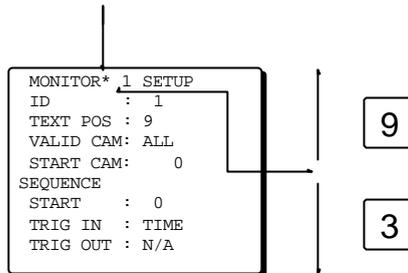


Figure 3, Change of INDEX number

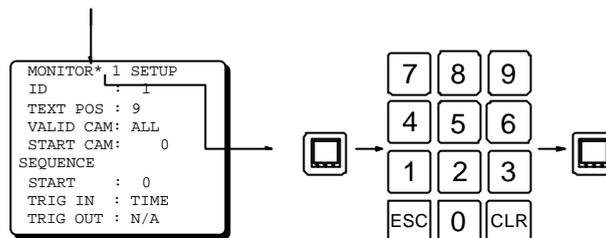


Figure 4, Change of INDEX number

2-04	Numeric field: Used to enter new ID's, text line positions, dwell time etc. If the number typed is outside the valid range the number will not be accepted when pressing the MONITOR key and the field will either be set to 0 or the previous value will be restored.
2-05	Menu field: Calls up a sub menu for further programming. Acceptance of a menu field results in a sub menu.
2-07	Monitor Sub menu
2-08	Sub Index field: Used to select the first camera, monitor, key or sequence entry on a page.
2-09	Choice field: The choice field steps through a number of pre-defined options.
2-10	More information marker: A small arrow in the lower right corner, which indicates more information either upwards or downwards.
	Text field: Used for entering of either camera or alarm text strings. Refer to figure 5.
	Info field: Read only field, i.e. these fields can not be changed - intended as information only.

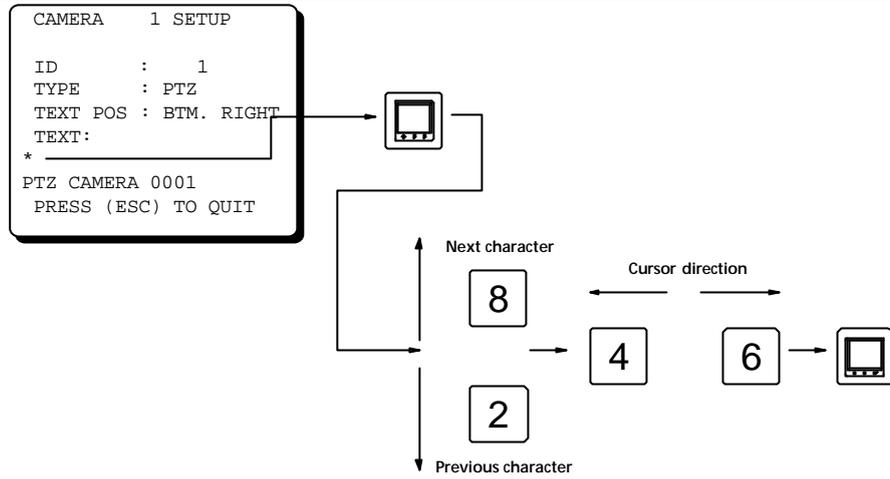


Figure 5, Text programming

Quit programming:

Press ESC in order to quit the actual menu and save the any changes made in this menu. Press MENU to quit the setup system while saving any changes made.

Keyboard layout

Great effort has been made in order to reduce the number of keys used to program the system:

Key	Pointer Mode	Edit Mode
	Acts as an enter key which is used to open and close the field where the cursor is positioned.	
	Used to quit programming if the key is used in the main menu. Using this key in a sub menu will accept any changes made and bring back the previous menu.	Used to cancel the changes made in a field. This key restores the field to the value it had before changes were made.
		In numeric fields this key set the field to 0. In text field this key deletes the character below the cursor.
	No function	Numeric key where an index, sub index or numeric field has been accepted.
	Use as scroll down in menus containing data about valid cameras, monitors or keys. This key will change the sub index downwards.	Numeric key where an index, sub index or numeric field has been accepted.
 	Use to move the cursor to the next field.	Numeric key where an index, sub index or numeric field has been accepted. Use to move to the next character in text fields.
	Use to change the index downwards one position, independent of the cursor position.	Numeric key where an index, sub index or numeric field has been accepted.
 	No function	Numeric key where an index, sub index or numeric field has been accepted. Use to move to the previous character position in text fields. Use to select previous choice in choice fields.
	No function	Numeric key where an index, sub index or numeric field has been accepted.
 	No function	Numeric key where an index, sub index or numeric field has been accepted. Use to move to the next character position in text fields. Use to select next choice in choice fields.
	Use as scroll up in menus containing data about valid cameras, monitors or keys. This key will change the sub index upwards.	Numeric key where an index, sub index or numeric field has been accepted.
 	Use to move the cursor to the previous field, or use for text programming.	Numeric key where an index, sub index or numeric field has been accepted.
	Use to change the index upwards one position, independent of the cursor position.	Numeric key where an index, sub index or numeric field has been accepted.
	Used to enter programming mode. In programming mode, used to quit the setup system, and save any changes made.	

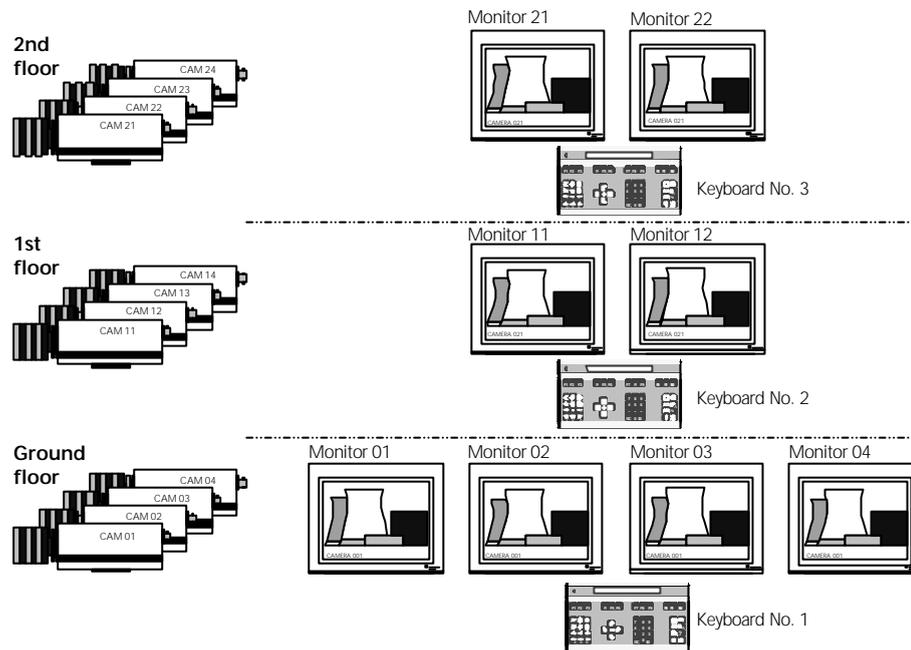
Monitor ID number and Valid Cameras

The monitor ID number is the number the operator has to call in order to operate this monitor. The reason for having both a physical number, which is the physical BNC-connector, and a logical ID monitor number is that this allows for a more flexible system design.

Let us assume that we have a system with 8 monitors installed in a three floor building. Each floor has its own monitor set for observation; with the logical numbering it is possible to number the monitors in a logical way:

Floor	Physical No.	Logical ID
Ground	1 - 2 - 3 - 4	1 - 2 - 3 - 4
1st	5 - 6	11 - 12
2nd	7 - 8	21 - 22

With the *Valid Cam* menu it is possible to reduce the number of visible cameras to the relevant ones only; i.e. valid cameras for e.g. the second floor monitors 21 and 22 are restricted to camera ID's 21 to 24.



Trig in - a video sequence is controlled by external equipment

The **Trig in** field is used to specify if the picture sequence on this monitor should be controlled from external equipment e.g. a Time Lapse VCR via an alarm input instead of time. Using this feature it is possible to record a large number of cameras on one tape.

The time lapse VCR record a number of frames from the first camera in the sequence, stop recording, ask for the next camera in the sequence by triggering the specified alarm input and then start recording again etc.

This feature can also be combined with the alarm features; meaning that the VCR relay in case of active alarms can temporarily switch the VCR to real time recording of the alarmed picture on the monitor output.

The **Trig in** feature will also allow manual control of the picture sequence from e.g. a push button.

Trig out - controlling external equipment from a video sequence

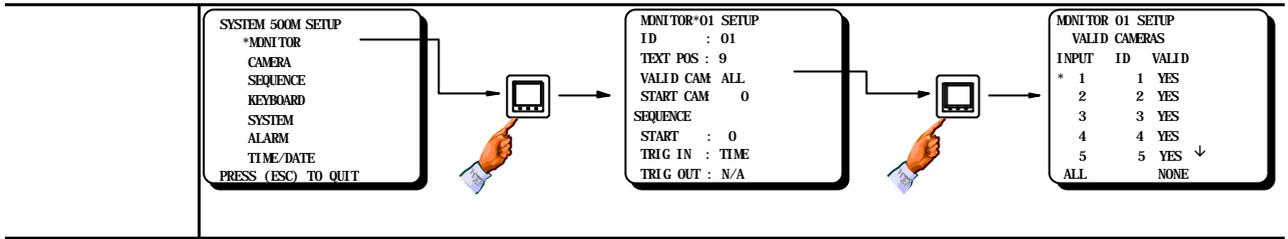
This feature will allow synchronised control of external equipment e.g. a frame store, when a picture sequence is running.

This can be used in connexion with a Time Lapse recorder; the system will tell the VCR when a new camera is present on the monitor output. When the VCR has been triggered it will record a number of frames.

Monitor Setup

Each monitor can be programmed with its own individual setup.

Menu Structure:



Programming:

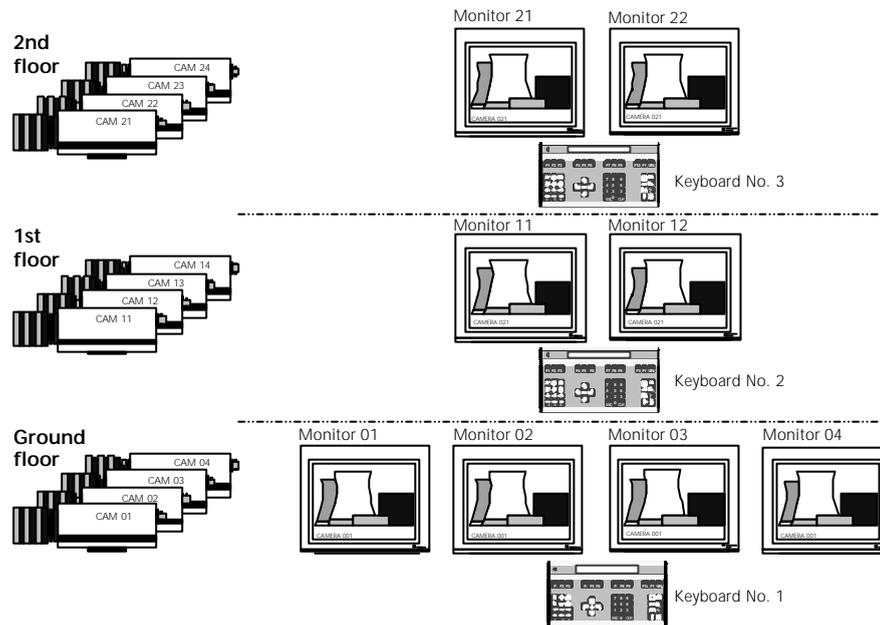
Field	Type	Description	Default	Valid
ID	Numeric	Assigning a logical ID number to a physical output number.	Physical = Logical	1 - 99
		Warning! It is possible (BUT NOT LEGAL) to attach the same logical ID number to more than one monitor.		
Text pos	Numeric	Set Camera text position between line 1 and 9. Line 0 disables the Camera text.	9	0 - 9
		Note! Position number 8 will clear camera text if the CLR key is pressed.		
Valid cam	Menu	Set which cameras should be valid for the selected monitor.	ALL	ALL SOME NONE
		Note! Although some cameras are set invalid they will be displayed on this monitor in alarm situations, if they are specified by alarms.		
		Warning! It is possible to delete all cameras for a monitor.		
Start-up cam	Numeric	Set which camera should be displayed on the monitor after reset.	0=None	1 - 999
		Note! This condition will be overridden by the Start-up seq settings.		
		Note! The start-up conditions can also be called by pressing the keys ESC + MON.		
		Note! Remote Cameras can not be selected.		
Start-up seq	Numeric	Set which sequence should be started on the selected monitor after reset.	0=None	All sequence ID's
		Note! This condition will, if different from 0, override the Start-up cam settings.		
		Note! The start-up conditions can also be called by pressing the keys ESC + MON.		
Trig In	Choice	If the sequence on this monitor (picture change) should be controlled from external equipment, specify the alarm input number used for control. If the sequence should use the dwell time set TIME.	TIME	TIME INP 13 INP 14 INP 29 INP 30
Trig Out	Choice	If the sequence on this monitor should trig external equipment set the alarm output number used. Otherwise set N/A.	N/A	N/A OUT 15 OUT 16 OUT 31 OUT 32

Camera ID number

The camera ID number is the number the operator has to call in order to view this camera. The reason for having both a physical number, which is the physical BNC-connector, and a logical ID monitor number is that this allows for a more flexible system design.

Let us assume that we have a system with 12 cameras installed in a three floor building. Each floor has its own cameras for observation; with the logical numbering it is possible to number the cameras in a logical way:

Floor	Physical No.	Logical ID
Ground	1 - 2 - 3 - 4	1 - 2 - 3 - 4
1st	5 - 6 - 7 - 8	11-12-13-14
2nd	9 - 10 - 11 - 12	21-22-23-24



Home position

A home position is a preposition, the camera station will default to automatically after a pre-programmed time of inactivity, the *Timeout* time. The *sequence prepositions* feature will inhibit the home position feature when active.

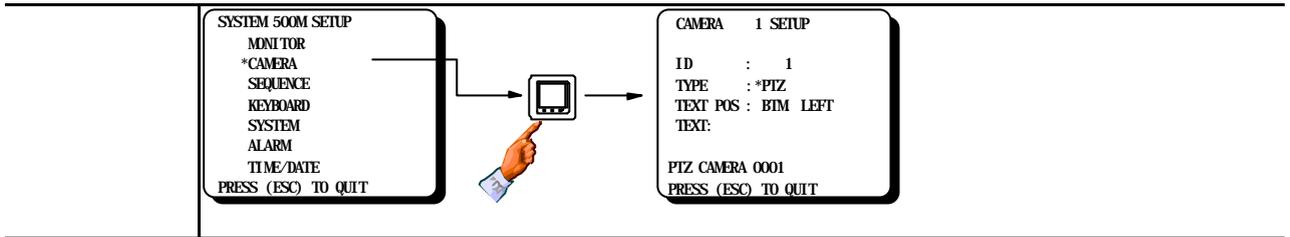
This feature is very convenient when several operators can control the camera station; when a new operator later selects the camera it has returned to its home position.

The home position feature is available in conjunction with the Series BDR-550 camera stations only.

Camera Setup

Each camera can be programmed with its own individual setup.

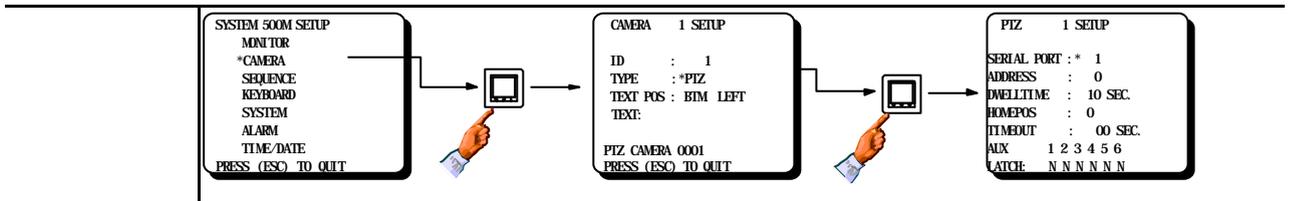
Menu Structure:



Programming:

Field	Type	Description	Default	Valid
ID	Numeric	Assigning a logical ID number to a physical video input number.	Physical = Logical	1 - 999
		Warning! It is possible (BUT NOT LEGAL) to attach the same logical ID number to more than one camera.		
Type	Choice/Menu	Set the type of camera control or equipment used with the selected camera. Note! For programming of prepositions refer to the installation manual for the BDR-55X Series Digital Camera Stations.	FIXED	FIXED PTZ VM12/14 VM30 VST10CA
Text pos	Choice	The camera text string can be positioned in one of the 4 corners of the monitor. Note! Changing the Text position will also affect the position of all other messages, and texts displayed on the monitor.	BOTTOM LEFT	BOTTOM LEFT BOTTOM RIGHT TOP LEFT TOP RIGHT NO TEXT
Text string	Text	Program up to 20 characters for camera identification.	CAMERA XXX (XXX = ID no.)	Max. 20 characters.

PTZ Submenu Structure:



Programming:

Serial port	Numeric	Set the serial port used.	1	1 - 2
Addr	Numeric	Set the address of the camera station belonging to this video input.	0	0 - 254
Dwelltime	Numeric	Set dwell time in seconds for the pre-position sequence.	10	0 - 255 sec.
Homepos	Numeric	Set which pre-position should be used as home position after time-out.	0 = Homeposition feature disabled.	0 - 30
Timeout	Numeric	Set time-out for home position (in seconds). The time-out is from the last command received by the camera station.	0	0 or 10 - 2550 sec.
Latch	Choice	580M/1801M: Set function of AUX relays. 1802M: Function is set in the Keyboard itself, see <i>Keyboard 180XM Set-up - page 48</i> .	LATCH = N	N = NO Y = YES

Serial port number

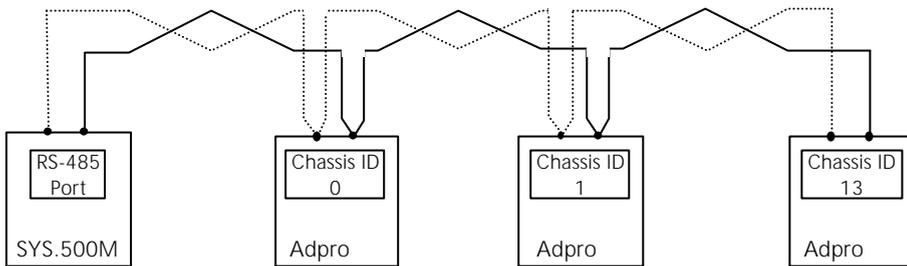
SYSTEM 500M is equipped with two serial ports, SIO 1 and SIO 2. Adpro equipment can be connected to one port only, since the other port has to be used for connection of the 1502M/1503M keyboard for control of the Adpro equipment.

Chassis ID

The Chassis ID is used in connexion with the Adpro equipment.

Up to 14 VST10 CA Fast Scan's can be connected and controlled via a common serial port. In order to distinguish between several units of the same type the chassis number is used. Two Video Motion Detection rack frames, with a total of 14 VM12/14 modules can be connected.

Note: maximum 16 units, VST 10CA and/or VM12/14, can be connected to the SYSTEM 500M, due to the SYSTEM 500M's maximum 16 camera inputs (518M).

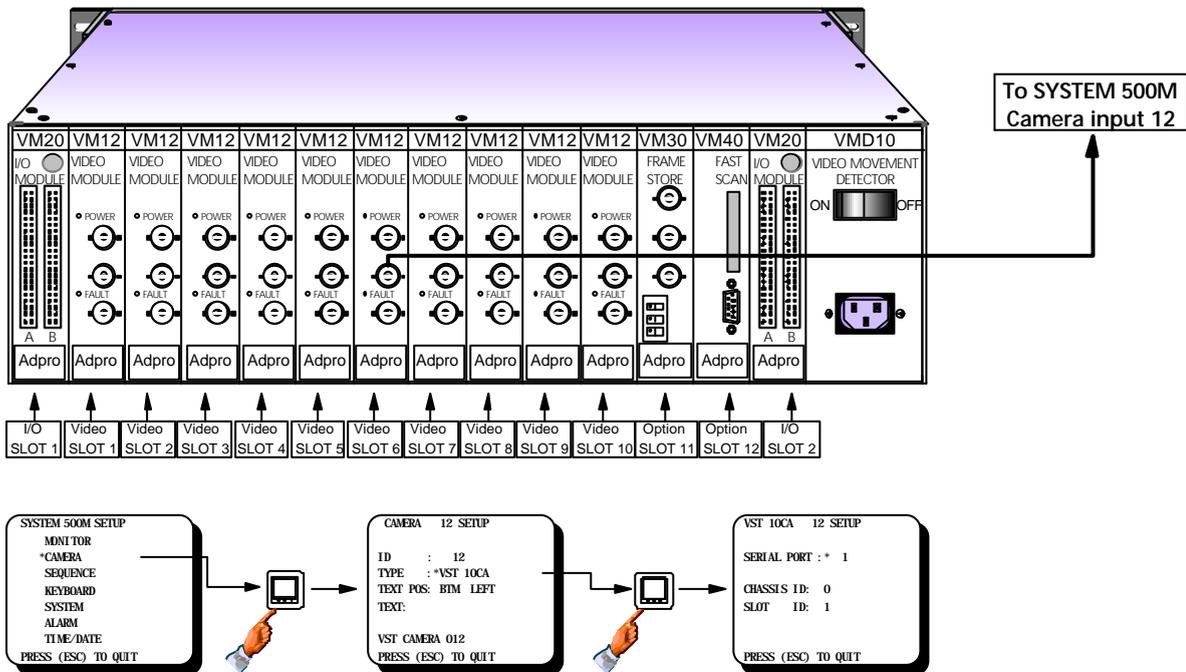


Example: Multiple units with different Chassis ID's on a common line.

Slot ID

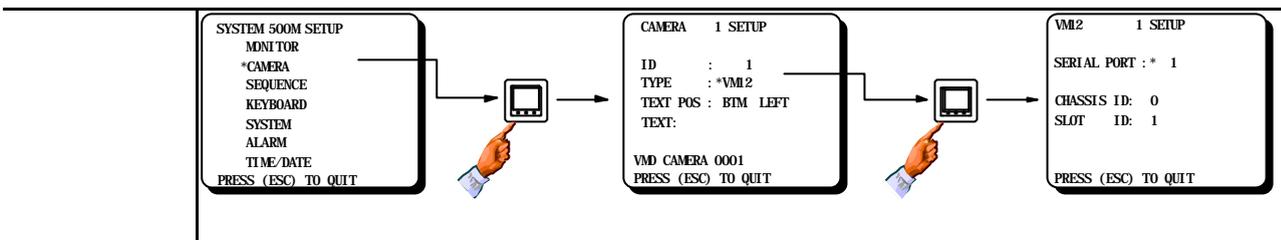
The SLOT ID is only relevant in connexion with the Adpro VMD rack frame. 12 slot positions are available, the VM-12/VM-14 Video Motion Detection board can be installed in slots 1-10. Note, that a VMD module always must be installed in slot 1. VM-30 Frame Store modules can be installed in slot 11-12.

Refer to the example below.



Example: Camera input 12 is connected to a VM-12 module installed in SLOT 6 of a VMD-10 rack frame.

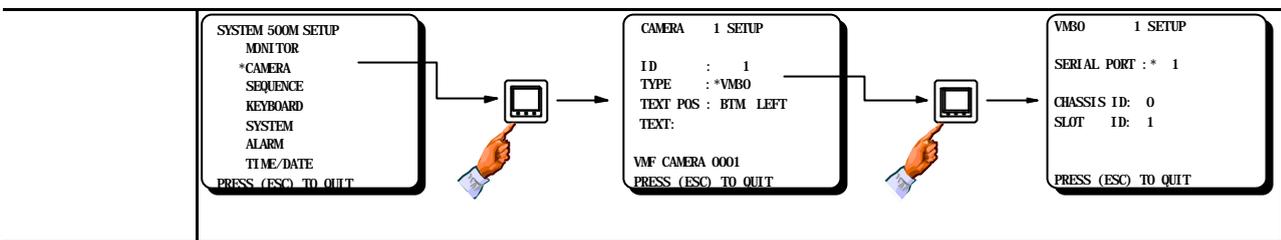
VM12/14 Submenu Structure:



Programming:

Field	Type	Description	Default	Valid
Serial port	Numeric	Set the serial port used.	1	1 - 2
Chassis ID	Numeric	In which VMD rack frame is the VM12/14 located.	0	0 - 13
Slot ID	Numeric	In which slot in the VMD rack frame is the VM12/14 located.	1	1 - 10

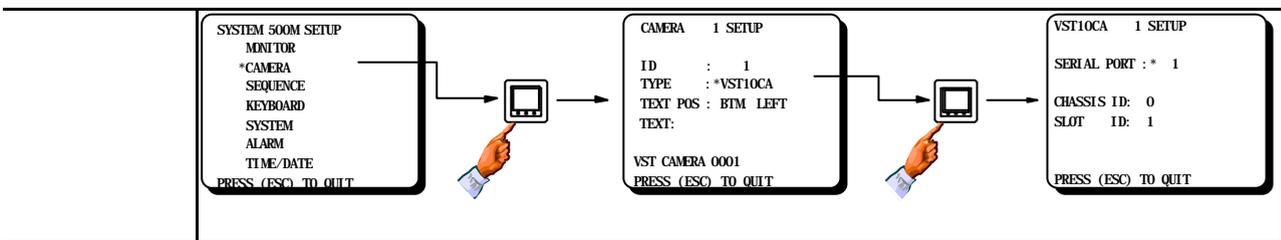
VM30 Submenu Structure:



Programming:

Serial port	Numeric	Set the serial port used.	1	1 - 2
Chassis ID	Numeric	In which VMD rack frame is the VM30 located.	0	0 - 13
Slot ID	Numeric	In which slot in the VMD rack frame is the VM30 located.	11	11 - 12

VST10CA Submenu Structure:



Programming:

Sio No	Numeric	Set the serial port used.	1	1 - 2
Chassis ID	Numeric	Chassis ID of the current unit.	0	0 - 13
Slot ID	Numeric	Not relevant with this equipment; fixed.	1	1

Using video sequences

Video sequences are automated change of cameras on a monitor, controlled either by time or by trigger pulses from external equipment.

Video sequences are used to replace quad-splitters or equivalent due to the higher picture resolution and lower installation costs.

The SYSTEM 500M contains eight different sequences which can be called to any monitor output, each with 64 camera- and individual dwell time entries. A video sequence can be called to several monitors.

The cameras can be viewed in any order, and the same camera can be included several times if necessary e.g. if the camera covers an entry gate.

Video sequences can also be started automatically after reset on selected monitors.

A video sequence can be stopped temporarily by pressing the HOLD-key once and restarted by activating the HOLD-key again. If the HOLD-key is kept depressed it works as a global hold for all running sequences.

It is possible to quick step through a video sequence using the SEQUENCE-key.

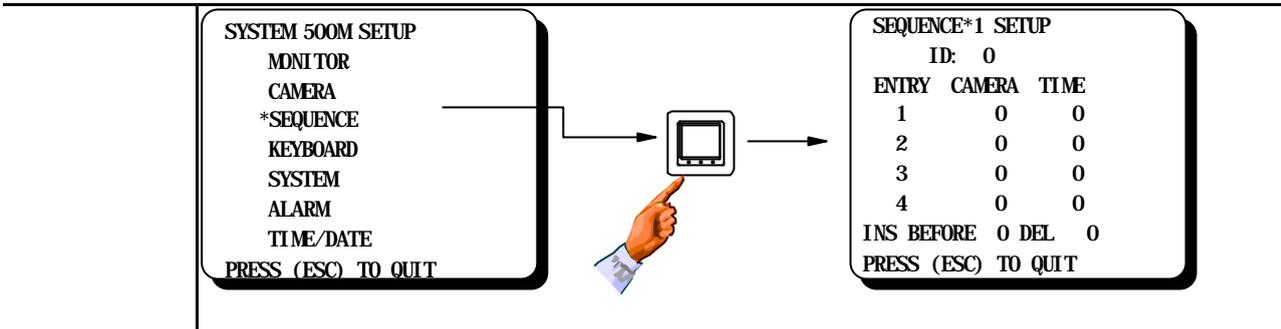
Also refer to the *Monitor Setup* section.

Note: The video sequences programmed here are not related to the sequences displayed in alarm situations.

Sequence Setup

Eight different sequences (SEQUENCE 1 to SEQUENCE 8) are available, each with 64 entries.

Menu Structure:



Programming:

Field	Type	Description	Default Value	Valid Entry
ID	Numeric	Assigning a logical ID number for this sequence.	0	1 - 999
		Warning! Remember to assign an ID before leaving the setup; otherwise the programming will be lost.		
Entry	Numeric	Each sequence can have up to 64 entries		
Camera	Numeric	Program the cameras for this sequence.	0	All camera IDs
		Note! Cameras can be handled in any order.		
Time	Numeric	Program the dwell time for each camera in seconds.	0	1 - 255
Ins Before	Numeric	To insert a new entry type the number of the entry you want the new entry to appear before.	0	1 - 64
Del	Numeric	The number of the entry to delete.	0	1 - 64

Note: In order to delete a complete sequence already programmed, assign the ID number 0 to the sequence.

Note: When all displayed entries are programmed, use the **[1]** key to display a new entry line.

Keyboard type; *Device*

Normally this field should be set to the actual keyboard type being used, but in certain situations it might be convenient not to do so:

By simulating a keyboard without display, using a keyboard with display, all display messages will be inserted on the monitor - not in the keyboard display.

Should the *Status* display be updated/monitor bar be displayed?

If the *Status* field is set to **OFF** and the *Device* field is set to **W/ DISPLAY** or **28XXM** the keyboard display is not updated.

If the *Status* field is set to **OFF** and the *Device* field is set **INTERNAL** or **W/O DISPLAY** the status bar is not shown on the monitor.

Keyboard *Priority*

The keyboard priority settings has effect in two situations:

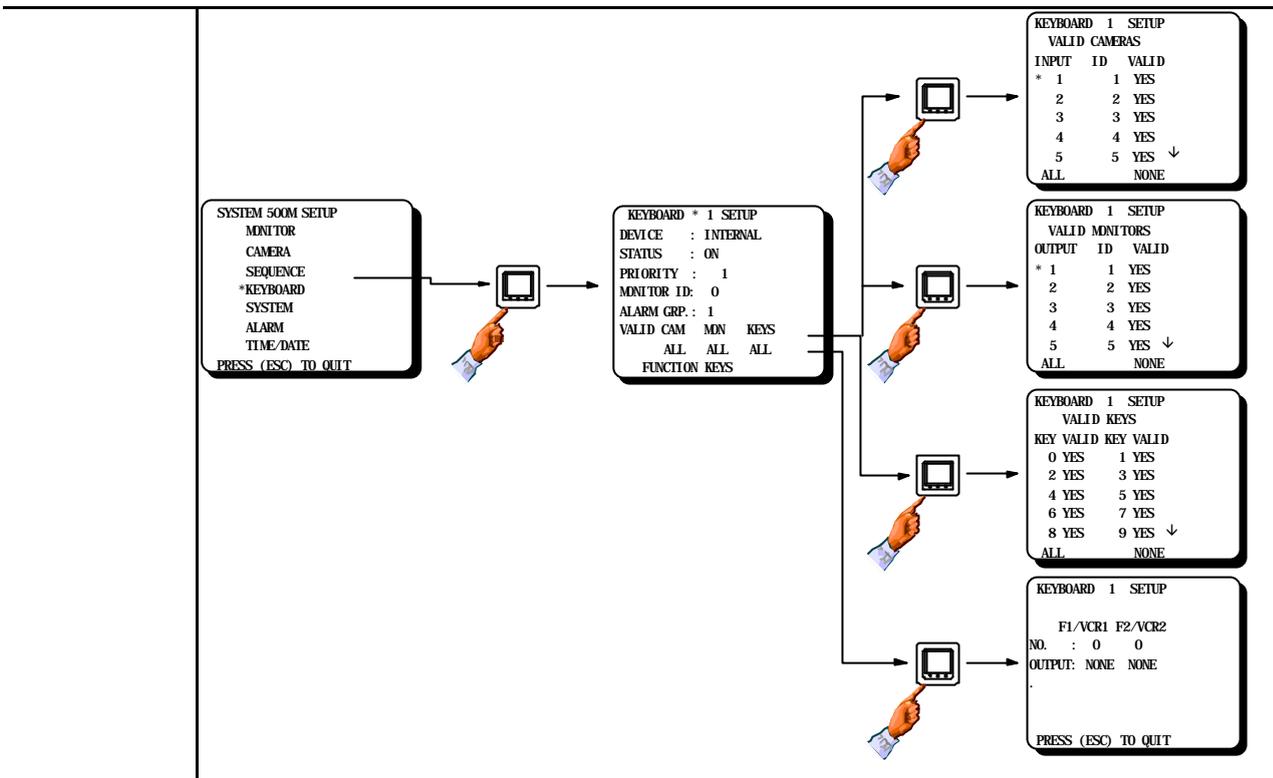
When a keyboard tries to take PTZ-control to a camera station which another keyboard having a higher priority currently is controlling, it will not be possible to obtain control to the camera station. If both keyboards has the same priority, it is possible to override the other keyboard by pressing the MONITOR-key again.

When a keyboard tries to select a certain monitor and another keyboard having a higher priority currently has selected the same monitor, it will not be possible to select the monitor. If both keyboards has the same priority, both keyboards can control the monitor simultaneously.

Keyboard Setup

The keyboard setup covers all 6 operator keyboards; the internal front plate keyboard and the maximum 5 external keyboards.

Menu Structure:



Programming:

Field	Type	Description	Default Value	Valid Entry
Device	Choice	Set the keyboard type for this keyboard.	W/O DISPLAY	INTERNAL W/O DISPLAY W/ DISPLAY 28XXM NOT USED
		<i>Note!</i> Keyb. 1 is always INTERNAL. (front) Keyb. 2 is always 150XM/28XXM on SIO 1. Make sure to set SIO 1 to RS-232 interface. Keyb. 3 is either 150XM/28XXM on SIO 2 or 150XM on RS-485. Keyboard 4-6 are always 150XM.		
Status	Choice	Controls the status bar shown on the monitor selected by this keyboard.	ON	ON OFF
Priority	Numeric	Set keyboard priority for the selected keyboard.	Keyboard 1 = 1 Keyboard 2 = 2 etc.	1 - 255
		<i>Note!</i> Priority 1 is the highest priority number.		

Start-up conditions

The *Start-up monitor* field is used to automatically select a monitor for the actual keyboard after reset.

This feature together with the other start-up conditions described in the *Monitor Setup* section are activated automatically when the system is powered up, but can also be activated manually from any keyboard by pressing the ESC key first, then the MONITOR key. This is very convenient in connexion with change of guards.

Restricting keyboard access

It is possible to restrict the camera and monitor selection from each keyboard. This will e.g. prevent the user from accidentally selecting cameras to monitors operated by another keyboard.

Also each key can be set invalid thus inhibiting the belonging function; e.g. can all programming functions be disabled by setting the MENU-key invalid.

Take into consideration, that several keys has a double function; e.g. the MONITOR-key is used to select monitors and to take PTZ-control to a camera station as well.

Although being set invalid, all keys will be operational in the setup system.

In the submenu for Valid Keys, a list of numbers is displayed. These numbers refer to specific keys on the keyboards. In the Appendix, *on page 44*, the different keyboard lay-outs are shown, together with the corresponding numbers for the specific keys.

Note: Certain key combinations on the 1502M/1503M keyboard, used in connexion with the Adpro equipment, are represented by a single number and can therefore be set invalid also; refer to figure **A-3** in the Appendix.

Function keys menu

The F1 and F2 keys on the Internal keyboard and the VCR1 and VCR2 keys on the 150XM keyboard can be used to directly control two outputs on the internal alarm module 590M.

These outputs can e.g. be used to manually control a video tape recorder, which also could be activated automatically in alarm situations.

If a full VCR control, i.e. more than two functions is needed, a BDR-514, which is equipped with 6 AUX-relays, can be used instead. This means that the VCR is operated and connected as a PTZ camera where the six AUX-relays controls the tape mechanism (*RECORD*, *PLAY*, *STOP*, *FastForward*, *FastReverse* and *PAUSE*) via the remote control connector on the VCR. If the VCR should start recording automatically in alarm situations the *RECORD* function must be connected to an output controlled by the alarm handling system, though.

Assignment to an Alarm Group

A keyboard can be assigned to the alarm group for direct resetting of alarms without further key selections; i.e. simply clearing the alarms using the **[CLEAR ALARM]** key without entering the alarm group number in front of the **[CLEAR ALARM]** key.

Field	Type	Description	Default Value	Valid Entry
Monitor ID	Numeric	Set the monitor to be controlled from this keyboard after reset.	0 = No monitor.	All monitor ID's
		<i>Note! The start-up conditions can also be called by pressing the keys ESC + MON.</i>		
Alarm group	Numeric	Set the default alarm group in which this keyboard can clear alarms directly.	1	1 - 8
Valid Cameras	Menu	Set valid cameras for this keyboard.	ALL	ALL SOME NONE
		<i>Warning! It is possible to delete all cameras for a keyboard.</i>		
Valid Monitors	Menu	Set valid monitors for this keyboard.	ALL	ALL SOME NONE
		<i>Warning! It is possible to delete all monitors for a keyboard.</i>		
Valid Keys	Menu	Set valid keys for this keyboard. Refer to the figures in the appendix.	ALL	ALL SOME NONE
		<i>Warning! It is possible to delete all keys for a keyboard.</i>		
Function Keys	Menu			
Output	Choice	Set which outputs the F1/VCR1 key and the F2/VCR2 key should control on the internal alarm module 590M.	NONE	NONE VCR I (Internal) O/C I (Internal)

Serial port programming

Two serial ports, SIO1 and SIO2, are available, both having a programmable interface selectable between RS-485 and RS-232. The RS-485 and RS-232 interface on the same serial port can not be used simultaneously.

The Serial Port 1 *Default Values* are set to camera station control (PTZ) on RS-485 interface.

The Serial Port 2 *Default Values* are set to be used with the *IEC protocol* on RS-232 interface.

Description of Devices

PTZ is used to control camera stations Series BDR-500 using the ERNA protocol. The protocol is very simple and can be found in any Series BDR-500 manual. The ERNA format can be used on RS-485 interface for direct connection of camera stations or on RS-232 interface via modems, Fast Scan or other equipment.

KEYBOARD covers the SYSTEM 500M/1000M keyboards on RS-485 and/or RS-232 interface, or a 28XXM keyboard with ELP V.7.0 software on RS-232 interface. Remember to set the keyboard type; refer to the *Keyboard Setup* section. Keyboards on RS-232 interface might also be connected remotely via modems; refer to the *Baudrate, Retransmissions and RTX-time* section below.

ALARM PRINTER: Used when a serial printer for alarm logging is connected to the RS-232 interface. Printable ASCII characters are transmitted in alarm situations. Refer to the *Alarm Setup* section. Handshake: By software using the *Xon / Xoff* principle: When the printer receive buffer is almost full, the printer transmits a *Xoff* (=13Hex) character which temporarily stops the transmitter, the SYSTEM 500M, until the printer transmits a *Xon* (=11Hex) character again. If the printer doesn't support the *Xon / Xoff* principle it should be equipped with an adequate sized receive buffer or memory in order to ensure that alarm messages are not lost in alarm situations.

IEC is used either when the SYSTEM 500M is connected to a Personal Computer (PC) with the *SYSTEM 500M/1000M Setup* program, or when the serial port is connected to ADPRO equipment. It is also used for communication with a *Main System*.

Make sure to set the interface **Type** properly; i.e. typically to RS-232-C when used with the *Setup* program running on a PC, and to RS-485 when used with Adpro equipment.

Description of the *Baudrate, Retransmissions and RTX-time* fields

The default values of these fields assumes that the transmission line is "ideal"; i.e. without delays, noise and with short cable lengths. If communication problems arise it is possible to compensate for the reduced transmission line quality or, if modems or equivalent are used, for transmission delays.

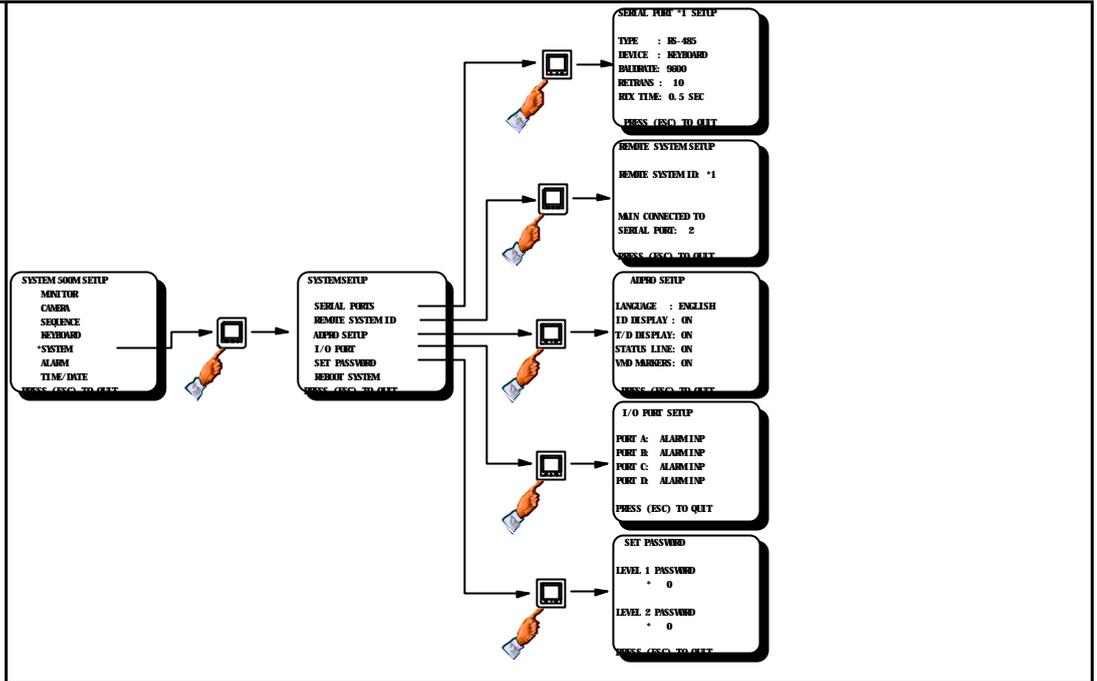
If modems are used, make sure to set the baud rate in accordance with the modems used. In case of problems first try to increase the retransmission time (*RTX time*), secondly increase the number of retransmissions.

If a low quality, noisy transmission line is used, try to decrease the baudrate and / or increase the number of retransmissions.

If *Device* is set to **PTZ, ALARM PRN** or **IEC** the *Retrans* and *RTX-time* settings are not relevant since these protocols do not use these parameters.

System Setup

Menu Structure:



Programming of Serial Ports 1 and 2 (SIO1 and SIO2):

Field	Type	Description	Default Value	Valid Entry
Type	Choice	Specify the interface type for this serial port.	SIO 1: RS-485 SIO 2: RS-232-C	RS-485 RS-232-C
Device	Choice	Specify type of device for this port. <i>Note! Make sure to select NOT USED if the serial port is unused.</i>	SIO 1: PTZ SIO 2: IEC	KEYBOARD PTZ ALARM PRN. IEC NOT USED
Baudrate	Choice	Program the baud rate used for the connected device. <i>Warning! Always make sure that the baud rate is the same for all units connected together.</i> <i>Signalling: 8 databits, no parity, 1 stop bit</i>	SIO 1: 2400 SIO 2: 19200	19200 9600 4800 2400 1200
Retrans	Numeric	Program how many times the data should be re-transmitted in case of errors. <i>Warning! The re-transmission feature can not improve a low quality transmission line. If the transmission between keyboard and rack does not work with max. re-transmissions, a new and better transmission line has to be established. Also, if a large number of re-transmissions are executed the response time is increased.</i>	SIO 1: 2 SIO 2: 10	2 - 10
RTX Time	Choice	Set the time-out for the transmission. <i>Note! The RTX time should be increased if the baudrate is decreased.</i> <i>Warning! Always program the RTX time to a minimum in order to get the fastest response time.</i>	0.5 SEC.	0.5 SEC. 1.0 SEC. 1.5 SEC. 2.0 SEC. 2.5 SEC. 3.0 SEC. 4.0 SEC. 5.0 SEC.

Main System

SYSTEM 1000M can be used as a Main System with up to 9 Remote SYSTEM 500M/1000M connected on RS-232 and/or RS-485.

The Main SYSTEM 1000M can then select cameras from the Remote Systems, and have them displayed on its local monitors. PTZ control of the Remote System cameras is also possible.

Remote System

SYSTEM 500M and SYSTEM 1000M can be used as Remote Systems. A Remote System is an Individual system with local cameras, monitors, keyboards, alarms, etc. By connecting communication and video to a Main System, it can be remotely controlled from the Main System.

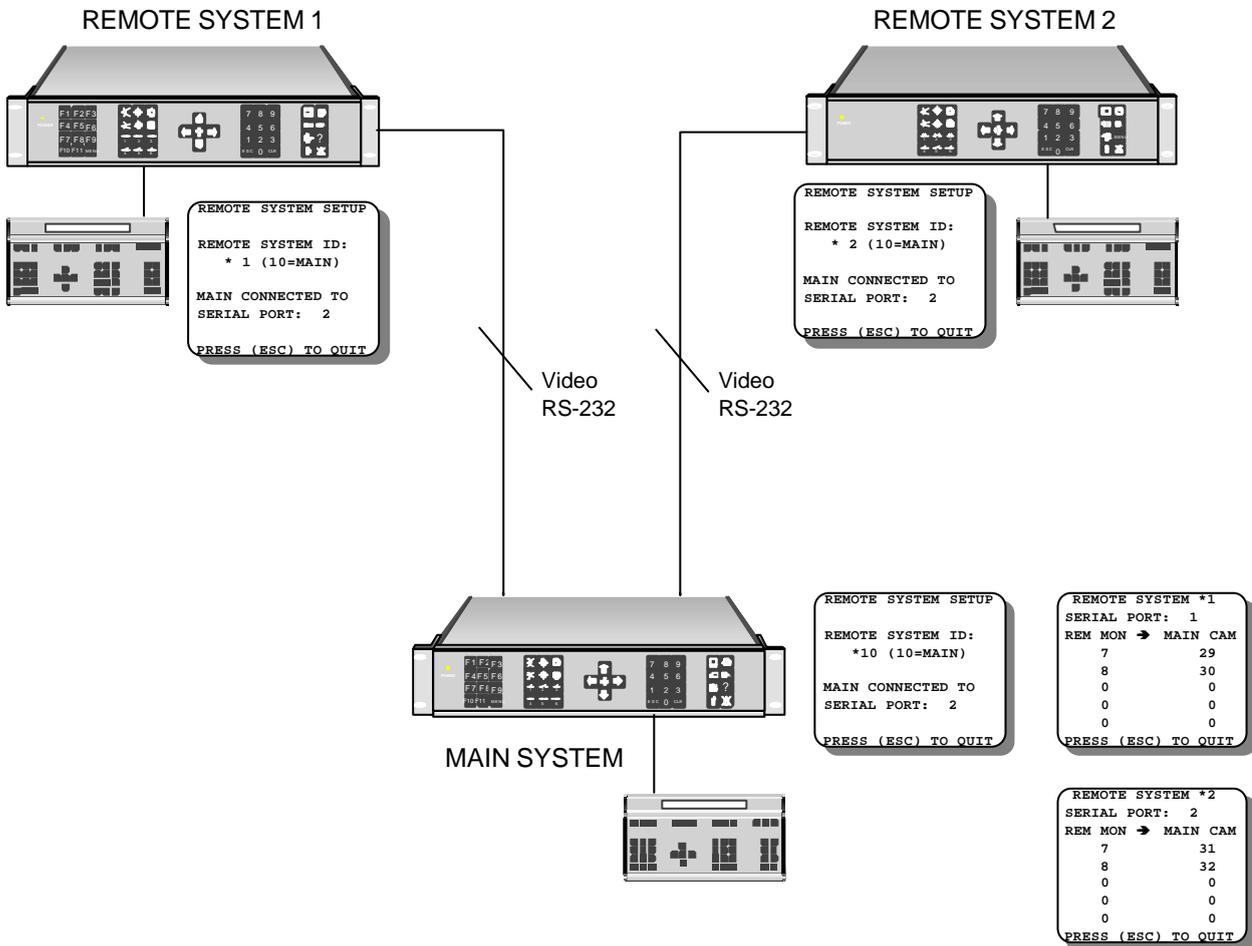
Communication

Two ways of communication can be used between Main System and Remote System(s), with the following features:

RS-232: Selection of Remote cameras - PTZ control of Remote cameras - Alarm feed-back from Remote System. Only one Remote System per Serial Port on the Main System, maximum 9 Remote Systems.

RS-485: Selection of Remote cameras - PTZ control of Remote cameras. Up to 9 Remote Systems on one RS-485 line.

A mixture of the two communication forms are also possible.



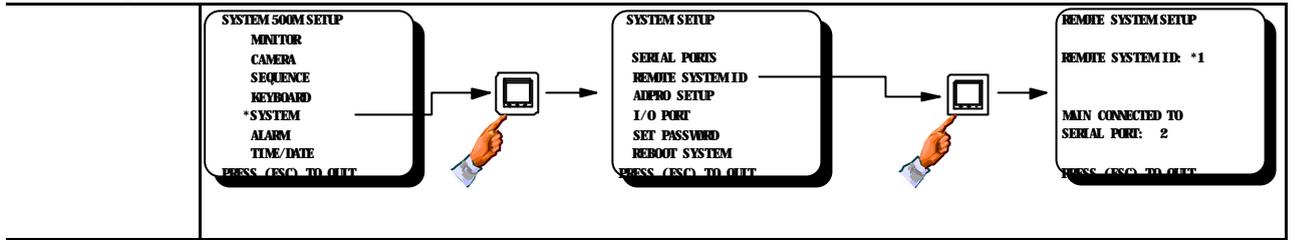
Remote System ID

In this menu, a unique address is assigned to the Remote SYSTEM 500M.

SYSTEM 500M can only be used as a *Remote System*.

SYSTEM 1000M can be used both as *Remote* and *Main System*.

Remote System Setup:



Field	Type	Description	Default Value	Valid Entry
Remote System ID	Numeric	Enter the ID number for this System.	1	1 - 9
Main Connected to Serial Port	Numeric	When programmed as Remote System, enter the Serial Port where the Main System is connected.	2	1 - 2

Various general Adpro settings

These settings are used in connexion with the Video Motion Detection rack frame.

These settings are after reset automatically downloaded from the SYSTEM 500M to the Adpro equipment

For further information on these settings refer to the appropriate Adpro manuals.

ID display

This corresponds to the camera ID text programmed in the SYSTEM 500M. The camera ID text are automatically downloaded from the SYSTEM 500M. If this field is set to YES the text is displayed on the VM-12/14 module.

T/D display

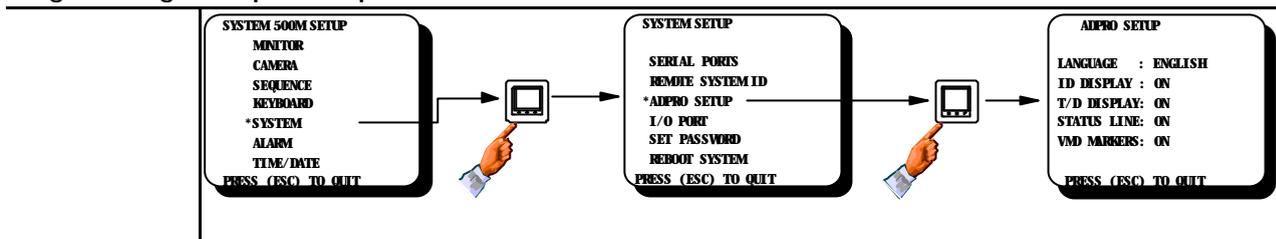
The time and date is automatically downloaded to the Adpro equipment each minute, in order to synchronise Time/Date of all connected equipment. The time and date is displayed on the Adpro equipment if this field is set to YES.

The time and date is NOT transferred to the VST 10CA Fast Scan transmitters, since the transmitters might be located in another time zone.

Adpro Setup

Certain general parameters concerning the Adpro equipment are set here.

Programming of Adpro Setup:



Field	Type	Description	Default Value	Valid Entry
Language	Choice	Specify the language of the Adpro setup system menus.	ENGLISH	ENGLISH FRENCH GERMAN ITALIAN SPANISH
ID display	Choice	Specify whether the camera ID should be displayed.	ON	ON OFF
T/D display	Choice	Specify whether the time & date should be displayed.	ON	ON OFF
Status	Choice	Specify whether the status lines should be displayed.	ON	ON OFF
VMD markers	Choice	Specify whether the VMD markers should be displayed.	ON	ON OFF

Programming of I/O port

The I/O port is divided into four ports; port A, B, C and D. Port A, B and C are fixed to be used as alarm inputs while port D can be programmed for external control of video sequences.

Refer to the *Monitor Setup* section for further information on this subject.

When port D is programmed to SEQ TRIG the number of alarm inputs are reduced from 32 to 24.

Programming of Passwords

Two different passwords are present, the **LEVEL 1** password and the **LEVEL 2** password.

The **LEVEL 1** password is used in connexion with the Adpro equipment which can be controlled or operated only when the password is known by the operator.

For further information on these functions, please refer to the Adpro manual.

The **LEVEL 1** password is also used to access the *Alarm Status Menu*, please refer to the *SYSTEM 500M User Manual*.

The **LEVEL 2** password protects the setup menu systems on the *SYSTEM 500M* and the Adpro equipment, i.e. the *VST 10 CA Fast Scan* and the *Video Motion Detection* rack frame.

Reboot of system

All change in the SYSTEM SETUP requires a system reboot before the changes are activated. Therefore accept the *Reboot System* field when all system parameters has been changed.