

Introduction

Congratulations on your purchase of DOAR's Integrated Evidence Presentation System. You will find that the display of video and digital information has never been so compelling and easy to use.

The DOAR Integrated Evidence Presentation System features two control panels with touch screen capabilities that can select and control any of the video and audio sources, set -up and execute video conferences, as well as control audio/video system components. Among the available sources are a document Camera (Communicator), a VHS VCR, auxiliary audio inputs, several computer inputs, and three cameras placed throughout the courtroom. In addition, an optional video image reproduction is available using a Video Image printer (VIP).

Your product from DOAR Communications Inc. is warranted for one year against failure. Extended warranty protection is also available.

Evidence and courtroom presentation is maturing into a powerful new capability for judges, attorneys and court administrators. DOAR's Digital Evidence Presentation System represents a technological philosophy and implementation methodology that will grow with the judicial system. DOAR's evidence systems and trial support system relies on the integration of video and digital display technology with options to combine real time reporting, video conferencing, and computer-based evidence system. DOAR's Communicator document camera and presentation enhancement equipment completes this coherent presentation facility. The system is housed in a handsome, rack that is controlled by a state-of-the-art (and easy to use) remote control system. The system comes with training, on-call support and complete service. This total solution is being used throughout U.S. Attorney Offices, Federal and State Courts.

System

At the center of a versatile trial presentation system is DOAR's Communicator document camera. This unit has been specifically developed for the trial attorney. Complete with zoom, optional built-in preview monitor, and integrated computer graphics display. Special adapter lenses are also available for very close inspection of small objects. Combined with our **24-hour/7 days a week** on-call trial support, this system is the preferred choice over "box-generic" solutions. Once you have had the pleasure of using the Communicator, you will find it to be an invaluable resource for evidence presentation.

Service

DOAR prides itself on providing “full solution” trial presentation technologies. **We work closely with attorneys, prosecutors and the courts.** We service and support all systems, provide training videos, and on-site, in-depth training programs. We exclusively install the systems and stand behind everything we provide. With over 3,500 clients -- law firms, prosecutors, U.S. Attorneys and courts -- we are the only providers of this unique, personal and supportive service. DOAR becomes an extension of your organization, ready to help you “***elevate the art and science of persuasion***”TM.

DOAR is also available to consult on trials, generate demonstrative evidence graphics, create imaging solutions for digital trials, and support clients with our litigation associates at trial. This is especially useful in complex litigation. Please do not hesitate to call DOAR at (800) 875-8705 for information on any of these products and services.

System Component Overview

Each system component offers a specific feature and has been custom configured by DOAR to provide the most effective courtroom presentations. The following chapters describe in greater detail how each individual component operates and how the system connects with the outside world.

DOAR's Communicator 21 (document camera)

DOAR's Communicator has the capability to project photos, documents, books, 3-D objects, x-rays (positive & negative) fingerprints, DNA autorads, transparencies, etc. The Communicator boasts many advanced features including negative/positive switching and additional input sources for video. The zoom function allows you to quickly magnify the most critical areas of an exhibit for display. The Communicator is the most practical presentation system for pre-trial discovery, depositions, settlement conferences, ADR and trials. DOAR's Communicator has been designed with a number of key functions to make it more effective for courtrooms and attorneys. The Communicator can include an optional 3" color monitor (15" monitor is also available) for previewing exhibits, and is connected to system via a single cable.

VCR Tape System

DOAR offers a state of the art 4-head VCR system with accurate freeze frame control. An interface to our Remote Control System is used for simple deck control, such as forward, reverse, pause, etc. The VCR has its own input into DEPS so images may be displayed and printed.

Integrated Switcher /Scaler

The Integrated Switcher/scaler is designed to convert DOAR's Communicator input, and regular video (such as a VCR or Aux Input), into a higher quality output. The concept of the switcher is to increase the quality of video output to that which is more comparable to VGA computer quality, without the noticeable scan lines. This device cleans-up low quality videotape playback so that the image is insured to be stable and sharp in the highest resolution possible. Also this device acts as a multi-input switcher. It accepts inputs from the Communicator, VCR, computers, and Aux Inputs. As the inputs are accepted, all resolutions are adjusted and maximum quality output is attained. This device also switches and rebalances audio (to provide a single audio output feed to your sound system).

Visual Image Printer

The Visual Image Printer allows you to create 3" x 5" instant color photos from DOAR's Communicator, VCR or computer source. This is very useful for evidence preservation or handouts to the jury.

Courtroom Director (Optional equipment)

The Courtroom Director is an optional multi-output monitor control system. DOAR's Control Director allows the judge or the clerk to control what is viewed on each and every monitor in the court room. For instance, during a side bar, the clerk can limit the video publication of evidence to the judge's monitor only. The optional remote control can be customized to allow different configurations of monitor outputs. The Court room Director also permits long runs of cable between the system and monitors in the court room.

Control System

The CRESTRON Control System provides the interface between color touch panels and the operation of a number of key overall features. The Control System operates input selection, output selection, volume controls, VCR control, and printer control.

Connecting the System



IMPORTANT – PLEASE READ



It is important that you completely POWER DOWN THE SYSTEM before connecting anything to the system. You must then re-power everything back up again to regain all the settings. If a change is made to the system, especially items associated with annotation, you must **COMPLETELY RE-POWER THE SYSTEM with the master switch to recognize all the changes.**

DOAR's Communicator

Accessories

1. DOAR's Communicator
2. Power Supply Cable
3. Video Cable
4. 3" monitor, power supply and video cable. (optional)

Power Connection

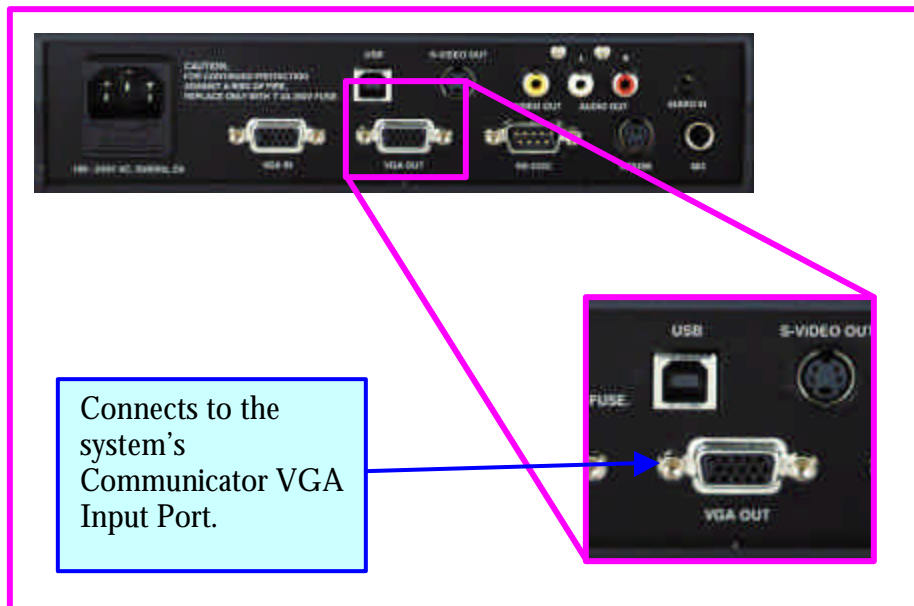
Connect the supplied power cable to the AC IN connector. The other end of the cable is connected to the power outlet.



- **Be sure to turn the power off before making connections (in order to protect the Communicator and the whole System).**
- **Hold the cable plug firmly when disconnecting the video cable.**

Audio and video Connection

Connect one end of the VGA output cable to the VGA output terminal of the Communicator and the other end to the Communicator VGA Input of the back of the rack.



3" Podium TV Monitor (optional equipment)

The 3" TV attaches to the bracket on the back of the Communicator. The yellow video cable connects to the video out (a BNC to RCA connector may be necessary) on the back of the Communicator and the video in plug on the monitor. Use the brightness knob to adjust for contrast. Contrast is affected by viewing angle, so you may need to adjust the brightness knob once the Communicator is set up for courtroom use.

Plaintiff or Defense Laptop Connection (at the podium)

Connect the VGA cable labeled PC INPUT from the Laptop to the Communicator. If Audio is to be used, connect an audio mini plug from the back of the laptop to AUDIO IN on the back of the Communicator.

Auxiliary Audio Connection (optional equipment)

An optional speaker can be connected to the system rack unit using an RCA connecting cable. Connect the RCA cable from HOUSE AUDIO OUT on the back of the system rack unit to the RCA input on the speaker.

15" LCD Touch screen Monitor Connection (optional equipment)

Use one VGA cable to connect the LCD monitor to the system rack unit. Locate VGA IN on the back of LCD monitor. Connect one side of the VGA cable to VGA IN on the Monitor. Connect the other side of the VGA cable to UNSWITCHED MONITOR on the back of the system rack unit. Use one 9 PIN connector cable to connect the 9 PIN OUT (Monitor) to TOUCHSCREEN on the back of the system rack unit for touch screen annotation capabilities.

DOAR's Visual Image Printer

The DOAR Visual Image Printer (VIP) has been designed to provide quick, high quality prints of your evidence. All connections are factory installed internally. Therefore, by simply pressing "PRINT" on the Remote Control, a vivid photo of the currently displayed item will be produced.

The VIP generates these photos by using special ink and paper. Your system may come pre-installed with a small amount of supplies used during testing of the system rack.

To obtain additional supplies, call DOAR at (800) 875-8705.

Safety Instructions

Carefully review the following guidelines to protect yourself from possible injury or from damaging the system.

- 1.) Always unplug the system from all power supplies when connecting any cables.
- 2.) Always make sure the power is turned off on every component before plugging the system rack into a power outlet.
- 3.) Never open the casings of any component.
- 4.) Never remove the back steel shielding of the system rack.



The system produces high voltage energy, which can cause bodily injury. Only certified DOAR service personnel are authorized to maintain this unit or remove component covers.



Opening the back of the system rack electronic cabinet, which has been sealed for the client's and DOAR's protection, is considered a violation of DOAR's warranty of service and support and a violation of the Customer License Agreement. In addition, DOAR has invested significant capital and personnel resources in the design of system, its components, connectivity and integration and thus represents significant and valuable intellectual property. Any copying, imitating, or designing based upon DOAR's proprietary implementation of the system is a violation of intellectual property rights. The seals and plate covers to this unit represent our protection of those rights and can only be opened by qualified and authorized DOAR personnel. If you have any questions, please call DOAR at 800/875-8705. Thank you.

Operating the System

Powering ON the System

If the power will be regularly cycled at the racks, the following will help you locate the appropriate power switches to turn the unit On and OFF. If the racks are to be left ON for prolonged periods of time, it is recommended to allow free air for the equipment to cool off. If possible, leave the equipment room door open and lectern door down.

Note:

The podium must be powered ON prior to the powering of the main equipment rack.

The power switch for the main equipment rack is located on the front of the video rack.

The lectern rack's power switch is also located in the rear of the rack, near the top section.

Once the system is powered ON, the Crestron control panels will always be ON. If no activity is detected, the screen may enter a screen saver mode and the display will black out. Press anywhere on the screen to cancel the screen saver.

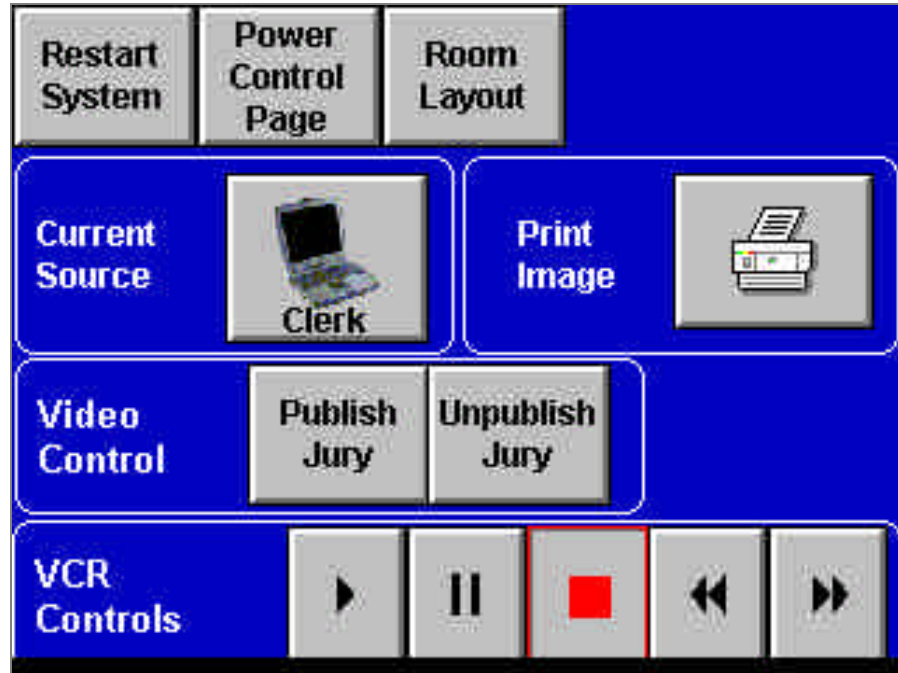
Control System

Initially, the Opening Page will be shown (see fig. below). Press anywhere on the screen to open the Main Page.



Main Page

This screen contains controls for the system's main features.



CURRENT SOURCE

The current video source is displayed in the gray button.

Pressing this button will bring up the Source Selection window, where a video source can be selected for display. Depending on the source, a new window or controls may become available. (See Select Source Page, later discussed in this guide).

PRINT IMAGE

This button creates a hard-copy of the current screen image.

VCR CONTROL BUTTONS

These buttons will appear only when the VCR is selected as a source. They will provide control on the VCR to PLAY, STOP, PAUSE, FF and REW a tape.

UNPUBLISH JURY

This button shuts off the video feeds to all the jury monitors, the witness, attorney monitors as well as the evidence cart monitor. All this is done in order to prevent unwanted evidence to be seen by the jury. This button will also mute the evidence audio.

PUBLISH JURY

This button will turn video on so that everyone can view it. This button will also turn evidence audio on.

ROOM LAYOUT

This button will open the room layout page.

RESTART SYSTEM

This button will flip the touch screen to the DOAR logo page. If the system is on, this button will turn the system off as well. If the system is already off, it will only switch to the DOAR logo page without starting the system.

POWER CONTROL PAGE

This button will open the Power Control Page.

Source Selection

This screen will be shown when SELECT SOURCE is pressed on any page. Press the appropriate button to select the desired source and display it on the monitors throughout the room.



Document Camera	The document camera will be selected as the active video source.
Video Conference (VTC)	The Video Tele Conferencing will be selected as a source & the VTC page will open on the Control Panel.
VCR	The VCR input will be selected as the source.
Judge, Clerk, Defense, Plaintiff & Podium PC's	The respective PC will be selected as the source.
AUX	The AUX input at the cart will be selected.

Witness Camera	The witness gooseneck document camera will be selected.
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Room Layout Page

This page will be displayed when the system will be powered on or when the “ROOM LAYOUT PAGE” button is pressed on the main page.

Note:

The button on the bottom of the page will display the “POWER ON” caption when starting up the system; otherwise, the button caption will display “DONE”. In both cases, the button will bring the main page up when pressed.

First, select the appropriate location in which the cart is located.

Second, select the appropriate location in which the defense table is located.

Third, select the location in which the plaintiff’s table is located.

Fourth, select the location in which the witness box is located.

Finally, press the “Power ON” button. This will turn the system on and flip the touch panel to the main page.

Note:

The numbers, are location numbers, where “1” is closest to the judge’s bench and “2” or “4” is farthest.

Video Tele Conferencing Page (VTC)

This page is the main page for VTC controls.



TO PLACE A CALL

1. Press the “VTC Dial Page” button. This will open the keypad page.
2. See keypad page for further instructions.

TO ANSWER A CALL

1. Press the “VTC Dial Page” button. This will open the keypad page.
2. See keypad page for further instructions.

BACK TO MAIN PAGE

1. This button will take the panel back to the main page.

2. See main page for further instructions.

VTC CONTROLS PAGE

1. This button will take the panel to the VTC controls page.
2. See VTC controls page for further instructions.

PRINT FAR SIDE

This button will produce a hard copy print of the video being received from the far side.

PRINT NEAR SIDE

This button will produce a hard copy print of the video being sent to the far side.

PIP CONTROL ON

This button will turn picture in picture on. The far side will be seen on the larger portion of the screen and the evidence/camera video being sent to the far side will be displayed in the small window.

PIP CONTROL OFF

This button will turn picture in picture off. The far side will be seen on the entire screen.

SEND-JUDGE

Pressing this button will send the video from the judge camera to the far side.

SEND-WITNESS

Pressing this button will send the video from the witness camera to the far side.

SEND-LECTERN

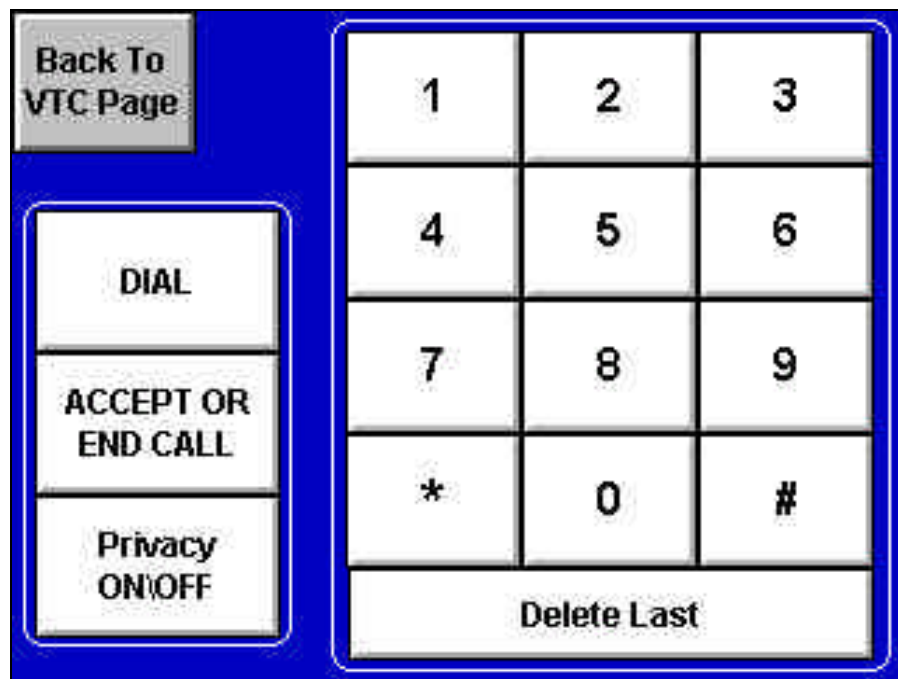
Pressing this button will send the video from the lectern camera to the far side.

SEND-EVIDENCE

Pressing this button will open the evidence send page. See "Evidence Send Page" for further instructions.

Video Tele Conferencing Keypad Page

This page is used for placing or answering Video conference calls.



TO PLACE A CALL

1. Dial the number on the keypad as would be done on a telephone (the phone number will be displayed on the monitors).
2. Press DIAL.
3. To end the call, press ACCEPT OR END CALL.

TO ANSWER A CALL

1. Press ACCEPT OR END CALL.
2. To end the call, press ACCEPT OR END CALL.

BACK TO VTC PAGE

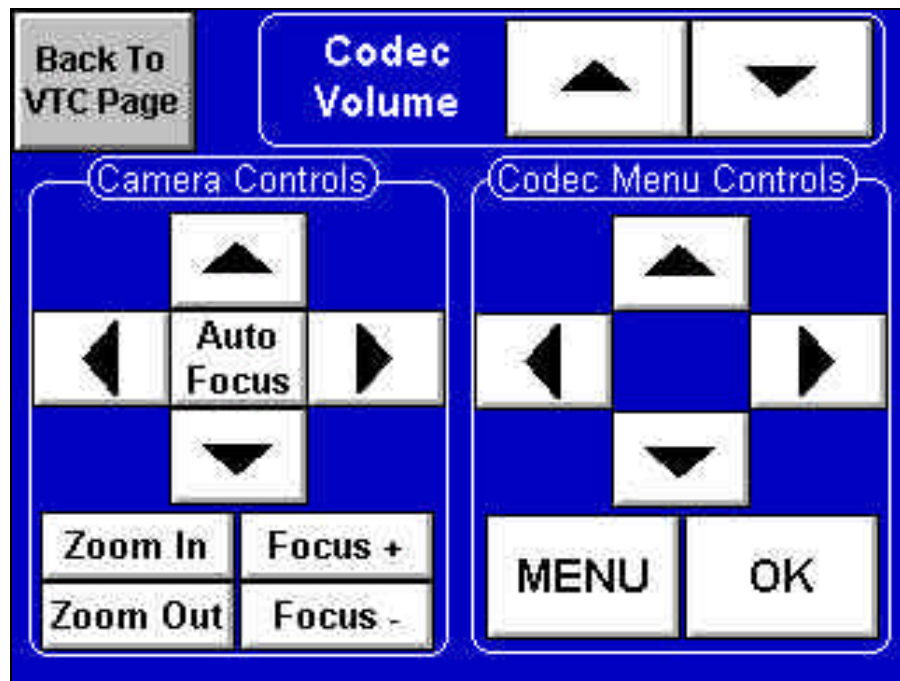
1. This button will open the main VTC page.

DELETE (LAST)

1. Will delete the last number displayed on the screen.

Camera Controls

These Camera control buttons will be available if JUDGE, WITNESS, or PODIUM CAMERA is selected as the evidence being sent to the far side. The buttons allow control of the cameras in the room for viewing or positioning to use during a videoconference.

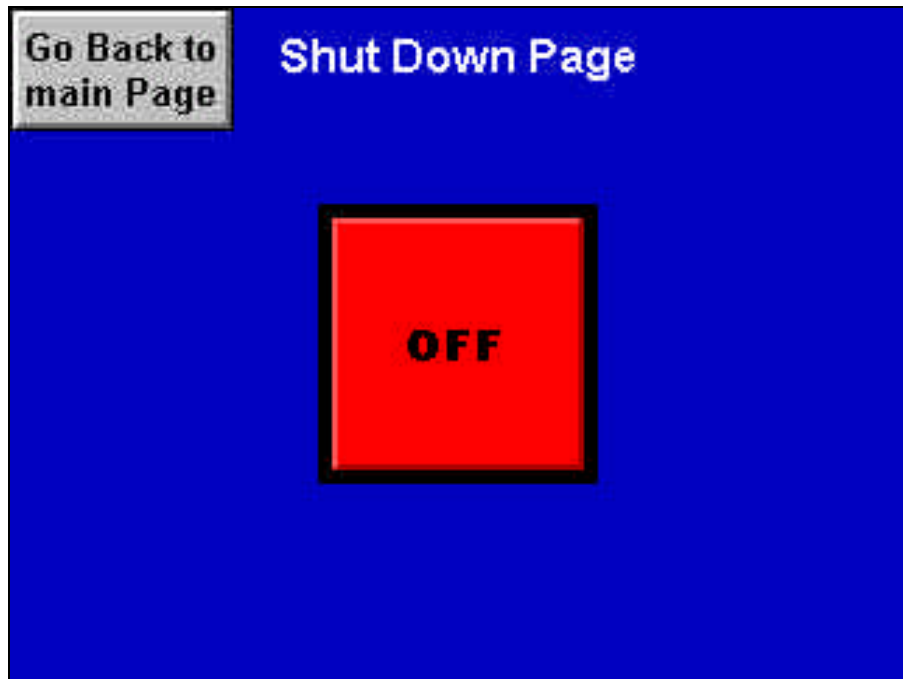


These controls will allow positioning of the camera in all four directions (up, down, left, right) as well as zoom in and zoom out. Auto Focus will automatically focus the subject in front of the camera.

Note:

When selecting another source, the camera function buttons (pan, tilt, zoom and focus), cannot be changed until a camera is selected again.

Power Control Page



GO BACK TO MAIN PAGE

This button will take you back to the main page.

OFF

Press this button if you wish to shut down the system. Note: the cart still needs to be manually switched off from the switch in the back.

System Components

The following equipment is comprised in the Integrated Evidence Presentation System:

DOAR's Communicator



DOAR's Communicator is an easy-to-operate and portable evidence presentation system. This unit is equipped with a high-resolution CCD camera and features an 8-10X magnification zoom lens and a high accuracy auto focusing system. The Communicator presents all types of materials to view or record through monitors, e.g. 3-D objects, paper documents, transparencies, x-rays, etc.

Using the Communicator

- 1) If not already powered ON, turn 'ON' the power switch of your Communicator.
 - Connection to the monitor should be previously executed.
 - The initial settings are displayed by their respective indicators.
- 2) Select communicator by pressing the COMMUNICATOR button on the remote control.
- 3) Place the object on the white stage. While you observe the image adjust the zoom to obtain the optimum size.
- 4) Fine-tune the image using the manual focus.
 - Pay attention to depth of field with 3-Dimensional objects. You may need to focus again, or even to rotate the camera head and remove the close-up lens to focus from a distance (this is only for a very large object.)

Simple Steps for Viewing Transparencies or Slide Film

- 1) When you press the lamp button (BASE), the lighting switches from the "UPPER" lamps to the built-in base-light lamp.
- 2) For 35mm negatives, press and hold the column lock button (located in the middle of the camera arm), then set the camera head to its lowest position.
- 3) Press the nega/posi conversion button. The indicator will show (N) (negative) mode. You may want to adjust the Iris to over expose for a better color reproduction.
- 4) When turning off the base light, press the lighting button (UPPER) again.

For Use as a Conventional Video Camera

- 1) The close-up lens should be removed when you are shooting the object at a distance.
- 2) The camera head can be rotated to the horizontal position. This allows you to present images from far away.



BACK PANEL OF THE DOCUMENT CAMERA

Communicator Functions

Lighting

These buttons are used to turn on/off the lights. There are two lighting units. They are as follows:

Upper: The upper lighting unit is used for viewing materials such as printed matter and 3-D objects.

Base: The Base light unit is used for viewing slides, transparencies, X-rays etc.



When the lighting button is pressed, the indicator flashes, and after a few seconds, the upper fluorescent lamps turn on. To turn the lamps off, press the lighting button again. Select the (UPPER) or (BASE) mode. (It is not possible to use both the upper lighting unit and the base light). It is advisable to use the upper lighting unit to obtain a clear image with better color rendering especially when the stage is not sufficiently lighted.

Input Selection

Input selection lets you select the input you would like to show on the monitors or to change input line. There are three input selector options. They are as follows:

Internal: Displays whatever is in the view of the Communicator.

AV1 & AV2: Inputs from two separate AV sources are available to be projected on the monitors by pressing one of the input selection buttons.

Nega/Posi Conversion

This function is used to view negative film as a positive image. Press the Posi/Nega conversion button, and the indicator shows (N) (negative). If you press the button again, it changes to normal (P) (positive) mode. This is a very useful function for 35mm slides, x-rays, MRIs and auto-rads.

Color/B&W Selection

This button is used for viewing black and white material, such as documents. This function allows you to select color or black and white images on the monitors.



It is advisable to use this mode for viewing the B&W button so that materials such as documents have a clear image with no color blur. For normal use, set to (C) (Color) mode.

Zoom

Zoom function lets you adjust the image size and zoom into a specific section. When (TELE) is pressed, the image gets larger (zoom in). When (WIDE) is pressed, the image gets smaller (zoom out).

Focus



It is difficult to focus on objects under the following conditions. You need to manually focus in order to clearly view objects in these conditions.

- **Objects bearing little contrast.**
- **Objects with a fine repeated pattern such as lateral stripes, or a checkered pattern.**
- **Bright objects or ones reflecting strong light.**
- **The background of the object is bright.**
- **Picture itself is dark.**
- **Moving objects.**

Manual Focus:

. Press the focus button (N) or (F) for manual focusing. This function is used to view 3-D objects of which any part can be focused.

DOAR's S-VHS VCR

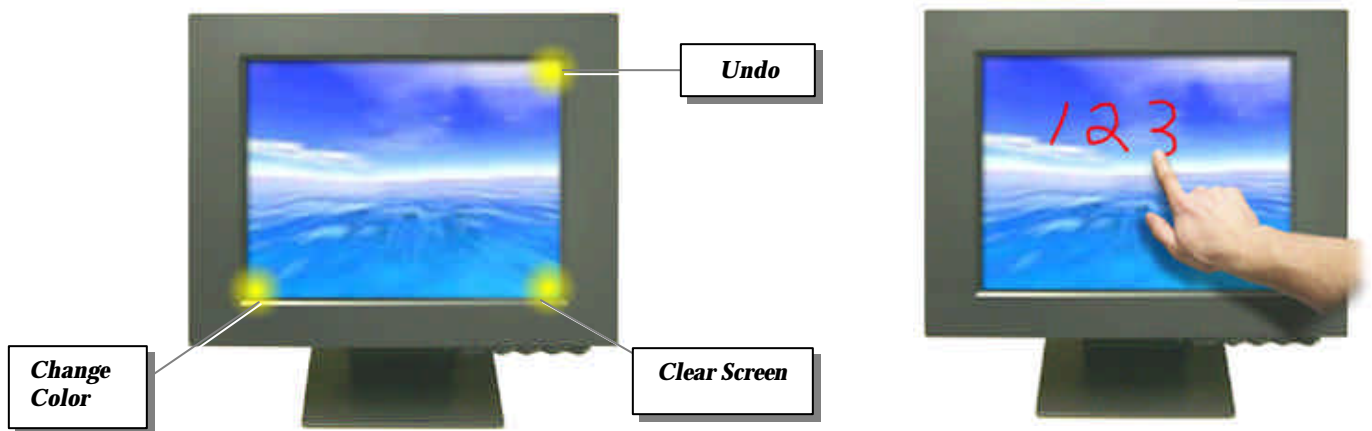
The VCR in the video system plays either VHS or S-VHS video-tapes. The superior quality of the S-VHS reduces video noise and produces a high quality picture.



The playback VCR can be controlled by manually using the VCR buttons. Make sure to load the desired tape and verify that the power button of the VCR is in the ON position.

DOAR's Touch Screen

The touch screen can be used to make on-screen annotations. It allows a witness to easily make annotations with the touch of a finger.



Annotations can be made by pressing lightly and dragging with your finger similarly to using a pen. The touch screen's corners activate special functions as described below.

UNDO



Tapping the **top right corner** of the screen will delete the annotations one at a time, beginning with the most recent.

CLEAR SCREEN



Tapping the **lower right corner** of the touch screen will remove all annotations.

CHANGE COLOR



Tapping the **lower left corner** of the screen will cycle through the available colors that can be used for annotations. The colored swatch that appears on the screen will be the active color, and will change as the corner is tapped.

DOAR's Visual Image Printer

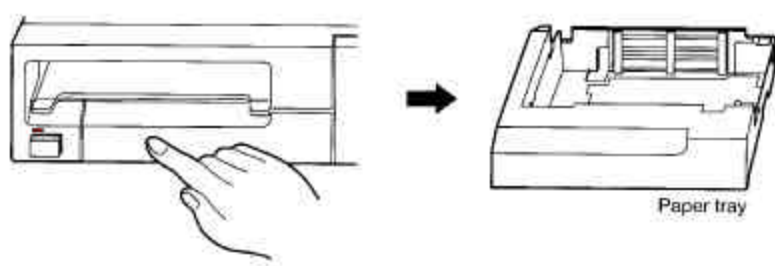
The DOAR Visual Image Printer (VIP) is an integrated component of the DEPS controlled through the Remote Control system. Under normal operation, you should utilize the quick "one-touch" operation on the remote to produce a hard copy of the currently displayed image

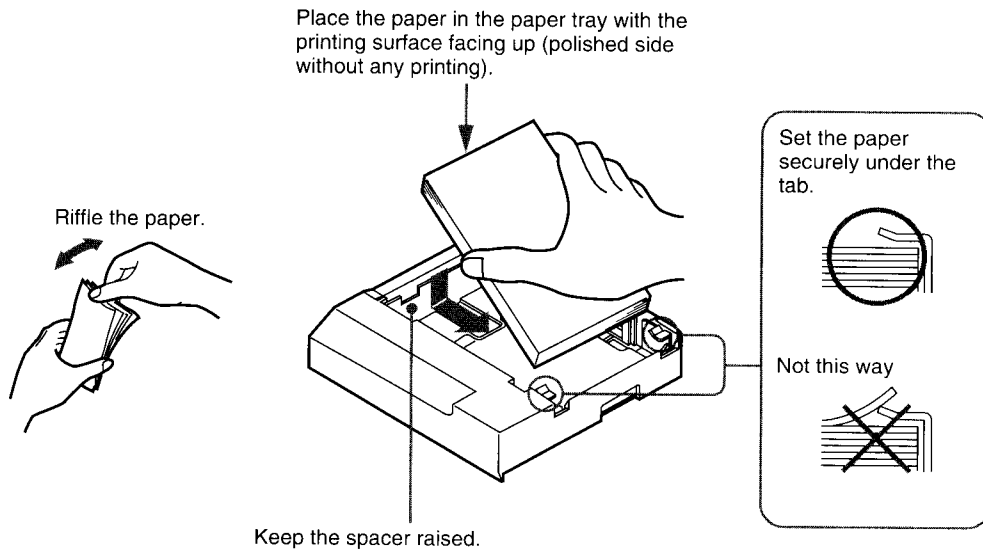
The DEPS VIP requires paper and ink supplies to operate. Instructions for changing paper and installing new ink cartridges are included with the supplies.

Changing the Printer Paper

The VIP contains cartridge loaded printer paper. It has been designed for simple replacement, and can be quickly changed during courtroom operation.

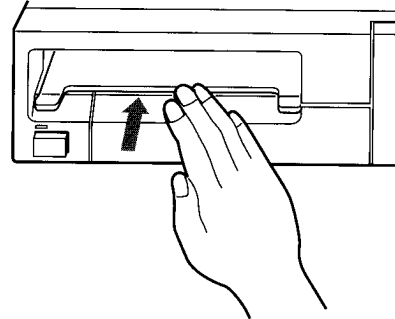
1. Push in the paper tray and then release to eject.





2. Place the new paper into the tray. Be sure to load the paper so it lays flat in the tray. If the paper is somewhat curled reduce the number of sheets inserted to ensure proper loading.

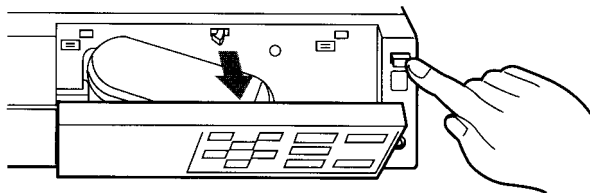
3. Slide the paper tray back into the printer and slowly push in, until it clicks in place.



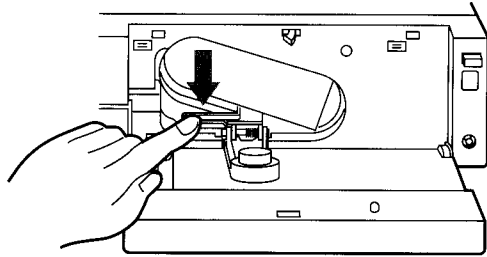
Changing the Ribbon Cassette

The VIP contains a cartridge loaded ribbon cassette, which has also been designed for simple replacement, and can be quickly changed during courtroom operation.

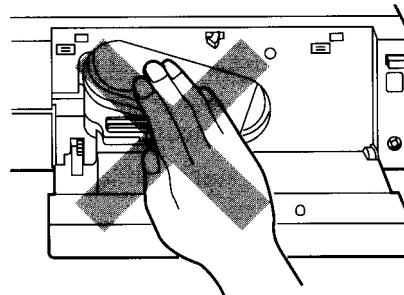
1. To open the front panel control door, thus revealing the ribbon cassette, simply press the top right hand button on the VIP.



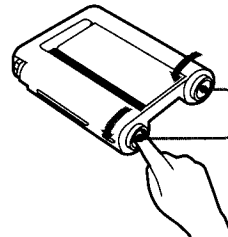
2. Remove the ink ribbon cassette by pulling down the eject lever.



Never put your hand into the ink ribbon cassette dock. The thermal head becomes very hot, and can burn if touched.

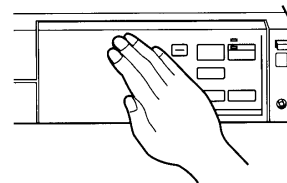
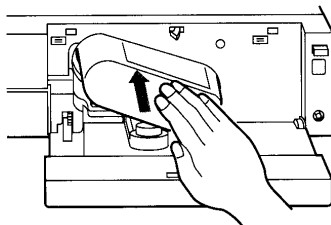


3. Take up any slack in the ink ribbon. This is critical, as any ribbon left slacked, may crumple and damage the VIP.



4. Insert the ink ribbon cassette firmly until it stops.

5. Close the front panel.



Be sure to only use genuine DOAR replacement paper and ribbons. Failure to do so may void user's warranty. Please call DOAR at (800) 875-8705 for supplies.

Service & Support

DOAR is available to assist in operating the system. Our on-call consultants will work with you to explain how to operate the system. Feel free to call us at (800) 875-8705 with any questions or ideas on how to improve the system. Thank you for purchasing the DOAR Digital Evidence Presentation System.

Trouble shooting

If any minor problems are encountered with the system, these pages may help. If more serious problems arise, please contact DOAR Communications.

The troubleshooting guide is set in this format:

- Problem Encountered
 - Possible solution
 - Possible solution
-
- **No Video Seen on any Monitor**
 - Verify that system is powered ON
 - Select Source from a color touch panel
 - Try selecting another source from the color touch panel
 - **Video Images only Seen on certain Outputs**
 - Verify that the correct video selection is highlighted.
 - **Color Touch-panels are not Working**
 - Verify that the system is powered ON

- **Annotation does not function**
 - Power OFF the system unit, reconnect cable, power ON the system
(Be sure the Monitor is powered ON before system)
 - Verify that the cables are plugged into the correct port(s) on the system (and floor boxes).

- **Printing does not Function**
 - Verify that paper is loaded in the machine
 - Verify that there is ink in the cartridge
 - Verify that you see an image on the monitor when you press PRINT from the remote control.

COURTROOM PRESENTATION, ANNOTATION & PRESERVATION

HIGH RESOLUTION DIGITAL IMAGE CONTROL AND DISTRIBUTION

UNITED STATES DISTRICT COURT



INTEGRATED EVIDENCE PRESENTATION SYSTEM

CLEVELAND, OH

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About the User's Manual

This manual provides the owner and operator of the Integrated Evidence Presentation System with the basic information needed to operate the system in court, arbitration, settlement conference, etc. DOAR has made every effort to compile a comprehensive guide for the user. This manual covers the overall functionality, operation and control of the system. If you should encounter situations beyond the scope of this manual, please call DOAR's **24-hour / 7 days a week** service and support line at (800) 875-8705.

Disclaimer

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TABLE OF CONTENTS

CHAPTER 1- INTRODUCTION

SYSTEM	2
SERVICE	3

CHAPTER 2 - SYSTEM COMPONENT OVERVIEW

DOAR'S COMMUNICATOR	4
VCR TAPE SYSTEM (OPTIONAL EQUIPMENT)	4
DOAR'S INTEGRATED SWITCHER	5
DOAR'S VISUAL IMAGE PRINTER	5
DOAR'S COURTROOM DIRECTOR (OPTIONAL EQUIPMENT)	6
DOAR'S CONTROL SYSTEM	6

CHAPTER 3 - CONNECTING THE SYSTEM

PHYSICAL CONNECTIONS WARNING	7
DOAR'S COMMUNICATOR 21	8
LAPTOP	9
MONITOR	9
DOAR'S VISUAL IMAGE PRINTER	10
SAFETY INSTRUCTIONS	11

CHAPTER 4 - OPERATING THE SYSTEM

POWER ON	12
CONTROL SYSTEM	13
MAIN PAGE	14
SOURCE SELECTION	16
ROOM LAYOUT PAGE	17
VIDEO CONFERENCING PAGE	18
VIDEO TELE CONFERENCING KEYPAD PAGE	20
CAMERA CONTROLS	21
POWER CONTROL PAGE	22

CHAPTER 5 - SYSTEM COMPONENTS

DOAR'S COMMUNICATOR 21	24
COMMUNICATOR FUNCTIONS	26
DOAR'S S-VHS VCR	29
DOAR'S TOUCH SCREEN	30
DOAR'S VISUAL IMAGE PRINTER	31

CHAPTER 5 - SERVICE AND SUPPORT

TROUBLE SHOOTING	34
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