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Model No. 4000CL-LPH

400 CLIP FAST ACCESS SYSTEM

Louth Protocol - Philips Recue

USER MANUAL

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1. REVISION HISTORY

100903	Rev. 2.2	Company header information revised.
112103	Rev. 2.3	Added DNF Controls Limited Warranty.
013004	Rev. 2.4	Added Transfer Cue List section.
080604	Rev. 2.5	Added T-bar dimension.

2. SYSTEM DESCRIPTION AND BENEFITS

- ❑ FAST access to 400 video clips in Philips Media Pool.
- ❑ Quickly & Easily assign video clips to 400 locations in the SHOTLIST.
- ❑ Enter a 1, 2 or 3 digit number to access any location in the SHOTLIST. Then LOAD and PLAY. It's that easy.
- ❑ Ideal for:
 - Backup in case of On Air Automation failure
 - News Shows
 - Game Shows
 - Sports Shows.
 - Anywhere that requires fast access to pre recorded video clips.
- ❑ Ideal as Betacart/Flexcart replacement.
- ❑ SHOTLIST Software. Clip Based, Efficient, Reliable, Customizable.
- ❑ The 400 Clip Fast Access System consists of:
 - ST300-SSM VTR/DDR Controller**
 - ShotList Software**

DEFINITIONS

Throughout this document VTR, DDR, VDR & Video Server will be referred to collectively as "Video Server".

The ST300-S/SM is referred to as "ST300".

Words surrounded by brackets, for example, [ENTER], are keys on the ST300.
[XXX] + [XXX] means hold the two keys down simultaneously. XXX = Key name.

3. SYSTEM INSTALLATION

ST300-S/SM, VTR/DDR CONTROLLER

Plug one end of a 9-conductor, RS422 serial cable into the 9-pin connector (VTR 1, VTR 2, VTR 3 or VTR 4) on the rear of the ST300. Plug the other end of the cable into the 9-pin remote connector on the Video Server.

Connect the +5, +12, -12 VDC POWER SUPPLY into the POWER connector on the rear of the ST300. Plug the Power Supply into a wall outlet, 90 VAC to 240 VAC.

The display shows “NO PRT Selected”.

Press [MENU] then rotate wheel until

On the top line the display shows “VTR1 LOUTH PORT=00”.

The bottom line shows “ENTER 1-9”.

Press the desired number on the numeric keypad.

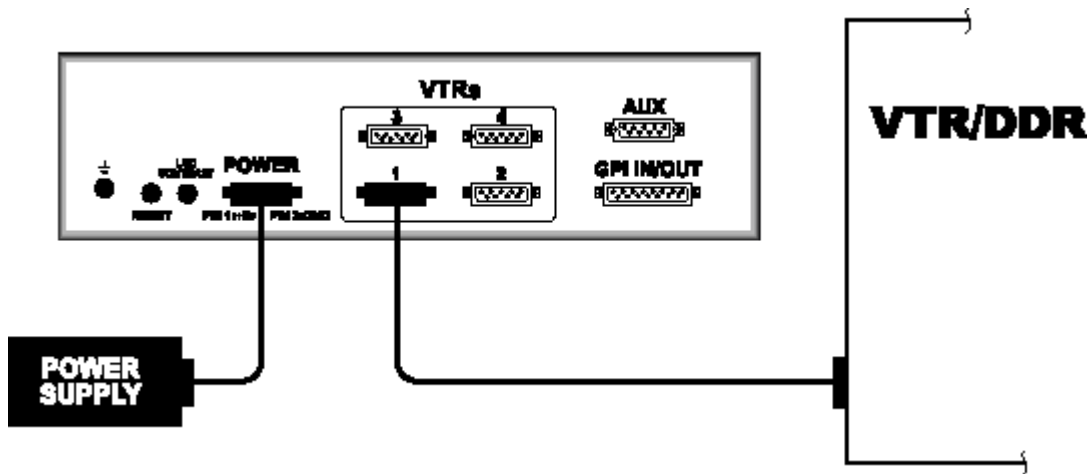
To turn the port off, leave it at “00”.

NOTE: at least one Port must be assigned to a valid port.

4. Rotate the wheel and repeat the above procedure for VTR 2, 3 and 4.
5. Press [ESC] at any time to exit.
6. Check the other options in the SETUP MENU prior to using the ST300 to confirm proper Record mode, and other User settable modes.

Installation is complete.

Connection Diagram



4. VIDEO SERVER SETUP

- a. Select LOUTH Broadcast communications protocol on the VIDEO SERVER to be controlled.
- b. If required, assign a serial port on the VIDEO SERVER through which the ST300 will control it.
- c. The VIDEO SERVER may not support LTC or VITC time modes in LOUTH Broadcast mode. The ST300 will default to Tape Time if a non-supported time mode is selected on the ST300.

NOTE:

In LOUTH mode, the VIDEO SERVER may **ONLY** allow Full Record. INSERT and ASSEMBLE record modes may be disabled.

The Video Server does **not** support search to a time location using Timecode (LTC or VITC) in LOUTH Protocol. Tape Time mode (TM) must be selected on the ST300.

Setup is complete.

5. LOAD AND PLAY CLIPS USING THE ST300

a. LOAD AND PLAY A CLIP USING THE ST300

- 1) Press [CLIPLIST] to view the list of Clips that exist in the VIDEO SERVER. The display will show "CREATE NEW CLIP".
- 2) Turn the wheel. The top line of the display will show "xxxxxxx:"
Where "xxxxxxx" is the eight character CLIP ID.
Turn the wheel clockwise to scroll forward through the list of available CLIPs
Turn the wheel counter-clockwise to scroll back through the last 10 CLIPs previously viewed.
- 3) Press [LOAD] to load the current CLIP ID shown on the top line of the display.

b. LOAD AND PLAY A CLIP FROM THE SHOTLIST

On the ST300

- 1) Select a Cue Point in the Shotlist:
Press [NEXT CUE] or [LAST CUE] to step forward or step backward through the SHOTLIST.
OR
Enter a 1-, 2- or 3-digit number on the numeric keypad, followed by [ENTER].
The contents of the selected Cue Point are shown on the bottom line of the display.
- 2) Press [LOAD] to load the CLIP ID shown on the bottom line of the display.
- 3) Press [PLAY] to play the clip.

c. RECUE THE CURRENTLY LOADED CLIP

On the ST300

Press **[RECUE]** to recue the CLIP to its beginning.
The VIDEO SERVER will recue to the beginning of the clip, then go to STILL mode.

OR

Press **[SHIFT] + [RECUE]**.

The display will show: “xx:xx:xx:xx”

(Where xx:xx:xx:xx = Last entered RECUE time.)

“Enter RECUE time”

Enter the desired time to search to using the ST300’s numeric keypad.

Press **[ENTER]** to search to the entered time.

OR

Press **[ESC]** to exit without searching.

d. VIEW THE CLIP ID OF THE CURRENTLY LOADED CLIP

On the ST300

- 1) Press and hold the **[SHIFT]** key.
- 2) Press and release the **[LOAD]** key.
- 3) The bottom line will show: “Loaded Clip: xxxxxxxx” where xxxxxxxx is the CLIP ID.

6. LOOP A CLIP

NOTE:

ONLY clips loaded from the SHOTLIST can be looped.

Any clip in the SHOTLIST can be played as a continuous loop

OR

Once from the beginning to the end of the clip.

a. SET CLIP PLAY MODE: CONTINUOUS LOOP OR NORMAL

On the ST300

- 1) Press [**CLIPLIST**]. The LED above CLIPLIST comes on.
- 2) Select the desired SHOTLIST location by pressing [**NEXT CUE**], [**LAST CUE**] or manually entering the 1-, 2- or 3-digit location number.
- 3) Press [**PLAY**] to set the play mode of the saved CLIP ID in the currently displayed SHOTLIST location shown on the bottom line of the display.
- 4) Select NORMAL or LOOP CLIP modes:

NORMAL will play from the beginning, to the end of the clip and stop. The Play Mode indicator to the right of the CLIP ID will be blank.

LOOP CLIP (LC) will play from the beginning to the end of the clip, then loop back to the beginning and repeat. The Play Mode indicator to the right of the CLIP ID will show LC.

- 5) Press [**ESC**] to exit CLIPLIST function at any time.

b. LOAD AND PLAY A LOOPED CLIP

On the ST300

- 1) Select the desired SHOTLIST location by pressing [**NEXT CUE**], [**LAST CUE**] or manually entering the 1-, 2- or 3-digit location number
- 2) Press [**LOAD**] to load the desired Clip.
- 3) Press [**PLAY**].
- 4) The CLIP will continually loop until [**STOP**] is pressed.

7. CREATE NEW CLIPS

a. Press **[CLIPLIST]**. The LED above the CLIPLIST key lights up. The display will show “CREATE NEW CLIP”.

b. Press **[LOAD]**. The display will show the default CLIP ID.

c. Press **[LOAD]** to accept the default CLIP ID.

OR

Use the **[NEXT CUE]**, **[LAST CUE]** keys and Wheel to edit the CLIP ID.

Use the **[NEXT CUE]** and **[LAST CUE]** keys to position the cursor.

Turn the Wheel to select the desired letter.

OR

Press **[LOAD]** followed by a maximum of eight (8) digits, using the numeric keypad.

d. Press **[LOAD]** or **[ENTER]** to create the selected CLIP ID.

e. If the selected CLIP ID already exists, a warning message will be displayed. To load the existing clip, press **[ENTER]**. Press **[ESC]** to exit without loading the existing clip.

8. RECORDING CLIPS

NOTE: The video server must have enough memory to record the entire clip.
Video input must be connected to the Record Channel.
The ST300 Port selected for recording must be (-1)

- a. Press [**CLIP LIST**] and then [**ENTER**] to manually enter the new CLIP ID.
- b. Press [**ENTER**] or [**LOAD**] to create the new clip.
- c. Press [**RECORD**] to start recording.
- d. Press [**STOP**] to stop recording.

9. TRANSFERRING CUELIST

The TRANSMIT CUELIST function allows you to transmit your list of Cue Points to a PC, using the provided utility software on the PC, or to another ST300. Transfer to a PC requires OpSuite 3.0 software, which runs on a Windows-based computer. Contact DNF Controls for more information.

a. TRANSMIT CUE LIST FUNCTION

1) To Transmit Cue Points to the ST300

- a) Connect the VTR4 connector on the rear of the ST300 to the VTR4 connector of the receiving ST300 using an RS422 9-pin cable with TX and RX lines crossed.
(A “turnaround” cable)
- b) Press [MENU] and scroll the Wheel to “Transmit CUE List?
YES=Enter,Exit=ESC”.
- c) Press [ENTER] to start transmitting.
The Display shows “Waiting to transmit” on the first line.
- d) When the Receiver is ready, transfer starts automatically.
The Display now shows “Transmitting cuelist.”
- e) After the transfer is over, the display shows “Transfer is over” for one second and then shows “Waiting to transmit” again.
- f) Connect another ST300 to transmit the list again.

OR

Press [ESC] twice to exit the MENU mode.

2) To Transmit Cue Points to the PC

- a) Connect the VTR4 connector on the back of the ST300 to one of the COM ports on the PC using a RS422 to RS232 adapter.
- b) Repeat steps b-f of the TRANSMIT CUE POINTS to the ST300 section.

b. RECEIVE CUE LIST FUNCTION

The RECEIVE CUELIST function allows you to receive your list of Cue Points from a PC or from another ST300. Transfer to a PC requires OpSuite 3.0 software, which runs on a Windows-based computer. Contact DNF Controls for more information.

1) To Receive Cue Points from the ST300

- a) Connect the VTR4 connector on the back of the ST300 from the VTR4 connector of the transmitting ST300 using RS422 9-pin cable with TX and RX lines crossed.
(A “Turnaround” Cable)
- b) Press [MENU] and scroll the Wheel to “Receive CUE List?
YES=Enter, Exit=ESC.”
- c) Press [ENTER] from start receiving.
The Display shows “Waiting to receive” on the first line.
- d) When the Transmitter is ready, transfer starts automatically.
The Display now shows “Receiving cuelist.”
- e) After the transfer is over the display shows “Done-Success! Press any key...”
- f) Press any key. The display shows “Receive cuelist?” message.
- g) Press [ESC] to exit the MENU mode.

2) To Receive Cue Points from the PC

- a) Connect the VTR4 connector on the back of the ST300 to one of the COM ports on the PC using RS422 to RS232 adapter
- b) Repeat steps b-g of the RECEIVE CUE POINTS from the ST300 section.

10. MENU OPTIONS

1. Press **[MENU]**. The MENU key indicator will turn on.
2. Turn the Wheel to select item to change.
3. Press **[MENU]** to change the desired mode for that option.
4. Turn the Wheel at any time to select another item.
5. Press **[ESC]** at any time to exit Setup Menu.
The MENU key indicator will turn off.

SETUP MENU: Turn WHEEL to select ITEM to change. Press **[MENU]** to toggle between available modes of operation for each item. Press **[SHIFT]** to save changes and exit.

RECORD Lockout, Assemble Crash/Full, or Insert. Only in INSERT mode: Press the key located below the display, to toggle Video, Audio1, Audio2, Audio3 or Audio4 record on/off.

SLOMO SPEED RANGE Select speed range: 0 → +200 **OR** -100 → +200. (WHEEL ONLY)

SLOMO PRESET (WHEEL ONLY) UPDate Mode - when exiting SLO-MO mode, the last used speed is saved in the Preset Speed register.

STATic Mode - the Preset Speed register is NOT updated when exiting SLO-MO mode. It is only changed in PRESET SLOMO MODE.

MAX WIND Select the desired wind speed when **[RWD]** or SPEED **[FFWD]** is pressed.

MARK Q Enable/Disable automatic ADVANCE to next Cue Point.

SET FACTORY DEFAULTS Press **[DEL]** to reset all modes to their default value.

CLEAR CUE MEMORY Press **[DEL]** to clear all Cue Point locations to 00:00:00:00.

DISPLAY SOFTWARE VERSION The version number for the currently installed software is displayed.

RECORD= **[RECORD]** or **[RECORD] + [PLAY]**

SEARCH	Select ST300 or VTR to control the search mode of the VTR. The ST300 SPEED or VTR mode will be aster. Select the fastest Search mode. Select VTR mode if you will be Controlling Multiple VTRs.
RECORD DELAY=	Enter up to 99 frames.
RECORD LENGTH	Set maximum record length.
LOUTH PORT	Select Louth Port numbers 1-9 for VTR 1-4 for Playout Channels. At least one VTR must be assigned a Port Number. To turn the Port off, choose 00. Set maximum record length.

11. FUNCTION TABLE

Function	Key Press	Description
GANG	[SHIFT] + [VTR#1] [SHIFT] + [VTR#2] [SHIFT] + [VTR#3] [SHIFT] + [VTR#4]	Select VTRs to gang together. The ganged VTR's LEDs will turn on. Press [SHIFT/ESC] to exit.
FFWD	[FFWD]	Press and HOLD to shuttle. Release key to stop. Set WIND Speed in MENU.
JOG	[JOG]	Select JOG mode and enable the Wheel.
LAST CUE	[LAST CUE]	Step to the previous Cue Point Location.
NEXT CUE	[NEXT CUE]	Step to the next Cue Point Location.
RECORD	[REC]	Places VTR in the Record mode selected by RECORD MODE in the SETUP MENU. (see MENU). One button record.
REWIND	[RWD]	Press and HOLD to shuttle. Release key to stop. Set WIND Speed in MENU.
SHUTTLE	[SHUTTLE]	Select SHUTTLE mode and enable the Wheel.
SLOMO	[SLOMO]	Press SLOMO to slo-mo the VTR. Turn the wheel or move the T-Bar to change the play speed. Press SLOMO to STILL frame OR press any transport key to exit.
SLO-MO SPEED PRESET	[SHIFT + SLOMO]	For WHEEL ONLY - Press [SHIFT] + [SLOMO] to preset the slo-mo speed. Turn wheel to select desired speed. Press [ESC] or any transport key to exit.
STOP	[STOP]	Press once to STILL frame VTR. Press again to put VTR into STOP mode.
TIME MODE SELECT	[TIME MODE]	Press to toggle between Timecode (TC), VITC (VT) or Tape Timer (TM) display modes.
RECUE	[RECUE]	Press to Recue the loaded clip.

12. SPECIFICATIONS

Power	90 VAC to 265 VAC adapter supplied with IEC connector		
Size	(L" x W" x H") 12" x 6" x 1.5" (front) 3.0" (rear) (T-bar unit is 12.6" long)		
Weight	4 lbs.		
Real Panel Connectors:	VTR1, VTR2, VTR3, VTR4	(All DB9F)	
	GPI	(DBF15F)	
	Power	(DB9M)	
	Aux	(DB9F)	
Display:	Easy to read 2-line, back-lit LCD display (User adjustable contrast)		
Jog/Shuttle Wheel with mechanical detents.			
Optional "T"-bar, slo-mo 0-200% of Play Speed			

RS422 SERIAL CONNECTOR

9-Pin D-Type, Female

Pin #	1	Frame Ground	6	Receive Common
	2	Receive A ←	7	Receive B ←
	3	Transmit B →	8	Transmit A →
	4	Transmit Common	9	Frame Ground
	5	Spare		

POWER CONNECTOR

9-Pin D-Type, Male

Pin #	1	+5v DC	6	+5 VDC
	2	+5v DC	7	Ground
	3	Ground	8	Ground
	4	+12 VDC	9	Ground
	5	-12 VDC		

13. DNF CONTROLS LIMITED WARRANTY

DNF Controls warrants its product to be free from defects in material and workmanship for a period of one (1) year from the date of sale to the original purchaser from DNF Controls.

In order to enforce the rights under this warranty, the customer must first contact DNF's Customer Support Department to afford the opportunity of identifying and fixing the problem without sending the unit in for repair. If DNF's Customer Support Department cannot fix the problem, the customer will be issued a Returned Merchandise Authorization number (RMA). The customer will then ship the defective product prepaid to DNF Controls with the RMA number clearly indicated on the customer's shipping document. The merchandise is to be shipped to:

DNF Controls
12843 Foothill Blvd., Suite C
Sylmar, CA 91342
USA

Failure to obtain a proper RMA number prior to returning the product may result in the return not being accepted, or in a charge for the required repair.

DNF Controls, at its option, will repair or replace the defective unit. DNF Controls will return the unit prepaid to the customer. The method of shipment is at the discretion of DNF Controls, principally UPS Ground for shipments within the United States of America. Shipments to international customers will be sent via air. Should a customer require the product to be returned in a more expeditious manner, the return shipment will be billed to their freight account.

This warranty will be considered null and void if accident, misuse, abuse, improper line voltage, fire, water, lightning or other acts of God damaged the product. All repair parts are to be supplied by DNF Controls, either directly or through its authorized dealer network. Similarly, any repair work not performed by either DNF Controls or its authorized dealer may void the warranty.

After the warranty period has expired, DNF Controls offers repair services at prices listed in the DNF Controls Price List. DNF Controls reserves the right to refuse repair of any unit outside the warranty period that is deemed non-repairable.

DNF Controls shall not be liable for direct, indirect, incidental, consequential or other types of damage resulting from the use of the product.

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