



## DNS-33W Sports Camera

and the



## SAT-2000 Transport

### Sports Reference Guide

Software Version    2.24 FB DNS-33W  
                                 2.28 FB SAT-2000

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**NLT**  
**Non Linear Technology**

# **DNS-33W/SAT-2000 Sports Reference Guide**

This reference document helps you get started with your new DNS-33W camera or Transport describing how to configure it specifically for sports acquisition. The document includes procedures and the steps used to configure the Sports Recorder.

This reference guide includes 6 main sections:

- the basic steps to get started recording with the Camera or Recorder
- a description of the REMOTE ATTRIBUTE CONTROLLER (TETHER) options
- procedures to set up attributes before and during acquisition
- a description of the 12 setup procedures
- a reference to the 7 FieldPak tasks to perform
- a summary of practice and gameday setup procedures for quick reference

# Getting Started

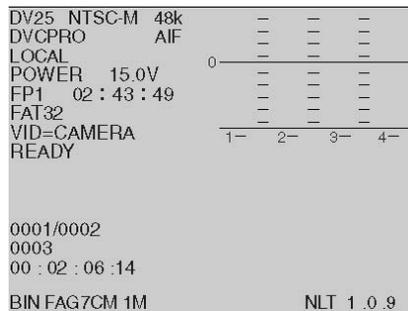
One advantage of the Sports Recorder is the ability to assign attributes or metadata to video during acquisition. Defining attributes you need streamlines editing and makes locating clips faster and easier. The DNS-33W software has a set of screens that you use to define these attributes. Instructions for setting attributes start below. Once you have defined the attributes, refer to Section 6, of DNS-33W manual for specific instructions on how to set up and perform basic camera functions. To get started recording, there are four basic steps.

## 1. Set Up your Logging Device

Follow the steps below to get to the Recorder screen, which is the starting point for assigning metadata attributes.

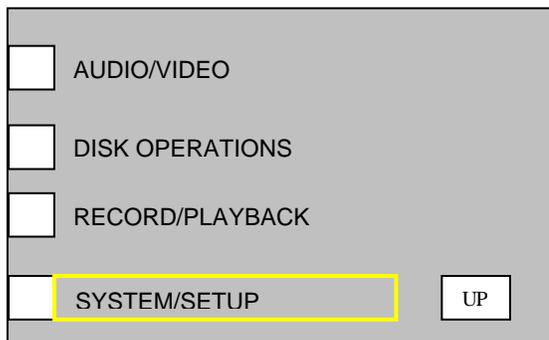
To define your attributes before recording:

### The Recorder (Status) Screen



- Power on the device. The **Recorder** Screen, pictured above, displays.
- Touch the Recorder Screen anywhere to display the **Main Menu**.

### The Main Menu Screen



*Set Up your Logging Device continued on next page*

- c) From the Main Menu Screen, press the **SYSTEM/SETUP** button to display the screen pictured below.

### SYSTEM/SETUP Screen

The screenshot shows a menu with four rows of options, each with a checkbox on the left and a 'UP' button on the right. The options are: INFO, ENVIRON; TIME & DATE, INTERFACES; SAT, TOUCH SCREEN; and OPERATIONS. The 'SAT' option is highlighted with a yellow box.

- d) On the **SYSTEM/SETUP** Screen, press the **SAT** button. The SAT Screen displays.

### SAT Screen

The screenshot shows a menu with three options, each with a checkbox on the left and a 'UP' button on the right. The options are: CLIP ATTRIBUTES, CI IP NAME, and SETUP. The 'SETUP' option is highlighted with a yellow box.

- e) On the SAT Screen, press the **SETUP** button. This displays the **SAT/SETUP** Screen. Now you are ready to store your attribute files into the Recorder.

### SAT – SETUP Screen

The screenshot shows a menu with four options, each with a checkbox on the left and a 'UP' button on the right. The options are: TETHER COMMANDO, STARTUP: ODK; Load Attr Files: ODK, CUSTOM; ATTRS SET AT: PAUSE; and SET DEF ATTRS.

*Set Up your Logging Device continued on next page*

The top left button on the SAT/SETUP Screen is named **TETHER**. This defines the type of logging device you are using. The **TETHER** button scrolls to offer three selections described below, make your selection, then **Power Off/On** to enable the setting to take effect (before using the TETHER device make sure it is attached to the Recorder before power is turned on).

Button	Use When
COMMANDO	When the CoachComm-logging remote is attached, you will see the STARTUP button display. The STARTUP button allows ODK or CUSTOM attributes to be active at Power On.
DECK	The Camera or Transport is connected to an RS422 deck controlling remote with playback and record capabilities. •
PALM	A Palm Pilot is attached and used for logging (setting attributes). The Palm Pilot software is available from NLT and is required to be used in this configuration.

## 2. Define your Attributes and copy to a FieldPak

Refer to Understanding the Commando Attribute Options [HOTLINK](#)

- a) Edit the file **CUSTOM.ATR** on your computer. Copy the file onto a **FieldPak**, to the root level (to the top level when you open the FieldPak).
- b) Edit the file **ODK.ATR** on your computer. Copy the file onto a **FieldPak**, to the root level (to the top level when you open the FieldPak).

## 3. Load the Attribute Files into the Recorder

- a) Insert the FieldPak with the defined attribute files into the recorder.
- b) From the **Main Menu** screen go to the **SYSTEM/SET/UP** screen. Select **SAT**, then **SETUP**.
- c) Below the “Load ATTR Files”
  - (a) Select the **CUSTOM** button to read the file into the Recorder for later use.
  - (b) Select the **ODK** button to read the file into the Recorder for later use.

## 4. Power the Recorder or the Transport Off, then On

When you make your selections, you must turn the power off then back on again before the setting takes effect (before using the TETHER device make sure it is attached to the Recorder before Power On).

# Understanding the Commando Attribute Options

## **Commando ODK**

1. Using the **STARTUP** button on the DNS33W SAT-SETUP Screen, select **ODK**.
2. To change the text used for the **ODK** attributes, create/edit the txt file ODK.ATR on your computer (Using NOTEPAD, WORDPAD or other TXT editor), then copy the file onto a FieldPak, at the root level (the top level of the FieldPak when you open it). This filename ODK.ATR should be all capitals.
3. Safely unmount the FieldPak from the computer and place it in the Camera or Transport.
4. From the SETUP/SAT Screen, select the **Load Attr Files, ODK** button. The camera reads the file, and associates the 8 ODK buttons to the 8 text fields.

An example file displays below.

ODK.ATR

```
#  
# GAME DAY Attributes  
ODK  
1:01 OFF  
2:02 DEF  
3:03 KO  
4:04 KR  
5:05 PU  
6:06 PR  
7:07 FG  
8:08 FGB
```

**Note:** Button 1 on the remote would log “01 OFF” as the single field attribute, in the example above.

## **Commando Custom**

Selecting **CUSTOM** from the SETUP/SAT Screen will read the file CUSTOM.ATR from the FieldPak and program the 64 attributes. There are 8 banks of 8 attributes in each bank.

An example file displays below.

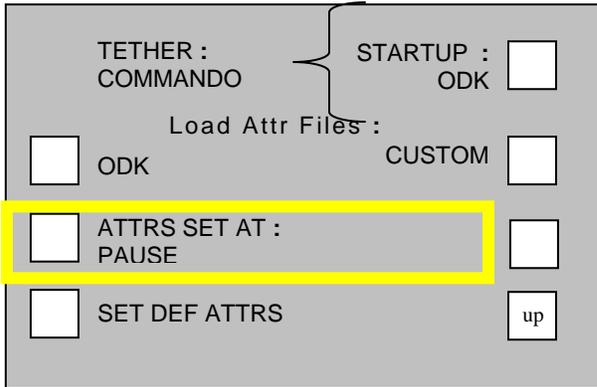
CUSTOM.ATR

```
# Set custom attributes
# Attribute names can only be 15 characters in length
# 64 attributes

1.0: ISO Drills
1.1: OL
1.2: DL
1.3: RB
1.4: LB
1.5: TE
1.6: DB
1.7: WO
1.8: Kickers
2.0: Interviews
2.1: Coach
3.0: Special Teams
3.1: KO
3.2: KR
8.0: Team Drills
8.1: Team Off
8.2: Team Def
8.3: 7 on 7
8.4: 9 on 7
8.5: pass rush
8.6: run block
8.7: 2 minute
8.8: Misc
```

# Setting Up Attributes During Acquisition

## SAT-SETUP Screen



The **ATTRS SET AT** button defines when the attributes are assigned to the play during a recording session. To make this function active the **RECORD/RECORD-PAUSE** mode must be set to **ON**.

### To Set Up Attributes During Recording

1. From the Main menu screen, select **RECORD**, then **PAUSE-RECORD**.
2. Press **PAUSE-RECORD** to **ON**.
3. From the **SAT-SET UP** screen, press the **ATTRS SET AT** button to toggle to your choice of either **PAUSE** or **EOP** (End of Play).

ATTR SET AT mode	Use When
PAUSE	<p>During Recording the attributes that are selected will be associated with the video just recorded, or the current sub-clip (EG at the moment when recording is PAUSED). You need the attributes selected before the recording is PAUSED to associate attributes to the video just recorded. You can modify attributes up until the moment the camera is placed into pause mode by using the Attribute menu or by using your remote logging device.</p> <p>A MARK-IN and a MARK-OUT are assigned to the subclip's head and tail position of the video just recorded.</p>
EOP	<p>During Recording the attributes that are selected will be associated with the video just recorded, at the moment the EOP button is pressed. You need the attributes selected before pressing EOP to associate attributes to the video just recorded. You can modify attributes up until the moment the EOP button is pressed by using the Attribute menu or by using your remote logging device.</p>

ATTR SET AT mode	Use When
	When using EOP mode several START-PAUSE events may have occurred. When using SET ATTR AT EOP, these video segments that were recorded are made into a single subclip, a MARK-IN and a MARK-OUT are assigned to the subclip's head and tail position of the video just recorded.

### Modifying Attributes While Using PAUSE

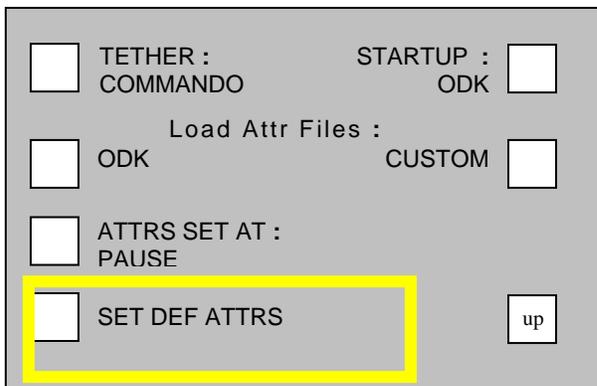
A subclip is made automatically after every PAUSE event and Attributes are assigned to the subclip at the PAUSE event (Attributes can be modified until the PAUSE event). In this mode each time a video segment is recorded (START then PAUSE) a new subclip is made with marks and attributes. If during the game a false event was recorded which was not a play then the extra play must be removed during POST editing. Noting the play number will help identify the extra play to be later removed during editing.

### Modifying Attributes While Using EOP

Pressing the EOP button while at a Pause assigns the active attributes to the video recorded. Attributes can be modified until the EOP button is selected on the Commando remote. This feature is useful for stringing video clips together as one video segment. For example, if you want to have the scoreboard and play as one video clip not two, you would set your camera to use EOP. The RET button (RETURN VIDEO REQUEST) on the lens assembly also acts as the EOP button. In EOP mode, the RET button will mark EOP.)

### Setting Default Attributes

Selecting the SET DEF ATTRS button allows you to set the attributes to a predefined set. The button lets you reset the football attributes to the initial, factory programmed state. Use this option if the attribute strings loaded are not valid or if the camera is having trouble with them (e.g., non-printable characters inserted into strings). Caution pressing this button will erase any attributes previously loaded.



## Setting Attributes Using the Commando Remote

Each bank of attributes can be accessed on the COMMANDO by pressing the **ODK** and **EOP** button at the same time (both buttons will begin to blink). This puts the remote in **CHANGE MODE**: Select #1 - #8 for Custom attributes, or **ODK** for the game day attributes.

- Selecting **BANK** (1 – 8): While in **CHANGE MODE**, once you press the bank key, that button begins to blink. This is to show the user which bank is active. Pressing 1 – 8 changes the attribute on the **STATUS** Screen of the camera to the attributes of the selected **BANK**.
- Selecting **ODK**: This makes the **ODK** label active. Selecting the 8 offensive, defensive, kicking attributes of the game will update the **STATUS** Screen.
- The **EOP** button: The **EOP** (end of play) button has special meaning and characteristics. A clip is only created when the **EOP** button is pressed; no matter how many times the record button is pressed. Once the **EOP** button is pressed, the **EOP** button will stay lit until the camera returns to Record mode. This feature allows the user to know if they have ended the play. The user can press the **EOP** button while recording, and at the **NEXT** pause-record, the active attributes will be assigned to the video clip and the **EOP** will remain on until recording begins again.

If you do not have a Logging Tether, then use the Recorder screen. Refer to the “Logging Using the Recorder screen” instructions below.

## Setting Attributes using the Recorder screen

To log attributes using the LCD touch screen, follow these steps:

1. From the **Main menu**, go to the **SYSTEM / SETUP**, then **SAT** screen.
2. From the **SETUP** screen, press **TETHER**, until **PALM** is selected.
3. Power the **Camera** (OFF then ON)
4. Then from the **Main menu**, select **SYSTEM / SETUP**, then **SAT** and **CLIP ATTRIBUTES**.
5. On the **CLIP ATTRIBUTES** screen, select **Attribute(s)**.
6. Shoot Practice. Changing the attribute you need to change and continue shooting.
7. A good practice is to Press the **STOP** button after every set of drills. This makes a new master clip.

# Setup Procedures

The general setup procedures are those tasks associated with setting up the DNS-33W or SAT Portable Transport to record football games/events. Follow the steps provided to complete each task. The following is a recommended list and brief description of each task detailed in this guide.

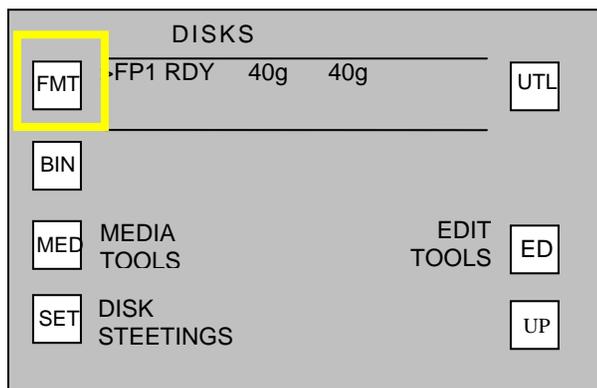
- Format a FieldPak:** initialize the FieldPak you are using before recording.
- Set a clip name:** use the LCD panel to identify a clip.
- Set unit identification:** provide every recorder in your organization with a unique identification number
- Calibrate the video inputs:** set up the system to accurately digitize the analog signal
- Save delay:** set the maximum time the camera will wait in idle mode before performing an Auto Save
- Reset clip number:** reset the master clip number or internal counter
- Reset clip name and counter:** change the master clip name in order to reset the name and counter
- Create and display a splash screen:** follow the main menu to the screen that enables you set and display a splash screen
- USB KB to navigate and enter text:** enter text and navigate with an attached USB keyboard
- LCD Touch panel's function keys:** use the Recorder LCD touch screen panel to perform specific functions
- Update the system:** use a multi-step process to download and install the most recent software for the DNS-33W or SAT Transport
- Backing up the system:** follow a procedure to save configurations (including metadata) to a FieldPak.

## 1. Format a FieldPak

Follow these steps to format each FieldPak before you record to it:

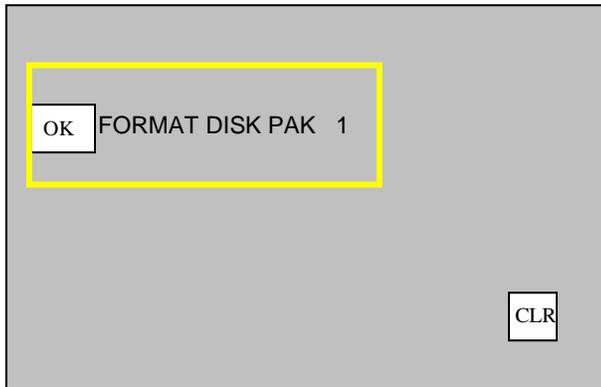
- a) From the **Main menu**, select **DISK OPERATIONS**. Press the **FMT** button to open the **FORMAT DISK PAK** Screen.

### DISK OPERATIONS Screen



- b) Hold **SHIFT** button down and press **OK** button. Open the keypad door to access the **SHIFT** button. Caution Formatting the FieldPak will erase any video that was recorded to the FieldPak. This operation will take several seconds.

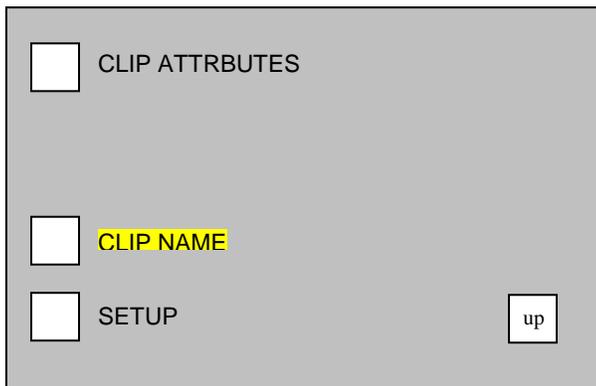
### FORMAT DISK PAK Screen



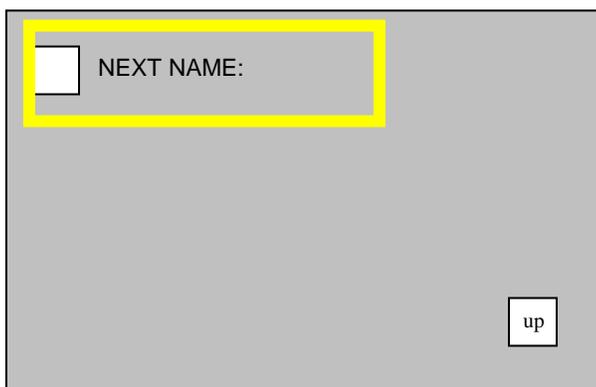
## 2. Name the Clip Before You Record

To assign every clip a unique name:

- a) From the **Main menu**, select **SYSTEM / SETUP**, then **SAT**. Press the **CLIP NAME** button. The **CLIP ATTRIBUTES/NAME** Screen displays.

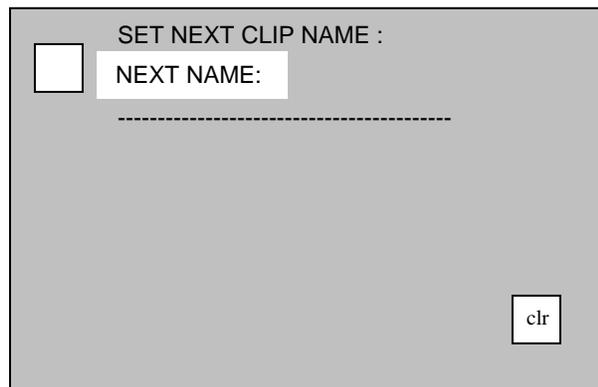


- b) Press the **CLIP NAME** button and the **NEXT NAME** Screen displays. (At this point, make sure that you are NOT in Record mode/NOT recording. The clip name must be set before you record.)



*Name the Clip continued on next page*

- c) Press the **NEXT NAME** button then use the buttons on the Recorder screen to enter the clip name. (Follow the directions in the **ENTERING CLIP NAME** box below for directions on how to use the buttons to enter text.)
- (a) Enter the name of your FieldPak on this screen using the buttons, and/or USB keypad to enter text:
    - Use > to advance 1 character, < to move back 1 character
    - Use >>| to advance 10 characters, |<< to move back 10 characters
  - (b) Use the **PLAY** button to save displayed characters and automatically advance to the next character.



SET NEXT CLIP NAME :

NEXT NAME:

-----

clr

### 3. Set UNIT ID

It is important to set a unique Unit Identification (0-36) for each camera or recorder in your organization. This needs to be done only once.

- a) From the **Main menu**, go to **DISK OPERATIONS**, then select **DISK SETTINGS** and the **UNIT: X Screen**.
- b) Set a new ID for each camera. Media files will be named using this ID to ensure unique filenames on the server.

#### 4. Calibrate VIDEO INPUTS

The Camera and Transport digitizes the input video during recording. The same operation performed on an analog signal using a vector-scope must be performed on the Transport to allow these devices to accurately digitize the video. Black must be set to 0 IRE and white must be set to 100 IRE. You must adjust color saturation and hue as well. These operations should be done periodically (either annually, after the Camera/Transport maintenance, or if required to match input sources which may be slightly out of calibration). The DNS33W video input can be calibrated using the same process as the Transport but the switcher must be set to external.

Use the following procedure to calibrate the Transport. If the input source is not properly calibrated, the Transport may capture degraded video. For the best results the input source should be properly calibrated.

- a) Use a calibrated input source such as a SMPTE test generator or camera. Provide 100% SMPTE bars to the component and composite input. The SDI input signal is a digital format and cannot be calibrated. Use the LCD to navigate this path:
- b) From the **Main menu**, go to **AUDIO/VIDEO**, then select **VIDEO**, and **CALIBRATE**.
- c) Prior to pressing Calibrate use the video input selector to select the component (or composite) input to be calibrated.
- d) The LCD will display the selected source. After confirming correct input source and color bars, press: **CALIBRATE VIDEO**. The system will automatically adjust the levels and offsets. The Transport will give a calibration result such as “Excellent Calibration”.

#### 5. Set SAVE DELAY

The Save Delay feature sets the maximum time the Camera/Transport will wait in idle before it automatically saves your recorded clips. You only need to make this setting this once. The default setting is five seconds.

To set the Save Delay:

- a) From the **Main menu**, go to **DISK OPERATIONS**, then select **DISK SETTINGS** and **SAVE DELAY: 00:05**
- b) Use the keypad to change the number if you prefer a more frequent or longer automatic save.

#### 6. Reset CLIP NUMBER

This function resets the master clip number of the Camera or Transport. The clip number is the internal counter, independent of the clip name counter.

To reset the Clip Number:

- a) From the **Main menu**, go to **DISK OPERATIONS**, then select **MEDIA TOOLS** and **RESET CLIP NUMBER**.
- b) You can only reset the appended master clip number by changing the clip name. To do so, follow the directions to reset clip name and counter below.

## 7. Reset CLIPNAME and COUNTER

This function resets the master clip name and the number appended to the clip name. The number that is appended to the clip name is automatically incremented for each master clip created. The only way to reset this number is to change the master clip name.

To change the master clip name:

- a) From the **Main menu**, go to **SYSTEM / SETUP**, then select **SAT** and **CLIP NAME-NEXT NAME**
- b) Enter a new clip name using the buttons under the Recorder screen. The clip number will begin with 0000.

## 8. Create and Display a Splash Screen

Creating a splash screen is another way to customize your DNS-33W Camera or Transport.

To create a Splash screen:

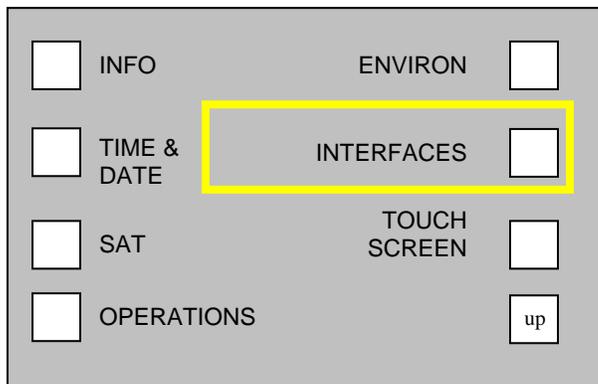
- a) From the **Main menu**, go to **SYSTEM / SETUP**, then select **OPERATIONS** and **DISPLAY SPLASH**
- b) Touch the screen to return to the previous screen.

## 9. Using a USB keyboard to navigate and enter text

You can use a USB keyboard to navigate and enter text in any text field on the Camera or Transport. Before using the keyboard, the Transport must have the USB functionality turned ON. (The USB interface is configured to the disabled position by default.)

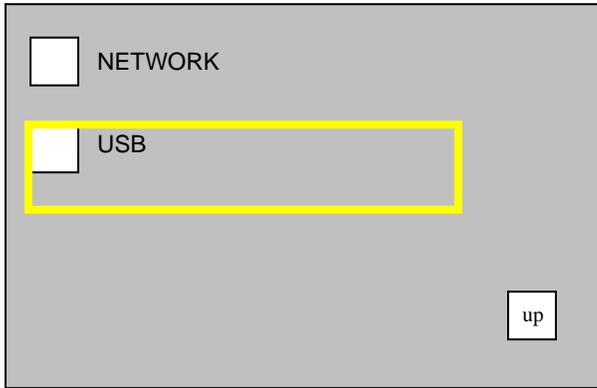
- a) From the **Main menu**, go to **SYSTEM / SETUP** screen.
- b) On the **SYSTEM/SETUP** screen, select **Interfaces**.

**NETWORK** and **USB** screen.

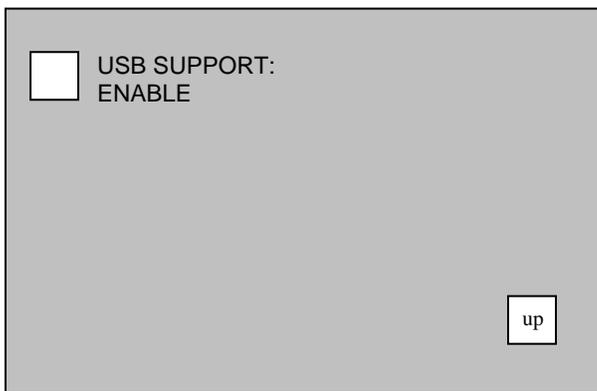


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**NETWORK** and **USB** Screen



c) Press the **USB** button to open the **USB SUPPORT** Screen.



- d) When you press the **USB SUPPORT** button, you can toggle between **DISABLE** and **ENABLE**. Toggle to select **ENABLE**.
- e) Power the Camera **Off**, then **ON** again for the setting to take effect.
- f) After restarting, attach a keyboard to the system. When attaching the keyboard, the system will acknowledge the device by displaying a message on the Recorder screen or in the Viewfinder if you are using the Camera.

*Using a USB Keyboard continued on next page*

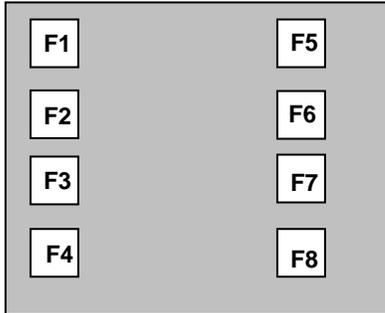
## Keyboard and Buttons

The table below indicates the keystrokes to use on the USB keyboard, the function that it is equivalent to and the function it performs.

On the USB Keyboard use	Or use this Equivalent Button on the Recorder	To
CTRL + R	RECORD	Record
CTRL + S	STOP	Stop
CTRL + P	PLAY	Play if idle
	PAUSE-REC	For SAT-2000, <u>Pause if recording</u>
CTRL + E	MARK EOP	Identify the end-of-play
CTRL + L	RETROLOOP	Engage Retroloop
CTRL + T	TIMELAPSE	Engage Timelapse
CTRL + F	SHIFT + PAK1 or SHIFT + PAK2	Switch to disk mode, select FieldPak(P) 1 or 2
CTRL + D	SHIFT + F8	<ul style="list-style-type: none"> <li>Go to Recorder screen if in submenu</li> <li>Toggle LCD screen to Video/Recorder screen</li> </ul>
CTRL + V	CVBS, SDI, YRB	Switch to default video input source
Left arrow	<	Return to the frame one step back
right arrow	>	Advance to the frame one step forward
up arrow	>>	Go to next clip/event
down arrow	<<	Move to prior clip/event
HOME	<< + <<<	Move to first clip/event
END	>>  + >>>	Return to last clip/event
page up	>>  + SHIFT	Advance to next bin/playlist
page down	<<  + SHIFT	Return to prior bin/Playlist
ESC		Clear / Exit edit mode

## F Key Button Functions

The LCD Panel includes the function key buttons. The table below identifies each button and describes its function..



Use This Button	To
F1	
F2	
F3	
F4	
F5	
F6	
F7	
F8	

## 10. Updating Your System

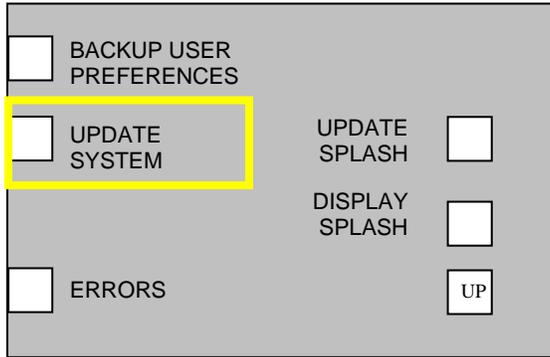
The time to update a system varies depending on what software components are being reprogrammed. Updates usually take less than 10 minutes. If you experience an update longer than this, please call support **BEFORE** you pull power. The LED or buttons will flash in some sequence during the update to indicate progress. When completed, the system may restart and the Recorder Screen will display. You will note that the version number in the lower right corner will be the new version number you installed.

Turn off the USB service, before you update your system's computer.

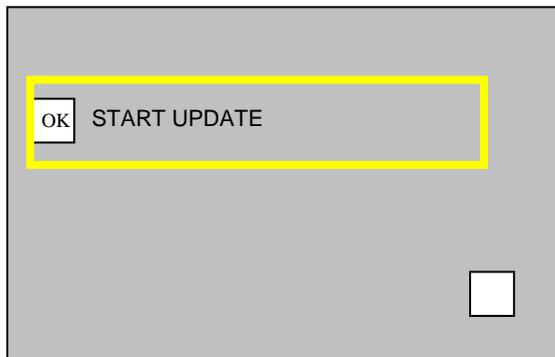
To turn USB connections off:

- From the **Main menu**, go to the **SYSTEM / SETUP** screen.
  - Select **INTERFACES** and USB. Then select **USB SUPPORT: DISABLED**
- a) Gather the software update version you need from NL Technology. You can get updates at [www.nltek.com](http://www.nltek.com) by FTP or CD-ROM, or you can call 978 686-1700.
  - b) Review the release/installation notes for any changes to this procedure.
  - c) Copy the new set of system files (specified in the release), to the top level of a formatted FieldPak on your computer.

- d) Unmount the FieldPak and place it into the Camera or Transport. Before beginning the update, make sure the Camera is being powered by AC or has a **full battery**.



- e) To update, navigate to the **SYSTEM OPERATIONS** Screen by going to the **Main menu**, and selecting **OPERATIONS**.
- f) Press the **UPDATE SYSTEM** button. The **START UPDATE** Screen displays.
- g) Hold the **SHIFT** button down while pressing the **OK** button to confirm the update.



**Note: Disruption of power during the system update may render the system unusable.**

## 11. Backing Up Your System

The backup and restore function allows you to save the configuration (including metadata) to a FieldPak or smart memory card. The file **USERDATA.SAV** can be copied to a personal computer and restored to the Camera or Transport at any time.

- a) From the **Main menu**, select **OPERATIONS**. Then select **BACKUP USER PREFERENCES**.
- b) Select the button which corresponds to the location where you want to save the backup file.

The screenshot shows a menu with the following elements:

- Top left:  SAVE TO FP
- Top right: RESTORE FROM FP
- Center: FILE: USERDATA.SAV
- Bottom left:  SAVE TO SM
- Bottom right: RESTORE FROM SM
- Bottom right (below RESTORE FROM SM):  UP

## 12. Restoring a Backup

To restore files, use the same process as you did when backing up your system but in reverse. Place a previous **USERDATA.SAV** file on a FieldPak and navigate to the **OPERATIONS** screen.

## FieldPak Tasks and Operations

The common FieldPak tasks are listed below with a brief description of each. Step-by-step instructions for performing each procedure are covered in this document.

<b>Identify the FieldPak:</b>	assign a unique name to each FieldPak
<b>Recover media</b> (After Power Loss):	recover and rebuild media after a power loss
<b>Use the FieldPak Wipe feature:</b>	remove all information from the FieldPak at once
<b>Test the Fieldpak:</b>	checks the FieldPak for its read/write performance, data integrity, and data access capabilities
<b>Access FieldPak Smart Data:</b>	use the vendor's system to show the FieldPak status
<b>View FieldPak Directories and Files:</b>	display all files and directories on the FieldPak
<b>Record to Dual FieldPaks:</b>	use two FieldPaks at the same time to make identical recordings to both drives (TRANSPORT only).

### 1. Identify the FieldPak by Name

It is a recommended practice to assign a unique name to each FieldPak you use.

To assign a name to a FieldPak

- a) From the **Main menu**, select **DISK OPERATIONS**. Then select **MEDIA TOOLS** and **DISK LABEL**. The Disk Label Screen displays.
- b) Enter the name of your FieldPak on this screen using the buttons, and/or USB keypad to enter text:
  - Use > to advance 1 character, < to move back 1 character
  - Use >>| to advance 10 characters, |<< to move back 10 characters
- c) Use the **PLAY** button to save displayed characters and automatically advance to the next character.

### 2. Recover Media After a Power Loss

If your FieldPak encounters a power loss while recording, use the following process to recover media files that were not closed out properly.

To recover media:

- a) From the **Main menu**, select **DISK OPERATIONS**. Then select **MEDIA TOOLS** and **RECOVER MEDIA**.
- b) If the system reports **LOST MEDIA FOUND**, then press **SHIFT** and the **RECOVER MEDIA** buttons at the same time to recover and convert clips.
- c) The Recover Media tool will then run the **REBUILD DATABASE** tool automatically and find the just created clips and add them to the active **BIN**.

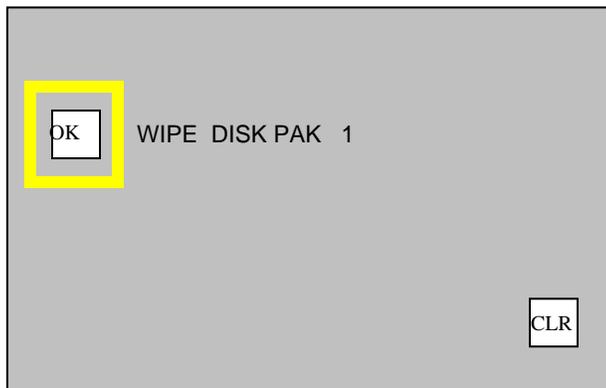
### 3. FieldPak Wipe

The Wipe feature is a low level format of the FieldPak that removes all information including the file system. Use the Wipe utility when a FieldPak has experienced file system issues and you want to begin in a fresh state.

When using Wipe, all data previously recorded is completely destroyed; the FieldPak must then be reformatted for use. You can wait until the wipe procedure finishes, or you can stop the process at anytime by pressing the **STOP** button on the camera's side panel or by pressing the Transport's **STOP** button.

To use the Wipe Utility:

- a) From the **Main menu**, select **DISK OPERATIONS**, then **UTL (Utility)**, then select **WIPE**.
- b) On the Wipe Screen, hold the **SHIFT** button while pressing **OK**.



#### 4. Test Your FieldPak

The Test Utility lets you test your FieldPak's performance including its Read/Write ability, data integrity, and data access capabilities.

To use the Test Utility:

- a) From the Main menu, select **DISK OPERATIONS**, then **UTL (Utility)**
- b) Select the **TEST** button. The **TEST** screen displays with a list of options.
- c) Press the button corresponding to the test you want to run.

**TEST OPTIONS** include:

- Seek across platter test
- Read performance test (look for reads longer than 0.25 secs)
- Read access test (make sure all sectors are readable)
- Write performance test (look for writes longer than 0.25 secs, destructive)
- Write access test (make sure all sectors are writable, destructive)
- R/W performance test (read/write all sectors, look for accesses longer than 0.25 secs) **(RECOMMENDED TEST)**
- R/W access test (make sure all sectors are readable and writable)
- Data integrity test (check all sectors with pattern check, destructive)

#### 5. Access FieldPak Smart Data

Smart data is the disk vendors' way to show the status of a FieldPak.

#### 6. View FieldPak Directories and Files

There are situations in which you will want to display all the files and directories on a FieldPak.

To view FieldPak directories and files:

- From the Main menu, select **DISK OPERATIONS**, then **UTL (Utility)**.
- Select **DIR VIEW**. Select from the folders.

#### 7. Record to Dual FieldPaks—For use with the Transport only

Dual FieldPak recording enables you to create two identical copies at the same time. The FieldPaks must be formatted together and stay as a pair.

To record to two FieldPaks at once:

- a) From the **Main menu**, select **DISK OPERATIONS**, then **DISK SETTINGS**.
- b) Set **DUAL RECORD: ON**

To use a single FieldPak in the Transport:

- a) From the **Main menu**, select **DISK OPERATIONS**, then **DISK SETTINGS**.
- b) Set **DUAL RECORD: OFF**

## For Quick Reference

### Gameday and Practice Setup with EOP

To setup your Transport for an End of Play Scoreboard and Play as one clip, use the following steps: (SIDELINE)

1. From the **Main menu**, select **RECORD**, then **PAUSE-RECORD**. Select **PAUSE-RECORD: ON**
2. From the **Main menu**, select **SYSTEM SETUP**, then **SAT**, select **TETHER**. Select **COMMANDO**.
3. Set Commando to **ODK** mode either as default or on remote.
4. Then set End of Play by going to the **Main menu**, select **SYSTEM SETUP**, then **SAT**. Select **SETUP**. Then select **ATTR SET AT: EOP**.

### Practice Setup—No EOP

To setup the Transport for practice only—not EOP, follow these steps:

1. From the **Main menu**, select **RECORD**, then **PAUSE-RECORD**. Select **PAUSE-RECORD: ON**
2. From the **Main menu**, select **SYSTEM SETUP**, then **SAT**, select **TETHER**.
3. Select **COMMANDO**.
4. Set Attribute at Pause by going to the **Main menu**, select **SYSTEM SETUP**, then **SAT**. Select **SETUP**. Then select **ATTR SET AT: PAUSE**

### Summary of Practice and Gameday Tasks

Below the tasks are presented in sequence in which they should be performed to prepare for recording practice and gameday clips.

1. Format your FieldPaks
2. Assign a clip name for camera 1
3. Check to verify **PAUSE-RECORD** is **ON**
4. Check that attributes are set at **PAUSE** or **EOP** (Sideline) **Note:** Select **EOP** on the Commando after every play – or press **RET** on lens
5. If you are using a tether, check that it is properly set. Check **ODK** is the startup attribute for the Commando