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# **Model 3040P-O**

## **PLAYLIST PLAYOUT SYSTEM**

**FOR**

***ODETICS PROTOCOL***

**USER MANUAL**

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## **1. REVISION HISTORY**

100803 Rev. 3.1 Company header information revised.

112193 Rev. 3.2 Added DNF Controls Limited Warranty.

## *Getting Started . . .*

### **2. DESCRIPTION**

The 3040P-O Playlist Playout System consists of the ST400 with a large LCD display and Playlist software. The Playlist is stored in non-volatile memory in the ST400.

The 3040P-O is ideal as an On-Air Automation System backup, as it doesn't need a separate video output; simply connect the 3040P-O to the video server. The 3040P-O supports 2000 elements, which means there can be up to 50 playlists of 40 clips each.

Scroll the list of available clips in the video server. Build a stack of clips for individual playout or list playout. While a playlist is playing, insert new clips into the list or delete unwanted clips. Set the start time for each clip to play from.

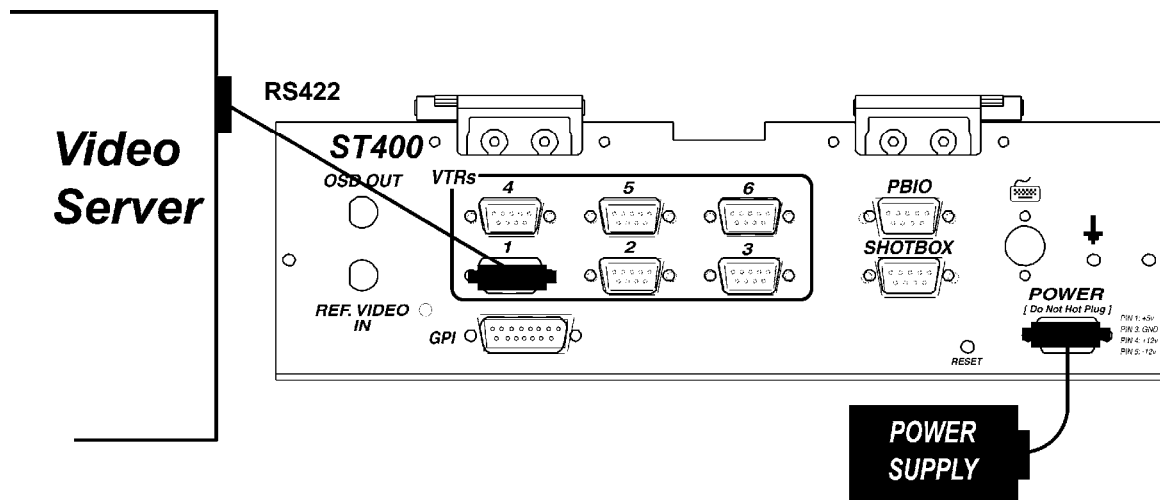
### **DEFINITIONS**

- ❑ Words surrounded by brackets in bold type, [**ENTER**], are keys on the ST400.
- ❑ Words surrounded by brackets in bold italic type, [***LOAD***], are softkeys on the ST400.
- ❑ [**XXX**] + [**XXX**] means hold the two keys down simultaneously.

### 3. INSTALLATION

- a. Plug one end of a 9-conductor, RS422 serial cable into the VTR 1 (2,3,4,5) connector on the rear of the ST400. (**NOTE:** VTR6 is for CAPTURE only.)
- b. Plug the other end of the cable into the REMOTE connector on the Video Server.
- c. Plug the power supply into an outlet, 90 VAC to 240 VAC.

#### CONNECTION DIAGRAM



## 4. VIDEO SERVER SETUP

Select "Odetics" Protocol on the video server.

Check the other options in the SETUP MENU prior to using the ST400 to confirm proper Video Standard mode and other User settable modes.

The 3040P-O System uses TM (field counter) time – not time code or VITC.

**NOTE:** A clip with 5 seconds of black on it called ~ *BREAK* must be created on the video server if breaks are to be inserted in the playlist.

## 5. PLAYLIST MAIN SCREEN

- ❑ TM: Magnified Countdown time
- ❑ PL: Playlist number, location in list and name of Clip currently playing
- ❑ TM START: Current clip's start time
- ❑ TM DURATION: Current clip's duration
- ❑ TM CUR TIME: Current clip's count-up time
- ❑ CLIP NAME, START and DURATION: Current Playlist information  
(Diamond indicates first clip in Playlist; squares are spaced every 5 clips.)

<b>TM</b> 00:00:02:29		<b>PLAY</b>	
PL:05 07/9 LASTWORD			
TM START:	07:00:08:00		
TM DURATION:	00:00:04:00		
TM CUR TIME:	00:00:01:31		
<b>CLIP NAME</b>	<b>START</b>	<b>DURATION</b>	
GOLFSHOT	◆ 00:00:00:00	◆ 00:00:04:00	
GOLFOPEN	◆ 00:00:09:00	◆ 00:00:09:00	
10CONT	00:00:15:00	00:01:10:00	
90240	00:01:10:00	00:03:03:00	
LadyBB	■ 00:03:03:00	■ 00:00:15:00	
JEFF	■ 04:00:15:00	■ 00:00:06:30	
<b>LASTWORD</b>	<b>07:00:08:00</b>	<b>00:00:04:00</b>	
Martin	09:00:00:22	00:00:02:20	
PULP	21:00:00:05	00:00:05:00	
<b>SKIP</b>	<b>TOP</b>	<b>CUE</b>	<b>LOAD UNLOAD EDIT</b>

**[SKIP]** jumps to the next clip in the list and keeps playing (enabled in PLAY mode only).

**[TOP]** cues to the top of the list.

**[CUE]** cues the current clip to its IN time.

**[LOAD]** selects a Playlist and, if previously saved, cues up the first clip.

**[UNLOAD]** unloads the current Playlist.

**NOTE:** Playlists are automatically saved when they are unloaded.

**[EDIT]** opens the PLAYLIST EDIT screen.

## 6. PLAYLIST EDIT SCREEN

- **PLAYLST**: Shows the current playlist; ready to be edited with the currently selected clip highlighted.
- **CLIP LIST**: Shows the list of clips that exist on the video server.

<b>TM 00:00:02;29</b>		<b>EDIT</b> 02/14: GOLFSHOT STR 00:00:00:00 DUR 00:00:04:00		
PL:05 02/14 GOLFSHOT TM START: 00:00:00:00 TM DURATION: 00:00:04:00 TM CUR TIME: 00:00:01:31		<b>PLAYLST</b>		
<b>CLIP LIST</b>		<b>TURN WHEEL TO VIEW CLIPS</b>		
GOLFSHOT GOLFOOPEN 10CONT 90240 LadyBB JEFF LASTWORD Martin PULP		* JAZZ <b>GOLFSHOT</b> 1010 GOLFOOPEN * 10CONT 90242 LadyBB JEFF LONGCELEB * LASTWORD MARTIN MOVIES PULP ONAIR		
<b>CLIP</b>	<b>ADD</b>	<b>INSERT</b>	<b>DELETE</b>	<b>EDIT</b>

\*[**CLIP**] selects the clip list for cliplist selection.

\*[**ADD**] adds the current cliplist clip to the playlist.

\*[**ALT**] + [**ADD**] adds a break to the playlist.

\*[**INSERT**] inserts the current cliplist clip at the position of the highlight bar in the playlist.

\*[**ALT**] + [**INSERT**] inserts a break at the position of the highlight bar in the playlist.

\*[**DELETE**] deletes the currently highlighted clip in the playlist.

\*[**ALT**] + [**DELETE**] deletes the entire playlist.

\*[**EDIT**] (with the **PLAYLST** selected) allows editing of the highlighted playlist clip's start time and duration.

**THE CURRENT PLAYOUT CLIP CANNOT BE EDITED**  
**WHILE BEING PLAYED.**



## *Advanced Features . . .*

### **7. PLAYLIST FUNCTIONS**

**NOTE:** All playlists are automatically saved in the 3040's memory as they are being created. There is nothing a user needs to do to save a playlist.

#### **a. SELECT A LIST NUMBER/LOAD A LIST FROM MEMORY**

- 1) Press [**LOAD**].
- 2) Enter the list number to be loaded, from 1-50.
- 3) Press [**ENTER**] to load and cue the selected list.  
**OR**  
Press [**ESC**] to abort.

#### **b. CREATE A PLAYLIST**

- 1) Select a list as described in **a.** above.
- 2) Press [**EDIT**] to enter EDIT mode.
- 3) Press [**CLIP**] to move the highlight bar to the CLIP LIST.
- 4) Turn the Wheel clockwise to scroll forward, or counterclockwise to scroll backward, through the list of available CLIP IDs.
- 5) When the desired CLIP ID is highlighted, press [**ADD**] to add the clip to the PLAYLIST.
- 6) The screen now displays "Enter Start Time."  
Press [**ENTER**] to accept the default start time (00:00:00:00).  
**OR**  
Enter the start time with the numeric keypad and press [**ENTER**].
- 7) The screen now displays "Enter Duration."  
Enter the duration with the numeric keypad and press [**ENTER**].  
  
(A duration of less than 1 second will NOT be accepted.)
- 8) To add additional clips, in order, to the PLAYLIST, repeat steps 3 through 7.
- 9) The playlist is automatically saved.

### c. **INSERT CLIPS INTO AN EXISTING PLAYLIST**

- 1) Press [**EDIT**] to get to the PLAYLIST EDIT SCREEN.
- 2) Turn the Wheel to move the highlight bar on the PLAYLIST to the clip that the new clip will be inserted before.
- 3) Press [**CLIP**] to move the highlight bar back to the CLIP LIST.
- 4) Turn the Wheel clockwise to scroll forward, or counterclockwise to scroll backward, through the list of available CLIP IDs.
- 5) When the desired CLIP ID is displayed, press [**INSERT**].
- 6) The screen now displays “Enter Start Time.”  
  
Press [**ENTER**] to accept the default start time (00:00:00:00).  
**OR**  
  
Enter the start time with the numeric keypad and press [**ENTER**].
- 7) The screen now displays “Enter Duration.”  
Enter the duration with the numeric keypad and press [**ENTER**].
- 8) To insert additional clips to the PLAYLIST, repeat steps 2 through 7.

### d. **TO PLAY THE PLAYLIST**

(Press [**ESC**] to move from the Edit Screen to the Playlist Main Screen.)

- 1) Press [**TOP**] to cue the PLAYLIST to the beginning.
- 2) Press [**PLAY**] to play the PLAYLIST.
- 3) The next clip will load into the preview position.
- 4) The list will play continuously until a break or the end of the list is reached.
- 5) [**JOG**], [**SHUTTLE**], [**SLO-MO**], [**RWD**] and [**FFWD**] functions are not available while viewing the PLAYLIST – the playlist must be stopped first.
- 6) To move to the clips farther down in the PLAYLIST, press [**SKIP**].  
([**SKIP**] is only enabled during PLAY mode.)

### e. **TO ABORT PLAYING A PLAYLIST**

Press [**STOP**] to abort a PLAYLIST sequence.

**f. TO RECUE A CLIP**

- 1) Press [*CUE*] to position the clip to the head.  
**OR**
- 2) Press [*TOP*] to position the PLAYLIST to the beginning.  
**OR**
- 3) Press [*LAST*] to recue to the previous clip.  
**OR**
- 4) Press [*NEXT*] to move down one clip on the PLAYLIST.

## 8. CAPTURE

This function allows clips to be recorded on the Video Server using an external device for video (SOURCE) and VTR6 on the 3040P-O to control that device.

Press VTR [6] to initiate the Capture function.

<b>TM</b>				<b>00:00:02;29</b>		<b>PLAY</b>	
<b>DESTINATION: VTR 1</b>							
<b>IN:</b>				<b>00:00:00:00</b>			
<b>OUT:</b>				<b>00:00:04:00</b>			
<b>DUR:</b>				<b>00:00:04:00</b>			
<hr/> <p style="text-align: center;">*    CLIP 6012    *</p> <p style="text-align: center;">*    NUM CAPS    *</p> <p style="text-align: center;">*    Enter/edit Destination Clip    *</p> <p style="text-align: center;">*    Use numeric or PC keyboard    *</p> <p style="text-align: center;">*    or NEXT/LAST keys and wheel    *</p> <p style="text-align: center;">*    ENTER- continue, ESC- cancel    *</p> <hr/>							
<b>IN</b>	<b>OUT</b>	<b>DEST</b>	<b>TIME</b>	<b>CAPTURE</b>			

- [IN]** Sets the current location on the SOURCE as the IN point.  
**[SHIFT] + [IN]** Manually enter the IN point using a numeric keypad.
- [OUT]** Sets the current location on the SOURCE as the OUT point.  
**[SHIFT] + [OUT]** Manually enter the OUT point using a numeric keypad.
- [DEST]** Select VTR [1], [2], [3], [4] or [5] for the record location.
- [TIME]** Press softkey to select mode: Tape time (TM), VITC (VT) or Time Code (TC).
- [CAPTURE]** After entering the IN, OUT and DESTINATION information, press this softkey. The screen shown above will be displayed; enter the CLIP ID (maximum of 8 characters).
- When **[ENTER]** is pressed, the SOURCE VTR will go to the PREROLL VALUE that has been assigned and the DESTINATION VTR (on the Video Server) will go into record.

**NOTE:** If a Playlist is loaded when trying to CAPTURE, a warning message to unload lists will be displayed.

## Reference . . .

### 9. SETUP MENU

Press [MENU].

<b>TM</b> 00:00:02;29	<b>MENU</b>
PL:05 02/14: GOLFSHOT TM START: 00:00:00:00 TM DURATION: 00:00:04:00 TM CUR TIME: 00:00:01:00	Model: 3040P-O Software Ver: V4.0 032701
<b>LIST MAPPING: 20 X 0100 ELEMENTS</b> STANDARD- NTSC WIND SPEED & MODE= +03.9 HOLD PREROLL VALUE= 00:00:05:00 RECORD DELAY= 03 FRAMES  Turn the wheel to select a menu option, then press CHANGE softkey to modify it	
<b>SERVICE</b>	<b>CHANGE</b> <b>EXIT</b>

**LIST MAPPING** Enter the number of lists desired using a numeric keypad; the number of elements will be automatically computed. (There will be a warning message to unload all lists, if there are lists loaded.)

**STANDARD** [NTSC] or [PAL]

**WIND MODE** [HOLD]  
(Fast wind is maintained only while key is depressed.)  
**OR**

[LATCH]  
(Fast wind is initiated and maintained with momentary key press.)

[SPEED] Press the softkey to change the speed setting  
(3.9, 6.0, 8.1, 10.0, 23.7).

**PREROLL VALUE** Enter any number using a numeric keypad.

**RECORD DELAY** Enter a number, up to 99, using a numeric keypad.

[SERVICE] To set factory defaults ([DEFAULTS]).  
**OR**

Clear all playlists ([CLEANUP]).

<b>TM</b> 00:00:02;29	<b>MENU</b>
<b>PL:05 02/14: GOLFSHOT</b> <b>TM START: 00:00:00:00</b> <b>TM DURATION: 00:00:04:00</b> <b>TM CUR TIME: 00:00:01:30</b>	<b>Model:</b> 3040P-O Software Ver: V4.0 032701
<b>LIST MAPPING: 20 X 0100 ELEMENTS</b> STANDARD- NTSC WIND SPEED & MODE= +03.9 HOLD PREROLL VALUE= 00:00:05:00 RECORD DELAY= 03 FRAMES  Set defaults or clear all the playlists	
<b>DEFAULTS</b>	<b>CLEANUP</b> <b>BACK</b>

<b>TM</b> 00:00:02;29	<b>MENU</b>
<b>PL:05 02/14: GOLFSHOT</b> <b>TM START: 00:00:00:00</b> <b>TM DURATION: 00:00:04:00</b> <b>TM CUR TIME: 00:00:01:31</b>	<b>Model:</b> 3040P-O Software Ver: V4.0 032701
<b>LIST MAPPING: 20 X 0100 ELEMENTS</b> STANDARD- NTSC <hr/> * <b>!</b> You are about to set all user * * settings to factory defaults * * Do you wish to continue? * * ENTER- continue, ESC- cancel * <hr/> Set defaults or clear all the playlists	
<b>DEFAULTS</b>	<b>CLEANUP</b> <b>BACK</b>

<b>TM</b> 00:00:02;29	<b>MENU</b>
<b>PL:05 02/14: GOLFSHOT</b> <b>TM START: 00:00:00:00</b> <b>TM DURATION: 00:00:04:00</b> <b>TM CUR TIME: 00:00:01:31</b>	<b>Model:</b> 3040P-O Software Ver: V4.0 032701
<b>LIST MAPPING: 20 X 0100 ELEMENTS</b> <div style="border: 1px solid black; padding: 5px; margin: 10px auto; width: fit-content;"> * <b>!</b> YOU ARE ABOUT TO DELETE *  * ALL THE PLAYLISTS *  * Do you wish to continue? *  * ENTER- continue, ESC- cancel * </div> <hr/> Set defaults or clear all the playlists	
<b>DEFAULTS</b>	<b>CLEANUP</b> <b>BACK</b>

## 10. SPECIFICATIONS

Power:	90 VAC to 265 VAC adapter supplied with IEC connector
Size:	[L" x W" x H"] 12 3/4" x 8" x 1 3/4" (front) 3 5/8" (rear) [8 5/8" high to top of display]
Weight:	10 lbs.
Rear Panel Connectors:	VTR1, 2, 3, 4, 5, 6 ..... (All DB9F) GPI ..... (DBF26F) Power ..... (DB9M) SHOTBOX ..... (DB9F) PBIO ..... (DB9F) Keyboard ..... (6-pin mini DIN) Ref. Video In ..... (BNC) Ground ..... Threaded stud.
Display:	Easy to read, back-lit LCD display
Jog/Shuttle Wheel:	With mechanical detents

### RS422 SERIAL CONNECTOR

#### 9-Pin D-Type, Female (DB9F)

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, Female (DB9M)

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

### SHOTBOX RS422 SERIAL CONNECTOR

#### 9-Pin D-Type, Female

Pin #	1	None	6	None
	2	None	7	None
	3	None	8	None
	4	None	9	None
	5	None		

## **PBIO RS422 SERIAL CONNECTOR**

### **9-Pin D-Type, Female**

Pin #	1	None	6	None
	2	None	7	None
	3	None	8	None
	4	None	9	None
	5	None		

## **GPI IN/OUT CONNECTOR**

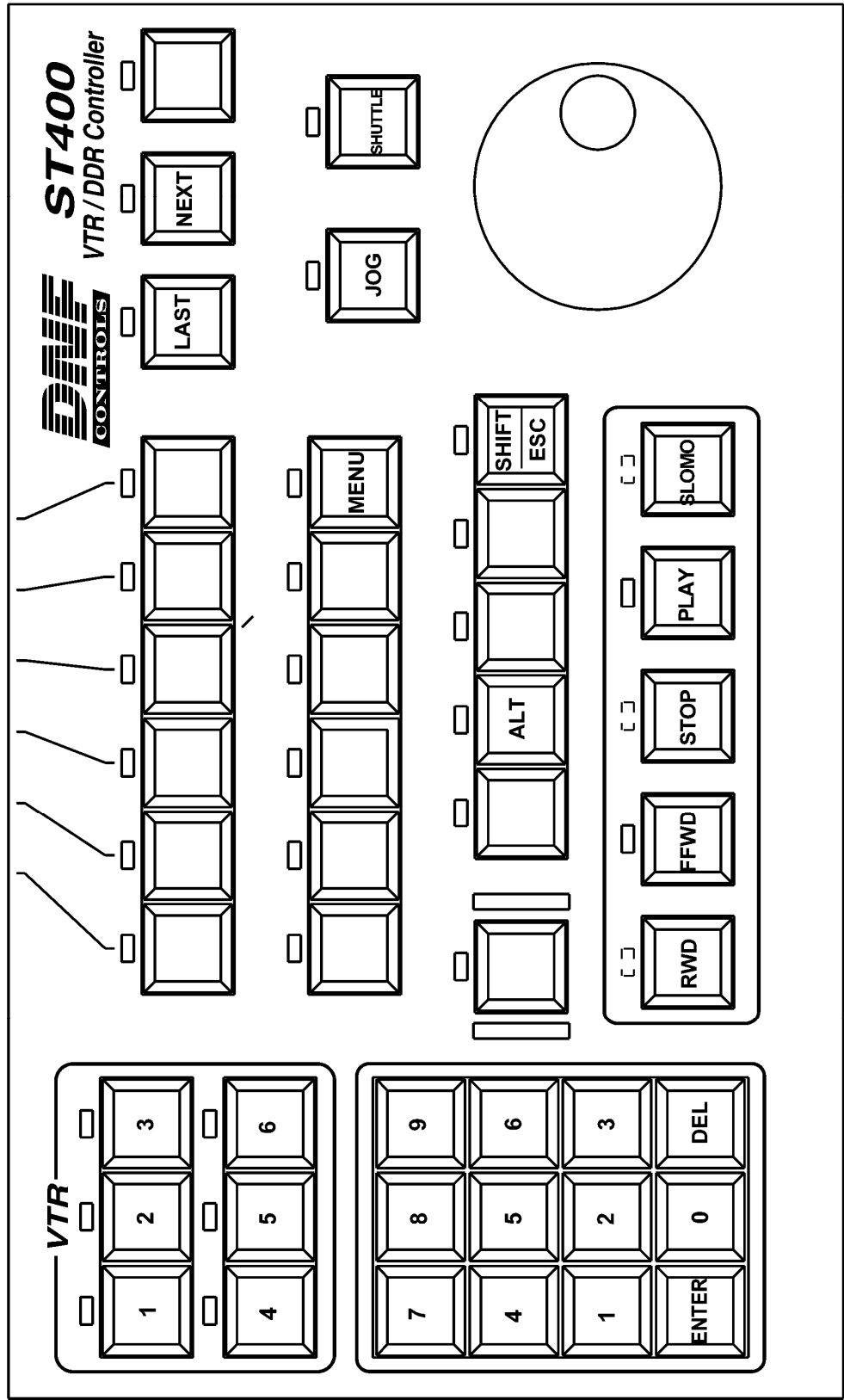
### **26-Pin D-Type, Female (DB26F)**

<b>Pin #</b>	<b>Function</b>	<b>Pin #</b>	<b>Function</b>
1	No Connection	14	GPI #5 Cue Element
2	No Connection	15	GPI #6 Next Element
3	No Connection	16	GPI #7 Last Element
4	No Connection	17	No Connection
5	No Connection	18	Ground
6	No Connection	19	+5V
7	No Connection	20	+5V
8	No Connection	21	No Connection
9	Ground	22	No Connection
10	GPI #1 Play	23	No Connection
11	GPI #2 Stop	24	No Connection
12	GPI #3 Skip	25	No Connection
13	GPI #4 List Top	26	Ground



# 11. KEY LAYOUT

## ST400 KEY CONFIGURATION 3040P-O



## 12. 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.

###