

Process View Recorder User Guide

Version 1.0
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Part No. 22200627

for use with:

Process View Recorder, PN 22293291



prepared by GPD Global® Documentation Dept.



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Warranty

General Warranty. Subject to the remedy limitation and procedures set forth in the Section “Warranty Procedures and Remedy Limitations,” GPD Global warrants that the system will conform to the written description and specifications furnished to Buyer in GPD Global’s proposal and specified in the Buyer’s purchase order, and that it will be free from defects in materials and workmanship for a period of one (1) year. GPD Global will repair, or, at its option, replace any part which proves defective in the sole judgment of GPD Global within one (1) year of date of shipment/invoice. Separate manufacturers’ warranties may apply to components or subassemblies purchased from others and incorporated into the system. THIS WARRANTY IS EXPRESSLY IN LIEU OF ANY AND ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

Limitations. GPD Global reserves the right to refuse warranty replacement, where, in the sole opinion of GPD Global the defect is due to the use of incompatible materials or other damages from the result of improper use or neglect.

This warranty does not apply if the GPD Global product has been damaged by accident, abuse, or has been modified without the written permission of GPD Global.

Items considered replaceable or rendered unusable under normal wear and tear are not covered under the terms of this warranty. Such items include fuses, lights, filters, belts, etc.

Warranty Procedures and Remedy Limitations. The sole and exclusive remedy of the buyer in the event that the system or any components of the system do not conform to the express warranties stated in the Section “Warranties” shall be the replacement of the component or part. If on-site labor of GPD Global personnel is required to replace the non-warranted defective component, GPD Global reserves the right to invoice the Buyer for component cost, personnel compensation, travel expenses and all subsistence costs. GPD Global’s liability for a software error will be limited to the cost of correcting the software error and the replacement of any system components damaged as a result of the software error. In no event and under no circumstances shall GPD Global be liable for any incidental or consequential damages; its liability is limited to the cost of the defective part or parts, regardless of the legal theory of any such claim. As to any part claimed to be defective within one (1) year of date of shipment/invoice, Buyer will order a replacement part which will be invoiced in ordinary fashion. If the replaced part is returned to GPD Global by Buyer and found by GPD Global in its sole judgment to be defective, GPD Global will issue to Buyer a credit in the amount of the price of the replacement part. GPD Global’s acceptance of any parts so shipped to it shall not be deemed an admission that such parts are defective.

Specifications, descriptions, and all information contained in this manual are subject to change and/or correction without notice.

Although reasonable care has been exercised in the preparation of this manual to make it complete and accurate, this manual does not purport to cover all conceivable problems or applications pertaining to this machine.

Overview

Key reasons to use the Process View Recorder:

- Allows recording of the process performed at station 1 or station 2 of dispense system.
- Video can be played back immediately after having been recorded.
- Video is saved to an SD card. Transport video files to your computer with the SD card.

Function

The Process View Recorder is an easy-to-use digital video recorder. Up to two cameras record processes performed at either of two dispense stations. Only one camera records at a time. An SD memory card stores all recordings.

Scope of Supply:

- Process View Recorder (PN 22293291)
- Remote Controller (not sold separately)
- SD card, 8 GB (PN 2025-0087)
- User Guide (PN 22200627)
- AV Cable Adapters (PN 2100-0512 and 2100-1007)

Features

The Process View Recorder provides:

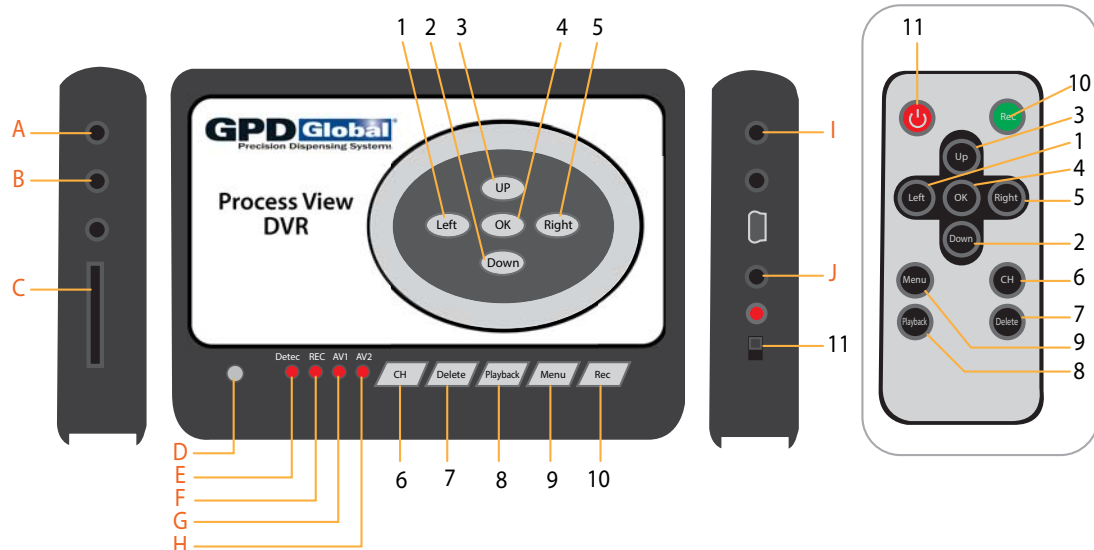
- Manual recording.
- Easily toggle recording between up to two camera locations.
- Easy operations via front panel or Remote Controller.
- Immediate playback available after recording.
- Various settings for 24 to 404 hours of recording time onto SD card.
- USB port for backup, download, and playback.
- Optional date and time stamp.
- Optional, automatic overwrite function when storage media is full.

Specifications

Hard Drive Size	SD card only
Storage Capacity	500 GB and under
Maximum Record Time	404 hrs
Number of Channels	2 (1 per monitor)
Video Format	NTSC/PAL (selectable)
Video Resolution	Full DI 720x480
Image Resolution	JPG 1280x960
Recording Frame Rate	30fps, 25fps, 20fps, 15fps, 10fps, 5fps
Storage Media	SD card
Storage Capacity	32GB (maximum)
Video Display	Full Screen (Live & Playback)
Video Compression Format	MPEG4
Video Record Quality	High/Medium/Low
Video Input	2 Channels RCA (1.0VP-P, 75Ω)
Video Output	1 Channel RCA (1.0VP-P, 75Ω)
Record Type	Photo/Video
Record Format	JPEG (Photo) / AV (Video)
Record Mode	Manual
Playback Function	Pause, Normal, FF, Rewind
Automatic Overwrite	Yes
Power Supply	AC 100~240V, 6VDC 800mA
Power Consumption	5W (maximum)
Operating Temperature	-10° C~50° C (14° F~122° F)
Operating Humidity	20%~80%
Dimensions (W x H x D)	95 x 130 x 25 mm (3.74" x 5.11" x 0.98")
Weight	0.2 kg (0.44 lb)

Part Identification

Figure 1: Process View Recorder and Remote Controller controls, connections, and indicators.



Controls

1	Left	Press to move left in menu or rewind during playback mode.
2	Down	Press to move down in menu.
3	Up	Press to move up in menu.
4	OK	Press to confirm or select.
5	Right	Press to move right in menu or fast forward during playback mode.
6	Channel (CH)	Press to manually switch between Cam1 and Cam2 input display.
7	Delete	Press to delete All/Current files or folders when in playback search mode.
8	Playback	Press to start playback video/picture.
9	Menu	Press to enter/exit menu or pause/exit during playback mode.
10	Record (REC)	Press to start manual recording. Press a second time to stop manual recording.
11	ON/OFF	Press this power switch to turn the Process View Recorder ON/OFF.

Connections & Indicators

A	AV IN1	
B	AV IN2	
C	SD Slot	
D	IR	NOTE: The Remote Controller must be aimed directly at IR (infrared) on the DVR box. The remote control can be used at up to a maximum distance of 25 feet and up to 120 degree angle.
E	Detection Indicator	
F	Record indicator	
G	AV1 indicator	
H	AV2 indicator	
I	AV out	
J	Power Jack	

Operations

The Process View Recorder records live video of the process performed at station 1 or station 2 of a dispense system.

Prepare & Turn On Process View Recorder

1. Insert SD card into SD Slot ([Figure 1](#), Item C).
2. Turn on the Process View Recorder using the ON/OFF switch ([Figure 1](#), Item 11). A boot up window displays.

Record Video

To manually record video:

1. To start recording, press the REC button ([Figure 1](#), Item 10). Recording begins and the red REC indicator LED light ([Figure 1](#), Item F) flashes, followed by two beeps to indicate the Process View Recorder is in record mode.
2. To stop recording, press the REC button again.
 - The manually recorded file is automatically saved.
 - The red REC indicator LED light turns off to indicate recording is turned off.

Select a Camera

To manually toggle between two camera inputs, press the Channel button ([Figure 1](#), Item 6) while in live view.

Playback Recording

To start playback, press the Playback button ([Figure 1](#), Item 8). The playback search query, folder(s), and file(s) display. For details, refer to [File Playback](#) (pg 11).

Delete a File or Folder

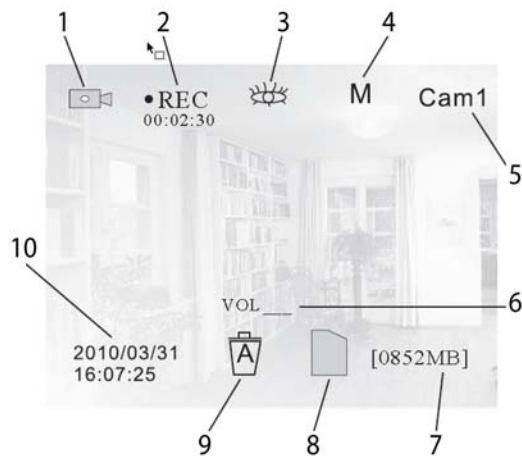
To delete a folder or file, advance to the folder or file and then press the Delete button ([Figure 1](#), Item 7). For details, refer to [Delete a File](#) (pg 12).

Menu

To enter menu setup, press the Menu button ([Figure 1](#), Item 9). For details, refer to [Menus](#) (pg 6).

User Interface

Figure 2: Process View Recorder user interface



1	Video/Picture mode	Video icon displays when Video/Picture mode is set to video in the setup menu. Camera icon displays when Video/Picture mode is set to picture in the setup menu.
2	Record	Record icon displays during video recording.
3	n/a	<i>(Motion detection is not applicable.)</i>
4	Manual / Auto Sequence mode	M (Manual) indicates the system is using Manual switch to toggle between camera1 and camera2.
5	Cam1 / Cam2	Indicates the currently selected camera channel. Press the Channel (CH) button to toggle between Cam1 and Cam2.
6	n/a	<i>(Volume is not applicable.)</i>
7	Free Space	Displays the amount of free space remaining on SD card.
8	SD Card icon	<p>After the SD card is inserted in the SD Card slot:</p> <ul style="list-style-type: none"> • the SD Card icon and Free Space (in MB) display 0MB, • the overwrite function is turned off, • the REC button is “press to record”, and • the Memory Full message displays in red in the center of the screen to indicate no more free space to record. <p>If the SD card is not inserted or cannot be recognized:</p> <ul style="list-style-type: none"> • SD Card icon does not display, and • Free Space displays 0000MB
9	Overwrite	Does not display when the Overwrite function is turned off in the setup menu. Displays when the Overwrite function is turned on in the setup menu.
10	Date/Time	Displays the Process View Recorder date and time.

Menus

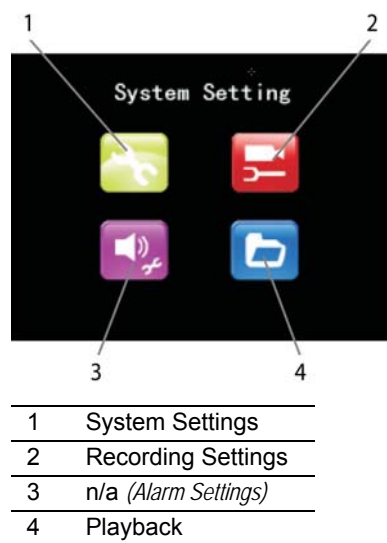
- [Menu Set Up](#) (pg 6)
- [System Settings](#) (pg 7)
- [Record Settings](#) (pg 9)

Menu Set Up

Press the Menu button ([Figure 1](#), Item 9) to open the Menu Set Up window.

- Navigate the selection options with the UP, DOWN, LEFT, RIGHT buttons.
- Open sub-menu windows with the OK button.
- Exit from sub-menu windows with the Menu button. Press the Menu button again to exit from Menu Set Up.

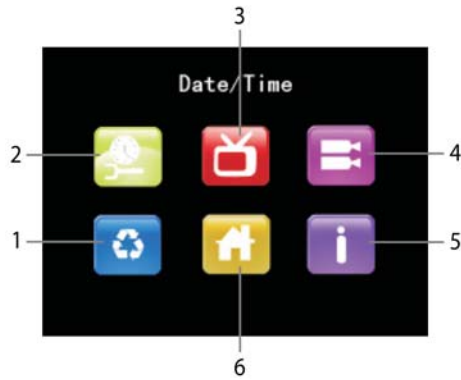
Figure 3: Menu Set Up window



System Settings

From the Menu Set Up window, select System Settings.

Figure 4: System Settings window



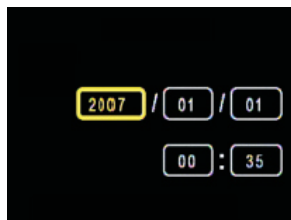
1	Format
2	Date & Time
3	n/a (Video System)
4	n/a (Scan Setting)
5	n/a (Version)
6	Default

Date/Time Setting

To set up the current date and time, select Date & Time from the System Setting window.

- Increase or decrease the highlighted value using the UP / DOWN buttons.
- To select a different value for editing, use the RIGHT / LEFT buttons.
- Press the OK button to save your settings and exit to the System Settings window, or press the MENU button to exit without saving edits.

Figure 5: Date & Time settings window



Format

To format the SD card:

1. Back up video files on the SD card before formatting the SD card.
2. Select Format from the System Setting window and press OK.
3. At the “Format will erase all data, continue?” prompt, select YES to format and erase all content from the SD card, and then press OK.

NOTE: To exit out of Format without formatting the SD card, select NO or press the MENU button.

Default

To restore all original factory selections:

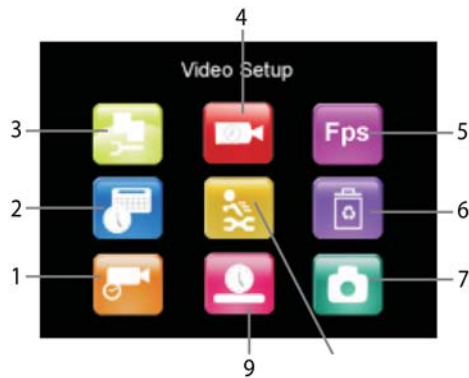
1. Select Default from the System Setting window and press OK.
2. At the “Restore default, are you sure?” prompt, select YES to reset to default settings and press OK.

NOTE: To exit out of Default without restoring defaults, select NO or press the MENU button.

Record Settings

From the Menu Set Up window, select Record Settings. The Record Settings window displays.

Figure 6: Record Settings window



1	n/a (PreRecord)
2	n/a (Schedule)
3	Video Setup
4	n/a (REC Time)
5	Frame Rate
6	Record Overwrite
7	n/a (Recording Type)
8	n/a (MD Setup)
9	Stamp

Video Setup

Video quality can be set to High, Medium (default), or Low. Increasing the recording quality setting increases file size, thus more quickly reducing storage space available on the SD card.

To set recording quality:

1. Select Video Setup from the Record Settings window and press OK.
2. Select desired quality setting (High Quality, Medium Quality, or Low Quality) and press OK.

Frame Rate

Frame rate settings range from 5 Fps to 30 Fps (frames per second) in increments of 5. The default is 25 Fps. Higher frame rate settings create larger file sizes but video playback is smoother. Lower frame rates conserve space but video playback quality is reduced.

To set the recording quality:

1. Select Frame Rate from the Record Settings window and press OK.
2. Select desired frame rate (5 Fps, 10 Fps, 15 Fps, 20 Fps, 25 Fps, or 30 Fps) and press OK.

Record Overwrite

When the Record Overwrite option is set to ON (enabled), the Process View Recorder overwrites the oldest recorded file when the SD card becomes full. If Record Overwrite is set to OFF (disabled), the Process View Recorder stops recording when the SD card becomes full.

To set the record overwrite setting:

1. Select Record Overwrite from the Record Settings window and press OK.
2. Select desired setting (ON, OFF) and press OK.

Stamp

Time Stamp adds the date and time to the video file if the Stamp setting is set to ON. If Stamp is set to OFF, date and time are not added to the video file.

To set the time stamp setting:

1. Select Stamp from the Record Settings window and press OK.
2. Select desired setting (ON, OFF) and press OK.

File Playback

The recording function is unavailable during video playback, i.e., the Process View Recorder can record and playback video but cannot do both at the same time.

Play File

To playback a video file:

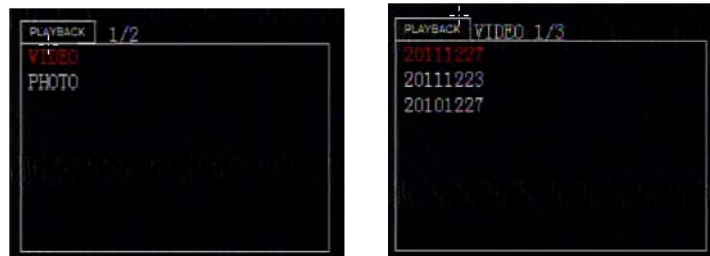
1. Stop the recording function.



IMPORTANT: Verify the recording function is turned off before playing back video files.

2. Open the playback directory:
 - Press the Playback button ([Figure 1](#), Item 8)
 OR
 - Press the Menu button ([Figure 1](#), Item 9) to open the Menu Set Up window, select the Playback button ([Figure 3](#), Item 4), and then press OK.

Figure 7: Playback Directory and Video Folder



3. Select VIDEO and press OK. The video folder displays.
4. Use the UP/DOWN and RIGHT/LEFT buttons to navigate through file lists and pages.
5. Highlight desired file, and then press OK to start file playback.

Playback Options

- **Pause** - to pause playback at any time during video playback, press OK. Press OK again to resume normal playback.
- **Rewind / Fast Forward** - to rewind video, press LEFT. To fast forward video, press RIGHT. Rewind and Fast Forward can be played at X2, X4, X8, or X20 speeds faster than normal speed.

Folders

Folder names consist of the year, month, and day and contain all the files recorded that day.

To delete a folder, advance to the folder and then press the Delete button ([Figure 1](#), Item 7). The folder will be deleted. Select between these options:

- **All** - delete all the folders
- **Current** - delete the currently highlighted folder
- **Cancel** - cancel delete process

Files

File names consist of the time, channel, event type (MAN for manual rec file), file type, and file size.



IMPORTANT: Manual recording length is fixed at 30 minutes per file. After 30 minutes, a new file and recording session starts.

Delete a File

To delete a folder, advance to the file, select the file, and then press the Delete button ([Figure 1](#), Item 7). The file will be deleted. Select between these options:

- **All** - delete all the files in the currently selected folder
- **Current** - delete the currently highlighted file
- **Cancel** - cancel delete process

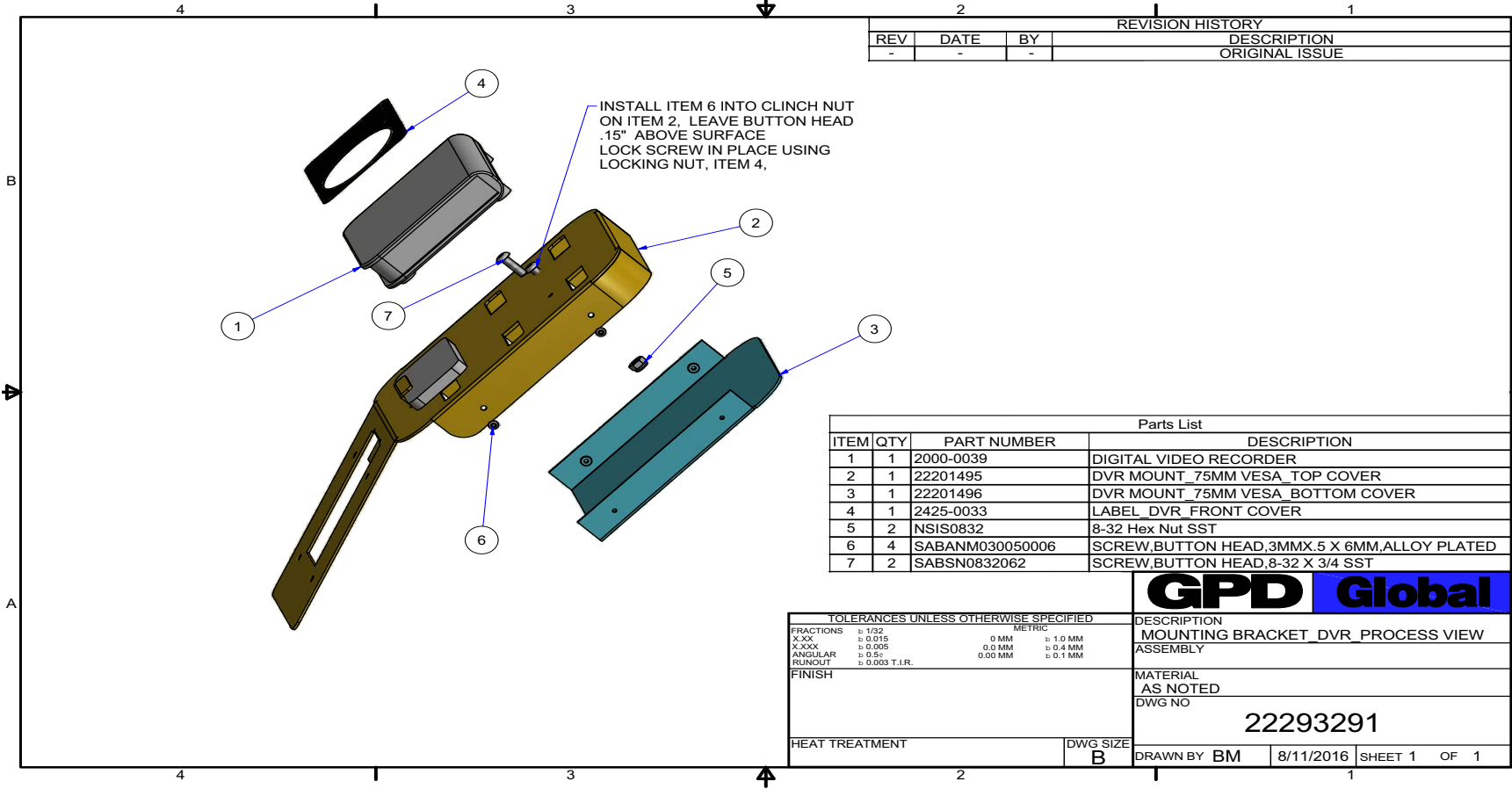
Mechanical Drawing

9/19/16

Process View Recorder

GPD Global®

File Playback



REVISION HISTORY			
REV	DATE	BY	DESCRIPTION
-	-	-	ORIGINAL ISSUE

Parts List			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	2000-0039	DIGITAL VIDEO RECORDER
2	1	22201495	DVR MOUNT_75MM VESA_TOP COVER
3	1	22201496	DVR MOUNT_75MM VESA_BOTTOM COVER
4	1	2425-0033	LABEL_DVR_FRONT COVER
5	2	NSIS0832	8-32 Hex Nut SST
6	4	SABANM030050006	SCREW,BUTTON HEAD.3MMX.5 X 6MM,ALLOY PLATED
7	2	SABSN0832062	SCREW,BUTTON HEAD.8-32 X 3/4 SST

<p>TOLERANCES UNLESS OTHERWISE SPECIFIED</p> <table border="0"> <tr> <td>FRACTIONS</td> <td>± 1/32</td> <td colspan="2">METRIC</td> </tr> <tr> <td>X.XX</td> <td>± 0.015</td> <td>0 MM</td> <td>± 1.0 MM</td> </tr> <tr> <td>X.XXX</td> <td>± 0.005</td> <td>0.0 MM</td> <td>± 0.4 MM</td> </tr> <tr> <td>ANGULAR</td> <td>± 0.5°</td> <td>0.00 MM</td> <td>± 0.1 MM</td> </tr> <tr> <td>RUNOUT</td> <td>± 0.003 T.I.R.</td> <td></td> <td></td> </tr> </table>		FRACTIONS	± 1/32	METRIC		X.XX	± 0.015	0 MM	± 1.0 MM	X.XXX	± 0.005	0.0 MM	± 0.4 MM	ANGULAR	± 0.5°	0.00 MM	± 0.1 MM	RUNOUT	± 0.003 T.I.R.			<p>GPD Global</p>	
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FINISH		DESCRIPTION																					
HEAT TREATMENT		MOUNTING BRACKET_DVR_PROCESS VIEW																					
DWG SIZE		ASSEMBLY																					
B		MATERIAL AS NOTED																					
DRAWN BY BM		DWG NO																					
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