MODEL	RANGE
4400A	±16g
4400A1	±200g

REVISIONS

REV.	ECN	DESCRIPTION	BY/DATE	CHK	APPR
A	11375	INITIAL RELEASE	LN 10/13/14	DV	AS
B	11819	ADDED 9007 SOFTWARE, SUPPLIED	JS 03/20/15	LA	DV
C	12939	ADDED NOTE △4	LN 09/06/16		AS

2.40 [61]

4X R.13 [3.2]

HARDWARE CHECK / READY INDICATOR LED

HARDWARE CHECK / READY

DYTRAN

4400AX VIBRATION RECORDER

1.600 [40.64]

2.00 [50.8]

RECORDING INDICATOR LED

RECORDING STATUS

X ○ Z

Y

△3 2X Ø.20 THRU [5.1]

.20 [5.1]

TROUBLESHOOTING

'HARDWARE CHECK/READY' LED IS CONSTANTLY GREEN - ERROR READING CARD

'HARDWARE CHECK/READY' LED IS CONSTANTLY BLUE - ACCELEROMETER IS NOT RESPONDING

'HARDWARE CHECK/READY' LED IS CONSTANTLY BLUE, FLASHING GREEN - CONFIG FILE IS NOT FOUND

'HARDWARE CHECK/READY' LED IS ALTERNATING BETWEEN BLUE/GREEN - LOW BATTERY

1.10 [27.9]

SD CARD SLOT

RECORD   POWER

RECORD BUTTON

S/N XXX

POWER BUTTON

MOLDED COVER

RARE EARTH MAGNETS, PERMANENTLY INSTALLED △4

9007 SOFTWARE, SUPPLIED

BOTTOM COVER, REMOVABLE FOR BATTERY REPLACEMENT.

△4 MAGNETS PULL RATING: UP TO 8.4 lb. NOTE: MAXIMUM PULL RATINGS ARE BASED ON DIRECT CONTACT WITH RUST-FREE AND UNPAINTED IRON PLATE. VARIATIONS IN MATERIAL CONDITION WILL SIGNIFICANTLY REDUCE THESE RATINGS.

△3 MOUNTING SCREW, MODEL 6246, 10-32 UNF-3A X 1.25, QTY. 2, SUPPLIED. MOUNTING SCREW, MODEL 6694A1, M5 X 0.8 X 35mm, QTY. 2, SUPPLIED.

2. HOUSING MATERIAL: ALUMINUM ALLOY, ANODIZED, COLOR: BLUE.

1. WEIGHT: 160 GRAMS, MAX.

NOTES: UNLESS OTHERWISE SPECIFIED

UNLESS OTHERWISE SPECIFIED: INTERPRET DIM & TOL PER ASME Y14.5M - 1994. REMOVE BURRS. COUNTERSINK INTERNAL THDS 90° TO MAJOR DIA. CHAM EXT THDS 45° TO MINOR DIA. THD LENGTHS AND DEPTHS ARE FOR MIN FULL THDS. DIMENSIONS APPLY AFTER FINISHING.

ALL MACHINED SURFACES. 63/ ∨ TOTAL RUNOUT WITHIN .005. BREAK SHARP EDGES .005 TO .010. MACHINED FILLET RADII .005 TO .015. WELDING SYMBOLS PER AWS A2.4. ABBREVIATIONS PER MIL-STD-12.

UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES. DIMENSIONS IN BRACKETS [ ] ARE IN MILLIMETERS TOLERANCES ARE:		
DECIMALS	METRIC	ANGLES
.XX ±.03	.X ± 0.8	±1°
.XXX ±.010	.XX ±0.25	

APPROVALS		DATE
ORIG	LN	10/14/13
CHK	DV	10/20/14
APP	AS	10/30/14

DYTRAN INSTRUMENTS, INC. Chatsworth, CA

MASTER ONLY IF IN RED

TITLE: OUTLINE/INSTALLATION DWG, VIBRATION RECORDER, MODEL 4400A

THIRD ANGLE PROJECTION USA

DO NOT SCALE DRAWING

SIZE B	CAGE CODE 2W033	DWG NO 127-4400A	REV C
SCALE: 1:1			SHEET 1 OF 1

172-0186 REV A

MODEL NUMBER 4400A	PERFORMANCE SPECIFICATIONS		DOC NO. PS4400A
	ACCELERATION RECORDER, TRIAXIAL		REV C, ECN 13988, 01/29/18

Model	Range (Gpeak)	Noise (G rms)	Oper. Temp(°F)	BandWidth(Hz)
4400A1	±200	0.06	-40 to +185	0 to 1000

- **RECORDS THREE-AXIS VIBRATION UP TO 24 HOURS**
- **IP64 RATED**
- **SDHC CARD COMPATIBLE**
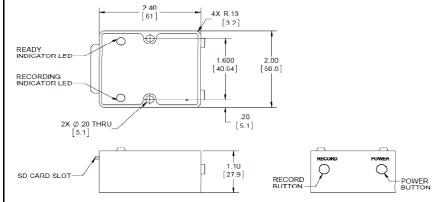- **DUAL MOUNTING CONFIGURATIONS**

Refer to the performance specifications of the products in this family for detailed description

Supplied Accessories:
1) Accredited calibration certificate (ISO 17025)
2) Mounting Screw, Model 6246, 10-32 X 1.25, Qty. 2
3) Mounting Screw, Model 6694A1, M5x0.8 X 35mm, Qty. 2

Notes:
[1] Linearity is % of specified full scale (or any less full-scale range), zero-based best fit straight line method.

[2] 3200 samples/sec sampling rate is not recommended for Free Run mode. Maximum data loss of .05% is possible when sampled at 3200 samples/sec in Free Run mode. Lower sampling rates result in no data loss. Triggered acquisition at 3200 samples/sec result in no data loss. Sampling rate tolerance ± 10%.

IMPORTANT: It is important to remember when using model 4400A that there are no anti-aliasing filters implemented in this design. While even if configured otherwise the sampling rate stays constant at 3200 kSamples/sec, any input signals over 1600 Hz will cause aliased signal within the displayed 1600 Hz bandwidth of the sensor.

PHYSICAL

	ENGLISH		SI	
Weight, Max.	5.6	oz	160	grams
Mounting	Screws / Magnets		Screws / Magnets	
Housing Material	Aluminum, Anodized		Aluminum, Anodized	

PERFORMANCE

	ENGLISH		SI	
Acceleration Range	±16	Gpeak	±157	m/s^2 peak
Maximum Frequency Range, -3dB	0 to 1000	Hz	0 to 1000	Hz
Resonance Frequency	>5.5	kHz	>5.5	kHz
Linearity [1]	< ±0.5	%F.S.	< ±0.5	%F.S.
Transverse Sensitivity, Max	5	%	5	%
Noise, Max.	0.015	G rms	147	mm/s^2 rms
Recording Time, Max.	24	hours	24	hours
Sampling rate [2]	100 - 3200	samples/s	100 - 3200	samples/s
Memory Card Type	SDHC, Class 4		SDHC, Class 4	
Acquisition Type	Free Run / Triggered		Free Run / Triggered	

ELECTRICAL

	ENGLISH		SI	
Battery	9V		9V	

ENVIRONMENTAL

	ENGLISH		SI	
Shock Max	1,000	g pk	9810	m/s^2
Vibration Max	100	g pk	981	m/s^2
Operating Temperature	-40 to +185	°F	-40 to +85	°C
Seal	Environmental / IP64		Environmental / IP64	

READY INDICATOR LED
RECORDING INDICATOR LED
2X ⌀.20 THRU [5.1]
2.40 [61]
4X R.13 [3.2]
1.600 [40.64]
2.00 [50.0]
.20 [5.1]
SD CARD SLOT
1.10 [27.9]
RECORD BUTTON
POWER BUTTON
RECORD
POWER

Units on the line drawing are in inches, units in brackets are in millimeters. Refer to 127-4400A for more information.

DYTRAN INSTRUMENTS, INC.