

Equipment Specifications

For further information: Email: <u>ttsoffice@aol.com</u> www.ttsurveys.com

TTS SC2004P Airgun Controller

Overview

The SC2004P is a fully integrated unit for the control and synchronization of air gun arrays. The SC2004P can control a maximum of 4 sleeve or G guns, or 2 GI guns per unit. When the unit is active, an external trigger is accepted and all guns are synchronized to a QC target time break value, known as the aim point. An extra toggle mode is available to fire odd and even guns alternatively. The raw detect signals of all the guns are displayed on the controller PC on a shot to shot basis and QC analysis will instantly inform the user when a shot is out of spec. A detailed line log is written to disk containing timings and amplitudes for each shot.

Specifications

Number of firing circuits: up to 8 sleeve or 4 GI guns

Solenoid Voltage: 50-70v (Hardware adjustable)

Solenoid Pulse Width: 10-30ms (Software

Programmable)

Solenoid Pulse width resolution: 100us

Detect Sensor Gain: 6dB or 12 dB (Software Controlled)

Detect Sensor Max I/P Voltage: (sensor gain of 6dB = 2v

peak to peak)

Detect Sensor Max I/P Voltage: (sensor gain of 12dB =

1V peak to peak)

A/D Input Range: 0-5V (2.5v bias)

A/D Resolution: 10 Bit

Samples Interval: 100us

Synchronisation Algorithm: Software Controlled

averaging, in 5 shot frames.

Timebreak O/P: TTL +ve pulse, set at Aimpoint, width

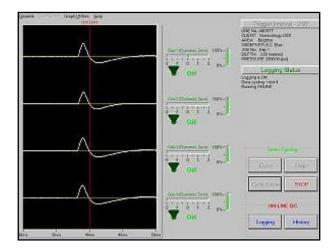
2ms

External Trigger I/P: +ve or -ve TTL Pulse (Hardware Adjustable)

Maximum cycle rate: 0.7 Sec (1x gun)

Size: 4u 480mm Deep Subrack Power Requirements: 220-240v AC





LINE DETAILS			Live No.:		VISION			F01:	20001/00		
			_	Clean		Oceanalies 2000			Avea	Tristme	
Jub Nec Day 1		OrphoMa		890			Charver:	SOLENe			
Carcinet Day 1											
			Shaller Shares			Gane:	A.				
Une Su	TITNEY 1	DC:Real	ada		in a	Shere	Aupto	ars	Terring Franks	Ange Ang	Augo Timas
State(-11	ALL DK.		- 6	4	18	4	-	0	99205	-634ms
of an in	-11	20048			2	34		_	- 0	09795	\$30 ma
Filmer	Ð			r	3	34		_	0	50.875	0:00 ma
Sheet D	dah d	-			1	54.			0	09.345	E.D. ost
Shet D		n Duriten	20202		1011	Evenuel		album	0 Templorate	06315	CLOSE
ta fant An	Bani Sen 200 mi	na Kan Den	10.000 0.000	101.0		Evenuel	Ken sterr	- Doct	Tempformer	04:395	CLOSE
	a Bank See	100 NOS	036 mg	ICL0		Gam Effering 0.00 ms	Kee stars man	000+	Terreg/Serverter 0. (2005) 4. (2007)	04:395	CLOSE
1 100 L Ar	1000 100 300 m 410 m 300 m	95.85 130.905 98.795	025 m 025 m	101.01 101.01 101.02		0.00 mm 0.00 mm 0.00 mm 0.00 mm	1000 1000 11205 11205 11205	000+	Teng Senate 0 (2005) 6 (2007) 6 (2007)	06.115	CLOSE
12 Card Ar	p Doct Tes 300 m 410 m 310 m 310 m	06305 130.905 96395 96475	000 m 000 m 000 m 000 m	101.0 101.0 11.60 11.60		Gan STrong DiOma DiOma DiOma	0 - 10 - 10 - 10 - 10 - 10 - 10 - 10 -	000+ 000+ 000+ 000+	Tene Parente 19330 19330 19330 19320 19320	06.315	CLOSE
1 000144 19385 19385 19385 19385 19385	9 Conti Ten 310 m 410 m 310 m 310 m 310 m	00.025 130.905 96.795 96.875 96.875 96.875	0 X m 0 X m 0 X m 0 X m 0 X m	1010 1010 1140 1100 1100		Gan STirrey 0.00 m 0.00 m 0.00 m 0.00 m 0.00 m 0.00 m	11.015 11.015 11.015 10.115 10.115 10.115	000+	Terres Portunes - 100000 - 100000 - 100000 - 100000 - 100000 - 100000	06.34%	CLOSE
1 00014 1936 1936 1936 1936 1936 1936	9 East See 310 mg 310 mg 310 mg 310 mg 310 mg 310 mg 310 mg 310 mg	99505 130.975 96.195 96.195 96.125 96.125	0 % m 0 % m 0 % m 0 % m 0 % m 0 % m	1010 1010 1140 1140 1100 1004		Gan STirrey 0.00 m 0.00 m 0.00 m 0.00 m 0.00 m 0.00 m	0.015 (1.315, (1.315, (1.315, (1.315, (1.315, (1.315, (1.315, (1.315,	000+ 000+ 000+ 000+ 000+	Teres Foreste • 19900 • 199000 • 199000 • 199000 • 199000 • 199000 • 199000 • 199000 • 1990000 • 1990000 • 1990000 • 19900000000 • 19900000000000000000000000000000000000	06.39%	CLOSE
1000 1 Jan 25 265 10 25 265 10 265 10 265 10 265 10 265 10 265 10 265	2 Cont Ten 3 Di mi 4 Di mi 3 Di mi 3 Di mi 3 Di mi 6 Di mi 2 Di mi 2 Di mi 2 Di mi	99305 130305 96395 96395 96375 96375 96375 96375 96375 96375	0% H 0% H 0% H 0% H 0% H 0% H 0% H 0% H	101.0 101.0 11.60 11.60 10.00 10.00 10.00 10.00 10.00 10.00		000 10 100 100 000 ms 000 ms 000 ms 000 ms 000 ms 000 ms	000 4400 11.315 11.315 10.115 10.115 10.215 10.215	000+ 000+ 000+ 000+ 000+	Teres Screets - 19900 - 19900 - 19920 - 19920 - 19920 - 19920 - 19920 - 19920 - 19920 - 19920	06.315	CLOSE
 300 1 Mer 30 205 40 205<td>2 Con 1 Tem 3 D ms 4 D ms 3 D ms 3 D ms 3 D ms 4 D ms 3 D ms 1 D ms 1</td><td>99305 139305 99395 99395 99305 9050000000000</td><td>030 m 033 m</td><td>1010 1010 9169 9169 9109 1010 10040 10040 10040 10040 10040</td><td></td><td>Gan S Fireing 0.00 ms 0.00 ms 0.00 ms 0.00 ms 0.00 ms 0.00 ms 0.00 ms 0.00 ms</td><td>Den 1440 11395 11395 11315 11315 11315 11315 11315 11315 11315</td><td>000+ 000+ 000+ 000+ 000+ 000+</td><td>Terres (1993) a (1993) a</td><td>96.315</td><td>ana particular</td>	2 Con 1 Tem 3 D ms 4 D ms 3 D ms 3 D ms 3 D ms 4 D ms 3 D ms 1	99305 139305 99395 99395 99305 9050000000000	030 m 033 m	1010 1010 9169 9169 9109 1010 10040 10040 10040 10040 10040		Gan S Fireing 0.00 ms 0.00 ms 0.00 ms 0.00 ms 0.00 ms 0.00 ms 0.00 ms 0.00 ms	Den 1440 11395 11395 11315 11315 11315 11315 11315 11315 11315	000+ 000+ 000+ 000+ 000+ 000+	Terres (1993) a	96.315	ana particular
1 2011 P 2 7/5 2 7/5	2 Cont Ten 3 Di mi 4 Di mi 3 Di mi 3 Di mi 3 Di mi 6 Di mi 2 Di mi 2 Di mi 2 Di mi	99305 130305 96395 96395 96375 96375 96375 96375 96375 96375	0% H 0% H 0% H 0% H 0% H 0% H 0% H 0% H	101.0 101.0 11.60 11.60 10.00 10.00 10.00 10.00 10.00 10.00		000 10 100 100 000 ms 000 ms 000 ms 000 ms 000 ms 000 ms	000 4400 11305 11305 10715 10715 10715 10715 10715	000+ 000+ 000+ 000+ 000+	Terro Portuna portun	06.115	CLOSE
1 001 00 3 3 3 5 4 5 4 5 4 5 4 5 4 5 4 5 4 5 4	9 Con 1 Tem 310 mg 4 10 mg 3 10 mg 4 10 mg 4 10 mg 4 10 mg 4 10 mg 4 10 mg 4 10 mg 2 10 mg 2 10 mg 2 10 mg	100 805 100 305 300 205 300 205 300 205 300 205 300 205 300 205 300 205 300 205 300 205	030 m 030 m	1010 1010 1100 1010 1010 1001 1001 100		Gan S Fireing 0.00 ms 0.00 ms 0.00 ms 0.00 ms 0.00 ms 0.00 ms 0.00 ms 0.00 ms 0.00 ms 0.00 ms	Exer (Ang. 11.205, 11.205, 10.715, 10.715, 10.715, 10.715, 10.715, 10.715, 10.715, 10.715, 10.715, 10.715, 10.715,	000 + 000 + 000 + 000 + 000 + 000 +	Terro Partesta e. (2010) e. (2020) e. (20	06.315	CLOSE
10 10011 Jan 20175 10 10185 10 10185 10 10185 10 10185 10 10185 10 10185	9 Continue 310 m (113 m 310 m (113 m 310 m (112 m 210 m (112 m 210 m 210 m (112 m 210 m (112 m)	00.035 130.005 90.195 90.195 90.125 90.125 90.125 90.125 90.125 90.125 90.125 90.125 120.145 120.145		1010 1010 1140 1100 1010 1010 1010 1010		000 870 490 000 490 000 490 000 490 000 490 000 490 000 490 000 490 000 490 000 490	Part March 1939 1939 1939 1939 1937 1937 1937 1937	000+ 000+ 000+ 000+ 000+ 000+ 000+ 000	Terreg Portante 0. 100000 0. 1000000 0. 1000000 0. 1000000 0. 10000000000 0. 100000000000000000000000000000000000	06.115	CLOSE