PC Programmable and Controllable Large Scale Music Fireworks Control System

Brochure



I. Introduction

Welcome!

GB Firing System dedicated to the world of Pyrotechnics.

This document shows how to use the PC programmable and controllable Large Scale Music Fireworks Control System.

PC programmable and controllable Large Scale Music Fireworks Control System is one of the professional Fireworks ignition Control System, which is provided by GB Special Effects Equipments Co., ltd. It consists of a PC, a Host-Controller, some sub-controllers and cables. Every sub-controller can ignite 32 cues fireworks, and the whole

System can ignite 3200 groups in total. The standard configuration is a PC, a Host-Controller, 30 sub-controllers, one terminal device, 26 cables, a serial cable, a USB-RS232, cable which can ignite 800 cues fireworks. The number of sub-controllers in the system can extend to 100 pcs, so the system has good expansibility. The user can create the ignition strategy flexibly according to the specific song, fuse the effect of music and fireworks furthest, thereby can make the best ignition effect artistically.

PC is the center controller of the system, it communicate the host-controller with the serial cable or USB-RS232 cable, sends command to host-controller and receive the data returned from the host-controller. On the host-controller's panel, there are:

(1) Four switches, can manage host-controller power supply, sub-controller power supply, Fire/Detection switch in sub-controller and host-controller operating mode;

- (2) One serial port;
- (3) One or two 7 cores cable ports;
- (4) Voltage indicator can be used to indicate the voltage of the host-controller's cell inside.
- (5) Charge interface.

The host-Controller is the main device of the system, which link up the PC and the sub-controllers. The shell of sub-controllers is made of stainless steel, On the top, there are 32 thread clips, which can ignite 32 cues fireworks. On the front and rear there are cable interface, an address identifier (ADDR_ID) and power indicator. The ADDR_ID can be set between 0 and 99.

II. Components

1. PC



fig 1 PC

2. Host-controller

The host-controller's appearance shows in fig 2.

The dimension of the host controller is 420 MM(long)×320 MM(width)×250 MM(height).

The host-controller has two versions, VER1.0 and VER2.0, VER1.0 has one 7 cores cable port and VER2.0 has two 7 cores cable ports.



fig 2 Host-controller

3. Sub-controller

The sub-controller's appearance shows in fig 3.

The dimension of the sub-controller is 340 MM(long)×160 MM(width)×100 MM(height).



fig 3 Sub-controller

4. Cable

Cable is 7 cores, show in fig 4. The standard configuration of cable is 26 cables, a 100m long, 24 25m long, a 50 cm long.



fig 4 Cables

5. Serial cable and USB-RS232 cable

In the case of PC has the RS232 port, we can use the serial cable connect with the PC and host-controller, and in the case of PC has not the RS232 port, we can use the USB port of PC to connect PC and host-controller use the USB-RS232 cable plus serial cable. Show in fig 5.



fig 5 USB-RS232 Cable and Serial Cable

6. Terminal Device

Terminal Device connect to the rear of the system which ensure the stability of the system. Show in fig 6.



fig 6 Terminal Device

7. Remote Host Controller

Remote Host Controller is used optionally. The remote control manner is realized with the remote Host Controller and remote Sub Controllers be participated.

The dimension of the remote host-controller is 240 MM (long) ×210 MM (width) ×115 MM (high).

8. Remote Sub Controller

Remote Sub Controller is used optionally. The remote control manner is realized with the remote Host Controller and remote Sub Controllers be participated.

The dimension of the remote sub-controller is 315 MM(long)×255 MM(width)×180 MM(high)

III. Connect Method (CM)

1. The terminal control Method: Show in fig 9. This is the general connect method.



fig 10 The intermediate control Method



3. The remote Control Method: Based on the terminal control Method and the intermediate control

Method, with the participating of the remote host-controller and the remote sub-controllers, the remote control manner can realize. The sketch map based on the terminal control method is show in fig 11.

IV. How to Use

4.1 Hardware

1. Please carefully check the components of firing system in advance. Whole equipment of firing system consist of :

(1) a PC; (2) a host-controller; (3) some sub-controllers; (4) one or two terminal Device;

(5) 26 7-cores cables; (6) A Serial cable and a USB-RS232 cable.

2. Aspect check before the mission of SET-OFF

(1) Switches, indicators, cable port, connection poles on the host-controller must be fixed reliably in good status, and with no damage;

(2) Confirm the host power, the sub power, fire/Detection switches are in "OFF" (upright).

(3) Confirm the cables are in good status with no damage, and the heads of cables have no become less crowded and distortion.

(4) Confirm the sub-controllers in good status, and with no damage.

3. The Connection of cables

After step 2, we can locate the host-controller, sub-controllers according to the SET-OFF mission, then connect the cables.

(1) The connection of electronically amorce head :

According to the SET-OFF strategy of the mission, connect the electronically amorce head on the specific sub-controllers' thread clip(the number of electronically amorce recommended is unique), And adjust the ADDR_ID in range of 0 to 99.

(2) The connection of cables :

Refer to fig 9 or fig 10 to connect the system.

(3) Serial cable or USB-RS232+serial cable :

Please switch off the power of host-controller, then connect the serial cable or USB-RS232+serial cable to the PC. In the case of PC has the RS232 port, we can use the serial cable connect with the PC and host-controller, and in the case of PC has not the RS232 port, we can use the USB port of PC to connect PC and host-controller use the USB-RS232 cable plus serial cable.

4. The sequence of Power On

(1) Start up PC , Note that not start the software of the control system;

- (2) Switch on the host-controller;
- (3) Switch on the sub-controller;
- (4) Before SET-OFF, switch fire/Detection to the position of "Fire";
- (5) Start up the software of the control system ;
- (6) Perform the Edit/Detection/Fire task.

Above step 2 to step 4 is completed on the host-controller. When in the edit status, step 2 to step 4 is alternative.

5. The detection before SET-OFF

- (1) Confirm above operation is OK, clean up field, related persons in place of check of sub-controllers, others withdraw beyond the safe region.
- (2) Perform the detection task according to the software part of this manual.
- (3) Note down the abnormal groups of the SET-OFF;
- (4) After checked entirely, notify the related persons make correspond cue to normal status.(in general the reason of abnormal is connection mistake);
- (5) Switch off all the power.

6. SET-OFF

- (1) Clean up field again, all persons withdraw beyond the safe region;
- (2) In the "**The sequence of Power On**" add step 4- Before SET-OFF, switch fire/Detection to the position of "Fire";
- (3) Perform the Fire task according to the software part of this manual.
- (4) Switch off the sub-controller and host-controller power;
- (5) Reclaim the equipment.

7. Charge

When the voltage is below 10V on the sub-controller and below 20V on the host-controller, please charge before use. The host-controller's charge must cooperate with the operating mode switch, the difference with switch on the "OP_MODE" is switch to the opposite position. Voltage check of the sub-controller will be used with the

multimeter. On the host and sub-controller there are two poles for charge, read for anode and black for cathode. The charge voltage is 12 volts.

Recommend duration of charge: is not exceed 8 hours.

4.2 Software

PC Configuration :

The Lowest Configuration : CPU : Pentium III 1GHz Memory : 256MB VGA Card : VGA 16bits Color Hard Disk : 20GB Windows 2000 or Windows XP DIRECTX9

The Recommended Configuration : CPU : Pentium VI 2.2G or higher Memory : 512MB VGA Card : VGA 24 bits Color Hard Disk : 40GB Windows 2000 or Windows XP DIRECTX9

1. On the desktop of WINDOWS (fig 12), double click the icon "Fire Expert Application", or click the "Fire Expert Application" in the folder of "Program" "Music Fire Control System", then the software of the control system will start up.



fig 12 Desktop

2. The control Interface show in fig 13. The communication port status and the status of connected to host-controller will display in the status bar below the interface, the status of control software will show in the status bar also(Edit Status). If the communication port initialized failure, please follow the fig 33 to configure the communication.

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fig 13 Control Interface

3. Menus. Show in fig 14 to fig 19.

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fig 14 "File" Menu

(2) Edit: show in fig 15.



fig 15 "Edit" Menu

(3) Music: show in fig 16.

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fig 16 "Music" Menu

(4) Control: show in fig 17. The menu has follow items: Cable control manner, Remote control

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fig 17 "Control" Menu

(5) View: show in fig 18

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fig 18 "View" Menu

(6) Help: show in fig 19. Click the menu items can display the version of the program and open the User's manual.

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fig 20 Load Music

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fig 21 shows the interface after load the music-"6.wav" in the install path.

fig 21 After load Music

When no necessary to use the music, you can specify the duration of ignition. Click the menu "Music" "Specify Duration", the specify duration of control dialog as show in will popup. You can specify the duration of control in seconds. The duration of control will display in the Total control window on the toolbar.

5标题 - Music Fire Control System				6
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	s s 00:00:00.0	00:00:00.0		
	Specify Duration of Control	×		
ex Ignition Time(hh:mm:ss.s)		atus	Ignition Status	Comment
	Duration: 1000			
	Duration. [1000]	seconus		
	OK Can	et		
				-
		hi		
Port CC	M1 initialized successfully, but communicate with H	ost-controller abnormally!	Edit Status, Comm Port Clos	adi
a 🕑 🥭 🔂 💥 🖬 🗐 🛷 🏳 🕵 💱 🖉	🛕 🧐 🦈 📜 🛛 🛥 Work_O (D:) 🛛 👿 :	Microsoft 🥙 FireExpert	🎬 无标题·Mus 🚔 🧷	🖉 (< 💕

When no necessary to use the music, you can specify the duration of ignition. Click the menu "Music" "Specify Duration", the specify duration of control dialog as show in will popup. You can specify the duration of control in seconds. The duration of control will display in the Total control window on the toolbar.

2	XV	•	II N	Q' Q	8	00:00:00.	0	00:00:	00.0		
					Specif	y Duration of Control			×		
ex	Ignit	ion Tir	ne(hh:m	0:ss. s)	Duration: 1000		seconds	atus	Ignition Status	Comment
						ок	Cancel				

fig22 Specify the duration of control

fig23 shows the interface after specify the duration of 1000 seconds.

• 9	×∨ ▶ ■ 11 M α α ∂	00:00:00.0) (00:16:40.0		
	Durat of Co	ion ntrol			Current Time of Control	
dex	Ignition Time(hh:mm:ss.s)	Sub-Controller(0~99)	Group(0~31)	Detect Status	Ignition Status	Comment
-						
_						

fig23 after specify the duration

5. After load the music, then can add control points. The control point is the fire group of the SET-OFF task. As show in fig 24. Click the "pause" button on the toolbar or push the spacebar in the edit status, then can enter the edit control point dialog. If the user wants to edit the item in the report table, he can double click the item in the edit status.

▲ 九岳總 - M	usic Fire Control Syst	em							-82
File(E) Edit(E)	Music(M) Control(C)	View(¥) Help(H)	101 A						
	X 🗸 🕨 🖬 II	NQC	a 8	00:00:00.0		00:00:44.1			
00:00:00.0	00:00:04.0	00:00:08.0	00:00:12.0	00:00:16.0	00:00:20.0	00:00:24.0	00:00:28.0	00:00:32.0	00:00:36.0 0
→ }-{}-	an a	A na series and a series of the	ekalenna akti	nga nga nga na 18 ng nga nga nga 18 ng nga nga nga nga nga nga nga nga nga	eregenden mi Hiller	lla de defendad	na yana) Kanalitaka	i dan sering Langing (A.	n transformer og Heligen i Hingil kol
•									2
Index	Ignition Time(hh:mm:ss.s)	Edit Contro	l Location		2	IS	Ignition Status	Comment
			Time	of Control:	00:00:06.0				
			Sub (Controller(0°00).	0				
			300 0		. 0				
			Group	o of Control(U 31)	: [u				
				OK	Can	cel			
•								I	
DLE		Port C	OM1 initialized suc	essfully, but communic	ate with Host-contr	oller abnormally!		Edit Status, Comm Port Ci	osedi
● 开始	i 🕑 💥 🚾 🗐	🖉 🙆 🙆 😒	4 🞯 🦈 🔼	□ 异面和	圖 使用说	🕈 CAJMew 🦉 á	₩命名· 🌃	无标题 自 2	' 🛃 🕻 « 🝠 15:11

fig 24 Edit control point

The interface after add the control point show in fig 25.

e(E) Edk	E) Music(M) Control(C) View(V) Help(H)		1		11	
		Cal 8 00:00:00.0		00:00:44.1		
• • •		ala dalar ak dila casha adal	ning ng n	an an ang pang pang pang pang pang pang		na na kata na k Na kata na kata n
TRACK	00:00:00:10.0	0 0	2	Detect Status		Comment
	Port	COM1 initialized successfully, but community	ate with Host-controls	= abnormally!	Edit Status, Comm Port C	losed1

fig 25 After editing control point

6. When all the control point was edited over, the user can save the strategy file. Click "File" "Save" menu, the dialog as show in fig 26 will popup, input the file name, then click "OK". The extend name of the file is ctr.

Contraction of the	 Music Fire Control Sys 	tem .					
E) Ed	t(E) Music(M) Control(C) View(Y) Help(H)				1	
0.00			00:00:00.0	00-00-20 0	00:00:44.1	0.00.20 0 00.00.22 0	00.00.20.0
	Carly March Martin		Librards all along a	MALLAR MAR	in a provinsi provins		Aundarladul
bulle	Continue of the state of the	a di se kata di dai dia	an de Prise and anna an	allina and and	. A determined by	n di k ^{an} trin, an kaina kai di	lin antique Attende
ev	Ignition Time	(hhimmies e) Su	h-Controller(0~00)	Groum(0~31)	Detect Statu	e Tenition Stat	tue Comment
r.h	00:00:06.0	0	D CONTINUES (C 557	0	Detect blatu	s ignition stat	us comperie
(00:00:10.0	0		2			
		97.2			213	el	
		保存在	(I): Dunic Fire Contro	l Systen 🔻 🗧	ديد. • 🗈 ሱ 🗔 •	5	
		Col bing	tal Stadta0.31 dr				
			st0-0-31.ctr				
		I Nimte	st1-0-31.ctr 🔄 test3-0-31.ctr st2-0-31.ctr				
		I Ninte	st3-0-31.ctr				
			-0-51.68				
		文件名(g): [test2-0-31.ctr		保存(5)		
		保存类型	2 (I): Fire Control Files (. etr)	取消		
						<u></u>	
						1	

fig 26 Save control file

7. Before SET-OFF, the user can open the saved strategy file directly. As show in the fig 27. The control system automatically enters the edit status after open the strategy file.

-	×✓ ► ■ II N QQ		0 (00:00:44.1		
ex	Ignition Time(hh:mm:ss.s)	Sub-Controller(0~99)	Group (0~31)	Detect Status	Ignition Status	Comment
		打开		1X		
		查找范围(I): C Nunic Fire C	ontrol System 💌	+ 🗈 💣 🗊-		
		Uninstall Test1-0-3:	Letr			
		Nmtest1-0-31.ctr = test3-0-33	.ctr			
		Nmtest2-0-31.ctr				
		test0-0-31.ctr				
		文件名 @ [test2-0-31.etr		打开(1)		
-		文件典型(I): [Fire Control Fil	les (4. etr.)	▼ 取消		
_						
					100	

fig 27 Open control file

fig 28 shows the interface after open the control file. The music waveform and control point will show in the control interface.

Der		II N C C	A 8	00:00:00.0		00:00:44.1			
00:00:00	00:00:01.0	00:00:02.0	00:00:03.0	00:00:04.0	00:00:05.0	00:00:06.0	00:00:07.0	00:00:08.0	00:00:09.0
	5.00 i	-	and to balland	and the state of the second	have ANULLI		MARILL, I	w. Phillipp	to work and the party
	Statement Statements	harmond light	an anna tha m	11 10 10 10 10 10 10 10 10 10 10 10 10 1	n to know	- 1141 A.V.		10 N	1. I.I
			M. IM who et Mr.	a fa all a des allels.	AND A DESCRIPTION OF		t de ballant et	** Later Party	ALLAND MAN
						and the state of the state	In the t	a measure a sure	a di li muta va
41									
		(1) ×	1	12 (0~00)	10 10001		1.	1	10
Index	Ignition lime	e(hh:mm:ss.s)	Sub-Conti	roller(0 99)	Group (0 31.	Detect Stat	us 1g	mition Status	Comment
1	00:00:01.0		2		0				
2	00:00:02.0		2		1				
4	00:00:04 0		2		2				
ч 5	00:00:05.0		2		4				
6	00:00:06.0		2		5				
7	00:00:07.0		2		6				
8	00:00:08.0		2		7				
9	00:00:09.0		2		8				
10	00:00:10.0		2		9				
11	00:00:11.0		2		10				
12	00:00:12.0		2		11				
13	00:00:13.0		2		12				
14	00:00:14.0		2		13				
15	00:00:15.0		2		14				
16	00:00:16.0		2		15				_
17	00:00:17.0		2		16				
18	00:00:18.0		2		17	_			
19	00:00:19.0		2		18				
20	00:00:20.0		2		19				
21	00:00:21.0		2		20	-			
02	00:00:22.0		2		21				
23	00:00:23.0		6		46				
27	00.00.24.0		14		23				,
1 I I I I I I I I I I I I I I I I I I I									

fig 28 After open control file

8. The selection of Control manner. Click "Control" "Cable-Ctrl Manner" or "Control" "Wireless-Ctrl Manner" can determine the control manner of mission. When the remote Host-controller and the remote Sub-controllers are used in the mission, the remote control manner should be selected.

9. Detection of Control points. Click the menu "Control" "Detect", the control system will enter the detection status. "Detect status, the Comm port is iopened" will show in the status bar in the right-bottom

corner. Click the"Play" button in the toolbar, the detection task will be performed so. The status of control points will be returned and show in the report table. As show in fig 29.

0 🛋 🛛	a × ✓ ▶ ■ II N Q	ca 🔤 💡	00:00:20.0	00:00:44.1		
0:00:00	.0 00:00:04.0 Pause 00:0	8.0 00:00:12.0	00:00:16.0 00:00:20	.0 00:00:24.0 0	0:00:28.0 00:00:32.0	00:00:36.0
	and a start of the light field in the start of	ALANA AND A CARDINAL IN	ha ha a tha that the the stands.		lagi, basali, 🖬 Karta, Kasta Masa 🛍	والقابان ومنادر المتعاد
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	a Maridelle La Lake a		a Mat Leit L Mildel Madea 18 L Har.	MARK AND MILL	le lla con a Manda, illadi ha a M	the second second and
			and the other of the second second			
Index	Ignition Time(bh:mm:e	e e) Sub-Contro	ller(0~99) Group(1731) Detect Status	Ignition Statue	Comment
1	00:00:01 0	2	0	No signal ret	a sin tron status	
2	00:00:02 0	2	ĭ	No signal ret	um	
3	00:00:03.0	2	2	No signal ret	urn!	
4	00:00:04.0	2	3	No signal ret	urn!	
5	00:00:05.0	2	4	No signal ret	urn!	
6	00:00:06.0	2	5	No signal ret	urn!	
7	00:00:07.0	2	6	No signal ret	urn!	
8	00:00:08.0	2	7	No signal ret	urn!	
9	00:00:09.0	2	8	No signal ret	urn!	
10	00:00:10.0	2	9	No signal ret	urn!	
11	00:00:11.0	2	10	No signal ret	urn!	
12	00:00:12.0	2	11	No signal ret	urn!	
13	00:00:13.0	2	12	No signal ret	urn!	
14	00:00:14.0	2	13	No signal ret	urn!	
15	00:00:15.0	2	14	No signal ret	urn!	
16	00:00:16.0	2	15	No signal ret	urn!	
17	00:00:17.0	2	16	No signal ret	urn!	
18	00:00:18.0	2	17	No signal ret	urn!	
19	00:00:19.0	2	18	No signal ret	urn!	
01	00:00:20.0	2	20			
21	00:00:21.0	2	20			
03	00:00:22.0	2	21			
23	00.00.23.0	6	66			
	00.00.24.0	4	40			

fig 29 Detection

10. Fire. Click the menu "Control" "Fire", the control system will enter the fire status. "Fire status, the Comm port is iopened" will show in the status bar in the right-bottom corner Click the "Play" button in the toolbar, the Fire task will be performed so. The status of control points will be returned and show in the report table. As show in fig 30.

		IN Q Q	28 8	00:00:13.1		00:00:44.1	3			
00:00:00.	0 00:00:04.0	00:00:08.0	00:00:12.0	00:00:16.0	00:00:20.0	00:00:24.0	00:00:28	8.0 00	:00:32.0	00:00:36.0
	AND A STATUTE OF UNITED	Lin Marshall star of a 1986	THOMAS MILLION	ALC: NOT ALC: NOT A	U.B. M. Lot II Making	A DESCRIPTION OF THE REAL	the had be	ALC: NUL	AND NO.	A Bring of Aug Bulg Ball
and marken	. And the state of	an chairi	1 1 1		a da da da da	11	1 million	MM Louis	b. the set	a particular particular second
	well is trailing day of	MA LOL & MARCH	ALL MADEL IN THE	tat a sing of a large strain	Internet and	at here alread	In dial	M. wellet	KADA MAR	and the state of the second second
	a the difficult	I CLUMMA . How	VARATE INCLATE	a Millel Lishing.	111 C 114 0	AND AND PROPERTY OF	H-HEILE	a national the	Sheet Ke v WI	held, to bull
			1. E							
			T. Contract		1	1		Desire a		
Index	Ignition Time	(hh:mm:ss.s)	Sub-Contr	oller(0~99)	Group(0~31)	Detect Sta	tus	Igniti	on Status	Comment
1	00:00:01.0		2		0	No signal :	return	Signal	Sended Ou	at
2	00:00:02.0		2		1	No signal :	return!	Signal	Sended Ou	t
3	00:00:03.0		2		2	No signal :	return!	Signal	Sended Ou	t
1	00:00:04.0		2		3	No signal	return:	Signal	Sended Ou	t.
2	00:00:05.0		2		9	No signal	returni	Signal	Sended Ou	1
2	00:00:08.0		2		6	No signal :	return:	Signal	Sended Ou	
2	00:00:08 0		2		7	No signal	return!	Signal	Sended Ou	
<u>.</u>	00:00:09.0		2		8	No signal	returnl	Signal	Sended Ou	÷
10	00:00:10.0		2		9	No signal	return!	Signal	Sended Ou	ă.
1	00:00:11.0		2		10	No signal	return!	Signal	Sended Ou	t
2	00:00:12.0		2		11	No signal :	returnl	Signal	Sended Ou	it
3	00:00:13.0		2		12	No signal	neturn!	Signal	Sended Ou	t i
14	00:00:14.0		2		13	No signal :	return!			
5	00:00:15.0		2		14	No signal :	return!			
.6	00:00:16.0		2		15	No signal :	return!	-		
7	00:00:17.0		2		16	No signal :	return!			
8	00:00:18.0		2		17	No signal	returni			
20	00:00:19.0		8		10	No signal	returni	-		
20	00:00:20.0		2		20	No signal	return:			
12	00:00:22.0		2		20	No signal	recurn:	-		
23	00:00:23.0		2		22	NO STRUGT	o contra			
24	00:00:24.0		2		23			10 20		
4										2
								the second se		

"Exit" or the right-top close button, to

11. Exit Program. If the SET-OFF is over, click the menu "file" exit the control program. As show in fig 31.

🕍 test2-0-31.ctr - Music Fire Control System - 8 × Fie(E) Edit(E) Music(M) Control(C) View(V) Help(H) New(N) Ctrl+N IIN Q Q B ? 00:00:00.0 00:00:44.1 Open(Q)... Ctrl+O 00:00:24.0 00:00:08.0 00:00:12.0 00:00:16.0 00:00:28.0 00 00:00:20.0 00:00:32.0 00:00:36.0 Save(5) Ctrl+S TRACIN Save As(A) A LEA AND A MADE AND AND A LEAST A MARK. UNIT IL A Distance in a little in the June 1 1 dialati Page Setup(R) ... 1 test2-0-31.dr 2 test0-0-31.ctr 3 Nmkest1-0-31.ctr 4 Nmkest0-0-31.ctr . Exit(X) Sub-Controller(0~99) Group(0~31) Detect Status . Ignition Time(hh:mm:ss.s) Comment Index Ignition Status 00:00:01.0 0 No signal return! Signal Sended Out 2222 00:00:02.0 Signal Sended Out 2 No signal return! 23 3 00:00:03.0 Signal Sended Out No signal return! 4 00:00:04.0 Signal Sended Out No signal return! 00:00:05.0 2222 4 5 No signal return! Signal Sended Out 00:00:06.0 67 56 Signal No signal return! Sended Out No signal return! Signal Sended Out 8 00:00:08.0 7 No signal return! Signal Sended Out 222222 9 00:00:09.0 8 No signal return! Signal Sended Out 10 00:00:10.0 9 No signal return! Signal Sended Out 11 10 00:00:11.0 No signal return! Signal Sended Out 12 13 00:00:12.0 11 No signal return! Signal Sended Out Signal Sended Out 00:00:13.0 12 No signal return! 15 222222222 14 00:00:15.0 No signal return! 16 00:00:16.0 15 No signal return! 17 00:00:17.0 16 No signal return! 18 00:00:18.0 17 No signal return! 19 20 21 22 23 24 00:00:19.0 18 No signal return! 00:00:20.0 19 No signal return! 20 21 00:00:21.0 No signal return! 00:00:22.0 No signal return! 22 23 2 00:00:23.0 00:00:24.0 9 . Port COM1 initialized successfully, but communicate with Host-controller abnormally! Ignition Status, Comm Port Closed! Exit the program 🦺开始 📀 🥭 🕃 😿 🗐 🧀 🏷 🏠 💱 📣 🚱 🦈 🔔 🔛 异面和... 🗐 使用说... 🦉 CA3Mew... 🦉 未命名 -... 🎬 test2-0-... 🛛 🚔 🧷 🐺 [] « 💆 15:20

4.3 USB To RS232 Cable

If the PC has not serial port, user can use the USB port to connect the host-controller. In this case, the USB-RS232 cable will be used.

1. Install the driver of USB-RS232 cable, the driver is in the folder "USB-RS232/pcdriver(Z-TEK)" on the install disk:

2. Plug the USB-RS232 cable into the USB port on the PC;

3. The OS will install the driver automatically, after installed, there is a new port will show on the "PORT" node in device manager, eg.," USB Serial Ports(COM1)", as show in fig 32.



fig 32 USB-to-Serial Port

4. Click the menu "Control" "Communication Setup", a dialog show as fig 33 will popup, in this dialog select the COM port "1", then, the program will use the COM1 to communicate with the host-controller. In General, only alter the number of COM port is enough, others option not needed alteration.

Theory and	Children Street Contactor	strat Systems				50		14	_101
0.00		II N QQ	19 8	00:00:00.	0	00:00:44.1	16		
00:00:00	.0 00:00:01.0	00:00:02.0	0.00:00:03.0	00:00:04.0	00:00:05.0	00:00:06.0	00:00:07.0	0.80:00:00	00:00:09.0
	n			ALTER ADDRESS	An an Albert Martin Martin	na la cara de la cara	ing parts in Inte hiltring	n na walipu Manasta M	nanga nanga Manang nangan
1									2
Index	Ignition Time	e(hhtmm:su.s)	Sub-Cont:	coller(0 99)	Group (0 3	1) Detect Sta	tus Ig	nition Status	Comment
2745678910122	00:00:02.0 00:00:03.0 00:00:05.0 00:00:05.0 00:00:05.0 00:00:05.0 00:00:05.0 00:00:05.0 00:00:05.0 00:00:05.0 00:00:05.0 00:00:11.0 00:00:12.0		COM Baudrat Parity B	I T 9600 T its None T OK	Data Bits Step Bits Flow Ctrl	8 v 1 v Nane v			
13	00:00:13.0		2		13	-			
15 16 17 18 19 20 21 29	00:00:15,0 00:00:16,0 00:00:17,0 00:00:17,0 00:00:19,0 00:00:29,0 00:00:29,0 00:00:21,0 00:00:22,0		e de seuse de de de se o		14 16 17 18 19 20				
23 29	00:00:23.0		222		22 23			10	
		Lever a							<u>ച</u>
(Prores)			4.00 -	D CAN-12	M) mainer	Mcanon 34	*es =	2.0 Im	-

fig 33 Communication Setup

V. Attention

- (1) Strictly follow the manual;
- (2) Gently get and gently put down;
- (3) Protect cable heads well;
- (4) During the SET-OFF, not move about the sub-controller once the sub-controller was located. If must move to another place, must switch off the sub controller power;
- (5) The equipment is waterproof and windproof to a certain extent;
- (6) The voltage of cell must above 11V;
- (7) The ADDR_ID rightly configured with the number from 0 to 99;
- (8) Before connect the electronically amore head, must check the resistance of the electronically amore head, which the resistance beyond 1 to 3 must discard.
- (9) The number of electronically amore head on one thread clip not exceed four, the resistance of electronically amore head plus the resistance of extend twisted-pair not exceed 10 . One electronically amore head connected to one thread clip is recommended.
- (10) Operating temperature not below -20 , When used below -20 , Please adopt some heat measure;
- (11) Once abnormal situation occur, please ask the professional person to solve;
- (12) The total control distance is not exceed 3 kilometers;
- (13) Protect the cables when SET-OFF, advise pave underground or protect key part with stannic berth paper;
- (14) During transport, storage and working, please keep upturned and protect electronical amorce head clips well;
- (15) When the host-controller is version 2, the other terminal device connected to the other unused cable interface optionally due to the situation.
- (16) When detecting, please select one or more electronical amorce heads to simulate realtime SET-OFF.

VI. Trouble Shooting

- 1. If "COMPort * initialized failure" is show in the status bar when the control software start up, then the control system is abnormal. There are two causes:
 - (1) The COM port is not exist, please follow the fig 33;

(2) Program was not exit normally last time, the process was not ended. Please open the task manager, if the "FireExpert.exe" is exist in the process card(as show in fig 34), then end the "FireExpert.exe" process, attempt to start the control software again.

映像名称 FireExpert.exe alg.exe testmer exe	用户名 Yangsh	CPU	内存使用	~
FireExpert.exe alg.exe taskmgr.exe	Wangsh	00		100
alg. exe	T COMPLET CONTRACTOR OF THE	00	1,420 K	
taskmar eve	LUCAL SERVICE	00	996 K	
canter . ere	Wangsh	04	5,028 K	
KPFWSvc. EXE	SYSTEM	00	756 K	
WINWORD. EXE	Wangsh	00	2,428 K	
spoolsv.exe	SYSTEM	00	1,736 K	
svchost.exe	SYSTEM	00	2,180 K	
KWatch. EXE	SISTEM	00	4, U36 K	
svchost.exe	WETWORK CERVICE	00	1,008 K	
svchost.exe	NEINUAR SERVICE	00	900 R	
svchost. exe	SISIEM Wassel	00	9,204 R	-
Acrolray. exe	NETWORK CREVTCR	00	1 576 K	
What I Han FVF	Wangeh	00	504 K	
suchast ave	SYSTEM	01	1 848 K	
KAVPEW EVE	Wangsh	00	884 K	
lease exe	SYSTEM	00	1 024 K	
Services eve	SYSTEM	00	1 856 K	

fig 34 task manager

2. When perform the detection, communication normal, but detection status is abnormal, there are two causes:

(1)Reset of Host-controller is not enough;

(2) There is having the same ADDR_ID sub-controller.

The solution is power on again and check the ADDR_ID of sub-controllers.

- 3. When exception is presented when switching between the cable-control manner and the remote control manner, Please determine the desirable control manner, exit the application, then start the application again.
- 4. When use USB-RS232 cable, after installed the driver, the COM port number is exceed 4, eg.

COM5, COM6, please alter attribute of port as follow:

- (1) Right click "My computer" "Attribute", then popup "System attribute" dialog;
- (2) Click the "hardware" sheet, then click device manager, then popup the interface of device manager;
- (3) Double click the "USB Serial Port (COM*)" in the "Ports(COM [‡]∏LPT)" node, then popup "USB Serial Port (COM*) attribute" dialog;
- (4) Click the button "Advanced" in sheet "Port Setup", then popup "COM*'s advanced setup" dialog;
- (5) Select "COM port number" to one of not in using COM1 to COM4, eg. COM1, then click "OK", return the "USB Serial Port (COM1) attribute" dialog;
- (6) Configure the specific port as show in fig 35, then click "OK".

表的文档 MaxEm DL		
製約电積 Media Player Classic	u	
	道讯端口 (COM1) 届性	<u>?</u> ×
	常規 端口设置 驱动程序 资源	
网上结婚 Setup Factory 7.0	毎秒位数 (8): 9600	
	数据(立 (1)): 8	
	音保校验 (P): 无	-
	停止位 (5):1	
2	流控制(P): 元	-
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fig 35 Port attribute

Hunan Dream Fireworks Co., Ltd GB Special Effects Equipment shop URL: www.dreamfireworks.cn

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