User Instructions for CKP Control Keypad

Introduction:

The CKP (Control Keypad) is an accessory keypad that can be added to any Systemline installation to enable RS232 control of third party systems. To provide this functionality a Xantech IRS232A IR to RS232 module MUST be used in conjunction with the CKP.

System Description:

A typical CKP RS232 control system would comprise of a Systemline S4.3/S4.4 installation to which CKP keypads can be connected directly or daisy-chained to existing NMS/KMS/DMS modules.

The Xantech IRS232A unit connects to a window emitter output on either the Systemline Controller or a global IR output on the Systemline Commander.

The CKP and IRS232A work totally independently of other Systemline Commands.

IRS232A Preparation:

Before installing and connecting the IRS232A unit it is necessary to remove a jumper within the Xantech unit to make it compatible with the Systemline window emitter output.

The procedure is as follows:-

1) Remove the two pozi-drive screws from **both** sides of the IRS232A.
2) Remove the two hex standoffs from each side of the D-Sub connectors on the Right hand side of the unit. Remove the cover.
3) Locate and remove the jumper JP1 positioned beneath the two LED's and R4. Replace the cover and all screws.

Connections:

Please refer to connection diagrams on the next page.

IMPORTANT: Make sure that you remove jumper JP1 inside the IRS232A first!

Refer to "IRS232A Preparation".

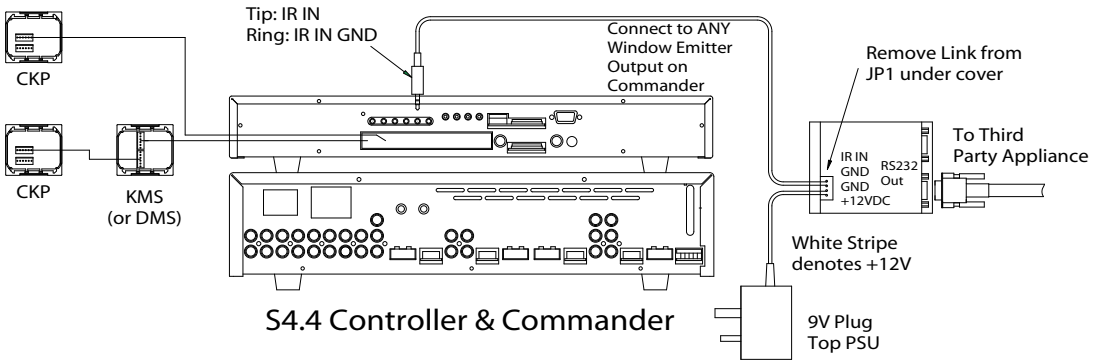
CKP keypad: Connect the Data Out socket on the CKP to either a Data IN on an NMS/KMS/CMS (if daisy-chaining) or else directly to a Zone Data Input on the

Systemline Controller or Commander.

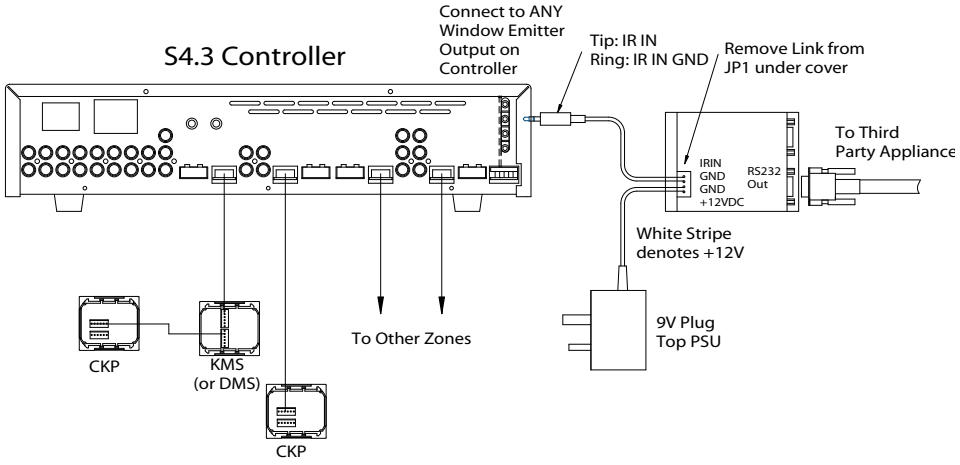
Systemline to IRS232A: Connect to the IRS232A using a mono 3.5mm jack plug and cable terminated with bare ends. Using the plug supplied with the IRS232A connect the 3.5mm jack 'Tip' connection to the IR IN connection, and the 3.5mm jack 'ring' connection the GND connection immediately below the IRIN connection.

Power Supply to IRS232A: Cut off the small 2.1mm power plug from the end of the supply lead on the 9V plug top supply. Bare the ends of the cable, connecting the conductor with the white stripe to the +12VDC connection and the remaining conductor to the GND connection immediately above the +12VDC input.

Note: Take care to ensure that there are no strands shorting across the connections.



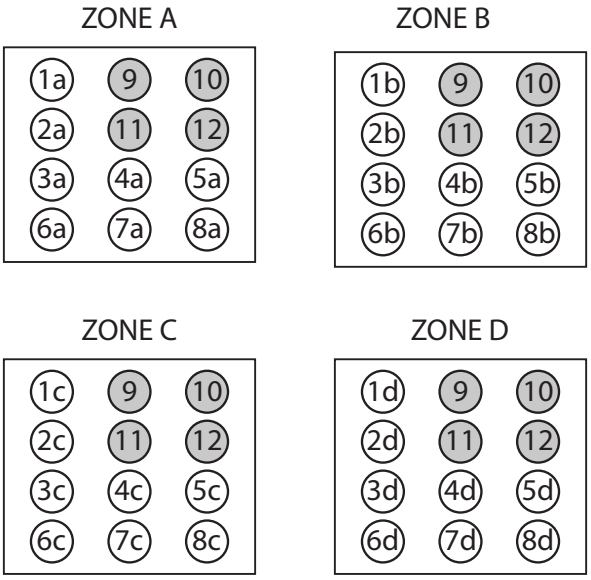
S4.4 Controller & Commander



Keypad to IRS232A mapping:

There are a total of 36 RS232 user definable commands available from the IRS232A. Each CKP keypad is capable of sending 8 independent and 4 global commands for each zone.

To address the 8 independent keys to a specific zone simply press key 8x and either Key 1x(ZoneA), 2x(ZoneB), 3c(ZoneC) or 6x(ZoneD) down simultaneously and hold for 1 second.



Setting the Zone example:

So, for example if you want to set a keypad up for Zone B, you simply press key 8x and 2x down simultaneously and hold for 1 second:

Where x=the zone a,b,c or d.

Note: *The zone setting feature is there to enable you to generate a set of 8 'different' commands for each zone if you wish. You can physically use any CKP keypad in any zone of Systemline. How you position and use keypads is totally up to you. You could have a single CKP keypad in each zone or up to four keypads connected in a daisy chain on a single zone (all with different zones set!).*

If you don't have different addresses set, all keypads will send the same 12 RS232 commands.

Command Table cross reference:

The table below shows how the IRS232A commands map to the CKP keypad.

Column 1 shows the 36 codes that are available for use.

Column 2 shows the Xantech button number that appears on the RC68 handset visual in the Dragon Drop-IR™ software supplied with the IRS232A.

Column 3 shows the NEC code that is transmitted by the CKP

Column 4 shows the CKP key number as shown in the diagrams above.

Column 5 shows the way in which the commands are allocated to specific zone settings on the CKP. Global commands can be sent by any keypad whatever its zone setting.

Command Table:

1	2	3	3	5
Code No.	Xantech	NEC code (DEC)	CKP Key no.	Zone
1	80	88.167.128.127	1a	Zone A
2	48	88.167.40.215	2a	
3	10	88.167.64.191	3a	
4	90	88.167.192.63	4a	
5	00	88.167.0.255	5a	
6	C0	88.167.160.95	6a	
7	50	88.167.96.159	7a	
8	D0	88.167.224.31	8a	
9	40	88.167.32.223	1b	Zone B
10	A0	88.167.144.111	2b	
11	30	88.167.80.175	3b	
12	B0	88.167.208.47	4b	
13	20	88.167.16.239	5b	
14	E0	88.167.176.79	6b	
15	70	88.167.112.143	7b	
16	F0	88.167.240.15	8b	
17	60	88.167.48.207	1c	Zone C
18	88	88.167.136.119	2c	
19	18	88.167.72.183	3c	
20	98	88.167.200.55	4c	
21	08	88.167.08.247	5c	
22	A8	88.167.152.103	6c	
23	38	88.167.88.167	7c	
24	B8	88.167.216.39	8c	
25	28	88.167.24.231	1d	Zone D
26	E8	88.167.184.71	2d	
27	78	88.167.120.135	3d	
28	F8	88.167.248.07	4d	
29	68	88.167.56.199	5d	
30	C8	88.167.168.87	6d	
31	58	88.167.104.151	7d	
32	D8	88.167.232.23	8d	
33	E1	88.167.178.77	9	Global
34	89	88.167.138.117	10	
35	C9	88.167.170.85	11	
36	A9	88.167.154.101	12	

To give an example of using the table:

Suppose you want to put a command on CKP key 2a. You can read across and see that this corresponds to Xantech key 48. Simply program the RS232 string that you require into this key using the Dragon Drop-IR™ PC software.

Using a handset to send RS232 commands.

You cannot use the Systemline handset to send RS232 commands via the IRS232A. You can however use the Xantech RC68+ Programmer handset to teach the codes to a learning remote control such as the Philips Pronto. This will then allow RS232 commands to be initiated via Systemline.

Programming of RS232 Commands:

This is entirely a function of the Xantech IRS232A Module, you should therefore refer to the units Installation Instructions for programming information.

Recommended Testing Procedure:

To check that the system is programmed and working correctly it is advisable to check the operation of the CKP keypads and IRS232A units using an application such as Hyper Terminal running on your PC.

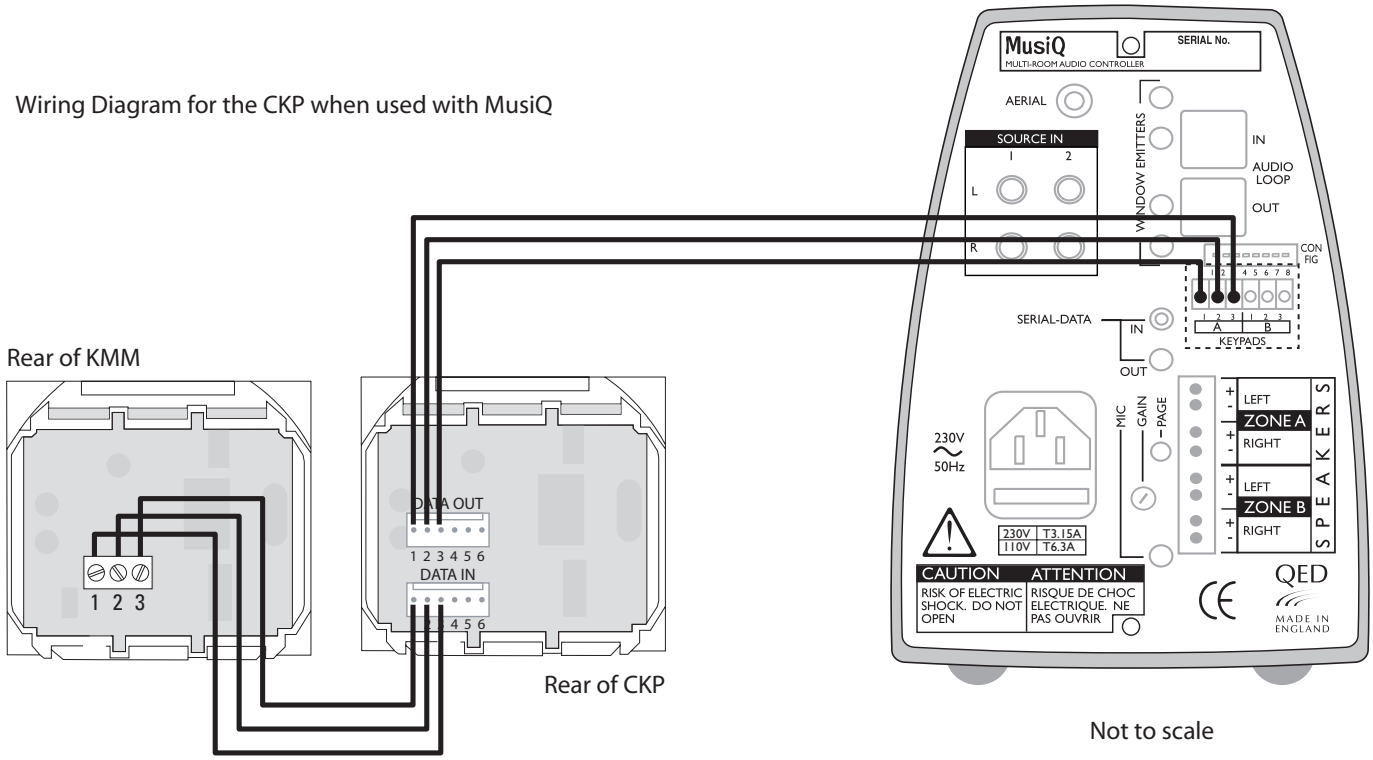
Hyper Terminal is an application supplied as standard with Windows software. You should connect the IRS232A to your computer with a **NULL MODEM CABLE** (pins 2 and 3 crossed). Ensure that the IRS232A had **been programmed** prior to checking operation with the CKP keypads.

Additional Note for using CKP with MusiQ

The CKP works equally well when connected using MusiQ but care needs to be taken to ensure that the wiring is correct as cores 1 and 3 need to be swapped over.

Note that should incorrect wiring be used that the window emitters will illuminate permanently and the MusiQ will cease to function.

Wiring Diagram for the CKP when used with MusiQ



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