GPI200+ Installation/Operators Manual

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GPI200+ Software Version 1.0

Contents

General Description

The GPI200+ General Purpose Interface provides an economic means of connecting up to eight Pull-cord switches or other devices onto an M200+ Nurse call System, in situations where speech communication is not required, e.g. bathrooms or WCs. The GPI200+ unit consists of a single PCB installed in a steel enclosure, which may be placed in any convenient location within the building.

Switches may be normally-open or normally-closed types and of a momentary or latching operation (the eight switches must all be of the same type). This flexibility enables a wide variety of devices to be used such as Smoke Detectors, Panic Buttons and Door Contacts.

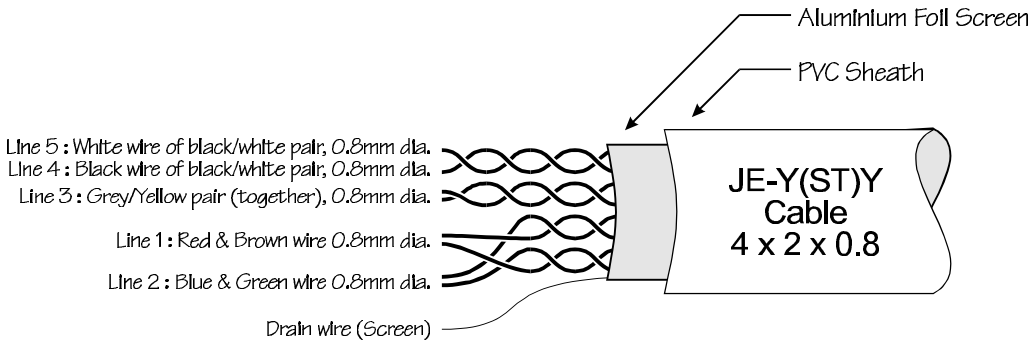
A block of eight consecutive logical addresses may be assigned to each GPI200+ with values above 200 e.g. 200-207, 240-247 etc. As with M200+ Room Units, each logical address may be individual re-assigned with any 4-digit alphanumeric flat number which may be required.

Cable Requirements

System Bus Cable

The GPI200+, M200+ room units and C200+ controller are interconnected by 5 common wires (the GPI200+ only requires 3) which carry power, speech and data. A single cable, of the type JE-Y(SY)Y, BSTL 'S6CR' (illustrated below) or equivalent, must be used to ensure correct operation of the system and compliance with European EMC directive (89/336/EEC).

JE-Y(ST)Y Cable Specification (For all new systems)



S6CR Cable Specification (Upgrades to existing systems only, where cable is re-used)

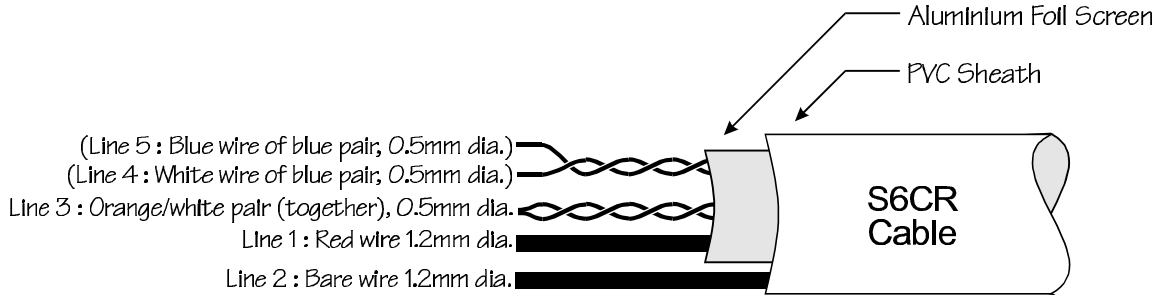
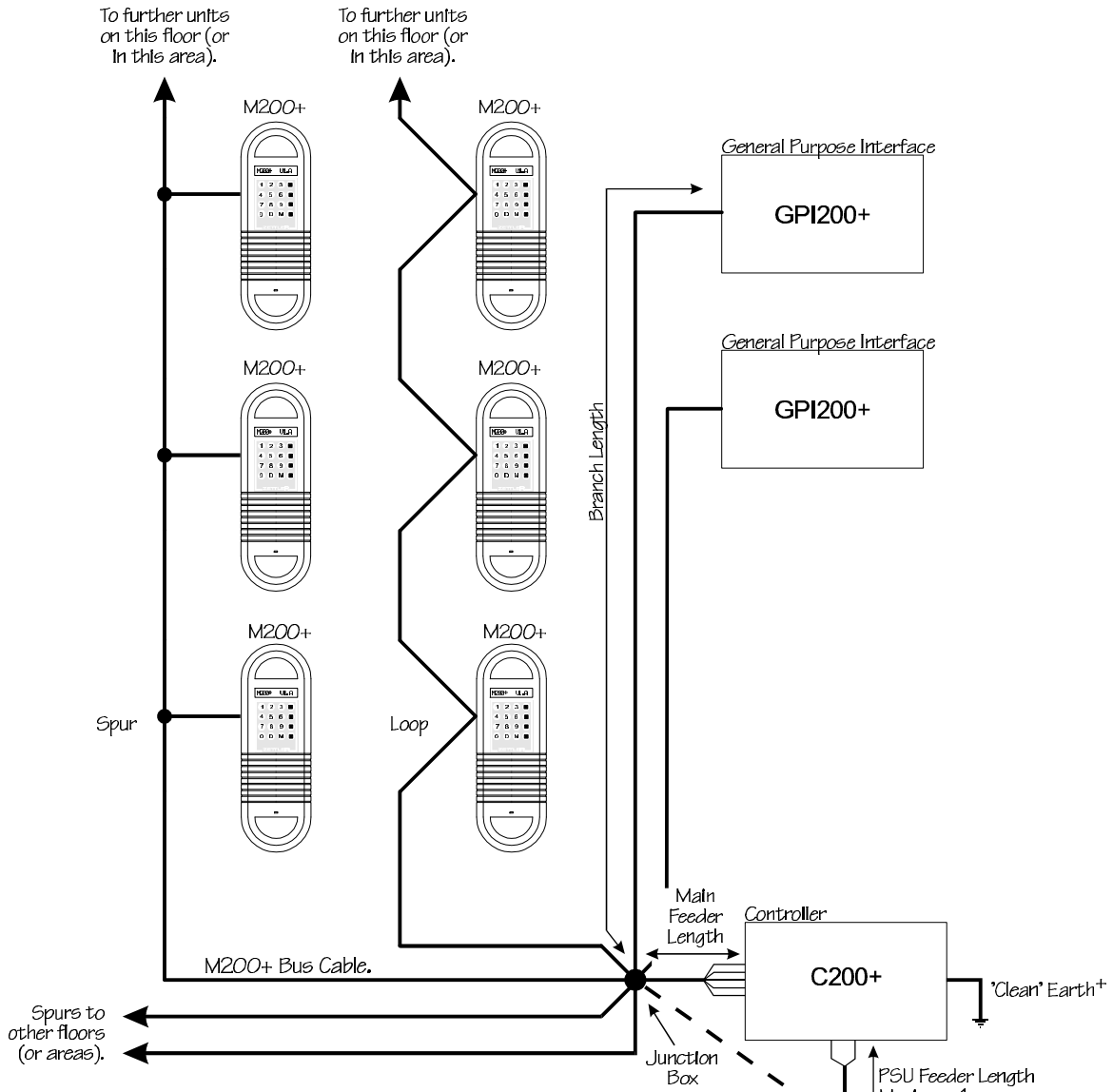


Diagram 1 - Cable Planning



Group the M200+ in floors or areas, run a spur from the junction box to each area.

Main Feeder Length - This length of cable should be a maximum of 1m.

PSU Feeder Length - This length of cable should be a maximum of 1m. If the power supply rating is greater than 5A then the cable should be connected directly to the junction box.

Branch Length - The length of this cable should not exceed the maximum specified in table 1.

+ Refer to 'Controller (C200+) Wiring' in the M200+ Installation Manual.

M200+ Bus Cable Distribution

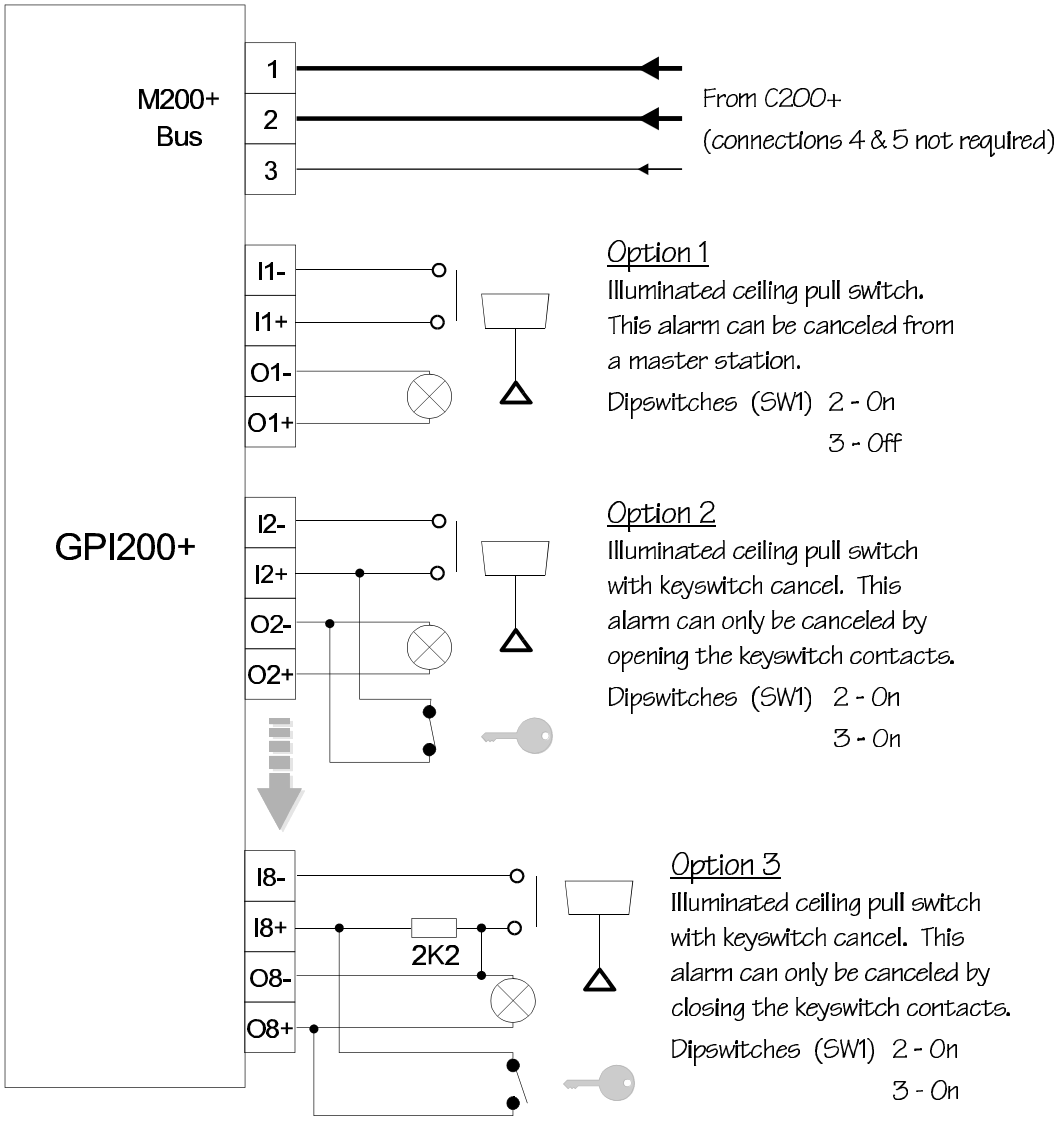
As illustrated in 'Diagram 1 - Cable Planning', the GPI200+ should be connected directly to the C200+ controller (or main junction box) on a dedicated cable run. To avoid excessive voltage drops a limit must be imposed on the length of this cable run; this depends upon the number of inputs used (up to 8) and the rating of the lamps. These limits are shown in 'Table 1. Cable Length Versus GPI200+ Usage'.

Table 1. Cable Length Versus GPI200+ Usage

Lamp Power	0W	1.2W	3.6W	6W
Inputs Used	Branch Cable Length			
2	400m	350m	200m	130m
4	400m	200m	100m	70m
6	350m	150m	70m	50m
8	275m	100m	50m	35m

GPI200+ Wiring

The system bus should be connected to the GPI200+ using BSTL 'S6CR', JE-Y(SY)Y, (or equivalent). Ceiling pull switches, smoke detectors and lamps should be connected to the GPI200+ as shown using 0.5mm standard telephone cable.



Notes

Additional switches and lamps can be connected in parallel where required up to a maximum of 6W in lamps.

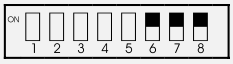
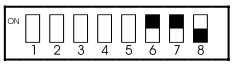
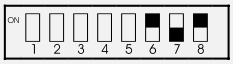
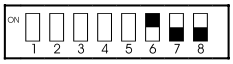
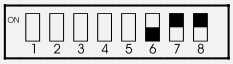
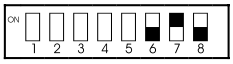
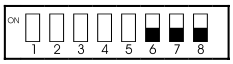
Power Supply Requirements

To calculate the power requirement for the GPI200+ and the M200 system as a whole see M200+ Installation Manual.

Setting Up the GPI200+

Dipswitch Setting (SW1)

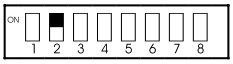
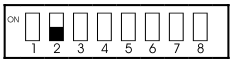
Input Address

Dipswitch	Input: Address							
	I1	I2	I3	I4	I5	I6	I7	I8
	184	185	186	187	188	189	190	191
	192	193	194	195	196	197	198	199
	200	201	202	203	204	205	206	207
	208	209	210	211	212	213	214	215
	216	217	218	219	220	221	222	223
	224	225	226	227	228	229	230	231
	232	233	234	235	236	237	238	239
	240	241	242	243	244	245	246	247

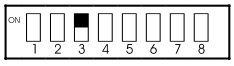
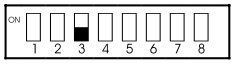
Alarm Type

Dipswitch	Alarm Type	M200+ Room Unit equivalent
	FIRE	Smoke Detector
	BATH	Bathroom
	REM	Ceiling pull switch
	ALARM	Call Button

Input Switch Type

Dipswitch 2	Input Switch Type
	Normally Open
	Normally Closed

Input Switch Sensitivity

Dipswitch 3	Input Switch Sensitivity
	Momentary
	Latching

Testing

To test the GPI200+ you must have installed and tested the controller (C200+) and at least one M200+.

Tests.

1. Make an alarm call from one of the GPI200+ inputs.
2. Make an M200+ a master unit.
3. Check the alarm call is of the correct type (i.e Bathroom alarm, fire alarm) .
4. Check the alarm lamps are on.
5. Connect and cancel the alarm from the M200+ unit, or cancel the alarm from the local keyswitch.
6. Repeat for the remaining inputs

Specifications

GPI200+

Supply Voltage	(Maximum)	28V D.C.	
	(Minimum)	18V D.C.	
Supply Current Idle	(Maximum)	60mA	
Supply Current Alarm	(Maximum)	280mA	Add 40mA per 1.2W lamp (max. 6W)
Weight	1.5Kg		
Size	Height	240mm	
	Width	192mm	
	Depth	50mm	

Bell System (Telephones) Ltd reserves the right to change these specifications without notice.

CE

Products comply with EMC directive 89/336/EEC

Standards

Emissions:	Generic BSEN50081-1
Immunity:	Generic BSEN50082-1 (IEC801-2, IEC801-6)