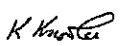


BMAC PRODUCT SPECIFICATION

PATTERN SERIES:	42X	ISSUE	1
DESCRIPTION:	Wireless Bell Push	DATE:	18-5-2011
CUSTOMER:	Any	MOD REQ:	7141
CONTRACT/CLASS:	Any	SECTION:	A.6.1
AUTHORISATION:		PAGE 1 OF 5	

Installation Procedure for Wireless Bell Push System

The wireless receiver interface module has 4 independent output channels, (CH0, CH1, CH2 & CH3), that can be connected to the different Bell Push zone inputs of the vehicle controller. Typically, this would be Upper Saloon, Lower Saloon and Wheelchair request. This leaves 1 spare channel. A maximum of 30 Bell Pushes can be assigned across the 4 channels.

Each channel has an open collector output that will be grounded, less than 0.2 volts, when a channel is operated. Each channel output should be connected to the relevant zone input of the vehicle controller.

Each Bell Push must be assigned to a zone or channel before fitting to the vehicle. This must be done with each Bell Push in relatively close proximity to the receiver, less than 5m

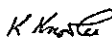
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AUTHORISATION:  **PAGE 2 OF 5**

Procedure to assign a Bell Push to a zone	
Step	Action
1	Power up the receiver interface module See sketch below for connection details LED6 should light Red to indicate power is on
2	Press SW1 for 0.5 seconds until LED5 lights and LED1 starts to flash
3	This indicates the module is in 'Learn Mode' and ready to learn Bell Pushes to CH0
4	Press a Bell Push that is to be assigned to CH0. This must be done within 30 seconds of entering learn mode.
5	When pressed LED1 will remain steady for 1 second, indicating the Bell Push has been learned
6	When it starts to flash again a second Bell Push can be learned to that channel Repeat this until all Bell Pushes that are to be assigned to CH0 have been learned
7	If the same Bell Push is pressed again within 4 seconds it will still be learned. If the same Bell Push is pressed again after more than 4 seconds it will be deleted from that channel. If no Bell Pushes are pressed within 30 seconds, learn mode will be exited. Any Bell Pushes assigned will remain assigned. To assign more Bell Pushes, press SW1 to re-enter learn mode.
8	When all Bell Pushes have been learned to CH0, wait until the channel indicator LED starts to flash and then press SW1 to move to the next channel
9	Repeat steps 4 to 8 for the remaining channels
10	If no other channels are required, keep pressing SW1 to index through the remaining channels. When finished LED4 & LED5 will go out
11	The receiver is now in run mode
12	Any Bell Push can now be pressed and the corresponding Amber LED channel indicator will light for 2 seconds
13	The Bell Pushes can now be fitted at the required locations in the vehicle

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AUTHORISATION: *K. Krutke* **PAGE 3 OF 5**

If a Bell Push needs to be removed it should, if possible, be deleted from the channel it was assigned to. This may not be possible if the Bell Push is faulty and not transmitting a signal.

Procedure to un-assign a Bell Push from a zone	
Step	Action
1	Remove the Bell Push from its location on the vehicle
2	Power up the receiver interface module LED 6 should light Red to indicate power is on
3	Operate the Bell Push and note which indicator LED lights
4	Press SW1 for 0.5 seconds until LED5 lights and LED1 starts to flash
5	This is now ready to delete the Bell Push from the assigned channel
6	Repeatedly press SW1 until the relevant channel indicator is flashing
7	When the correct indicator LED is flashing, press the Bell Push The channel indicator will go out for 1 second
8	When it starts to flash, press SW1 to index through the remaining channel. When finished LED4 and LED5 will go out
9	The receiver is now in run mode

Procedure to replace a Bell Push	
Step	Action
1	If possible un-assign the existing Bell Push as above If not, establish the zone or channel the replacement Bell Push is to be assigned to
2	Power up the receiver interface module LED6 should light Red to indicate power is on
3	Press SW1 for 0.5 seconds until LED5 lights and LED1 starts to flash
4	Repeatedly press SW1 until the relevant channel indicator is flashing
5	When the correct indicator LED is flashing, press the Bell Push. The LED indicator will remain steady for 1 second
6	When it starts to flash, press SW1 to index through the remaining channels. When finished LED4 and LED5 will go out
7	The receiver is now in run mode and the Bell Push can now be fitted at the required location in the vehicle

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AUTHORISATION: *K. Hunter* **PAGE 4 OF 5**

Procedure to clear all Bell Pushes from all channels	
Step	Action
1	Power up the receiver interface module LED6 should light Red to indicate power is on
2	Connect a link between the CLR pin and TP1 (0V) for 2 seconds
3	All Bell Pushes will be deleted from all channels and the receiver will then enter learn mode. LED1 will be flashing and LED5 will be on steady
4	If new Bell Pushes are to be assigned, follow the procedure above
5	If the receiver is to be left clear, press SW1 to index through the channels. When finished LED4 and LED5 will go out

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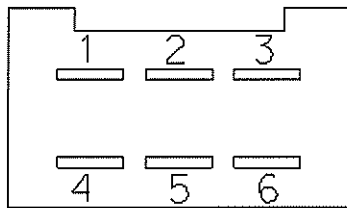
CONTRACT/CLASS: Any

SECTION: A.6.1

AUTHORISATION:

K. Koster

PAGE 5 OF 5



6	24V
5	0V
4	CH3
3	CH0
2	CH1
1	CH2
PIN No	CHANNEL No

