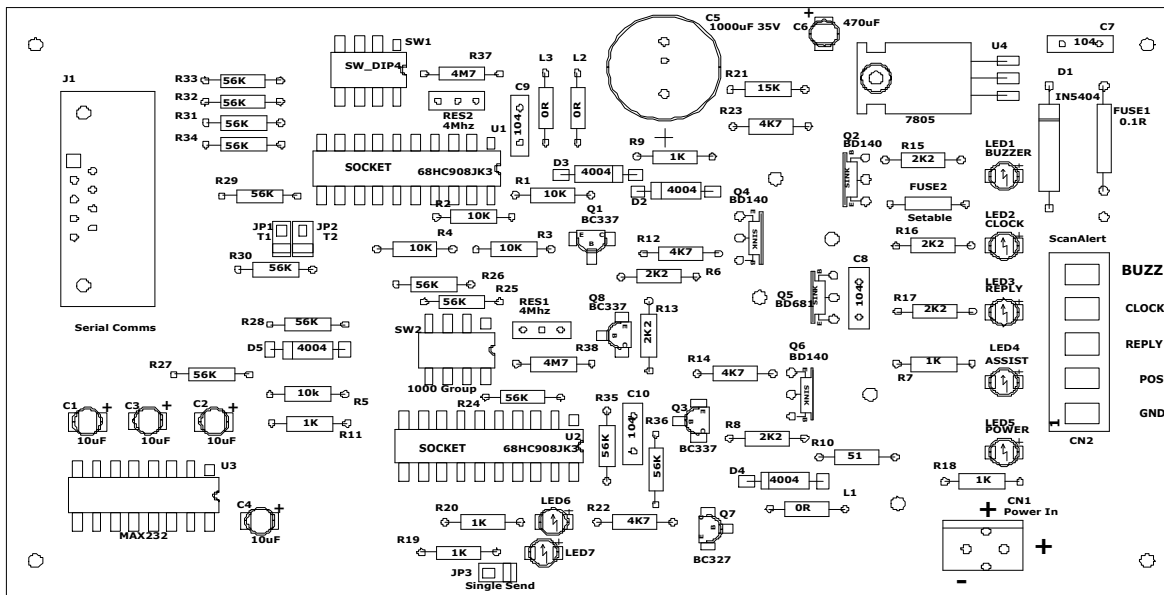


**Digital System Driver – DSD2 with Serial Expansion Interface**

Version 2 now operates with MC68HC908JK3 Processors.



**Documentation with the following version numbers applied**

- U1 at version 91-601a2.asm
- U2 at version 92-601a2.asm

**Description**

The Digital System Driver (DSD) provides the control signals for the Scanalert Digital System. Only one driver is required for each individual system of up to 509 call points. Further units can be added to the system using the Alert Accumulator which can accommodate up to 4 DSD's allowing a total cascade of 2036 call points or ScanAlert type equipment.

The DSD has indexing switches (DIP SW2) to allow identification of call point sub groups (e.g. floors of a building) for operation with "MultiTRACKER". It is housed in a plastic enclosure and installed with the power supply in a central location allowing easy access for servicing. Operation of this equipment is fully automatic. The DSD generates a repeating buzzer signal to sound the buzzers in the display panels or associated wall units whenever a call is active on the system. The serial port allows connection to Alert Software available for tracking and logging of calls giving comprehensive reporting of call point activity.

**Terminals**

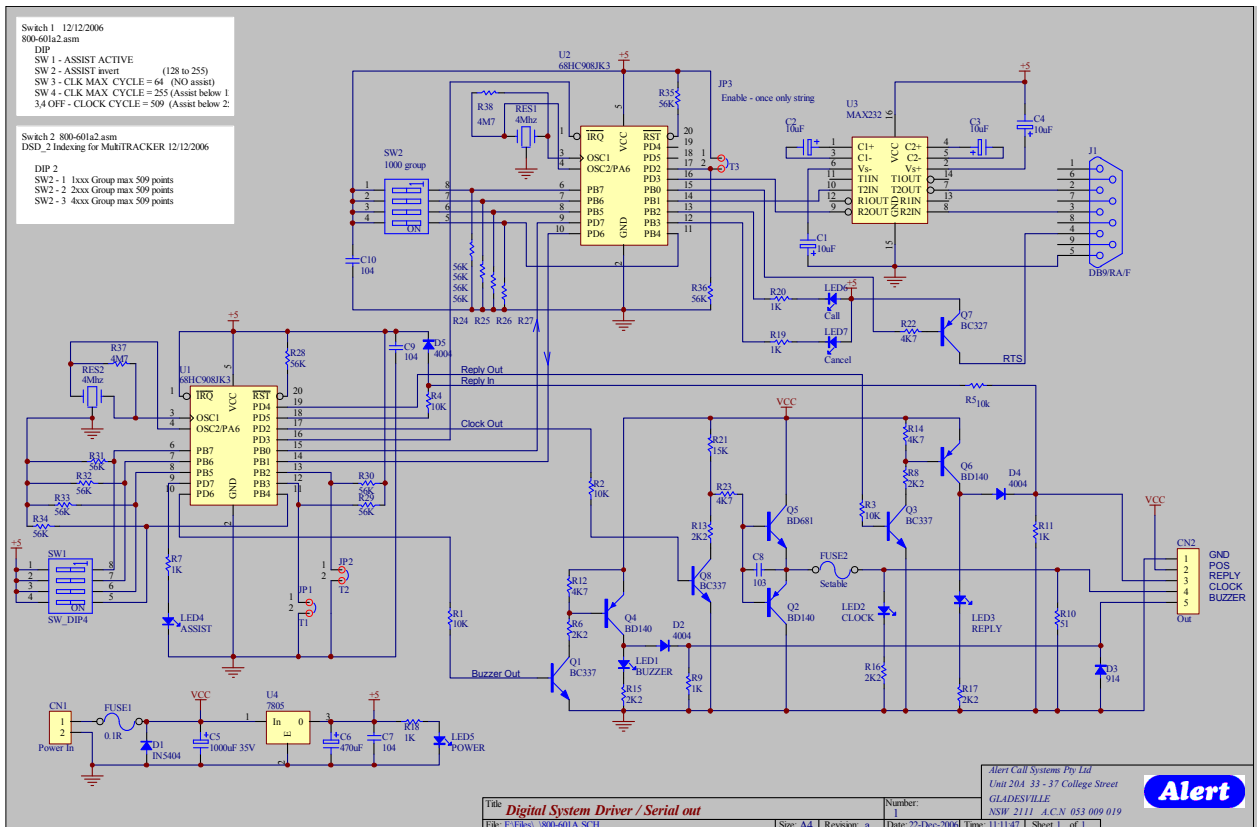
- A – System Ground**
- B – System Positive +13.8v**
- C – System reply (active high)**
- D – System Clock**
- E – System Buzzer (active high)**

**Priority Function**

The System Driver includes a feature whereby a group of call points can be programmed to act as a priority call. When this function is activated, the system automatically gives priority to the special call, and will prioritise the displays to present the calls visually and audibly at a higher level. The reporting software will open a new priority page and log the call for future printing.

(Operate SW1 – 1 to enable).





## Dip Switch 1

Used for optimising the DSD to the system it is controlling.

- Switch 1 In the on position the DSD will operate in ASSIST mode. Calls in the priority allocation will be presented as amber in colour and have the repeating buzzer operating at a more frequent rate. The display duration will be increased and the priority LED will illuminate on the DSD.
  - Switch 2 In the OFF position assist numbers are 127 and below. If position 2 is on assist numbers are 128 and above. This toggles the group of numbers.
  - Switch 3 For smaller systems (below 64 call points), operating this switch position will increase the speed of the system. DIP 1/1 must be off as there is no provision for assist calls with sw1-3 on.
  - Switch 4 Sets the maximum call point count to either 255 or 509. With SW4 –4 on the maximum call point count is 255. With SW1 – 4 off then the maximum call point count is 509.
- If SW1 – 4 is ON as well as SW1 - 1 then call points below 127 will be configured as ASSIST points and above 128 will be normal call points.
- If SW1 – 4 is OFF and SW1 – 1 is on, then the call points below 255 will be ASSIST points and above 256 will be configured as normal call points.

## JP3 Jumper

Is a jumper introduced for this version of firmware only. With the jumper open, the DSD is compatible with Alert Tracker and Alert Community. The active call data is sent to the serial port every scan of the buss.

With JP3 closed the call information is sent once only to accommodate compliance with other 3<sup>rd</sup> party software.

## Dip Switch 2

For indexing multiple DSD systems. Used in conjunction this the DSD Accumulator, up to four DSD units can be combined to allow operation with the "Alert MultiTRACKER" software. This allows logging and tracing all call activity across multiple floor levels in a building.

Switch 1 – **NA1001, Group 1** call point 1 is in ASSIST operation.

**NN1001, Group 1** call point 1 is in normal operation.

**NC1001, Group 1** call point 1 has been cancelled.

Switch 2 – **NA2001, Group 2** call point 1 is in ASSIST operation.

**NN2001, Group 2** call point 1 is in normal operation.

**NC2001, Group 2** call point 1 has been cancelled.

Switch 3 – **NA3001, Group 3** call point 1 is in ASSIST operation.

**NN3001, Group 3** call point 1 is in normal operation.

**NC3001, Group 3** call point 1 has been cancelled.

Switch 4 – **NA4001, Group 4** call point 1 is in ASSIST operation.

**NN4001, Group 4** call point 1 is in normal operation.

**NC4001, Group 4** call point 1 has been cancelled.

## Serial Output Protocol ( 8, n 4800 )

This newer generation DSD2-S (800-601a.PCB) has a serial output connection operating RS-232-c configuration. Format is *NO parity bit*, an *8-bit sequence*, with *2 stop bits* operating at *4800baud*. A serial string is presented to the 232 port every "System Reply Time", while a call is active. A carriage return will follow each transmission to be used as an end of TX. The cancel string will occur at "System Reset Time" and will be in the form of a block send if multiple calls are cancelled at one time. E.g. NC0001 NC0023 NC0128 etc followed by a carriage return at the end of the block. A cancel is sent only once.

**NA0001**, indicates call point 1 is in ASSIST operation.

**NN0001**, indicates call point 1 is in normal operation.

**NC0001**, indicates call point 1 has been cancelled.

A maximum of 8 calls can be stacked in any one session per DSD.

All calls are prefixed with the ASCII term "NN" followed by a 4-digit representation of the numeric call position.

All cancelled calls are prefixed with the ASCII term "NC" followed by its 4-digit numeric call position.

All Assist calls are calls are prefixed with the ASCII term "NA" followed by its 4-digit numeric call position.

Led 7 indicates a forward transmission for the called number string, and Led 6 indicates when the cancelled string is being transmitted.

## Controls

A cut-off switch is provided on the System Driver to switch off the repeating buzzer signal. The unit is fitted with status indicator Leds that show system operation and aid in diagnosing any problems. The indications include Power supply (13.8v), Data signal, Response from call points and Priority activation.

## Dimensions

188 x 98 x 40mm