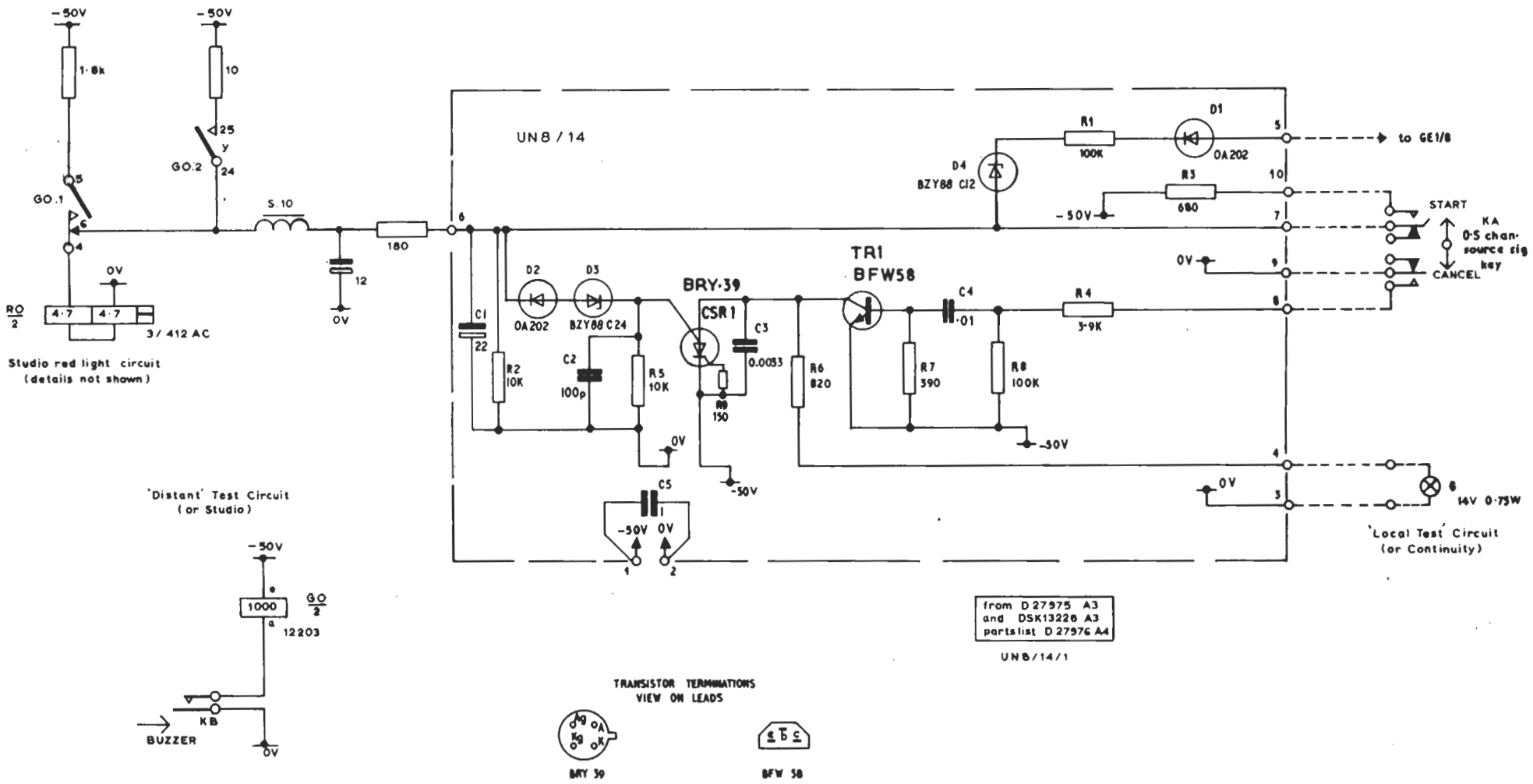
SOURCE SIGNALLING UNIT UN8/14


-50V
1·8k
10
25
y
GO.2
24
GO.1
5
6
4
S.10
180
12
0V
RO/2
4·7
4·7
3/412 AC
Studio red light circuit
(details not shown)
UN8/14
D1
OA202
R1
100K
D4
BZY88 C12
R3
680
to GE1/8
START
KA
0·5 chan·
source sig
key
CANCEL
TR1
BFW58
BRY·39
CSR1
D2
OA202
D3
BZY88 C24
C1
22
C2
100p
R2
10K
R5
10K
C3
0.0033
R9
150
R6
820
C4
·01
R7
390
R8
100K
R4
3·9K
C5
1
14V 0·75W
'Local Test' Circuit
(or Continuity)
'Distant' Test Circuit
(or Studio)
1000
GO/2
12203
KB
BUZZER
from D27975 A3
and DSK13226 A3
partslist D27976 A4
UN8/14/1
TRANSISTOR TERMINATIONS
VIEW ON LEADS
BRY 39
BFW 58

General Description

The source signalling unit UN8/14 provides facilities for red-light signalling to a remote studio and for the operation of the return green light and buzzer, and is used in conjunction with a source signalling key and lamp on a continuity desk. One unit is required for each source signalling circuit together with a common GE1/8 buzzer circuit. It is incorporated for example in the Miscellaneous Panel PA8/322.

The unit is constructed on a printed circuit card 53·2 mm by 49·2 mm and is fixed by four 6-BA screws on 47·7 mm by 35·5 mm fixing centres. It requires a 50-volt d.c. supply and draws no current in the static condition.

Circuit Operation (Fig. 1)

The operation of the unit can be followed by reference to Fig. 1. The buzzer GE1/8 is mounted in a desk telephone panel (e.g., PA8/309) and the key and green lamp on a channel panel (PA8/297). Circuit details vary with the type of installation, and a typical use will be described.

The key is operated by the continuity operator several times to *Start*, causing relay RO to operate and the red light in the studio (not shown in Fig. 1) to flash. Biasing diodes D3 and D4 prevent CSR1 from striking or the buzzer sounding. When ready the studio desk operator presses the buzzer push switch causing relay GO to operate, thus applying sufficient volts to strike CSR1, which lights the green lamp, and at the same time the buzzer GE1/8 is energised.

The continuity operator throws the key momentarily to Cancel. A pulse is applied to the base of TR1 through C4 and this extinguishes CSR1 and the green lamp goes out. When transmission is due the continuity operator throws the key to Start, bringing up the studio red light.

Test Procedure

Using the circuit of Fig. 1, the sequence of operations described under Circuit Operation should occur.

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