

**APPLICATION NOTE**

**VIDEO ANALYZER  
UAF  
as IEC 625(IEEE 488)-BUS  
Controller**

*Products:*

<b>VIDEO ANALYZER</b>	<b>UAF</b>
<b>TV GENERATOR</b>	<b>SG.F</b>
<b>ALL OTHER EQUIPMENT WITH IEC625- (IEEE488) BUS INTERFACE</b>	

```
0            IECOUT 8,    OUTPUT AUTOMATIC
1            IECOUT 8,    FAIL 3S
2            IECOUT 8,    BLACK 3S
3            IECOUT 8,    RESTORE 3S
4            --- PROGRAM END ---
```

## VIDEO ANALYZER UAF as IEC/IEEE-Bus Controller for Setting Additional SGPF Functions (and controlling external equipment)

Example using hidden functions of TV GENERATOR PAL SGPF.

Interconnect UAF and SGPF by means of an IEC625-bus cable.

Select on the UAF:

AUTORUN (hardkey) and then press softkey  
NEWPROG(RAM) or store an already existing program on  
a memory card.

Clear this program in the internal memory with

DELETE PROGRAM ?  
YES

Select

IECOUT with  
SPECAMD and the cursor keys and confirm with  
ENT(ER).

Key the SGPF address

eg 8 and press  
ENT(ER)

Select the command field for IECOUT 8 , “ “ function using cursor key “P “  
and confirm with

ENT(ER).

Type the commands

OUTPUT AUTOMATIC  
FAIL(DELAY) 3S (insert a blank between FAIL and 3S)  
BLACK 3S (insert a blank between BLACK and 3S)  
RESTORE 3S (insert a blank between RESTORE and 3S)  
using cursor keys ← ↑ ⇒ ↓.

Select individual characters by means of the

GET CHAR(ACTER) softkey.

Confirm the command with

ENT(ER) and

store the line with

STORE into the battery-backed RAM.

After writing the above SGPF setting program, start it by pressing the  
RUN softkey.

TV Generator PAL SGPF is now in the  
 AUTOMATIC mode, ie after the program monitoring time of 3 seconds  
 FAILDELAY it switches to an all-black picture and after another 3 seconds  
 BLACK DELAY to the set SGPF substitution signal.  
 After this the program signal has to be present for at least 3  
 seconds  
 RESTORE DELAY before the program is switched on again. If the  
 program signal was present before for at least 3 seconds error-  
 free, the program is switched on without intermediate switchover  
 to an all-black or substitution signal.

Other functions which can only be controlled via the IEC/IEEE-bus interface:

SC\_H\_PHASE -179°...0°...+180°  
 determines the SC/H phase of the generator signal  
 SC\_LOCK ON / OFF determines whether the SGPF should be coupled not only to the  
 sync and the field pulse but also to the colour subcarrier of the  
 program signal.  
 BYPASS ON / OFF activates/deactivates the passive bypass circuit when an SG.F  
 junction panel is used.  
 OUTPUT AUTOMATIC  
 GENERATOR  
 PROGRAM  
 VITSINSERT determines the operating mode of the program output.

The UAF controller function may also be used for controlling other instruments equipped with  
 an IEC-626/IEEE 488 interface provided they operate as a LISTENER.  
 In this case you need for your PC **neither** an IEC 625(IEEE 488)-bus card **nor** a respective  
 user interface. Make sure that the control programs in your UAF do not take up more than 150  
 lines.

## Additional Information

Our Application Notes are regularly revised and updated. Check for any changes at  
<http://www.rohde-schwarz.com>.

Please send any comments or suggestions about this Application Note to

[Broadcasting-TM-Applications@rohde-schwarz.com](mailto:Broadcasting-TM-Applications@rohde-schwarz.com).