Supplement A
to Operating Manual
Test Receiver FSET
(Firmware Version 4.02 and higher)

Dear Customer,

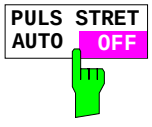
The new firmware offers a number of extensions that are not yet described in the operating manual. They are explained on the following pages. The new functions concern :

- Pulse stretcher in receiver mode
- Additional softkeys in receiver mode
- Level Adjust in receiver mode

Pulse Stretcher in Receiver Mode

The *PULS STRET ON/OFF* softkey is now available in the receiver mode.

MODE – RECEIVER left side menu:



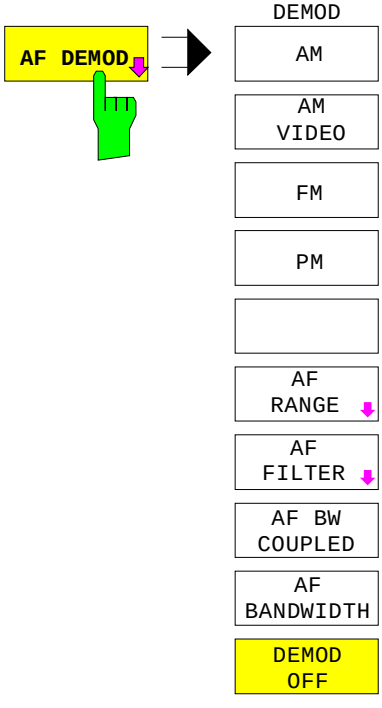
The *PULS STRET AUTO/OFF* softkey switches the pulse stretcher at IF bandwidths > 5 MHz on or switches it off for all bandwidths.

(see also description of softkey in the operating manual, Chapter "Setting and Coupling the Coupling Resolution, Video Bandwidth and Sweep Time" - SWEEP key group in analyzer mode)

New Softkeys in AF DEMOD Menu in Receiver Mode

The *AF BW COUPLED*, *AF BANDWIDTH* and *AF RANGE* softkeys are now available in the receiver mode.

CONFIGURATION MODE – RECEIVER sub menu:



The *AF BW COUPLED* softkey switches the coupling between receiver bandwidth and audio bandwidth on and off.

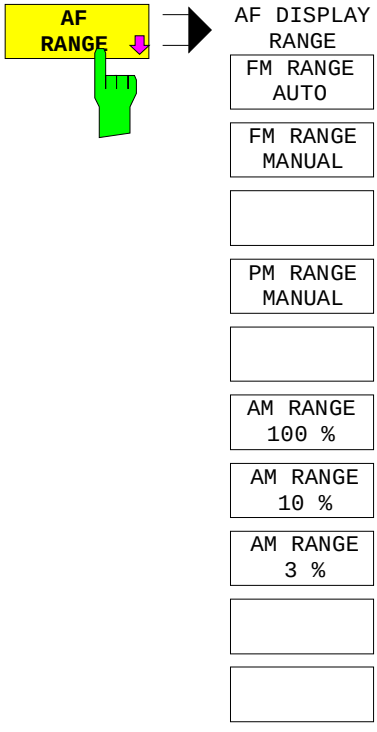
IEC/IEEE-bus command

```
:[SENSe<1|2>:]BWIDth:DEMod:COUPling ON|OFF
```

The *AF BANDWIDTH* softkey activates the entry of the audio bandwidth. Entries for audio bandwidth can always be made, however they influence the RBW only if *AF BW COUPLED* is active.

IEC/IEEE-bus command

```
:[SENSe<1|2>:]BWIDth:DEMod 100 kHz
```



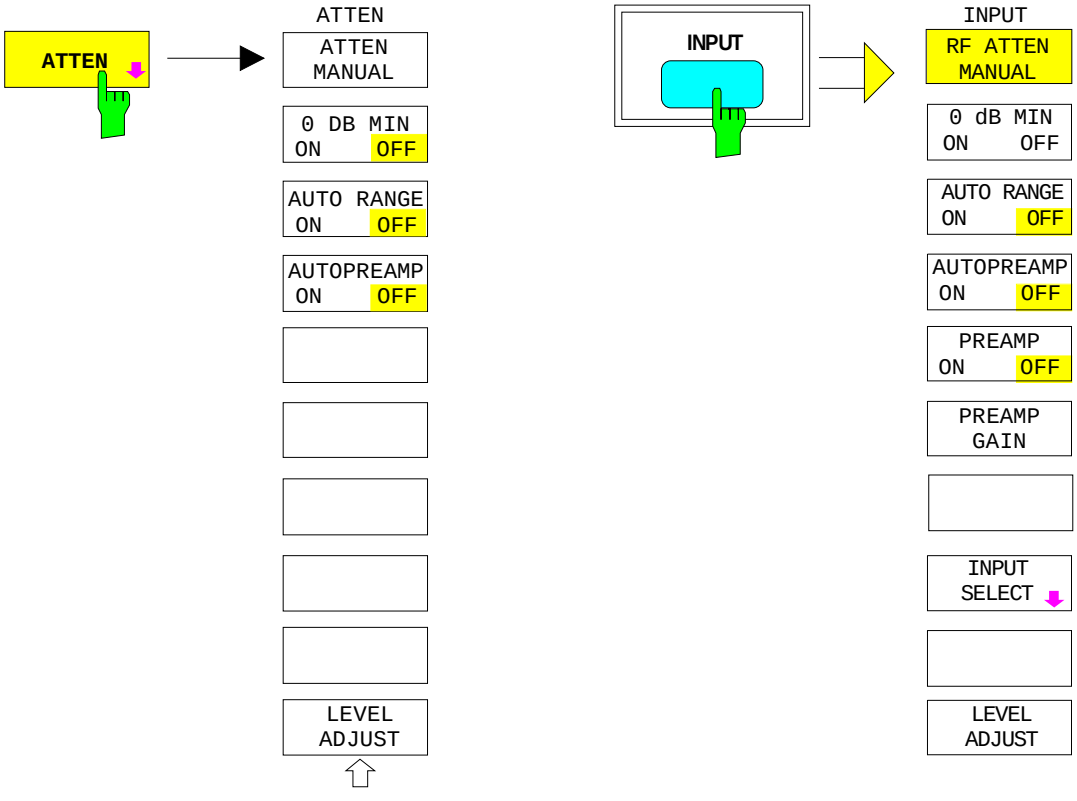
The *AF RANGE* softkey opens the submenu for setting the measurement range. The measurement range determines the scaling of the output level at the AF/FM OUTPUT connector on the rear panel.

With FM demodulation, this corresponds to the maximum frequency deviation range. With phase demodulation, this corresponds to the maximum phase deviation range, and with AM demodulation to the maximum modulation depth range.

For a detailed description of the submenu see chapter "AF Demodulation" in the operating manual.

LEVEL ADJUST in Receiver Mode

CONFIGURATION MODE - RECEIVER menu and *INPUT* menu:



The *LEVEL ADJUST* softkey activates a single autorange procedure by means of which the level of the detector with the highest display value is to be brought to the upper 10 dB of the display range. This procedure is analogous to regular autoranging except for the permissible level window which is limited.

If the measurement time is >1 sec, it is set to 1 sec for autoranging.

The regular autorange function is not automatically deactivated. It remains in the state that was active before LEVEL ADJUST, i.e. it uses the usual level window again after LEVEL ADJUST. If the signal level varies, the regular autorange function can therefore change the result of the single LEVEL ADJUST function.

IEC bus command `:INPut:ATTenuation:AUTO ONCE`

New IEC/IEEE-Bus Commands

The new firmware has been extended by the following IEC/IEEE-bus command:

- Level Adjust

INPut:ATTenuation:AUTO ONCE

This command initiates a single autorange in the receiver mode (see softkey LEVEL ADJUST).

Example: `"INP:ATT:AUTO ONCE"`

Features: *RST value: -
SCPI: device-specific

The command is an "event" and this is why it has no *RST value and no query form.