

5 Image System Calibration

5.3 Generator

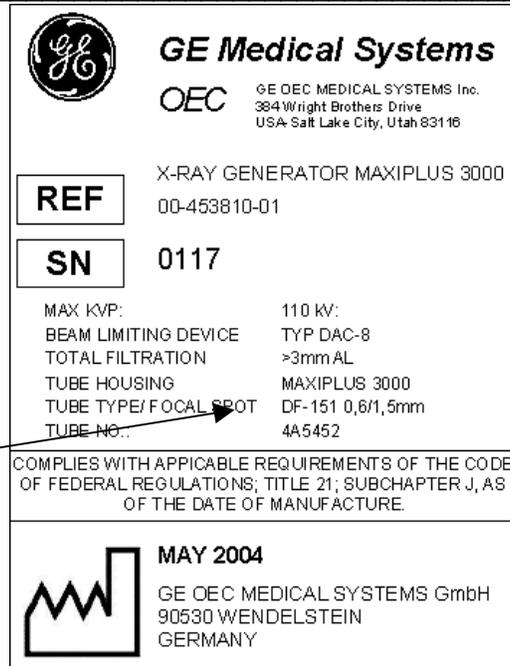


Figure 62

Toshiba = DF-151 0,6/1,5mm
Nago = GF9-190 0,5/1,5mm

To enter this setup:

Button "PI" - Setup - Service menu - Enter Service Password - press x-time next page until
Button "Tube Setup"

You can select three different pre heating modes

- fix pre heating value for Tube Type „GF151R“
Use this only if automatic cal. not work correct
- fix pre heating value for Tube Type „GF190“
Use this only if automatic not work correct
- automatic PRE-PREHEATING Calib.
Use this as standard

5 Image System Calibration

5.3 Generator

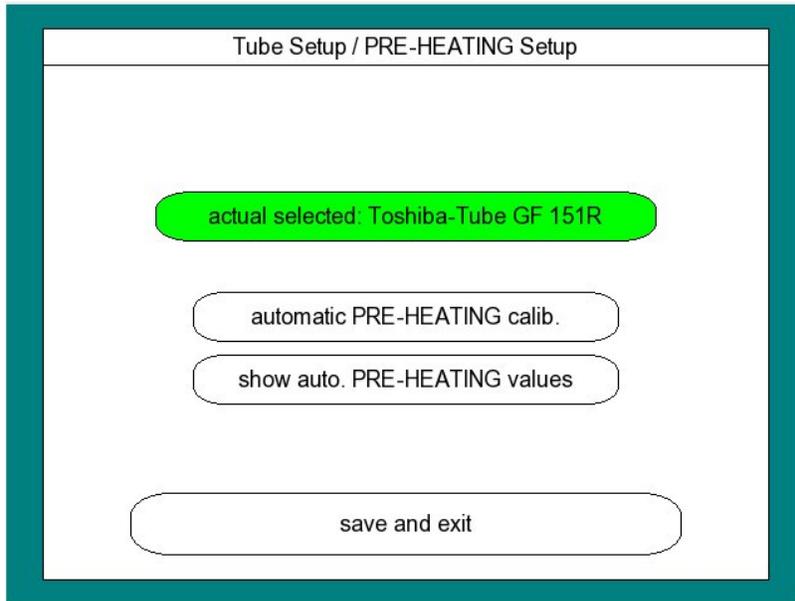


Figure 63

Example for actual selected Toshiba-TUBE GF 151R
=> fix pre-heating value for Tube Type „GF151R“

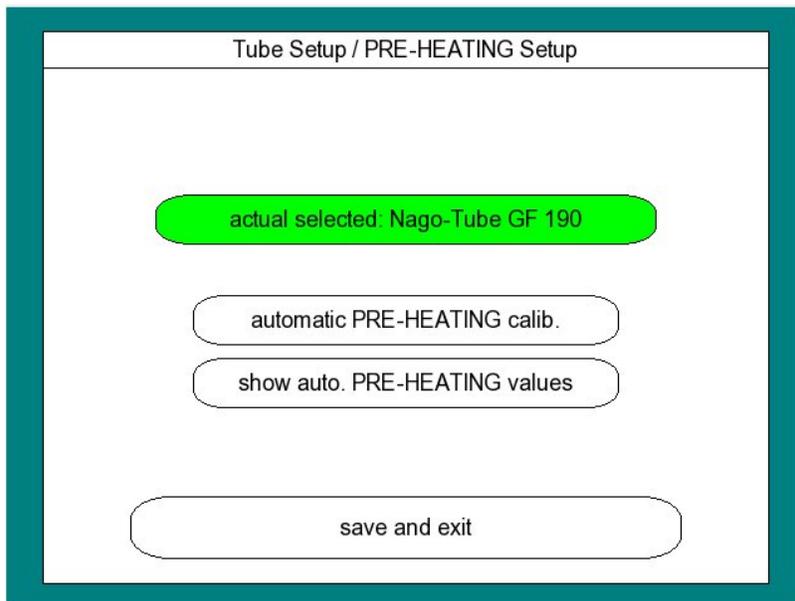


Figure 64

Example for actual selected NAGO-TUBE GF 190
=> fix pre-heating value for Tube Type „GF190“

5 Image System Calibration

5.3 Generator

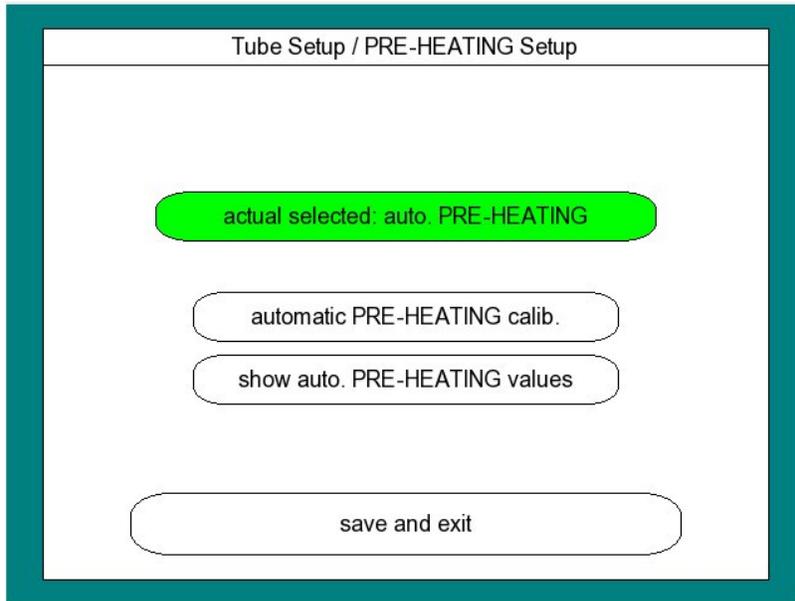


Figure 65
example for actual selected auto PRE-HEADING

Note:

After start „Automatic PRE-HEATING calib.“ . System work with automatic pre-heating values

Start Automatic PRE-HEATING calibration

Attention

X- RAY is necessary during this calibration. X-RAY protection

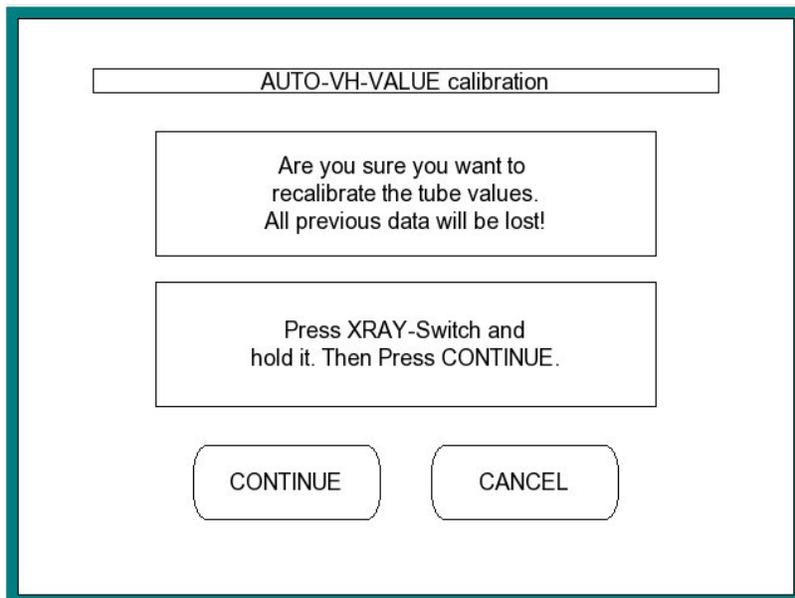


Figure 66
- Press Hand or footswitch

5 Image System Calibration

5.3 Generator

- press Button "CONTINUE"
Hold Hand or footswitch during the whole calibration !

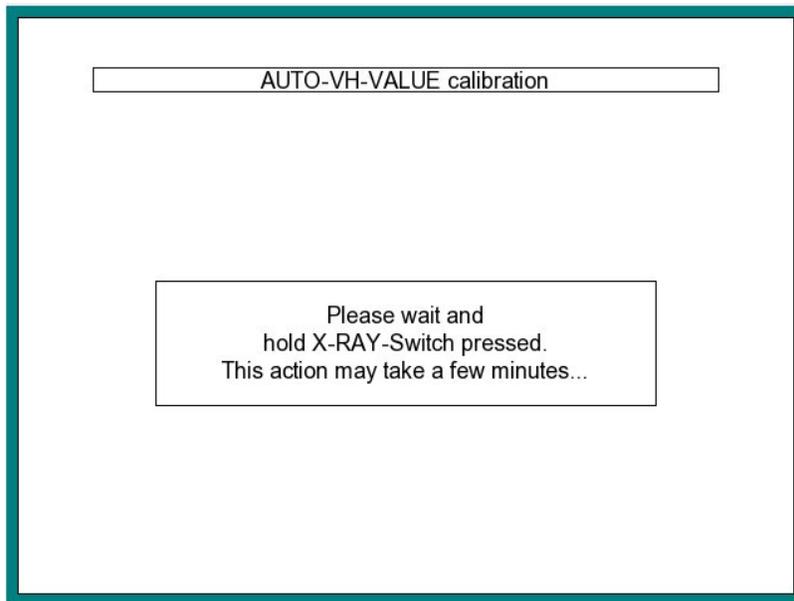


Figure 67
you will see this during calibration

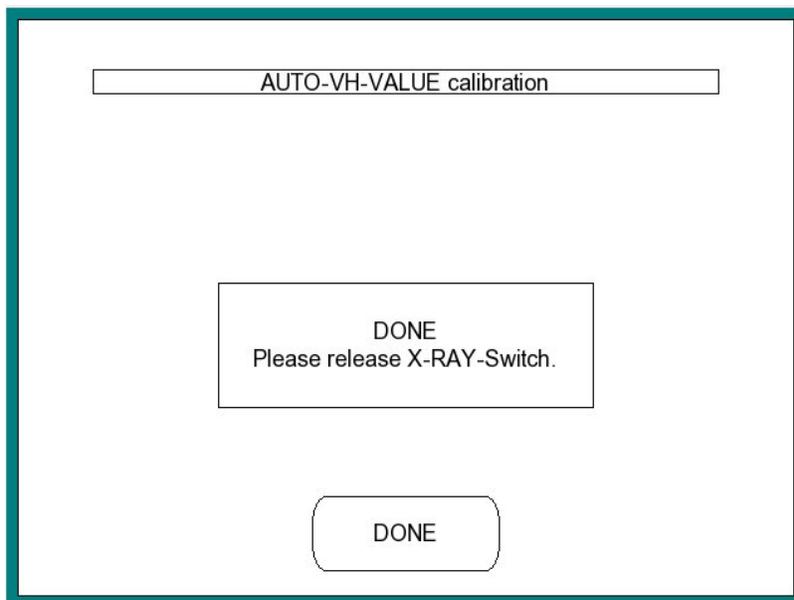


Figure 68
End of the automatic calibration
Please stop X-RAY
Confirm with Button "DONE"

5 Image System Calibration

5.3 Generator

AUTO-VH-VALUE calibration

| Mode | 110kV | 80kV | 50kV | 36kV |
|----------------|-------|------|------|------|
| REST-MODE: | 360 | 361 | 330 | 270 |
| SNAPSHOT-MODE: | 410 | 415 | 430 | 450 |
| BECKEN-MODE: | 390 | 384 | 340 | 270 |
| FILM-MODE: | 700 | 707 | 720 | 730 |

DONE Calib. OK

Figure 69

You see all the cal. Data
If the process end correct you see **"CAL. OK"**

Note: you can recall this CAL Data from "Tube setup" with Button "Show auto Pre-Heating Values"

Press **"DONE"** for exit this "auto-VH-VALUE calibration" Menu

5 Image System Calibration

5.3 Generator

5.3.2 kV and mA Calibration

This section includes the adjustments to ensure the proper system output and reduced patient dose. Complete this procedure upon tube replacement.

To measure KV connect DVM between MP 3 (+) and GND (-) on B352



Figure 70

5 Image System Calibration

5.3 Generator

Menu: kV/mA-Offset Setup (40KV)

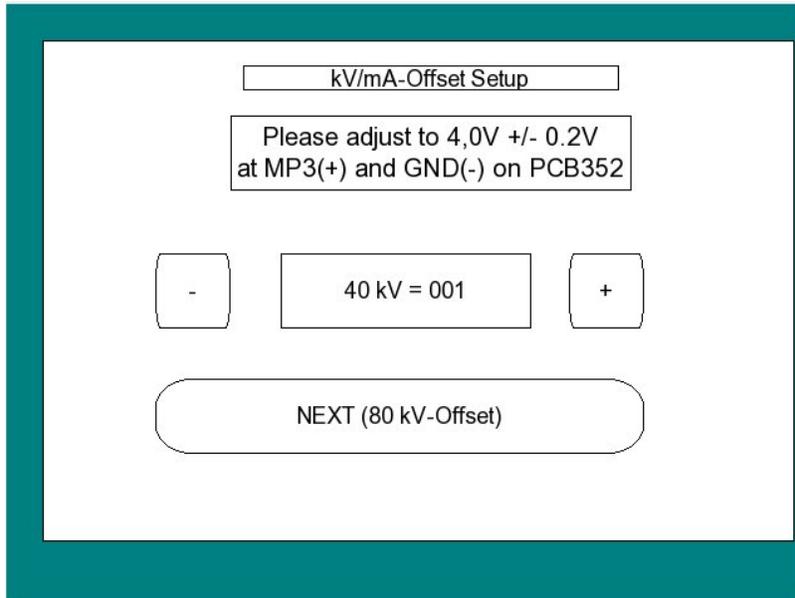


Figure 71

Make X-RAY and adjust with Button - and + to 4,0V ($\pm 0,1V$) on DVM

To continue press Button „Next (80kV Offset)“

Menu: kV/mA-Offset Setup (80kV)

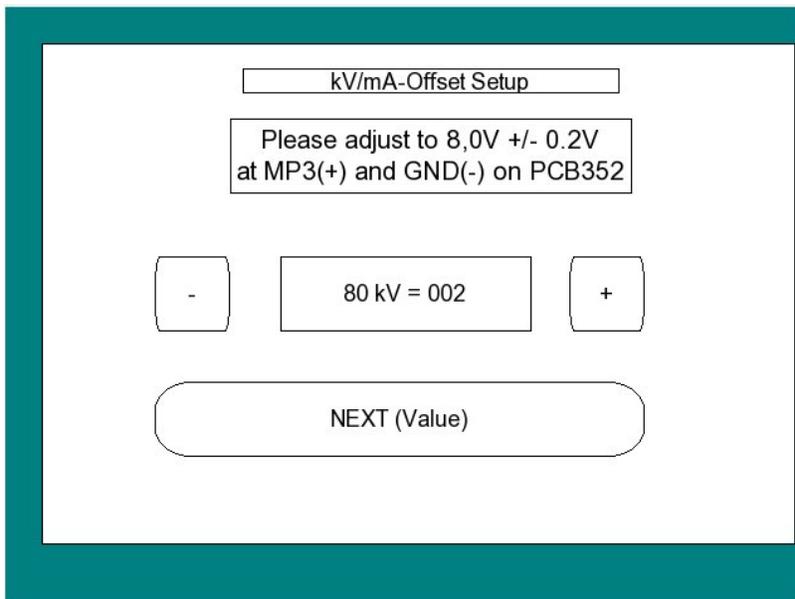


Figure 72

Make X-RAY and adjust with Button - and + to 8,0V ($\pm 0,1V$) on DVM

5 Image System Calibration

5.3 Generator

To continue press Button „Next (Value)“

Menu: kV/mA-Offset Setup (0,2mA)

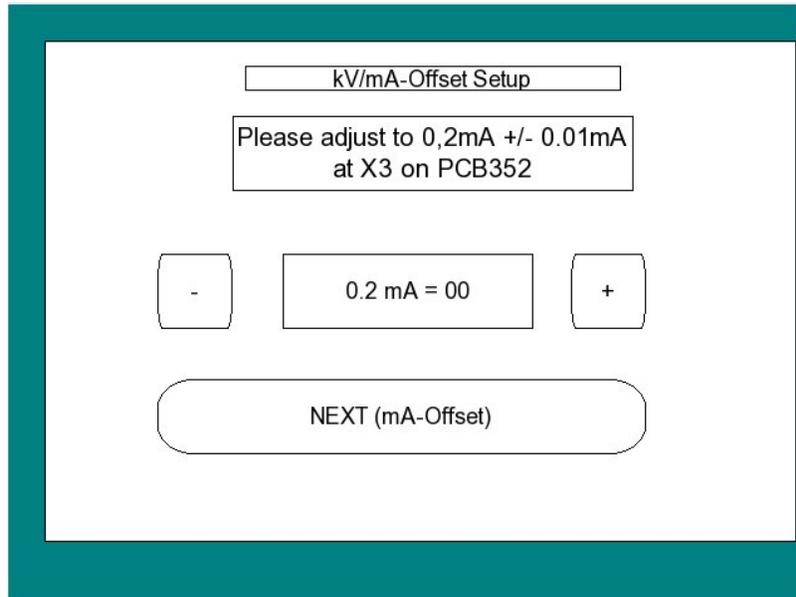


Figure 73

To measure mA with DVM remove jumper and connect DVM



Figure 74

Make X-RAY and adjust with Button - and + to 0,2mA (\pm 0,01mA) on DVM.

5 Image System Calibration

5.4 Tri Mode 9/6/4.5-inch Image Intensifier

To complete select Save and Exit or exit without save to discard.

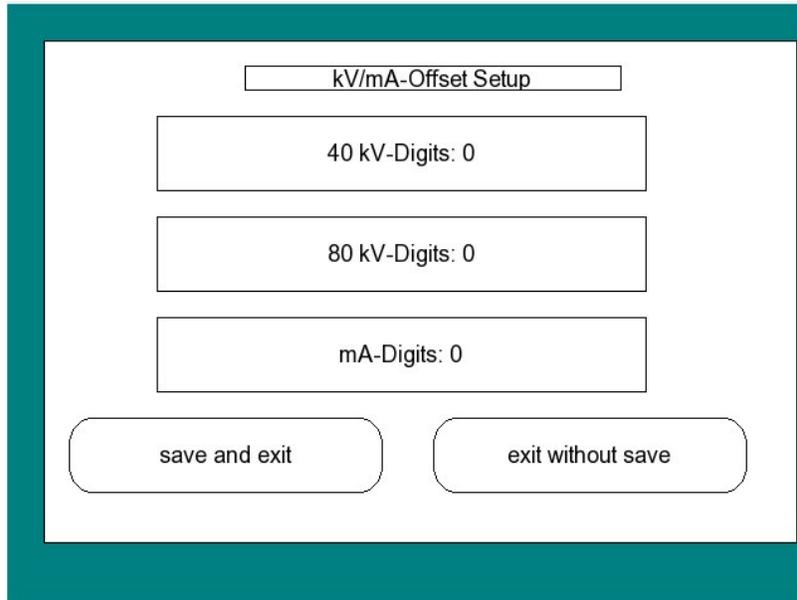


Figure 75

5.4 Tri Mode 9/6/4.5-inch Image Intensifier

P1 - Sharpness of Normal 9-inch mode

P2 - Sharpness in 6-inch mode

P3 - Sharpness in 4.5-inch mode

P4 - Diameter in Normal 9-inch mode adjust to max (ca. 21,2cm)

P5 - Diameter in 6-inch mode adjust 15,5cm

P6 - Diameter in 4.5-inch mode adjust 11,0cm