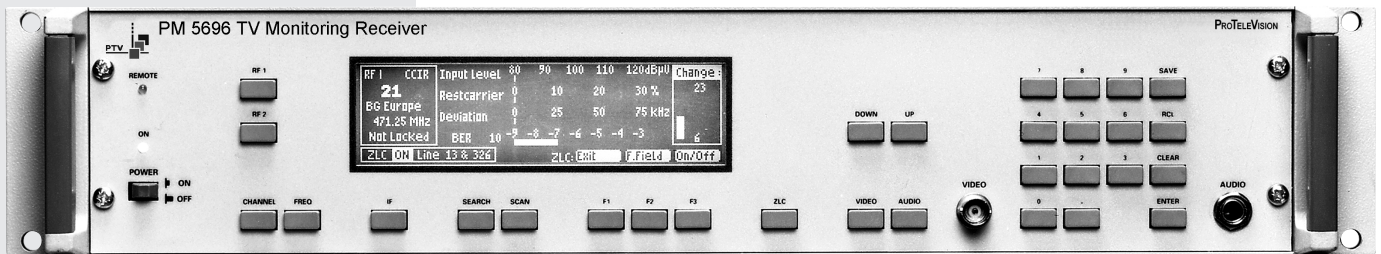


TV Monitoring Receiver, PM 5696



- **Frequency Agile Receiver; allows channel and frequency entry**
- **Selective and sensitive front-end maintains same specification from low VHF to high UHF**
- **Analyzes and displays vital transmission parameters**
- **Synchronous detection for vision and quasi splitcarrier processing for sound supports high quality demodulation**
- **IF output**
- **Available in versions for audio stereo demodulation**
- **M-version: Mono version supports BTSC stereo decoding**
- **Remote control IEEE or RS-232**

Application

The TV monitoring receiver, PM 5696, is a professional multi-channel receiver designed for off-air reception and monitoring of TV signals. The selectivity of the front-end enables the instrument to receive a signal in an environment, where many RF signals may be present. Excellent frequency response is achieved by means of frequency response correction calibration data stored in the memory of the PM 5696.

The PM 5696 receives and demodulates RF signals between 40 and 960 MHz with a signal level between 100 microvolt and 1000 mV.

All recognized broadcast channels and standard CATV channels are stored in the memory of the instrument. The microprocessor control module even supports user-defined channels.

The instrument has two inputs for RF-signals and one for an IF-signal. The IF input accepts only the internally used IF signal specified for version. However, measurements on IF-signals on other

frequencies are possible by using the RF-input and redefining the set-up conditions. Typical applications are:

- Off-air monitoring of TV transmitters and transposers
- CATV, monitoring the installation
- In TV factories, to check the quality of signal distribution
- In relay reception, as a back-up for link at transmitter sites

RF-Input

The PM 5696 features one RF-input at 50 Ω /N and one RF-input at 75 Ω /BNC input impedance. However, the technical specification of the two inputs supports monitoring of two sources, e.g. a local transmitter and an off-air signal. (Note: RF sources are at same levels but located on different channels).

Display

A large LCD (Liquid Crystal Display) on the front panel indicates relevant transmission parameters such as:

- Channel number and frequency
- Selected input and input level
- Signal-to-Noise ratio (video)
- Vision to Sound ratio(s)



- Modulation depths, Restcarrier (residual carrier) and Deviation
- Status, e.g. Zero Level Clamp

The display together with the UP/DOWN push buttons, supports a number of help functions, e.g. setting of contrast and intensity of the display. The help menu even contains an operational description of all front-panel controls.

Channel Selection/Search Function

The channels are selected either directly by means of the push-buttons on the front panel, the remote control or by using the search function. The instrument even supports a frequency entry (visual carrier frequency) by means of the keyboard.

The search function has the following modes:

- Fast, searching only between channels stored in the memory of the instrument
- All, searching for TV-signals on any frequency

Scan

In the scan mode, the instrument scans through any channel/frequency stored in the memory and displays the received signal level together with a channel identification.

Stereo Performance

The instrument is available in versions for stereo sound monitoring of NICAM or the A2 stereo system (A2: the analog stereo system used in Germany). For the M version, the stereo options are: a BTSC sound module or an A2 stereo decoder designed for the encoding used in South Korea.

Stereo, NICAM System

The NICAM module detects and demodulates a NICAM-728 sound signal. Bit Error Rates are detected and the measured value is shown as a bargraph on the LCD-display. Audio-signals are made available together with the digital data (NICAM-728 format) on the rear panel. A head-phone facility is found on the front panel.

Stereo, BTSC System

The instrument supports via a wideband audio output external BTSC decoding equipment.

Stereo, A2 system

The stereo module detects the pilot information and decodes the audio information accordingly. The Stereo module outputs a Mono signal, a Left and a Right channel (in dual language mode: A and B). Three auxiliary outputs provide demodulated signals as (L+R) and L-R and the modulated pilot signal.

Remote Control

All front-panel controls incl. channel selection are accessible via the remote interface, likewise status-information and measuring results shown on the display.

The instrument is supplied either with an IEEE- or a RS-232 interface. The type of interface must be specified as a part of the ordering information.

Product Data

RF Input

The operational input RF 1 or 2, is selected by means of push buttons on the front panel

RF 1, 50 Ω Input

- Connector: N-female (rear panel)
- Input level: 100 μV_{RMS} to 1 V_{RMS} (peak sync level)
- Frequency range: 40 to 960 MHz
- Return loss: ≥ 12 dB

RF 2, 75 Ω Input

- Connector: BNC-female (rear panel)
- Input level: 150 μV_{RMS} to 1 V_{RMS} (peak sync level)
- Frequency range: 40 to 960 MHz
- Return loss: ≥ 10 dB

IF Input

- Connector: BNC
- Impedance: 50 Ω
- Return loss: ≥ 20 dB
- Input level: 5 mV_{RMS} to 100 mV_{RMS} (peak sync)

- IF frequency D/K, B/G and I: 38.9 MHz
- IF frequency M,N: 45.75 MHz

Level Control

Automatic level control

- Coarse setting: Peak level
- Fine adjustment: Blanking (keyed ALC)
- Manual operation: The ALC function can be switched for manual operation via the menu function "Special"

Zero Level Clamp

Internal Function, 625 lines system

- Insertion in a single line between line 10 -20 and 323 -333 or all active lines

Internal Function, 525 lines system

- Insertion in a single line between line: 10 -20 and 273 -283 or all active lines

External Input

- Connector: BNC
- Level: +5 V HCMOS levels
- Suppression: When the control signal is "high"

Video Output

- Composite video, one front and one rear
- Connectors: BNC
- Impedance: 75 Ω
- Level: 1 V_{PP} nominal, adjustable
- Return loss: ≥ 30 dB up to 6 MHz

Sync Output

- Composite SYNC
- Connectors: NC
- Impedance: 75 Ω
- Level: 2 V_{PP}

IF Output

- The output delivers a complete IF spectrum containing Vision and Sound (Sounds)

- Connector: N
- Impedance: 50 Ω
- Return loss: > 20 dB at IF (Visual and Aural frequencies)
- Level: $\geq 100 \text{ mV}_{\text{RMS}}$ referring to sync level
- Frequency, D/K, B/G, I: 38.9 MHz
- Frequency, M, N: 45.75 MHz

Audio Output (Mono)

Front

- The output is unbalanced
- Connector: Jack-plug, 1/4"
- Impedance: < 50 Ω
- Level: Adjustable from +6 dB to -60 dB relative to the output on the rear panel

Rear

- Connector: XLR

- Impedance: < 40 Ω balanced
- Level: 6 dBm (1.55 V) at $\pm 30 \text{ kHz}$ deviation, 400 Hz modulation, 600 Ω load. (Note: M/N version: 1.55 V/400 Hz at $\pm 25 \text{ kHz}$)

Remote Control

Optional

IEEE-488 or RS 232

General Specifications

Power Supply

- Voltage: 100/120/220/240 V AC $\pm 10 \%$
- Frequency: 48 to 65 Hz
- Power consumption: 90 VA at 220 V AC

Mechanical Data

19" rack/table cabinet, 2 rack units high
Max dimensions incl. handles and "feet":

- Height: 88 mm (3.45")

- Width: 482 mm (19")
 - Depth: 522 mm (20.5") (approx.)
- Rack, built-in dimensions:
- Height: 88 mm (3.45")
 - Width: 440 mm (17.3")
 - Depth: 476 mm (18.7")
 - Weight: 17-18 kg (37 - 39 lbs) incl. cabinet

Environmental Conditions

- Operational temperatures: 5°C to 45°C (50°F to 113°F)

- Storage temperatures: -30°C to 70°C (-22°F to 158°F)

Electromagnetic Compatibility

- Electromagnetic interference: complies with the CENELEC requirements for radiation and immunity EN 50081-1 and EN 50082-1

Safety

- Safety: In accordance with IEC 348 class 1

PM 5696 D/K Demodulation Characteristics

Video

Amplitude-response

- 10Hz-5.0 MHz: $\leq \pm 0.5 \text{ dB}$
- 5.0 - 5.5 MHz: $\leq + 0.5 \text{ dB}$, -1 dB *)
- 5.5 - 6.0 MHz: $\leq + 0.5 \text{ dB}$, -3 dB
- 6.45 - 6.55 MHz: < -56 dB

*)Note: Video bandwidth is reduced to 5.1 MHz in NICAM versions

Group-delay Response

Specified as max. deviation from a flat when using the appropriate pre-correction. Measured with a delay aperture of 200 kHz

- 10 kHz - 5.0 MHz: $\leq \pm 30 \text{ ns}$
- 5.0 MHz - 5.5 MHz: $\leq \pm 50 \text{ ns}$

Note: the instrument makes use of SAW filter technology and the specified aperture is recommended, as it suppresses the fast ripples typical for SAW filters. These ripples are of low energy and have an insignificant influence on the pulse response.

Envelope Detector

- Differential gain: < 10%
- Differential phase: < 4°, typically $\leq 2^\circ$

- Low frequency non-linearity: $\leq 3\%$

Synchronous Detector

- Differential gain: < 2%, typically $\leq 1\%$
- Differential phase: < 2°, typically $\leq 1^\circ$
- Low frequency non-linearity: $\leq 2\%$
- Tilt (50 Hz): $\leq 0.5\%$
- 2T k factor: $\leq 1\%$
- 20T Gain inequality: $\leq 0.5 \text{ dB}$
- 20T Delay inequality: $\leq 20 \text{ nsec}$
- Signal-to-noise ratio: $\geq 59 \text{ dB}_{\text{RMS}}$ weighted, RF-level $\geq -28 \text{ dBm}$ (10 mV/50 Ω)
 $\geq 55 \text{ dB}_{\text{RMS}}$ weighted, RF-level $\geq -38 \text{ dBm}$ (3 mV/50 Ω)

Audio Mono

Amplitude-response

- < $\pm 0.5 \text{ dB}$ 40 Hz to 15 kHz with de-emphasis (50 μs)

Signal-to-noise ratio

- (CCIR Quasi-peak weighted acc. CCIR REC 468, deviation $\pm 30 \text{ kHz}$, modulation 1 kHz)
- $\geq 48 \text{ dB}$ (typical $\geq 50 \text{ dB}$) for 'all' video signals
 - > 56 dB for a black video signal

Harmonic distortion

- 50 kHz deviation: $\leq 0.5\%$
- 30 kHz deviation typical 0.25%

Stereo Versions

Preliminary information, systems are under consideration

NICAM Stereo

Note: In the NICAM version, the video bandwidth is limited to 5.1 MHz and NICAM is conveyed on a 5.85 MHz QPSK modulated carrier. System in principle like the B/G NICAM

Audio Outputs - Audio out, front

Output is either the "FM"- mono, "A" (left signal), "B" (right signal) or a stereo output selected via the audio menu

- The output is unbalanced
- Connector: Jack-receptor, 1/4"
- Impedance: < 50 Ω
- Level: Adjustable in 2 dB steps from +6 dB to -60 dB, relative to the output on the rear panel

Audio out, rear

The outputs are two audio channels (A & B)

- The outputs are balanced
- Connector: XLR, 3-pole female
- Impedance: < 40 Ω
- Level (400 Hz, 7.26 dBr): 0 dBm, 600 Ω load *)

*) *Note: dBr describes dB above the reference level.*

The NICAM levels would match the FM levels at 30 kHz deviation.

For system D/K, defined by a 400 Hz audio signal, the NICAM reference level equals a digital level 22 dB below overload

NICAM Data:

- Format: 728 kbit/s data in serial form
- Connector: BNC
- Level: Approx. ± 2.5 V in 75 Ω
- Impedance: 75 Ω

NICAM Clock

- Frequency: 728 kHz
- Connector: BNC
- Level: Approx. ± 2.5 V in 75 Ω
- Impedance: 75 Ω

Demodulated Characteristics

- Amplitude Response, deviation from the J17 de-emphasis:
20 Hz to 14 kHz: Within ± 0.5 dB
14 kHz - 15 kHz: Within +0.5 dB to -3 dB
- Signal to Idle Noise relative to 0 dBm with 600 Ω load and 1 kHz modulation: > 70 dB weighted acc. to CCIR Rec. 468
- Harmonic distortion, with 1.55 V output: < 0.25%
- Intermodulation with two tones each at a level 9 dB below overload: < 63 dB below overload

PM 5696 B/G Demodulation Characteristics

Video

Amplitude-response

- 10 Hz - 4.6 MHz: $\leq \pm 0.5$ dB
- 4.6 - 4.8 MHz: $\leq +0.5$ dB, -2 dB
- 5.45 - 5.55 MHz: < -56 dB

Group-delay Response

Specified as max. deviation from a flat when using the appropriate precorrection. Measured with a delay aperture of 200 kHz

- 10 kHz - 4.43 MHz: $\leq \pm 30$ ns
- 4.43 MHz - 4.8 MHz: $\leq \pm 100$ ns

Note: the instrument makes use of SAW filter technology and the specified aperture is recommended, as it suppresses the fast ripples typical for SAW filters. These ripples are of low energy and have an insignificant influence on the pulse response.

Envelope Detector

- Differential gain: < 10%
- Differential phase: < 4°, typically $\leq 2^\circ$
- Low frequency non-linearity: $\leq 3\%$

Synchronous Detector

- Differential gain: < 2%, typically $\leq 1\%$
- Differential phase: < 2°, typically $\leq 1^\circ$
- Low frequency non-linearity: $\leq 2\%$
- Tilt (50 Hz): $\leq 0.5\%$
- 2T k factor: $\leq 1\%$
- 20T Gain inequality: ≤ 0.5 dB
- 20T Delay inequality: ≤ 20 nsec

- Signal-to-noise ratio:
 ≥ 60 dB_{RMS} weighted,
RF-level ≥ -28 dBm (10 mV/50 Ω)
 ≥ 56 dB_{RMS} weighted,
RF-level ≥ -38 dBm (3 mV/50 Ω)

Audio Mono

Amplitude-response

- < ± 0.5 dB 40 Hz to 15 kHz with de-emphasis (50 μ s)

Signal-to-noise ratio

(CCIR Quasi-peak weighted acc. CCIR REC 468, deviation ± 30 kHz, modulation 1 kHz)

- ≥ 48 dB (typical ≥ 50 dB) for 'all' video signals
- > 56 dB for a black video signal

Harmonic distortion

- 50 kHz deviation: $\leq 0.5\%$
- 30 kHz deviation typical 0.25%

Stereo Versions

NICAM Stereo

Audio Outputs - Audio out, front

Output is either the "FM"- mono, "A" (left signal), "B" (right signal) or a stereo output selected via the audio menu

- The output is unbalanced
- Connector: Jack-receptor, 1/4"
- Impedance: < 50 Ω
- Level: Adjustable in 2 dB steps from +6 dB to -60 dB, relative to the output on the rear panel

Audio out, rear

The outputs are two audio channels (A & B)

- The outputs are balanced
- Connector: XLR, 3-pole
- Impedance: < 40 Ω
- Level, (400 Hz, 7.26 dBr): 0 dBm, 600 Ω load *)

*) *Note: dBr describes dB above the reference level.*
The NICAM levels would match the FM levels at 30 kHz deviation.

For system B/G, defined by a 400 Hz audio signal, the NICAM reference level equals a digital level 22 dB below overload

NICAM Data

- Format: 728 kbit/s data in serial form
- Connector: BNC
- Level: Approx. ± 2.5 V in 75 Ω
- Impedance: 75 Ω

NICAM Clock

- Frequency: 728 kHz
- Connector: BNC
- Level: Approx. ± 2.5 V in 75 Ω
- Impedance: 75 Ω

Demodulated Characteristics

- Amplitude Response, deviation from the J17 de-emphasis:
20 Hz to 14 kHz: Within ± 0.5 dB
14 kHz - 15 kHz: Within +0.5 dB to -3 dB

- Signal to Idle Noise relative to 0 dBm with 600 Ω load and 1 kHz modulation:
> 70 dB weighted acc. to CCIR Rec. 468
- Harmonic distortion, with 1.55 V output: < 0.25%
- Intermodulation with two tones each at a level 9 dB below overload:
< 63 dB below overload

A2 Stereo

Audio Outputs

Audio out, front

The output is either a mono or a stereo output, selected via the audio menu

- The output is unbalanced
- Connector: Jack-receptor, 1/4"
- Impedance: <50 Ω
- Level: Adjustable in 2 dB steps from +6 dB to - 60 dB, relative to the output on the rear panel

Audio out, rear

Depending on the encoding, the output is either a mono, a stereo or a bilingual output

- The outputs are balanced
- Connector: XLR, 3-pole
- Impedance: < 40 Ω
- Level, (400 Hz/30 kHz deviation): 6 dBm (1.55 V), 600 Ω load

Auxiliary Outputs

DFM1, Demodulated Sound 1 signal

- Connector: BNC
- Level, (400 Hz/30 kHz deviation): approx. 0.4 V_{RMS}, 600 Ω load
- Impedance: < 100 Ω

DFM2, Demodulated Sound 2 signal

- Connector: BNC
- Level, (400 Hz/30 kHz deviation): approx. 0.4 V_{RMS}, 600 Ω load
- Impedance: < 100 Ω

PILOT, pilot signal AM-modulated with the ID signal

- Connector: BNC
- Impedance: 75 Ω
- Level: 0.775 V_{RMS}

Demodulated Characteristics

- 20 Hz to 14 kHz: $\leq \pm 0.5$ dB, deemphasis on
- 14 kHz to 15 kHz: < 1 dB/ > -3 dB Harmonic distortion
- THD (50 kHz dev.): < 0.5%
- Stereo crosstalk (L to R, R to L): < 36 dB, typical 46 dB
- Channel Crosstalk: < -70 dB
- S/N (1 kHz, 30 kHz deviation, CCIR weighted): > 46 dB

PM 5696 I Demodulation Characteristics

Video

Amplitude-response

- 10Hz - 4.8 MHz: $\leq \pm 0.5$ dB
- 4.8 - 5.2 MHz: $\leq + 0.5$ dB, -2 dB
- 5.95 - 6.05 MHz: < -56 dB
- 6.05 - 7.0 MHz: < -60 dB

Group-delay Response

Specified as max. deviation from a flat. Measured with a delay aperture of 200 kHz

- 10 kHz - 4.8 MHz: $\leq \pm 30$ ns
- 4.8 MHz - 5.2 MHz: $\leq \pm 75$ ns

Note: the instrument makes use of SAW filter technology and the specified aperture is recommended, as it suppresses the fast ripples typical for SAW filters. These ripples are of low energy and have an insignificant influence on the pulse response

Envelope Detector

- Differential gain: < 10%
- Differential phase: < 4°, typically $\leq 2^\circ$
- Low frequency non-linearity: $\leq 3\%$

Synchronous Detector

- Differential gain: <2%, typically $\leq 1\%$
- Differential phase: <2°, typically $\leq 1^\circ$
- Low frequency non-linearity: $\leq 2\%$
- Tilt (50 Hz): $\leq 0.5\%$

- 2T k factor: $\leq 1\%$
- 10T Gain inequality: ≤ 0.5 dB
- 10T Delay inequality: ≤ 20 nsec
- Signal-to-noise ratio:
 ≥ 60 dB_{RMS} weighted,
RF-level $\geq - 28$ dBm (10 mV/50 Ω)
 ≥ 56 dB_{RMS} weighted,
RF-level $\geq - 38$ dBm (3 mV/50 Ω)

Audio Mono

Amplitude-response

- < ± 0.5 dB 40 Hz to 15 kHz with de-emphasis (50 μ s)

Signal-to-noise ratio

- (CCIR Quasi-peak weighted acc. CCIR REC 468, deviation ± 30 kHz, modulation 1 kHz)
 ≥ 46 dB (typical ≥ 50 dB) for "all" video signals
 >56 dB for a black video signal

Harmonic distortion

- 50 kHz deviation: $\leq 0.5\%$
- 30 kHz deviation typical 0.25%

Stereo Versions

NICAM Stereo

Audio Outputs - Audio out, front

Output is either the "FM"- mono, "A" (left signal), "B" (right signal) or a stereo output selected via the audio menu

- The output is unbalanced
- Connector: Jack-receptor, 1/4"
- Impedance: < 50 Ω
- Level: Adjustable in 2 dB steps from +6 dB to - 60 dB, relative to the output on the rear panel

Audio out, rear

The outputs are two audio channels (A & B)

- The outputs are balanced
- Connector: XLR, 3-pole
- Impedance: < 40 Ω
- Level, (400 Hz, 4.98 dB): 0 dBm, 600 Ω load *)

*) *Note: dBr describes dB above the reference level.*

The NICAM levels would match the FM levels at 30 kHz

For system I, defined by a 440 Hz audio signal, the NICAM reference level equals a digital level 24.3 dB below overload.

NICAM Data

- Format: 728 kbit/s data in serial form
- Connector: BNC
- Level: Approx. ± 2.5 V in 75 Ω
- Impedance: 75 Ω

NICAM Clock

- Frequency: 728 kHz
- Connector: BNC
- Level: Approx. ± 2.5 V in 75 Ω
- Impedance: 75 Ω

Demodulated Characteristics

Amplitude Response, deviation from the J17 de-emphasis:

- 20 Hz to 14 kHz: Within ± 0.5 dB
- 14 kHz - 15 kHz: Within $+0.5$ dB to -3 dB

- Signal to Idle Noise relative to 0 dBm with 600 Ω load and 1 kHz modulation: >70 dB weighted acc. to CCIR Rec. 468
- Harmonic distortion with 1.55 V output: $< 0.25\%$
- Intermodulation with two tones each at a level 9 dB below overload: < 63 dB below overload

PM 5696 M Demodulation Characteristics

Video

Amplitude-response

- 10Hz - 3.8 MHz: $\leq \pm 0.5$ dB
- 3.8 - 4.1 MHz: $\leq +0.5$ dB, -6 dB
- 4.45 - 4.6 MHz: < -56 dB
- 4.6 - 5.0 MHz: < -50 dB

Group-delay Response

Specified as max. deviation from a flat when using the appropriate precorrection. Measured with a delay aperture of 200 kHz

- 10 kHz - 3.58 MHz: $\leq \pm 25$ ns
- 3.58 MHz - 3.8 MHz: $\leq \pm 50$ ns

Note: the instrument makes use of SAW filter technology and the specified aperture is recommended, as it suppresses the fast ripples typical for SAW filters. These ripples are of low energy and have an insignificant influence on the pulse response.

Envelope Detector

- Differential gain: $< 10\%$
- Differential phase: $< 4^\circ$, typically $\leq 2^\circ$
- Low frequency non-linearity: $\leq 3\%$

Synchronous Detector

- Differential gain: $< 2\%$, typically $\leq 1\%$
- Differential phase: $< 2^\circ$, typically $\leq 1^\circ$
- Low frequency non-linearity: $\leq 2\%$
- Tilt (60 Hz): $\leq 0.5\%$
- 2T k factor: $\leq 1\%$
- 12.5T Gain inequality: ≤ 0.5 dB
- 12.5T Delay inequality: ≤ 20 nsec
- Signal-to-noise ratio:
 - ≥ 60 dB_{RMS} weighted, RF-level ≥ -28 dBm (10 mV/50 Ω)
 - ≥ 56 dB_{RMS} weighted, RF-level ≥ -38 dBm (3 mV/50 Ω)

Audio Mono

Amplitude-response

- $< \pm 0.5$ dB 40 Hz to 15 kHz with de-emphasis (75 μ s)

Signal-to-noise ratio

- >56 dB_{RMS}, flat 20 Hz - 20 kHz deviation 12,5 kHz, 1 kHz modulation
- ≥ 46 dB (typical ≥ 50 dB) weighted. (CCIR Quasipeak, deviation 25 kHz, modulation 400 Hz)

Harmonic distortion

- 50 kHz deviation: $\leq 0.5\%$
- 25 kHz deviation typical 0.25%

Stereo Versions

BTSC Stereo

The instrument supports via a wide-band audio out-put external BTSC decoding equipment.

A2 Stereo (Korean principle)

Audio Outputs - Audio out, front

Output is either a mono or a stereo outputs selected via the audio menu shown on the front-panel.

- The output is unbalanced
- Connector: Jack-receptor, 1/4"
- Impedance: < 50 Ω
- Nominal level: (400 Hz, 25 kHz deviation): 1,55 V, 600 Ω load

Audio out, rear

- The output is balanced
- Connector: 2 XLR, 3-pole
- Level, (400 Hz/25 kHz): 1,55 V, 600 Ω load
- Impedance: < 40 Ω

Auxiliary Output

AUX 1:

Demodulated Sound 1, (L+R) (or audio channel A)

- Connector: BNC
- Level, (400 Hz/25 kHz deviation): 0.775 V_{RMS}, 600 Ω load

AUX 2:

Demodulated Sound 2, (L+R) (or audio channel B)

- Connector: BNC
- Level, (400 Hz/25 kHz deviation, note: for 25 kHz audio modulation the total deviation of sound 2 will be 27.5 kHz including the deviation caused by the pilot): 0.775 V_{RMS}, 600 Ω load

AUX 3:

Pilot signal, AM modulated with the ID signal

- Connector: BNC
- Impedance: < 75 Ω
- Level: 0,775 V_{RMS}

Demodulated Characteristics

Frequency response, de-emphasis:

- 20 Hz to 14 Hz: $\leq \pm 0.5$ dB
- 14 kHz to 15 kHz: < 1 dB / > -3 dB

Harmonic distortion:

- THD (25 kHz dev.): $< 0,5\%$

Stereo crosstalk (L to R, R to L)

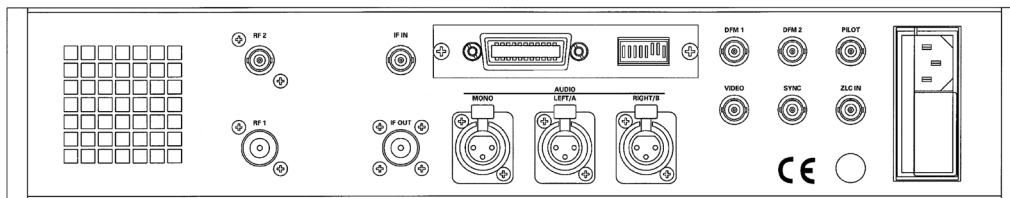
- < 40 dB
- Typical -46 dB, tested at 1 kHz, 12,5 kHz deviation

Channel Crosstalk:

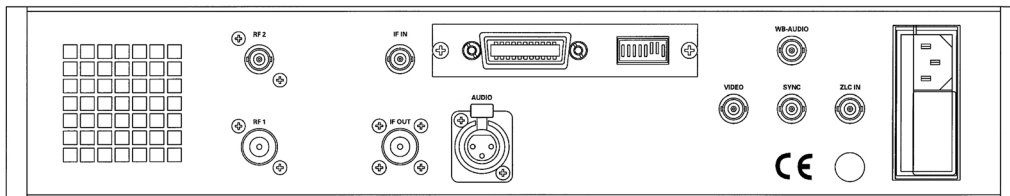
- < -60 dB

Signal-to-noise ratio:

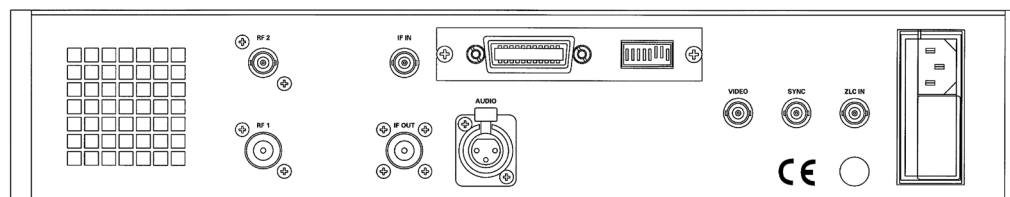
- > 56 dB_{RMS}, flat 20 Hz - 20 kHz, 12,5 kHz deviation, 400 Hz sinusoidal modulation
- > 46 dB quasi-peak, weighted ass. CCIR REC. 468, measured in dual mode, 25 kHz deviation, 400 Hz sinusoidal modulation



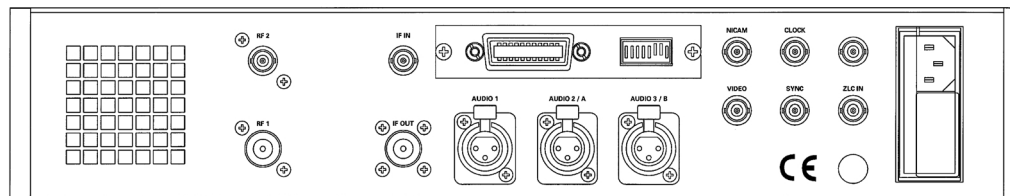
Rear panel, version for "A2" stereo sound



Rear panel, versions for the M mono sound including wideband output for BTSC decoding



Rear panel, versions for mono sound



Rear panel, versions for NICAM sound

Ordering Information

As a part of the ordering information, please specify in the 12 NC code number the digit "X" for the sound system and the "Y" for the receiver group delay.

PM 5696D/...: System D/K, 38,9 MHz IF
Ordering number: 9449 056 96 XY 2

X: 0 Mono version

1 equals NICAM and Mono

2 equals A2 Stereo

Y: 0 Flat delay

1 equals TKIII 830 (used a.o. in Hungary)

2 equals GOST 20535-75 (used a.o. in Russia)

PM 5696G/...: System B/G, 38.9 MHz IF

Ordering number: 9449 056 96 XY 3

X: 0 Mono version

1 equals NICAM and Mono

2 equals A2 Stereo

Y: 0 Flat delay

1 equals TRD ¹⁾ 5/2.1

2 equals Norwegian/Swedish delay

3 equals Australian delay

4 equals Danish delay

5, 6, 7 reserved for 50% versions

8 equals New Zealand delay

9 equals Spanish delay

*1) Note: TRD is an abbreviation for
Technische Plichtenhefte der öffentlichen
Rundfunkanstalten in
Bundesrepublik Deutschland.*

PM 5696I/...: System I, 38.9 MHz IF
Ordering number: 9449 056 96 X0 5

X: 0 Mono version

1 equals NICAM and Mono

PM 5696M/...: System M, 45.75 MHz IF

Ordering number: 9449 056 96 XY 8

X: 3 reserved for future applications

2 equals the Korean A2

0 equals Mono FM

Y: 1 The FCC specified delay profile

0 Reserved for future application

Optional Accessories

9449 819 33001

24 pin amphenol Male connector.

Applicable for users who want to make their own cables for TTL/IEEE or RS-232 remote control

For all versions:

To complete the ordering information, if required type of remote control must be specified

PM 8547/30 IEEE-488 interface

Ordering number: 9449 085 4730 1

PM 8547/20 RS-232 interface

Ordering number: 9449 085 4720 1

An example

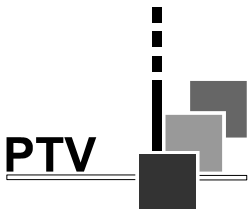
9449 056 96 11 3 including

9449 085 47 30 1:

The code-number defines PM 5696 in a version applicable for system B/G, equipped for NICAM stereo and adjusted for the German group delay and an IEEE-488 remote control has been installed.

FOR FURTHER INFORMATION

Contact the PTV sales office in your area, or contact us directly:



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