

## PortaMonitor X Series, 2-Channel

### GENERAL DESCRIPTION

The RTW PortaMonitor X series 1061X and 1062X each contain in a 176,5 x 125,5 x 61,5 mm table-top cases an analog and digital 2-channel display unit with Peak Program Meter, Loudness display and Correlator especially for analog and digital stereo applications.

- 2-channel multi-standard peakmeter analog and digital
- Phase meter (correlator)
- Audio Vectorscope
- Loudness display
- Real Time Analyzer
- AES/EBU status monitor

The RTW PortaMonitor features balanced analog inputs as well as AES/EBU digital inputs. Comprehensive menus allow a user defined configuration of the instrument to meet with the requirements of the application. This settings may be saved to or recalled from memory as User Presets.



2-channel Peakmeter analog and digital • Correlator • Audio Vectorscope • RTA • Loudness • AES/EBU Status

### TECHNICAL SPECIFICATIONS

#### General

Supply voltage:	+24 V DC (21 V to 30 V DC)
Current drain nominal:	260 mA (power-up current is much higher)
Operating temperature range:	0° to 45° celsius
Weight:	approx. 750 g without table stand
Connectors:	3 x 3-pin XLR-F 1 x 3-pin XLR-M 1 x 15 pin Sub-D-F (Remote) 1 x 4-pin low voltage connector Binder 710 (DC)
Dimensions:	176.5 x 125.5 x 61.5 mm (without table stand)

#### Functions

2-channel, analog and digital, multi-standard Peakmeter, audio vectorscope, AES/EBU status monitor, numeric level display, digital Over and Mute-detection, RTA (1062X, 1062X-PLUS only)

#### Analog Inputs

Inputs:	2 channels (1 x Stereo), electronically balanced
Max. input level:	+24 dBu
Adjustable range for reading reference:	+1 dBu to +16 dBu
CMRR:	> 60 dB
Input impedance:	> 10 k $\Omega$ (30 Hz bis 20 kHz)

#### Digital Inputs

Inputs:	1 (Stereo), AES/EBU, transformer balanced, 110 $\Omega$ or High-Z
Sample rate:	32 kHz to 96 kHz

#### Digital Outputs

Outputs:	1 (Stereo), AES/EBU, input signal looped through, unbuffered
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#### Display

Display:	1 color TFT, 5.7", 115 x 86 mm
Resolution:	320 x 240 pixel
Colors:	8
Optimal angle of view:	6 Uhr
Viewing direction:	horizontal +/-45° vertical +10°/-34°
Contrast:	> 85 with optimal angle of view

#### Peakmeter, General

Level display:	up to 2 channels, vertical display orientation, peak hold indicator switchable, additional spot correlator
Bargraph length:	78 mm
Display modes:	2-channel Stereo, analog or digital
Operation field:	below reference value: 0 to 15 dB in steps of 1 dB
Peak value memory:	additional peak hold indicators
Numeric level display:	selectable, displayed on the left side of the screen
Correlator spot indicator:	switchable
Loudness display:	additional spot indicator displayed on the bargraphs of the level display, RTW mode or A-, C-, CCIR-2k-weighted, RMS

#### Peakmeter, Analog

Scales/Standards:	DIN+5 (-50 to +5 dB), DIN+10 (-50 to +10 dB), Nordic (-42 to +12 dB), British IIa („1" to „7"), IIb (-12 to +12 dB), VU (-21 to +3 dB), Zoom $\pm$ 1 dB, Zoom $\pm$ 10 dB, smpte20rel (-40 to +20 dB), smpte40abs (-35 to +24 dB)
Reference level:	<ul style="list-style-type: none"> <li>• +6 dBu for:           <ul style="list-style-type: none"> <li>DIN, Zoom 20 (0 dB display), Nordic (+6 dB display), VU (lead selectable from 0 to 10 dB)</li> </ul> </li> <li>• +8 dBu for:           <ul style="list-style-type: none"> <li>British IIa („6" display), British IIb („8" display)</li> </ul> </li> </ul> according to selected standard or manually selectable (1 ms, 0.1 ms)
Integration time:	according to selected standard or manually selectable (1 ms, 0.1 ms)

## PortaMonitor X Series, 2-Channel

Fall back time:	according to selected standard (e. g. DIN: 1.5 s/20 dB)
Gain:	according to selected standard: +20 dB (DIN, Zoom) +40 dB (Nordic, British Ila, British IIb)
Memory:	peak level (Peak Memory), peak hold
<b>Peakmeter, Digital</b>	
Word width:	16 to 24 Bit
Scales digital:	0 dB FS to -60 dB FS, 0 dB FS to -20 dB FS,
Scales quasi analog:	+9 dB to 0 dB to -60 dB (BR/ARD), DIN+5, DIN+10, Nordic, British Ila, IIb, Zoom 2, Zoom 20
Special scales:	+18 dB to 0 dB (0 dB FS $\hat{=}$ +18 dB), +18 dB to -18 dB (0 dB FS $\hat{=}$ +18 dB), +20 dB to -40 dB (0 dB FS $\hat{=}$ +20 dB),
Headroom:	-5 dB to -20 dB, adjustable in steps of 1 dB
Integration time (Attack):	according to selected standard or Sample, 0.1 ms, 1 ms, 10 ms
Fall back time:	according to selected standard (e. g. DIN: 1.5 s/20 dB)
Gain:	according to selected standard: +20 dB (Zoom, quasi scale DIN) or +40 dB (digital scales, quasi scales British, Nordic)
High pass filter:	Off, 5 Hz, 10 Hz, 20 Hz
Peak hold display:	Integration time same as level display or sample
Digital Over indicator:	red spot indicators above each bargraph
Threshold:	Full Scale, Full Scale-1LSB, Full Scale-2LSB, -0.1 dB FS, -0.5 dB FS, -1 dB FS, -2 dB FS, -3 dB FS
Attack time:	1 to 15 samples
Word width:	16 to 24 bit
Mute indicator:	red spot indicators below each bargraph
Threshold:	all bits digital „0“
Attack time:	50, 100, 200 or 300 ms or 5 to 80 samples (in steps of 5 samples)

### Phase correlation display

Display mode:	bargraph (horizontal)
Scale range:	-1 r bis +1 r
Standardcolor setting:	red -1 r to -0.1 r yellow 0 r green 0.1 r to +1 r
Colors:	selectable
Attack time:	1.0 s, 2.5 s
Memory:	negative peak correlation integrated in peak memory
Memory accuracy:	better 0.1 r

### Audio Vectorscope (VSC)

Operation modes:	2/0 (stereo)
Display modes:	X/Y or M/S
Viewing area:	70 x 70 mm
AGC (Automatic Gain Control):	Auto or manual
Time of persistence:	Fast, medium, slow

### Real Time Analyzer (1062X, 1062X-PLUS only)

Bands:	31, 1/3-octave
Frequency range:	20 Hz to 20 kHz (IEC-225 ANSI class 2)
Measuring/display range:	selectable: 15 dB, 30 dB, 45 dB
Integration time:	fast/medium/slow, Average or Peak
Peak hold display:	selectable, 2.5 s, 4.0 s or manual
Memory:	8 plus peak hold
Peakmeter:	selectable, 2-channel

### AES/EBU Status Monitor

Status:	digital channels 1-2
Status information:	locked, decoded AES/EBU status
Display:	hexadecimal, binary, active bits, audio bits

### Remote Control Interface

Parallel interface:	external function control: Loud, PHold, Memo, Gain, Reset, Shift, Menu, Status, Opt 1, Opt 2, RTA, Gonio, additionally: switching to Digital, switching to Analog
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### Controls and additional display elements

Keys:	LOUD, PHOLD, MEMO, GAIN, RESET, SHIFT, MENU, STATUS, OPT 1, OPT 2, RTA, GONIO
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### Items delivered

PortaMonitor 1061X:	<ul style="list-style-type: none"><li>2-channel PortaMonitor graphite grey RAL 7024</li><li>counter plug for power supply</li><li>Operating manual</li></ul> <b>Order number: 1061X</b>
PortaMonitor 1061X-PLUS:	<ul style="list-style-type: none"><li>2-channel PortaMonitor graphite grey RAL 7024</li><li>table stand graphite grey RAL 7024</li><li>mains adapter</li><li>Operating manual</li></ul> <b>Order number: 1061X-PLUS</b>
PortaMonitor 1062X:	<ul style="list-style-type: none"><li>2-channel PortaMonitor with RTA graphite grey RAL 7024</li><li>counter plug for power supply</li><li>Operating manual</li></ul> <b>Order number: 1062X</b>
PortaMonitor 1062X-PLUS:	<ul style="list-style-type: none"><li>2-channel PortaMonitor with RTA graphite grey RAL 7024</li><li>table stand graphite grey RAL 7024</li><li>mains adapter</li><li>Operating manual</li></ul> <b>Order number: 1062X-PLUS</b>

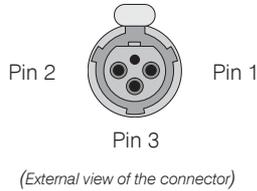
## PortaMonitor X Series, 2-Channel

### CONNECTION

#### CH-L, CH-R, AES/EBU IN connectors (3-pin XLR-F)

Pin: Function:

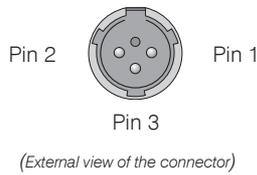
- 1 shield/chassis
- 2 +, hot
- 3 -, cold



#### AES/EBU OUT connector (3-pin. XLR-F)

Pin: Function:

- 1 Schirm/Gehäuse
- 2 +, hot
- 3 -, cold



#### Power supply connector (4-pin low voltage type Binder 710)

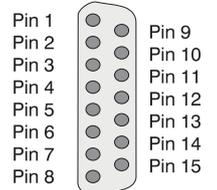
Pin: Function:

- 1-2 +24 V
  - 3-4 0 V
- 

#### Remote connector (15-pin Sub-D-F)

Pin: Function:

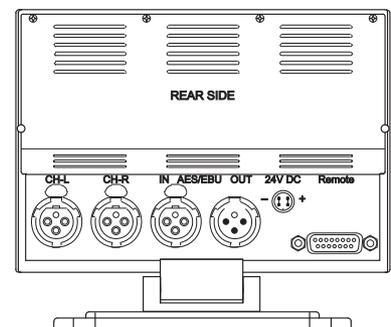
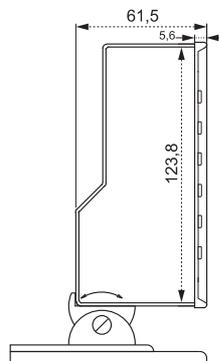
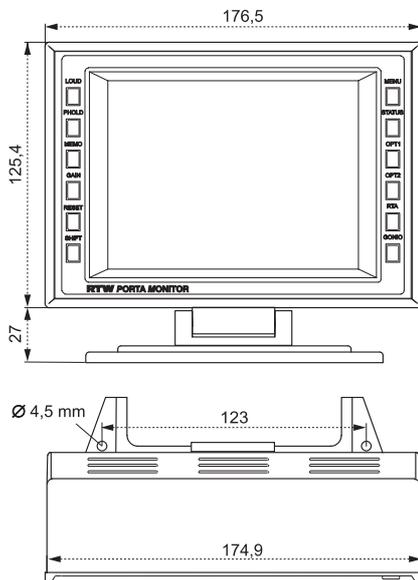
- 1 common potential for ext. switches - GND
- 9 external function selection: „MEMO“
- 2 external function selection: „GAIN“
- 10 external function selection: „MENU“
- 3 external function selection: „RESET“
- 11 external function selection: „STATUS“
- 4 external function selection: digital
- 12 external function selection: „OPT1“
- 5 external function selection: analog
- 13 external function selection: „OPT2“
- 6 external function selection: „LOUD“
- 14 external function selection: „RTA“
- 7 external function selection: „PHOLD“
- 15 external function selection: „GONIO“
- 8 external function selection: „SHIFT“



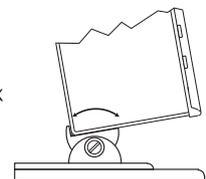
### COLORS

Case: Graphite grey RAL 7024,  
Scale: silver with black labelling

### DIMENSIONS



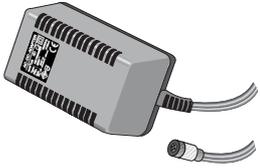
Tischfuß/Table stand:  
13719: Optional für/  
Option for  
1061X, 1062X



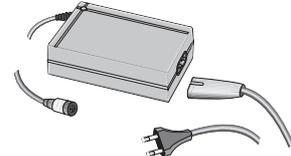
Abmessungen in mm/Dimensions in mm

## PortaMonitor X Series, 2-Channel

### ACCESSORY COMBINATION



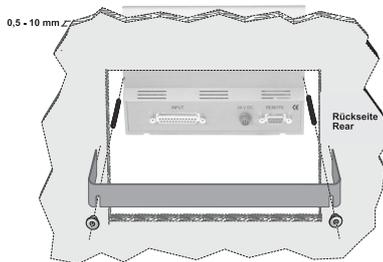
- Wide voltage power supply **1171-R**  
90 - 240 V AC/24 DC, 630 mA
- Euro plug
  - Locking 4-pin low voltage connector



- Wide voltage power supply **1175-R**  
100 - 240 V AC/24 DC, 2.7 A
- corresponding power cable
  - Locking 4-pin low voltage connector



PortaMonitor X Series, 2-Channel  
Table-top unit



- Panel mounting kit **13713** for front panel installation
- Required panel cutout:  
174,9 x 123,8 mm (B x H)
  - Panel thickness: 0.5 to 10 mm  
(Instrument not included)

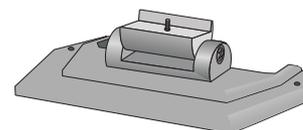


Table stand **13719**  
(Spare part!)

Subject to changes without prior notice 02/2010