

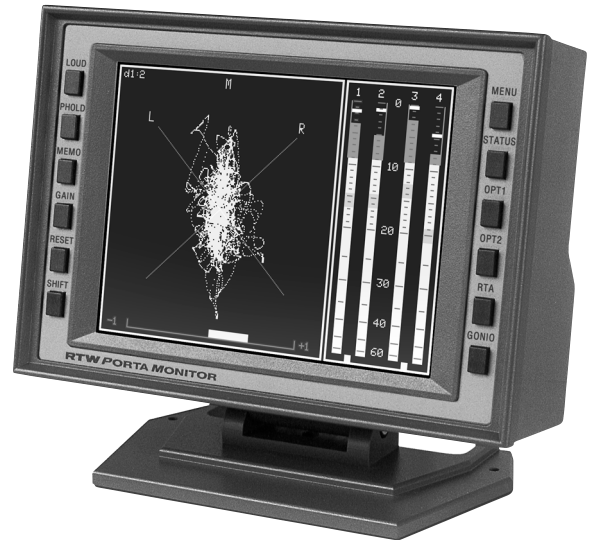
PortaMonitor X Series, 4-Channel

GENERAL DESCRIPTION

The RTW PortaMonitor X series 1063X and 1064X each contain in a 176,5 x 125,5 x 61,5 mm table-top cases an analog and digital 4-channel display unit with Peak Program Meter, Loudness display and Correlator especially for analog, digital and mixed stereo and 4-channel applications.

- 4-channel multi-standard peakmeter analog and digital
- Phase meter (correlator)
- Audio Vectorscope
- Loudness display
- Real Time Analyzer
- 3.1 Surround Monitor (1064X, 1064X-PLUS)
- AES/EBU status monitor

The RTW PortaMonitor features four balanced analog inputs as well as two 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.



4-channel Peakmeter analog and digital • Mixed Mode • Correlator • Audio Vectorscope • RTA • Loudness AES/EBU Status • 3.1 Surround Monitor

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:	2 x 25-pin Sub-D-F 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

4-channel, analog and digital, mixed mode, multi-standard Peakmeter, audio vectorscope, AES/EBU status monitor, numeric level display, digital Over and Mute detection, RTA (1064X, 1064X-PLUS only), Surround Monitor (1064X, 1064X-PLUS only)

Analog Inputs

Inputs:	2 channels (1 x Stereo) or 4 channels (2 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 Ω (30 Hz bis 20 kHz)

Digital Inputs

Inputs:	2 (Stereo), AES/EBU, transformer balanced, 110 Ω or High-Z
Sample rate:	32 kHz to 96 kHz

Digital Outputs

Outputs:	2 (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 4 channels, vertical display orientation, peak hold indicator switchable, additional spot correlator
Bargraph length:	78 mm
Display modes:	2 x 2-channel Stereo, analog, digital or mixed mode, 3.1 Surround (1064X, 1064X-PLUS only) below reference value: 0 to 15 dB in steps of 1 dB
Operation field:	additional peak hold indicators
Peak value memory:	selectable, displayed on the left side of the screen
Numeric level display:	switchable
Correlator spot indicator:	additional spot indicator displayed on the bargraphs of the level display, RTW mode or A-, C-, CCIR-2k-weighted, RMS
Loudness display:	

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"> • +6 dBu for: <ul style="list-style-type: none"> DIN, Zoom 20 (0 dB display), Nordic (+6 dB display), VU (lead selectable from 0 to 10 dB) • +8 dBu for: <ul style="list-style-type: none"> British IIa ("6" display), British IIb ("8" display)

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Integration time: according to selected standard or manually selectable (1 ms, 0.1 ms)
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

Peakmeter, Digital

Word width: 16 to 24 Bit
Scales digital: 0 dB FS to -60 dB FS, 0 dB FS to -20 dB FS, +9 dB to 0 dB to -60 dB (BR/ARD), DIN+5, DIN+10, Nordic, British Ila, IIb, Zoom 2, Zoom 20
Scales quasi analog: +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),
Special scales: -5 dB to -20 dB, adjustable in steps of 1 dB
Headroom: according to selected standard or Sample, 0.1 ms, 1 ms, 10 ms
Integration time (Attack): according to selected standard
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
Standard color 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), 3/1 (1064X, 1064X-PLUS only)
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 (1064X, 1064X-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

Surround Monitor (1064X, 1064X-PLUS only)

VSC surround modes: 3/1, 3/0 or 2/1, LF channel display in peakmeter only
AGC: Fast, slow
VSC refresh rate: Fast, slow
Indicator display: Lt/Rt signal, internal calculated or external processed

AES/EBU Status Monitor

Status: digital channels 1-2, 3-4
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

Controls and additional display elements

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

Items delivered

- PortaMonitor 1063X:
- 4-channel PortaMonitor graphite grey RAL 7024
 - counter plug for power supply
 - Operating manual
- Order number: 1063X**
- PortaMonitor 1063X-PLUS:
- 4-channel PortaMonitor graphite grey RAL 7024
 - table stand graphite grey RAL 7024
 - mains adapter
 - Operating manual
- Order number: 1063X-PLUS**
- PortaMonitor 1064X:
- 4-channel PortaMonitor with RTA and Surround Monitor graphite grey RAL 7024
 - counter plug for power supply
 - Operating manual
- Order number: 1064X**
- PortaMonitor 1064X-PLUS:
- 4-channel PortaMonitor with RTA and Surround Monitor graphite grey RAL 7024
 - table stand graphite grey RAL 7024
 - mains adapter
 - Operating manual
- Order number: 1064X-PLUS**

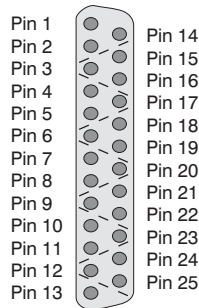
PortaMonitor X Series, 4-Channel

CONNECTION

Input and Output connectors (25-pin Sub-D-F)

Pin: Funktion:

4	Digital in-/output AES/EBU 2 (+, hot)
17	Digital in-/output AES/EBU 2 (-, cold)
5	shield/chassis
18	Digital in-/output AES/EBU 1 (+, hot)
6	Digital in-/output AES/EBU 1 (-, cold)
19	shield/chassis
7	Audio in-/output analog 4 (+, hot)
20	Audio in-/output analog 4 (-, cold)
8	shield/chassis
21	Audio in-/output analog 3 (+, hot)
9	Audio in-/output analog 3 (-, cold)
22	shield/chassis
10	Audio in-/output analog 2 (+, hot)
23	Audio in-/output analog 2 (-, cold)
11	shield/chassis
24	Audio in-/output analog 1 (+, hot)
12	Audio in-/output analog 1 (-, cold)
25	shield/chassis

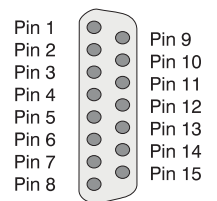


(External view of the connector)

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

Pin: Funktion:

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“



(External view of the connector)

Note: The incoming AES/EBU signals are passive looped through from input connector to the output connector.

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

Pin: Funktion:

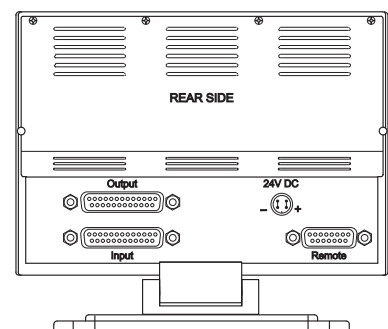
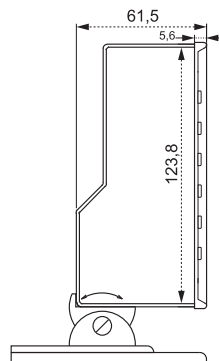
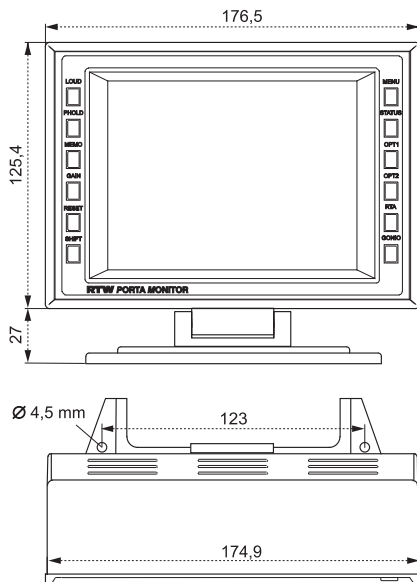
1-2	+24 V	3	2
3-4	0 V	4	1



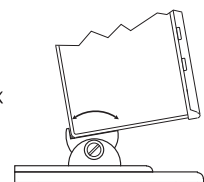
COLORS

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

DIMENSIONS



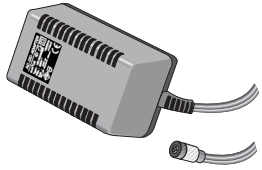
Tischfuß/Table stand:
13719: Optional für/
Option for
1063X, 1064X



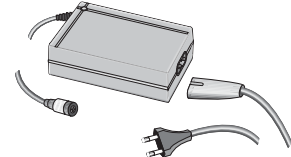
Abmessungen in mm/Dimensions in mm

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ACCESSORY COMBINATION



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



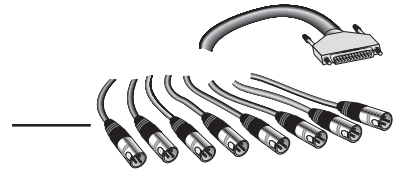
- Wide voltage power supply **1175-R**
 100 - 240 V AC/24 DC, 2.7 A
- corresponding power cable
 - Locking 4-pin low voltage connector



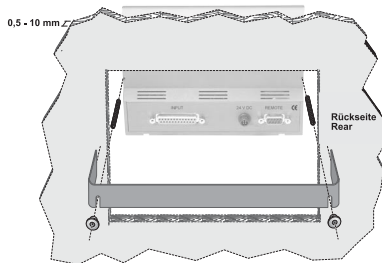
- 8-pair snake cable **1186**, 4 m
- Distributes 25-pin Sub-D connector to 8 XLR-F cable connectors
 - For connecting to "Input" connector



PortaMonitor X series, 4-channel
 Table-top unit



- 8-pair snake cable **1163**, 4 m
- Distributes 25-pin Sub-D connector to 8 XLR-M cable connectors
 - For connecting to "Output" connector



- 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)

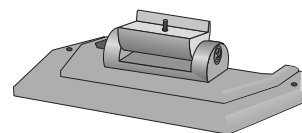


Table stand **13719**
 (Spare part!)

Subject to changes without prior notice 02/2010