

of the three primary colors should also stay the same at 'grey' levels. To permit this 'grey scale tracking', the PM 5539 has a wide sensitivity range (1 to 300 NIT full scale).

## VIDEO LEVEL METER PM 5548



**Precise video level measurement.**  
**Controls for line selection and position on the selected line(s) allow measurement at any place of the video level of a TV signal or pattern including insertion signals.**  
**Optional BCD output.**  
**Complementary to PM 5633 color generator, RGB.**

The digital video level meter is specially designed for aligning and checking all video equipment, such as pattern and test signal generators, encoders, decoders, mixers. The instrument uses a sampling method to measure levels at any point of the television signal. The position of the sampling pulse is determined by four frontplate controls: — thumbwheel switches, directly indicating the line number for the sampling to start, — control "height", determining how many lines will be sampled, — multiturn potentiometer "delay", giving the sampling point on the selected line(s), — control "width", determining the width of the sampling pulse.

## WAVEFORM MONITOR PM 5565



**Designed for use in broadcast studios and OB vans.**  
**Input at the front for a standard oscilloscope probe.**  
**Internal graticule for accurate level readings.**  
**Low power consumption.**  
**Compatible with other brands of waveform monitors.**

The PM 5565 Waveform Monitor is for use in television studios, VTR, telecine centers and OB vans. Its main application is for setting up and checking the signals of b/w and color cameras, videotape recorders, film

and slide scanners.

As a unique feature for an instrument of its price class, the PM 5565 has a probe input at the front. This enables the PM 5565 to be used for fault-finding with the equipment to which it is allocated, thus eliminating the need for an extra oscilloscope for servicing purposes.

The PM 5565 has two video inputs and a monitor output at the rear, plus a facility for synchronization from a third video or composite sync input. The vertical sensitivity is  $1V_{p-p}$  or  $0.2V_{p-p}$  full screen size. Filters for display of luminance only or chrominance only are provided. Differential gain measurement is also possible with a separate button.

Horizontal deflections are one or two lines as well as one or two fields, full screen size. Also 20 times magnification is possible. For the convenience of adjusting color cameras, the PM 5565 accepts signals from a 'parade display' switcher.

## VECTORSCOPE PM 5567



**Designed for use in broadcast studios and OB vans.**  
**Internal graticule for accurate vector readings.**  
**Low power consumption and high reliability.**  
**Very easy access for servicing.**  
**Compatible with other brands of vectorscopes.**  
**Easy to operate because of logic ergonomy.**

The PM 5567 Vectorscope is for use in television studios, VTR and telecine centres and OB vans. Its main application is setting up and checking the color content of signals from color cameras, video taperecorders, film- and telecine scanners.

The colors of the selected signal are displayed as vectors.

Vector length represents the saturation of the colors; vector angle represents the hue of the colors (the latter with reference to the color burst).

PM 5567 has two video inputs plus a further facility for synchronization from a third video color subcarrier signal. In the PAL version the R-Y alternation can be switched off when checking the 180 degrees PAL switching of the displayed signal. An NTSC display

also turns all the —(R-Y) vectors positive.

The internal graticule makes vector readings easier and more accurate, because parallax errors cannot occur. The graticule has special tolerance lines for reading both the amount of differential gain and phase distortion.

## PM 5665 WAVEFORM MONITOR AND PM 5667 AND PM 5668 VECTORSOPES



**Brightest, crispest displays.**  
**Select any line, directly from the front panel.**

**Front panel probe input.**  
**Measures differential gain.**  
**Remote control.**  
**Sc-H phase measurement.**

At the top of the line are the PM 5665 Waveform Monitor and PM 5667 and PM 5668 Vectorscopes.

High in price/performance value, low in power consumption and weight. And extremely easy to operate.

These new instruments deliver all the display modes you need. And with control panel formats clearly designed for your convenience. So you can continue to work in the way you've learned to work best.

Like all the instruments in the new PHILIPS waveform and vector monitoring group, these units give the brightest, crispest displays. The instruments' capabilities work for you even in high ambient light conditions, thanks to the new, improved PHILIPS CRT with the highest acceleration voltage available. The internal graticules are parallax-free for optimized accuracy.

Moreover, on the new PM 5665, you can now observe VITS with superb clarity and ease.

The PM 5665 Waveform Monitor has full line selection, allowing you to select any line, using a strobe facility. This instrument also lets you subtract the A-B input signals from each other. So you can now detect timing differences more easily.

The PM 5665 Waveform Monitor's dual filter display shows a complete video signal *simultaneous* with luminance information. Your camera set-ups will be much easier, now that you don't have to switch back and forth any longer.

The new PM 5667 and PM 5668 Vectorscopes measure chrominance signals with a higher degree of precision. Perfect companions to the PM 5665 Waveform Monitor, these new PHILIPS vectorscopes are ideal for measuring chrominance amplitude and phase, differential phase, and other distortions.

Safeguard the quality of your television color picture by using the PM 5667 or PM 5668 vector displays to readily detect errors in recording and playback, color encoding, and even transmission processes that can negatively affect chrominance, phase or amplitude. With the parallax-free graticule, you can easily spot significant phase shifts.

Far better resolution in measuring differential phase is another benefit you get when using one of the new PHILIPS Vectorscopes with the new PM 5665 Waveform Monitor.

And the new PM 5668 Vectorscope comes equipped with Sc-H phase measurement - an absolutely essential tool for matching color frames when editing or when working with animation.

## PM 5661 AND PM 5662 WAVEFORM/ VECTOR MONITORS



**Highly transportable.**  
**Easiest-to-read, easiest-to-use front panel.**  
**Sc-H Phase.**  
**With discrete displays for each mode, you avoid hard-to-read display overlap.**

The new all-in-one combination units, PM 5661 and PM 5662 Waveform/Vector Monitors, guarantee that PHILIPS continues to serve the world's professional television community with the latest and best in monitoring and measuring equipment. The new PM 5661 supplies all essential

waveform monitoring and vectorscope capabilities. The unit's compact size - only a half-rack wide - makes it absolutely ideal when power and space are limited.

This all-in-one waveform/vector monitor always delivers highly cost-effective performance. A benefit that can be yours in NTSC and all PAL-system versions.

As for portability, you just pick up the PM 5661 and carry the unit with ease almost wherever you have to work. Out of the studio and into the field, with no loss in quality.

Of course, wherever you work, the display remains bright and crisp. This is true whether you're monitoring waveforms, VITS, or viewing a signal's chrominance characteristics on the vectorscope. And to switch from one function to the other, all you do is press a button.

For an enhanced range of signal monitoring and measuring capabilities, including Sc-H phase display, PHILIPS now has the new PM 5662 Waveform/Vector Monitor. Available for NTSC and all PAL-system versions. Having all the measuring facilities and cost-effectiveness of PM 5661, the PM 5662 also provides horizontal sync timing, relative to the reference subcarrier (burst), to verify color framing and signal format. This Sc-H phase display capability now greatly simplifies a previously complex monitoring and analyzing task.

## COLOR MONITOR PM 5625



**Low cost, high performance 14" In-Line, "HiBri", self-converging CRT.**  
**Two inputs for encoded signals.**  
**Input for RGB signal.**  
**Split-screen display of encoded signals.**  
**Pulse cross display mode.**  
**Reduced picture size display mode.**  
**Internal and external synchronization.**  
**Available for NTSC, PAL and SECAM.**

The Philips PM 5625 Color Monitor meets all monitoring needs in any television system where high quality is required. The color monitor has a modern 14" in-line picture tube with a fine pitch of 0.65 mm for excellent resolution and color quality.

Its extensive range of features includes:

- Two inputs (A and B) for encoded signals
- RGB input

- Internal/external synchronization
- Pulse cross
- Split-screen display of A and B
- Color subcarrier notch (switchable)
- Switchable 75 ohm termination resistors on the A and B inputs.

These convenient features are complemented by advanced, state-of-the-art circuitry design, making the PM 5625 highly suitable for broadcasting studios, outside broadcasting vans (EBP) and video production houses. It is ideal for production check and monitoring of signals from cameras, video tape recorders, film and slide scanners and other equipment.

The low cost of this monitor makes extensive TV studio use economically feasible, in place of the usual mix of expensive color monitors and low-priced monochrome monitors.

The PM 5625 is available for the 625-line PAL, 625-line SECAM and 525-line NTSC TV systems. The SECAM version accepts PAL encoded signals as well. The decoder automatically selects the decoding system relevant to the supplied video signal. The SECAM/PAL decoder module of the SECAM version is available as type number PM 8529.

PM 5625 fits into an advanced and yet reasonably priced calibration system for TV studios, consisting of the following TV measuring instruments:

- PM 5630 Sync pulse generator with genlock and a number of valuable line-up signals
- PM 5646 TV test signal generator with a number of measuring signals
- PM 5625 Color monitor
- PM 5565 Waveform monitor
- PM 5567 Vectorscope
- PM 5539 Color analyzer

The use of this calibration system enormously improves picture quality in terms of picture fidelity and repeatability.

## STUDIO VITS GENERATOR PM 5651/52



**Self-contained unit with insertion and generation of CCIR or NTC 7 specified VIT signals.**

**Program path protected via by-pass relay.**

**Insertion of VIT signals selectable by internal matrix from line 8 to line 22 (321-335).**

**Optional source code generator available.**

The PM 5651/52 is for use in broadcasting