

**terra** 



**terra** 

**LCD/LED 2448W PV**  
**Manual del usuario**

- + GERMAN
- + ENGLISH
- + FRENCH
- + SPANISH
- + ITALIAN
- + RUSSIAN
- + POLISH
- + CZECH

**WORTMANN AG**

## Instrucciones de operación

Gracias por comprar este monitor, un monitor color multi-scan de alta resolución. Por favor lea esta guía minuciosamente antes de hacer la instalación.

Este monitor ha sido probado y encontrado en regla el marcado CE. Estos límites están designados para proveer una adecuada protección contra interferencias dañinas de una instalación residencial. Este monitor genera, usa y puede irradiar energía de radio frecuencia. Interferencias dañinas de la radio comunicación pueden seguirse como resultado si este monitor no es instalado y usado propiamente. Sin embargo, no hay garantías de que no ocurrirán interferencias en una particular instalación. Si este monitor causa serias interferencias en la recepción de radio o televisión, reajustar el monitor puede detenerlas. Sin embargo, los usuarios son alentados a corregir las interferencias haciendo una o más de las siguientes cosas:

- Reorientar o reposicionar la antena receptora.
- Mover el monitor y el receptor lejos el uno del otro.
- Conectar el monitor a una toma de corriente en un circuito diferente de aquel al que está conectado el receptor.
- Consultar al vendedor local o a un técnico calificado.

### **Advertencia:**

Para asegurar una continua conformidad, el usuario debe usar un cable enterrado de suministro de la corriente y el cable de interfaz de video provisto con el producto. Además, cualquier cambio no autorizado o modificaciones a este monitor harán vana la autoridad del usuario para operar este mecanismo.

**Nota:** Si es necesario, cables de interfaz recubiertos y el cable de la corriente deben ser usados cumpliendo con los límites de niveles de emisión.



Base de datos de productos de la UE para la etiqueta energética y la ficha de información del producto

2448W PV : <https://eprel.ec.europa.eu/qr/712322>

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## Precauciones de Seguridad

Este monitor ha sido manufacturado y probado bajo el principio de que la seguridad del usuario es lo primero. Sin embargo, el uso o la instalación impropia puede resultar de peligro para el monitor tanto como para el usuario. Lea cuidadosamente las siguientes ADVERTENCIAS antes de la instalación y conserve a mano esta guía.

### ADVERTENCIAS:

- ◆ Este monitor debe ser operado solamente según las fuentes de energía indicadas en la etiqueta en la parte trasera del monitor. Si usted no está seguro del suministro de energía en su residencia, consulte a su vendedor local o a la compañía de energía eléctrica.
- ◆ No trate de reparar el monitor por usted mismo cuando esto concierne a partes no ajustables por el usuario. El monitor debe ser reparado solamente por técnicos cualificados.
- ◆ No abra el monitor. Hay partes de alto voltaje adentro que pueden causar un golpe de corriente sobre el cuerpo humano, incluso cuando el cable de la corriente esté desconectado.
- ◆ Antes de encender el monitor, asegúrese de que el cable de alimentación está conectado a una toma de tierra.
- ◆ Si humo, o algún olor o ruido anormal sale de su monitor, desenchúfelo inmediatamente y llame al servicio técnico.
- ◆ Ponga su monitor solamente en un ambiente seco y limpio. Desenchufe el monitor inmediatamente si este se moja y consulte a su servicio técnico.
- ◆ Evite exponer el monitor directamente a la luz del sol o otra fuente de calor.
- ◆ Siempre desenchufe el monitor antes de limpiarlo. Limpie la cobertura con un tela seca y limpia. Aplique limpiadores no basados en amoníacos sobre la tela que usará para limpiar el monitor, nunca directamente sobre el vidrio de la pantalla.
- ◆ Conserve el monitor lejos de objetos magnéticos, motores, televisores, y transformadores de corriente.
- ◆ No coloque objetos pesados sobre los cables del monitor.
- ◆ Para EQUIPOS AÑADIBLES, el enchufe del toma corriente debe estar cerca del equipo y debe ser de fácil acceso.
- ◆ No coloque el monitor sobre en espacio inseguro ya que, si se cae, puede dañarse y provocar lesiones al usuario.
- ◆ Desenchufe el monitor si no lo va a utilizar durante un período prolongado de tiempo.
- ◆ Preste atención a todos los cables conectados al monitor para evitar tropezar con ellos.



Según la regulación WEEE, no se debe desechar este monitor, cuando se torna obsoleto, como una basura común en Europa. Favor refiera a la información de reciclaje de nuestro sitio web para tratarlo.

[www.wortmann.de](http://www.wortmann.de)

## Primer Paso

¡Felicidades por comprar este monitor de alto rendimiento!

Este monitor viene con los sigtes. accesorios:

- Cable de alimentación de CA
- Tarjeta de Garantía
- Destornillador
- Cable HDMI
- Guía de inicio Rápido

# Instalación Rápida

## 1. Conecte cable de vídeo (cable HDMI)

Asegúrese de que el monitor y el ordenador están APAGADOS.

Conecte el cable HDMI desde la salida HDMI de la computadora a la entrada HDMI del monitor.

### O conecte el cable DisplayPort \*Opcional

Conecte el cable DisplayPort desde la salida DisplayPort de la computadora a la entrada DisplayPort del monitor.

### O conecte el cable USB-C \*Opcional

Conecte el cable USB-C desde la salida USB-C de la computadora a la entrada USB-C del monitor.

**Nota importante:** El puerto USB-C no admite carga. Utiliza un cable USB-C capaz de transmitir vídeo, asegúrate de que la salida USB-C de tu PC, portátil o tableta admite la transmisión de vídeo y de que están instalados la BIOS y los controladores más recientes.

## 2. Conecte cable de alimentación

Enchufe el cable que toma la corriente a un toma corriente y después al monitor.

## 3. Conectar al Audífono (no provisto)

Conecte el audífono al terminal de salida del monitor. (Audífono vendido por separado).

## 4. ENCENDER ordenador y monitor

Encienda el ordenador, después Encienda el monitor.

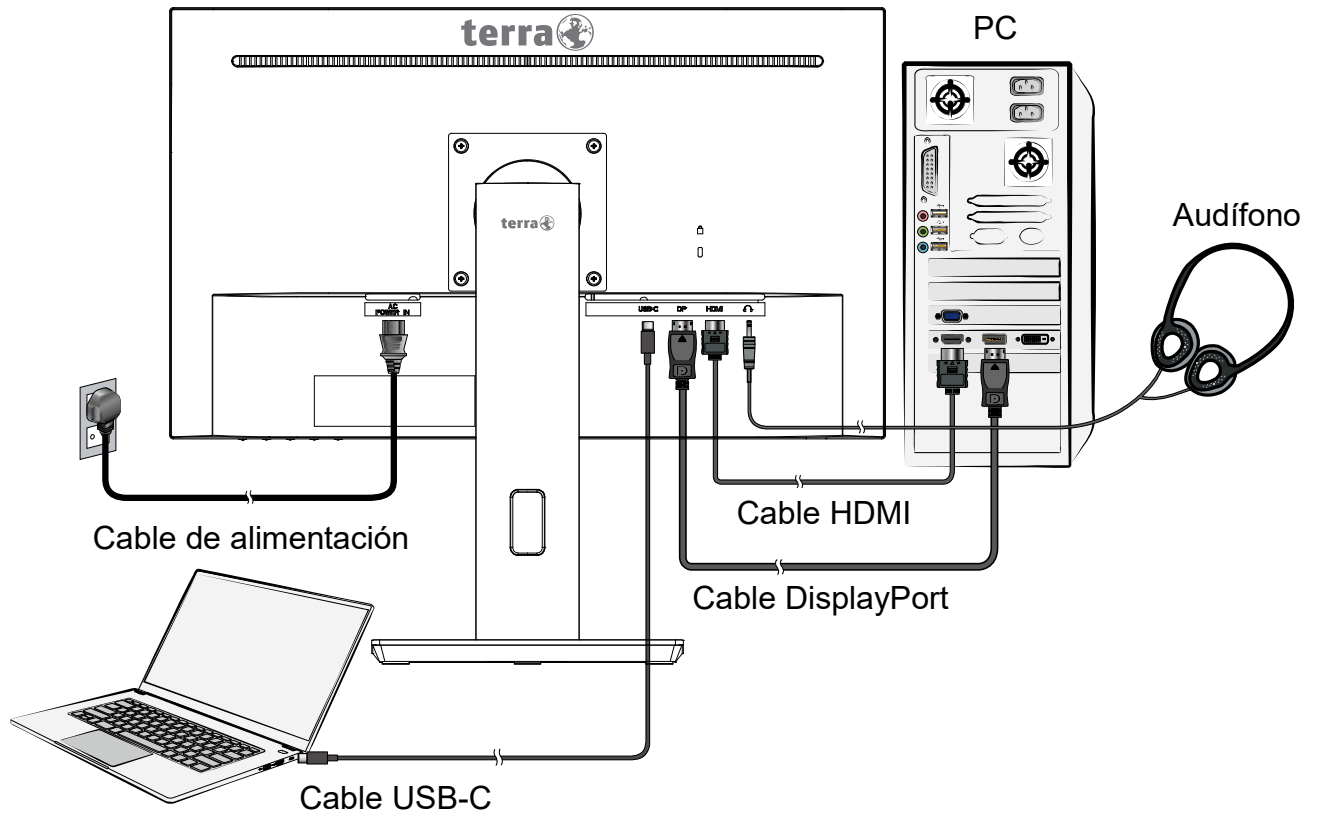
## 5. Usuarios de Windows: Configurar el Modo Cronometraje (Resolución e Índice de Renovar)

*Ejemplo: 1920 x 1080 @ 60 Hz*

Resolución Clic derecho en el Windows escritorio > Configuración de pantalla > Configuración avanzada de pantalla. Configure la resolución.

Índice de Renovar (frecuencia vertical) Vea la guía de usuario de su tarjeta de gráficas por las instrucciones.

Ejemplo:

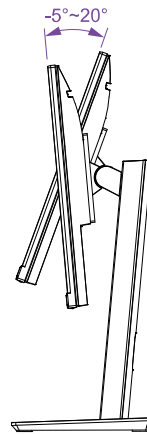


# Ilustración que muestra la forma de girar la base del soporte de altura ajustable

## (1) Ángulo de inclinación

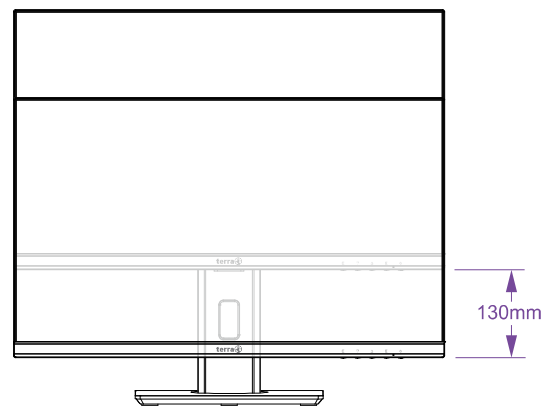
Inclinación hacia ARRIBA:  $20^{\circ}$

Inclinación hacia ABAJO:  $-5^{\circ}$



## (2) Intervalo de elevación

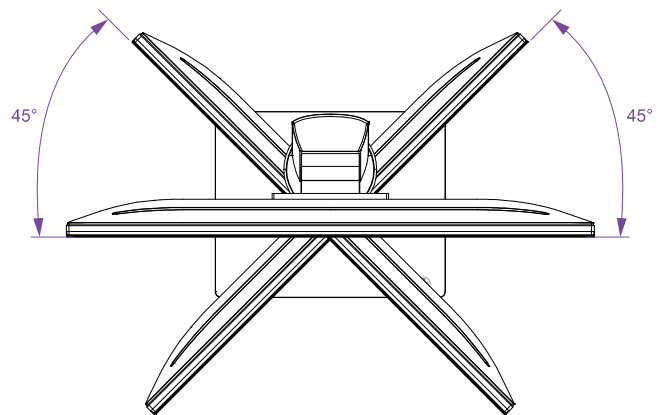
130mm



## (3) Ángulo de giro

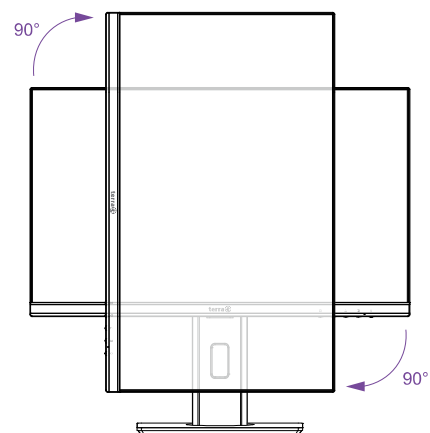
Izquierda:  $45^{\circ}$

Derecha:  $45^{\circ}$



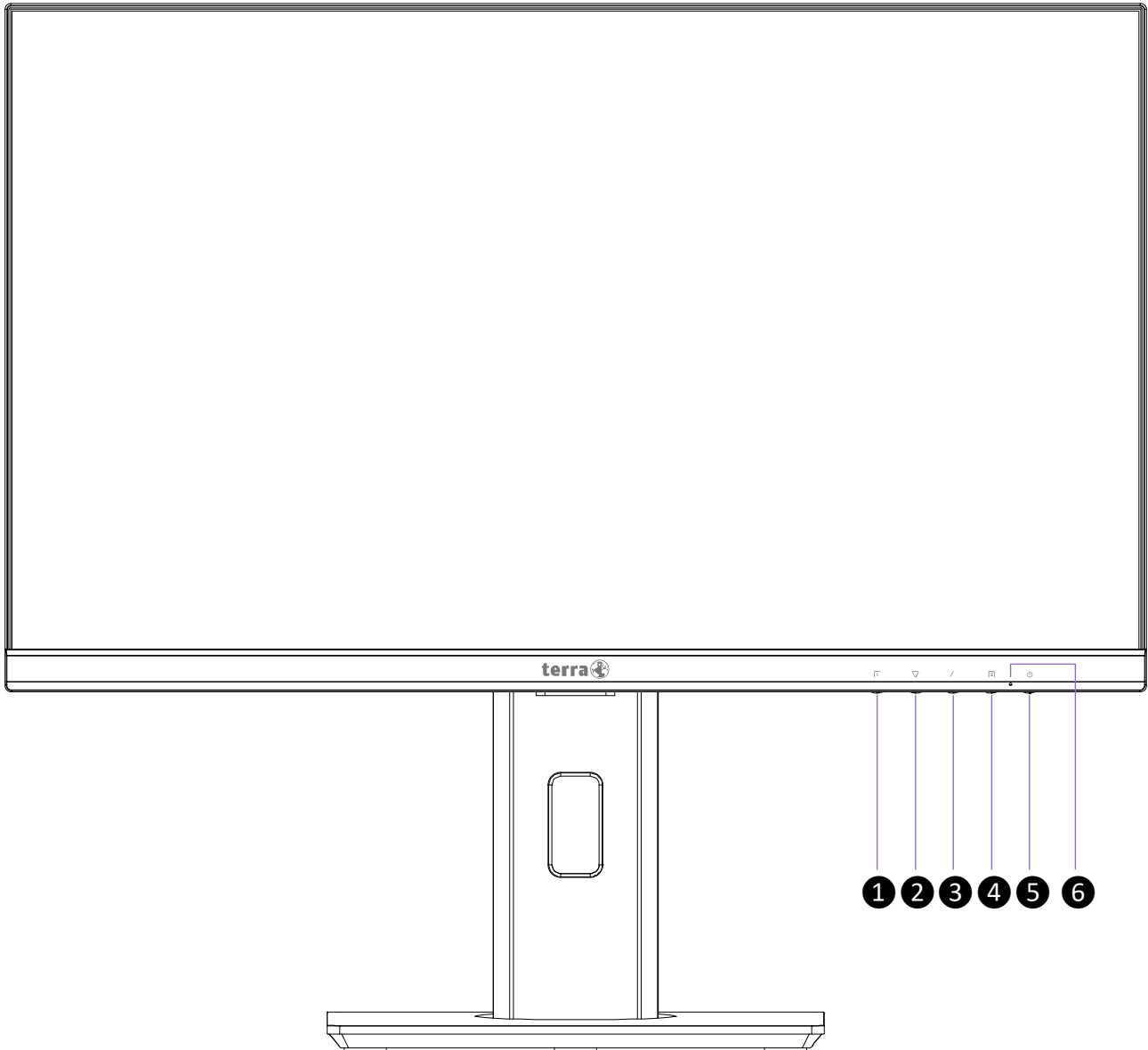
## (4) Ángulo de pivote

Derecha:  $90^{\circ}$



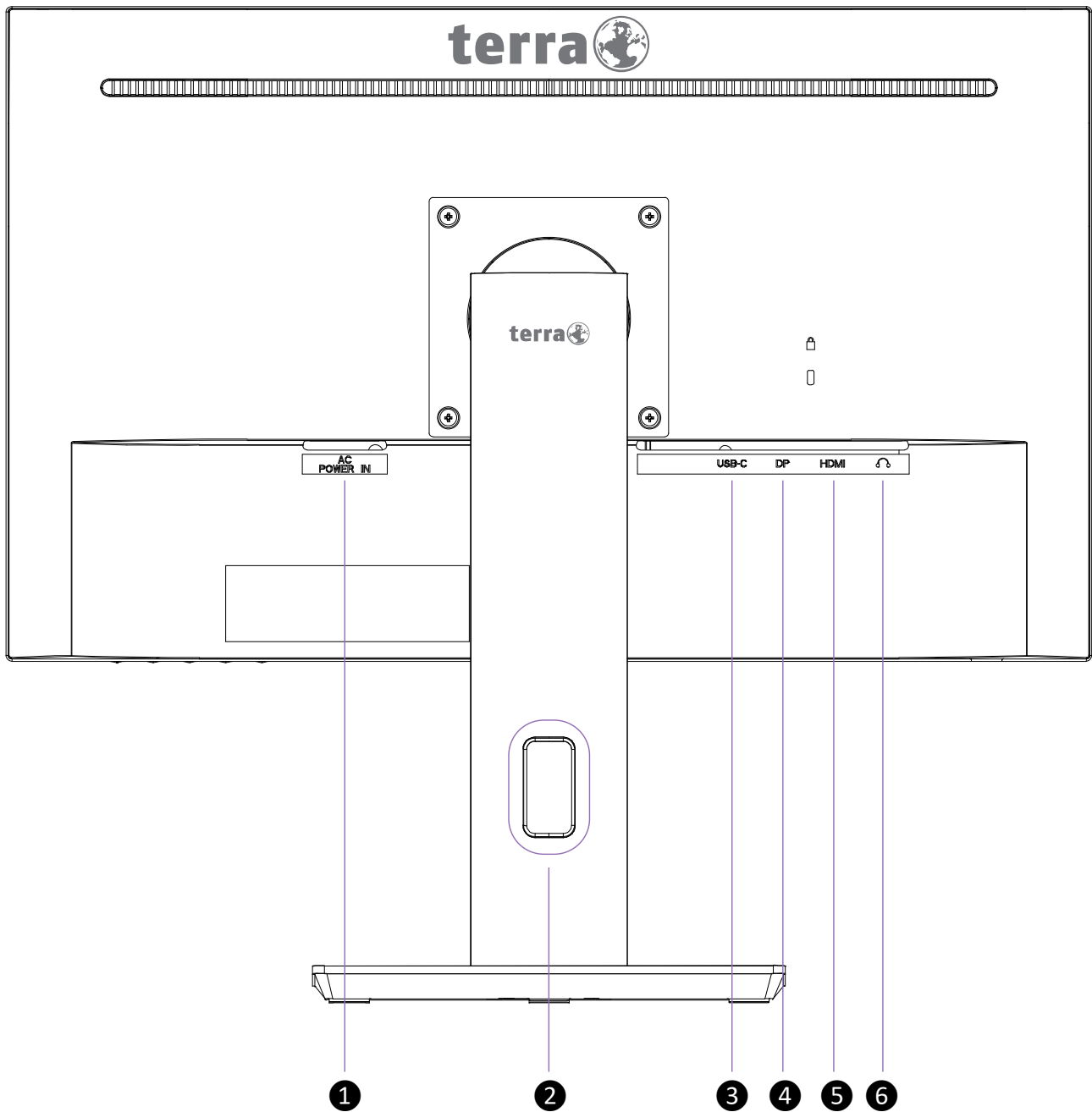


## Vista Frontal del Producto



|   |   |
|---|---|
| ① | Encendido/Apagado del Menú de Muestra En Pantalla |
| ② | Desplazar Abajo/Reducir                           |
| ③ | Desplazar Arriba/Aumentar                         |
| ④ | Confirmar Selección                               |
| ⑤ | Encendido/Apagado                                 |
| ⑥ | Indicador LED de Alimentación                     |

## Vista Trasera del Producto



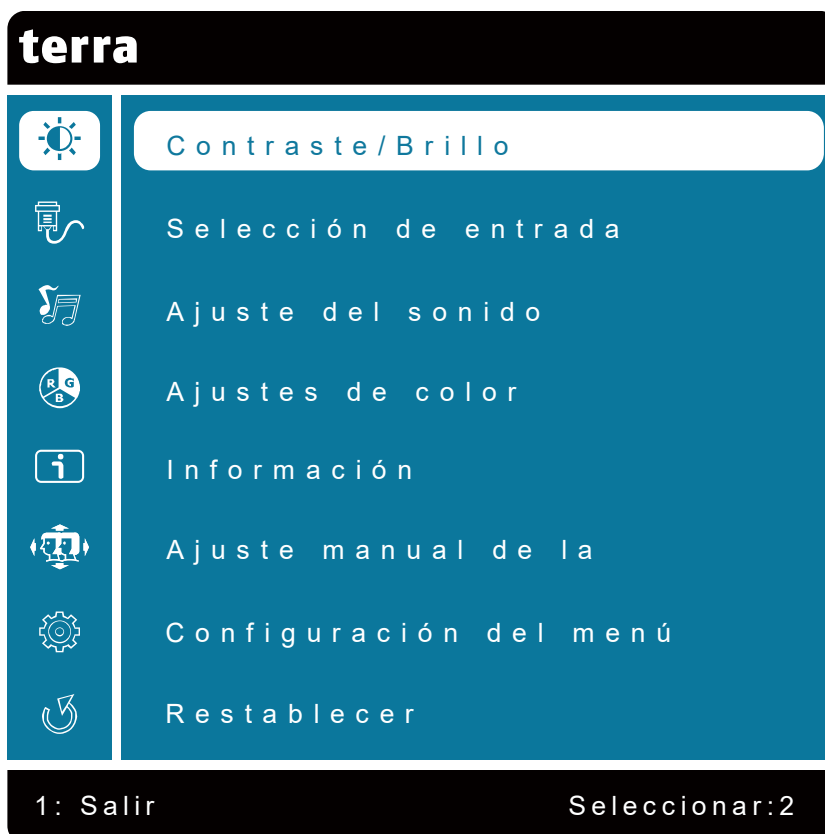
|   |   |
|---|---|
| ① | Entrada de alimentación   |
| ② | Administración de los cables  |
| ③ | Entrada USB-C<br><b>Nota:</b> El puerto USB-C no admite la carga.   |
| ④ | Entrada DisplayPort   |
| ⑤ | Entrada HDMI  |
| ⑥ | Salida de Audífono<br><b>Nota:</b> El ajuste del control de volumen a otros ajustes que no sean la posición central pueden aumentar la salida de potencia de los auriculares/audífonos y por lo tanto el nivel de presión del sonido. |

## Usar las Funciones de la Muestra En Pantalla (OSD)

|     |   |
|-----|---|
| 1   | Muestra el menú principal   |
|     | Sale del menú OSD   |
| ▲   | Selecciona el ítem deseado cuando se encuentra en el menú OSD                                   |
|     | Cuando no está en el menú OSD, ingresa directamente en el menú Volumen                          |
| ▼   | Selecciona el ítem deseado cuando se encuentra en el menú OSD                                   |
|     | Cuando no está en el menú OSD, ingresa directamente en el menú Contraste/Brillo                 |
| 2   | Modo ajuste manual selecciona para modo HDMI, DisplayPort, USB-C                                |
|     | Confirmar Selección   |
| ▲+▼ | Vuelve a llamar el Contraste y Brillo (cuando no se encuentra en el menú OSD)                   |
| 1+▲ | Bloquea OSD (cuando no se encuentra en el menú OSD ), mantenga pulsado durante 3 segundos       |
| 1+▼ | Bloquea suministro (cuando no se encuentra en el menú OSD), mantenga pulsado durante 3 segundos |

**Nota:** Cambiar la configuración del menú OSD puede aumentar el consumo de energía.

### Menú Principal



## La Función de Atajo del botón(es)



**Contraste/Brillo:** Para regular manualmente los siguientes ajustes de imagen: Contraste, Brillo, DCR, ECO y Over Drive.

- **Contraste:** Para ajustar el nivel de blanco de frente de la imagen de pantalla.  
▲: aumentar contraste, ▼: disminuir contraste.
- **Brillo:** Para ajustar la luminancia del vídeo.  
▲: aumenta el brillo, ▼: reduce el brillo.
- **DCR:** Para detectar la distribución de las entradas de las señales visuales y conseguir un contraste optimizado. Cuando el DCR está activado se deshabilita el ajuste de Brillo y ECO. Pulse el botón **2** para activar o desactivar DCR.
- **ECO:** Permite al usuario encender y apagar este modo. Cuando el ECO está activado se deshabilita el ajuste de Brillo y DCR. Pulse el botón **2** para activar o desactivar ECO.
- **Over Drive:** Permite al usuario cambiar a la potencia Over Drive. Mejora la calidad de las películas. Pulse el botón **2** para Apagado, 1, 2, o 3 Over Drive.



**Selección de entrada:** Al oprimir Selección de Entrada cambia la señal de Entrada a HDMI, DisplayPort o USB-C.



**Ajuste del sonido:** Para ajustar las funciones de audio.

- **Volumen:** Para ajustar el volumen de los altavoces y salida de audífono.



**Ajustes de color:** Para seleccionar el color para mejorar el brillo y la saturación de color entre Frío, Normal, Caliente, Color de usuario y Modo predeterminado.

- **Frío:** Añade azul a la imagen para hacer el blanco más frío.
- **Normal:** Añade rojo a la imagen para hacer el blanco más cálido y el rojo más rico.
- **Caliente:** Añade verde a la imagen para hacer los colores más oscuros.
- **Color de usuario:** Ajustes individuales para Rojo (R), Verde (V), Azul (A).
  1. Pulse el botón **2** para fijar el ajuste y seleccione el siguiente color a ajustar.
  2. Pulse ▼ o ▲ para ajustar el color seleccionado.
- **Modo predeterminado:** proporciona un entorno de visualización óptimo dependiendo del contenido visualizado. Consta de 5 preajustes seleccionables por el usuario.

**Estándar** se utiliza para el entorno general de Windows y el ajuste predeterminado del monitor.

**Juego** optimiza el entorno de juegos de la PC.

**Cinama** optimiza el entorno para películas y vídeo.

**Paisaje** optimiza la visualización de imágenes de escenas al aire libre.

**Texto** optimiza el entorno de procesamiento de textos para su edición y visualización.



**Información:** Muestra información acerca de la entrada actual desde la tarjeta gráfica de su ordenador.

**Nota:** Consulte el manual de su tarjeta gráfica para más información acerca del cambio de resolución y velocidad de fotograma.



**Ajuste manual de la:** Para ajustar, manualmente, el Nitidez y Ajustar El Modo Vídeo.

- **Nitidez:** Para ajustar la claridad de una señal no Full HD (1920x1080) con el botón ▼ o ▲.
- **Ajustar El Modo Vídeo:** Para seleccionar el modo de vídeo de 4:3 o Pantalla completa.

**4:3:** Para seleccionar el tamaño de imagen 4:3.

**Pantalla completa:** Para seleccionar imagen de tamaño de toda la pantalla.



**Configuración del menú:** Para configurar Idioma, Posición OSD, Temporizador OSD, Imagen de fondo OSD y AMD FreeSync.

- **Idioma:** Permite al usuario escojer entre los idiomas disponibles.
- **Posición OSD:** Oprima el botón ▼ o ▲ para seleccionar entre el ajuste de Posición OSD horizontal y vertical.
  - Posición H.:** Para ajustar horizontalmente la posición OSD.
    - ▲: mueve el OSD a la derecha, ▼: mueve el OSD a la izquierda.
  - Posición V.:** Para ajustar verticalmente la posición OSD.
    - ▲: sube el OSD, ▼: baja el OSD.
- **Temporizador OSD:** Para apagar automáticamente la Muestra En Pantalla (OSD) después de un período de tiempo prefijo.
- **Imagen de fondo OSD:** Activar o desactivar el fondo de la presentación en pantalla.
- **AMD FreeSync:** Para controlar el soporte AMD FreeSync. Pulse el botón **2** para activar o desactivar AMD FreeSync.



**Restablecer:** Para llamar las configuraciones de fábrica de vuelta para los controles de Vídeo & Audio.

Oprima el botón **2** para seleccionar la opción de menú Memoria.

## Tiempos soportados

|             |                     |
|-------------|---------------------|
| <b>VGA</b>  | 720 x 400 @ 70Hz    |
| <b>VGA</b>  | 640 x 480 @ 60Hz    |
| <b>MAC</b>  | 640 x 480 @ 67Hz    |
| <b>VESA</b> | 640 x 480 @ 72Hz    |
| <b>VESA</b> | 640 x 480 @ 75Hz    |
| <b>VESA</b> | 800 x 600 @ 56Hz    |
| <b>VESA</b> | 800 x 600 @ 60Hz    |
| <b>VESA</b> | 800 x 600 @ 72Hz    |
| <b>VESA</b> | 800 x 600 @ 75Hz    |
| <b>MAC</b>  | 832 x 624 @ 75Hz    |
| <b>VESA</b> | 1024 x 768 @ 60Hz   |
| <b>VESA</b> | 1024 x 768 @ 70Hz   |
| <b>VESA</b> | 1024 x 768 @ 75Hz   |
| <b>VESA</b> | 1280 x 960 @ 60Hz   |
| <b>VESA</b> | 1152 x 864 @ 75Hz   |
| <b>MAC</b>  | 1152 x 870 @ 75Hz   |
| <b>VESA</b> | 1280 x 1024 @ 60Hz  |
| <b>VESA</b> | 1280 x 1024 @ 75Hz  |
| <b>VESA</b> | 1440 x 900 @ 60Hz   |
| <b>VESA</b> | 1440 x 900 @ 75Hz   |
| <b>CVT</b>  | 1400 x 1050 @ 60Hz  |
| <b>VESA</b> | 1600 x 1200 @ 60Hz  |
| <b>VESA</b> | 1680 x 1050 @ 60Hz  |
| <b>VESA</b> | 1920 x 1080 @ 60Hz  |
| <b>VESA</b> | 1920 x 1080 @ 75Hz  |
| <b>VESA</b> | 1920 x 1080 @ 100Hz |

### \* Modos de vídeo

- 480i
- 480p
- 576i
- 576p
- 720p
- 1080i
- 1080p

**Aviso:** No configure la tarjeta gráfica de su ordenador de forma que exceda estas frecuencias máximas de refresco. Si lo hace podría dañar permanentemente su monitor.

## Información Técnica

### Especificaciones Técnicas

|                                     |  |
|-------------------------------------|--|
| <b>Panel LCD</b>                    | 60,5 cm (23,8") (Low Blue Light)   |
| <b>Administración de energía</b>    | Compatible con VESA DPMS<br>Modo apagado, ≤ 0,3 W  |
| <b>Resolución Visualizable</b>      | Full HD máximo 1920 x 1080.<br>Frecuencia Vertical máxima 100Hz.   |
| <b>Dimensión de Pixel</b>           | 0,2745 x 0,2745 mm   |
| <b>Color de Muestra LCD</b>         | 16,7M  |
| <b>Area de Visualización Activa</b> | 527,04 mm x 296,46 mm  |
| <b>Condiciones ambientales</b>      | <b>Temperatura</b><br>Funcionamiento: 0°C a 40°C<br>Almacenamiento: 10% a 90%, sin condensación<br><b>Humedad</b><br>Funcionamiento: -20°C a 60°C<br>Almacenamiento: 10% a 90%, sin condensación |
| <b>Conformidad</b>                  | CE, UKCA, WEEE, RoHS, BSMI   |
| <b>Energía</b>                      | Input Voltage AC100-240 V  |
| <b>Parlante</b>                     | 2W x 2   |

## Mantenimiento y Cuidado

### Cuidado

- Evite exponer el monitor directamente a la luz del sol o otra fuente de calor.
- Coloque su monitor lejos del sol para reducir el deslumbramiento.
- Coloque su monitor en un área bien ventilada. No ponga nada pesado sobre el monitor.
- Asegúrese de que el monitor esté instalado en un área limpia y libre de humedad.
- Mantenga el monitor lejos de imanes, objetos magnéticos, motores, transformadores, parlantes y televisores.

### Nota

- Saque el LCD del embalaje y quite la bolsa plástica y la goma esponjosa de poliestireno.
- Ajuste la inclinación de la pantalla para lograr una visión óptima.

### Sugerencias de Seguridad

- Si humo, o algún olor o ruido anormal sale de su monitor, desenchúfelo inmediatamente y llame al servicio técnico.
- Nunca quite la cubierta trasera o delantera del monitor. La unidad de visualización de adentro contiene partes de alto voltaje que podrían causar golpes eléctricos sobre el cuerpo humano.
- Nunca trate de reparar su monitor usted mismo. Llame siempre a su servicio técnico o a un técnico cualificado para arreglarlo.

## Solución de Problemas

### No enciende

- Asegúrese que el cable del monitor esté bien conectado al transformador o adaptador de corriente y este al enchufe de la corriente.
- Enchufe otro electrodoméstico en el mismo enchufe para verificar que el mismo está suministrando un voltaje correcto.
- Asegúrese que todos los cables cortos estén bien instalados.

### Encendido pero sin imagen en pantalla

- Asegúrese que el cable de video suministrado con el monitor esté bien conectado al puerto de salida de video en la parte de atrás de su computadora. Si no está firmemente conectado, conéctelo nuevamente.
- Ajuste el brillo.

### Colores extraños o anormales

- Si algún color (rojo, verde, azul) están faltando, revise el cable de video para asegurarse que este está bien conectado. Pins sueltos o quebrados en el cable conector podrían causar una conexión impropia o deficiente.
- Conecte el monitor a otra computadora.

Ajuste todos los valores a los valores predeterminados (consulte la función "Restablecer").



## WEEE Statement



### Wichtige Recyclinginformation

Das Gerät darf nach dem Ende der Nutzungszeit nicht mit dem Restmüll entsorgt werden. Bitte führen Sie es zur umweltgerechten Entsorgung den kommunalen Altgeräte-Sammelstellen zu.

Für weitere Informationen wenden Sie sich bitte an die unten stehende Adresse.

### Important Information for Recycling

This warning sign of trash bin indicates that the objects are not allowed to be disposed as general refuse. Please follow the local act and carry out further disposal with refuse recycling and collecting system in your Country or District.

Please contact the address below for more information on recycling.

### Informations importantes relatives au recyclage

En fin de vie, cet appareil ne doit pas être jeté aux ordures ménagères.

Veuillez respecter les réglementations locales et rester en conformité avec le système de collecte et de recyclage des ordures en vigueur dans votre région.

Pour plus d'information sur le recyclage, veuillez contacter votre centre de recyclage agréé.

Votre attitude quand au recyclage améliorera l'avenir de la planète et créera un environnement de vie de qualité pour les générations futures.

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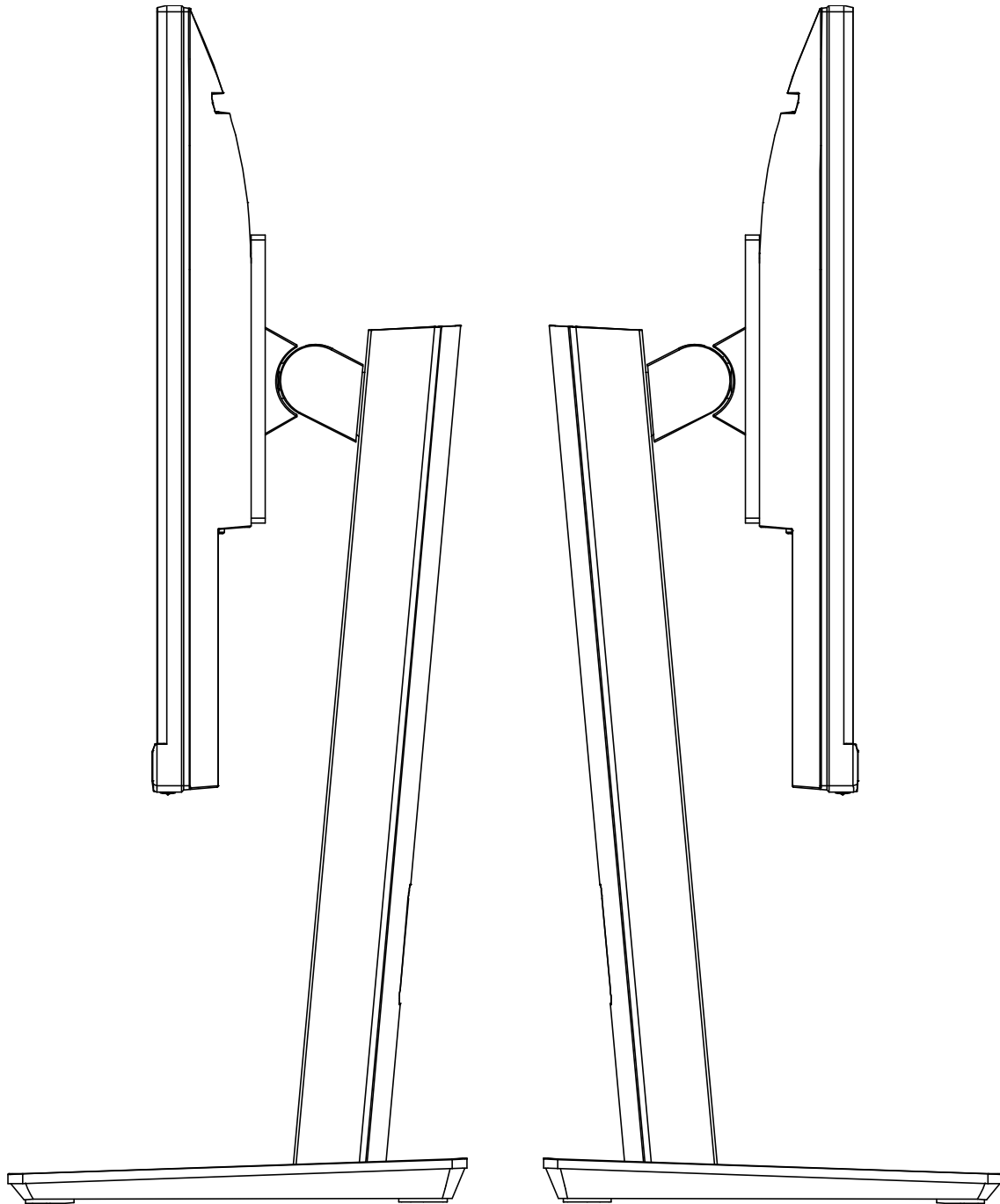
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```
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```

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