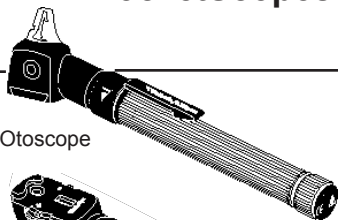
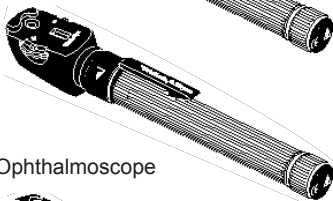


**WelchAllyn®**

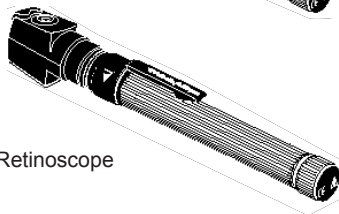
## PocketScopes™



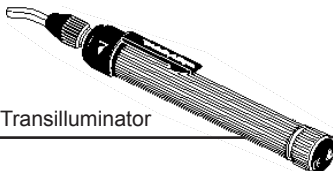
Otoscope



Ophthalmoscope



Retinoscope



Transilluminator

**Operating  
Instruction  
Manual**

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Thank you for purchasing the Welch Allyn Halogen PocketScope Set. The operating and maintenance instructions found in this manual are for both the Ophthalmic and Diagnostic model sets. They should be followed to ensure many years of accurate and reliable service. Please read these instructions thoroughly before using your PocketScope.

## Note:

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While the handles and instrument heads of the PocketScopes are interchangeable, different lamps are required for different instrument heads. For the retinoscope use lamp No. 08400, for the ophthalmoscope No. 03900 and for the otoscope/throat illuminator and transilluminator lamp No. 03400.

For guaranteed performance, use genuine Welch Allyn lamps only.

Merci d'avoir acheté un jeu de PocketScope™ WelchAllyn.

A la différence des poignées et des têtes, qui sont interchangeables, les lampes à utiliser sont spécifiques à chaque tête d'instrument. Veuillez consulter les diagrammes pour savoir comment remplacer les différentes lampes.

## **Otoscope : (p. 7)**

21131 – Tête d'otoscope standard (lampe 03400)

21111 – Otoscope avec source lumineuse pour la gorge ( lampe 03400). Pour convertir l'otoscope en source lumineuse pour la gorge, il suffit de dévisser la tête de l'otoscope.

## **Rétinoscope : (p. 6)**

Pour utiliser le rétinoscope, déployez l'appareil en tirant la tête vers l'extérieur.

Le manchon de mise au point permet d'effectuer la mise au point et la rotation des stries.

## **Ophtalmoscope : (p. 8)**

Instructions relatives aux lentilles –

**Dioptries '+'** - Faites pivoter le cadran de la lentille dans le sens horaire. A +6, faites de nouveau tourner le cadran de la lentille dans le sens horaire puis placez le 'multiplier lever' sur la position '+'. Faites de nouveau pivoter le cadran de la lentille dans le sens horaire si vous souhaitez atteindre les paramètres +7 à +22.

**Dioptries '-'** - Faites pivoter le cadran de la lentille dans le sens horaire inverse. A -9, faites de nouveau tourner le cadran de la lentille dans le sens horaire inverse. Placez ensuite le 'multiplier lever' sur la position '-'. Continuez à faire pivoter le cadran de la lentille dans le sens horaire inverse si vous souhaitez atteindre les paramètres -10 à -25.

Wir bedanken uns für Ihren Kauf eines PocketScope™-Satzes von WelchAllyn.

Obwohl die Griffe und Instrumentenköpfe untereinander austauschbar sind, werden für die verschiedenen Instrumentenköpfe verschiedene Lampen benötigt. Der Lampenaustausch ist auf den diagrammatischen Abbildungen angezeigt.

## **Otoskop: (p. 7)**

21131 – standardmäßiger Otoskopkopf (Lampe 03400)

21111 – Otoskop mit Halsbeleuchter (Lampe 03400). Zur Konversion des Oskops in einen Halsbeleuchter wird einfach der Otoskopkopf aufgeschraubt.

## **Skioskop: (p. 6)**

Zur Verwendung des Skioskops dieses zunächst teleskopisch auseinander ziehen, indem der Kopf nach außen gezogen wird.

Ein Brennpunktaufsatz ermöglicht die Scharfeinstellung und Rotation des Streifens.

## **Ophthalmoskop: (p. 8)**

Linsenanleitung –

**‘+’ Dioptrie** – Die Linsenscheibe im Uhrzeigersinn drehen. Bei +6 die Linsenscheibe wiederum im Uhrzeigersinn drehen und dann den ‘Multiplier Lever’ in die Position ‘+’ stellen. Die Linsenscheibe dann wieder im Uhrzeigersinn für +7 bis +22 drehen.

**‘-’ Dioptrie** – Die Linsenscheibe gegen den Uhrzeigersinn drehen. Bei +9 die Linsenscheibe wiederum gegen den Uhrzeigersinn drehen. Danach den ‘Multiplier Lever’ in die Position ‘-’ stellen. Die Linsenscheibe dann weiter für –10 bis –25 gegen den Uhrzeigersinn drehen.

Grazie per avere acquistato un set PocketScope™ WelchAllyn.

Le impugnature e le teste degli strumenti sono intercambiabili, tuttavia le teste degli strumenti richiedono l'uso di lampadine diverse. Per la sostituzione delle lampadine fare riferimento alle figure riportate qui di seguito.

## **Otoscopio (p. 7)**

21131 – Testa standard per otoscopio (lampadina 03400)

21111 – Otoscopio con illuminatore laringeo (lampadina 03400). Per convertire l'otoscopio in illuminatore laringeo basta svitare la testa dell'otoscopio.

## **Retinoscopio (p. 6)**

Per usare il retinoscopio estrarre la testa dello strumento.

Un apposito cilindro di focalizzazione consente di ruotare il fascio luminoso e di regolarne l'ampiezza.

## **Oftalmoscopio (p. 8)**

Istruzioni per la regolazione della messa a fuoco.

**Diottrie '+'** – Ruotare il selettore della lente in senso orario. A +6 ruotare nuovamente il selettore in senso orario, quindi portare la 'multiplier lever' sulla posizione '+'. Per le diottrie comprese tra +7 e +22, ruotare ancora il selettore in senso orario.

**Diottrie '-'** Ruotare il selettore della lente in senso antiorario. A -9 ruotare nuovamente il selettore in senso antiorario, quindi portare la 'multiplier lever' sulla posizione '-'. Per le diottrie comprese tra -10 e -25 continuare a ruotare il selettore in senso antiorario.

# Instrucciones de funcionamiento de PocketScopes™

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Le agradecemos su compra del SET PocketScope™ de WelchAllyn.

Aunque los mangos y las cabezas del instrumento son intercambiables, se necesitan bombillas diferentes para las DISTINTAS cabezas del instrumento. En los diagramas se indica cómo cambiar de bombilla.

## **Otoscopio: (p. 7)**

21131 – cabeza de otoscopio normal (bombilla 03400)

21111 – Otoscopio con iluminador de garganta (bombilla 03400). Para convertir el otoscopio en un iluminador de la garganta sólo hay que desenroscar la cabeza del otoscopio

## **Retinoscopio: (p. 6)**

Para usar el retinoscopio, tire primero de la cabeza hacia fuera para que salga como un telescopio.

El manguito de enfoque permite enfocar y hacer girar la FRANJA.

## **Oftalmoscopio: (p. 8)**

Instrucciones para la lente –

**‘+’ Dioptrías** - Gire el dial de la lente en sentido horario. A +6 mueva otra vez el dial de la lente en sentido horario, luego mueva la ‘multiplier lever’ a la posición ‘+’. Vuelva a mover el dial de la lente en sentido horario para +7 a +22

**‘-’ Dioptrías** – Gire el dial de la lente en sentido antihorario. A –9 mueva otra vez el dial de la lente en sentido antihorario. Luego mueva la ‘multiplier lever’ a la posición ‘-’. Siga moviendo el dial de la lente en sentido antihorario para –10 a -25

|                                              |       |
|----------------------------------------------|-------|
| <b>PocketScope Retinoscope</b>               |       |
| Retinoscope Features.....                    | 6     |
| <b>PocketScope Otoscope</b>                  |       |
| Throat Illuminator.....                      | 7     |
| <b>PocketScope Ophthalmoscope</b>            |       |
| Ophthalmoscope.....                          | 8     |
| Ophthalmoscope Lens Instructions .....       | 8-9   |
| <b>PocketScope Transilluminator</b>          |       |
| Transilluminator Features .....              | 10    |
| Transilluminator Attachment .....            | 10    |
| <b>Lamp Replacement</b>                      |       |
| Retinoscope Lamp Replacement.....            | 10-11 |
| Otoscope Lamp Replacement .....              | 11    |
| Ophthalmoscope Lamp Replacement .....        | 11-12 |
| Transilluminator Lamp Replacement .....      | 12    |
| <b>PocketScope Handles</b>                   |       |
| AA Battery Handle .....                      | 13    |
| Convertible Handle (AA & Rechargeable) ..... | 14    |
| <b>Batteries</b>                             |       |
| Recharging Batteries .....                   | 15    |
| Changing Batteries .....                     | 15-16 |
| <b>Cleaning Recommendations</b> .....        | 16-17 |
| <b>Replacement Parts</b> .....               | 17-18 |

# PocketScope Retinoscope

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## Retinoscope Features

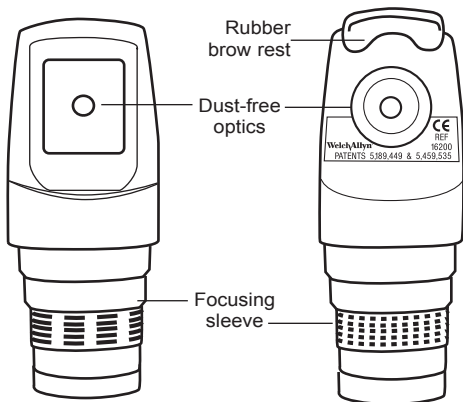
- External focusing sleeve allows for easy adjustment regardless of what size hand or how instrument is held. Continuous 360° rotation.
- Dust-free optics to keep instrument clean longer.
- Fixation cards that easily attach for use during dynamic retinoscopy.
- Collapsible head for compact size.

Patents: US 5,189,449 and 5,459,535

**NOTE: The retinoscope must be telescoped out by pulling in an outward direction. The retinoscope can only be used if this operation is performed.**

Patient Side

Practitioner Side



# PocketScope Otoscope

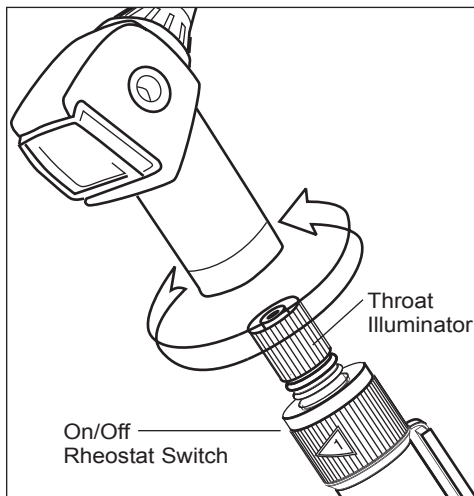
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## Throat Illuminator (21111 only)

To convert otoscope to throat illuminator, unscrew otoscope head in counterclockwise direction.

**NOTE:** Illuminator section can become hot. Avoid more than momentary direct skin contact.

To turn instruments on and off, and vary intensity rotate switch at base of instrument head. As intensity increases, green band gets thicker.



# PocketScope

## Ophthalmoscope

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1. Rubber Brow Rest.
2. Aperture selection dial with continuous rotation: Allows access to microspot, small, large, fixation, slit and cobalt blue.
3. Lens Selection Dial — When used with multiplier lever, allows single diopter steps through 48 lens combinations (from +22 to -25 diopters).
4. Multiplier Lever — Allows fast movement through the range via 16 diopter shifts. When used with lens selection dial, allows single diopter steps through 48 lens combinations.
5. Two-position filter switch: Engage either open or red-free filter.
6. Larger spot size for wider field of view.
7. Sealed optics.
8. Diopter Display Window — Displays direct reading of diopter values (positive values displayed in green; negative values displayed in red).

### **Lens Instructions:**

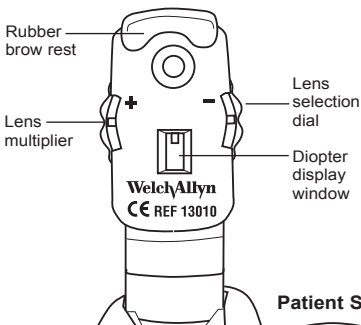
To move through the range on the plus (+) side:

Rotate lens selection dial in positive (clockwise) direction. At +6 diopters move lens dial clockwise again. Then move multiplier lever to “+” position. Continue moving lens dial in same clockwise direction to access +7 thru +22 diopters.

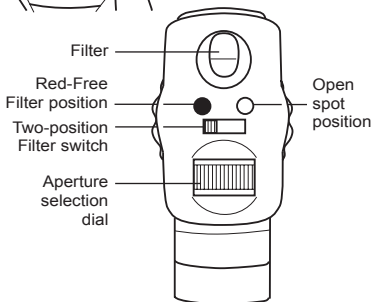
To move through the range on the negative (–) side:

Rotate lens selection dial in negative (counterclockwise) direction. At –9 diopters move lens dial counterclockwise again. Then move multiplier lever to “–” position. Continue moving lens dial in same counterclockwise direction to access –10 to –25 diopters.

### Practitioner Side



### Patient Side



# PocketScope Transilluminator

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## Transilluminator Features

- Fiber Optic transmission for bright cool light transmission.
- Curved design to fit into tight areas.

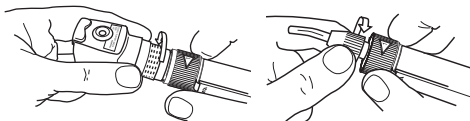
## Transilluminator Attachment

Remove the retinoscope by turning the instrument in a counterclockwise direction. This will disconnect the retinoscope.

Connect the transilluminator by turning the instrument in a clockwise direction.

Light pipe can be rotated to locate optimum orientation.

### Instructions for attaching the transilluminator

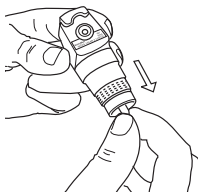


## Lamp Replacement

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### Retinoscope Lamp Replacement

1. Remove (unscrew) retinoscope head.
2. Grasp end of lamp and pull out (use nail file or similar object if necessary).

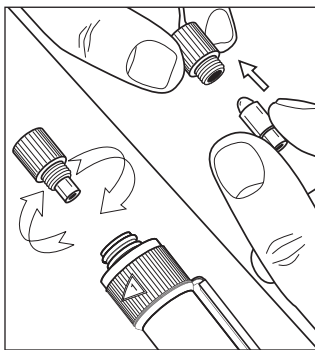


- 
3. Insert replacement lamp by carefully aligning pin on lamp shaft with slot in retinoscope. Push lamp in until firmly seated.

### **Otoscope Lamp Replacement (21111 only)**

1. Remove (unscrew) otoscope head.
2. Unscrew lamp holder in counterclockwise direction and remove from handle.
3. Grasp end of lamp and pull out of holder.
4. Insert new lamp by reversing above process.

**NOTE:** If lamp surface is touched or becomes smudged, wipe clean with a soft cloth. This will assure longer lamp life and higher output.

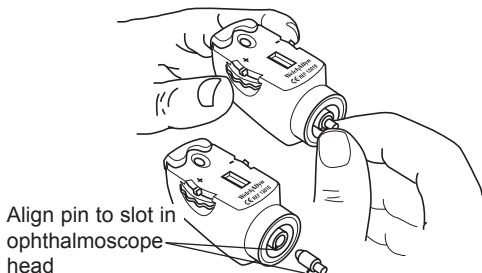


### **Ophthalmoscope Lamp Replacement**

1. Unscrew ophthalmoscope head in counterclockwise direction.
2. Grasp end of lamp and pull out (use nail file or similar object if necessary).

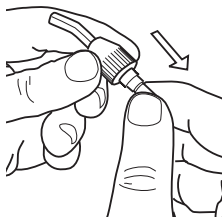
- 
3. Insert replacement lamp by carefully aligning pin on lamp shaft with slot in ophthalmoscope head. Push lamp in until firmly seated.

**NOTE:** If lamp surface is touched or becomes smudged, wipe clean with a soft cloth. This will assure longer lamp life and higher output.



## Transilluminator Lamp Replacement

1. Place thumb on knurled ring at base of instrument. Unscrew transilluminator in a counterclockwise direction.
2. Grasp end of lamp and pull out (use nail file or similar object if needed).



3. Insert replacement lamp (No. 03400). Push lamp in firmly.

# PocketScope Handles

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## AA PocketScope Handles (72830)

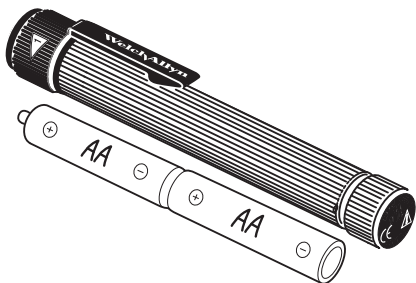
1. This handle accepts any brand of AA batteries.

Use alkaline batteries for best performance.

2. The AA handle can be upgraded to a **convertible handle**, which allows the handle to be used with AA batteries, Welch Allyn rechargeable batteries and the Universal Charger or PocketScope Desk Charger (obsolete).

The upgrade kit part number 72837 includes the rechargeable bottom cap (#72810) plus the rechargeable battery (#72600).

The upgrade kit part number 72860 or 72865 includes the rechargeable bottom cap, rechargeable battery and the 7114X Universal Charger with Pocketscope Adapters.

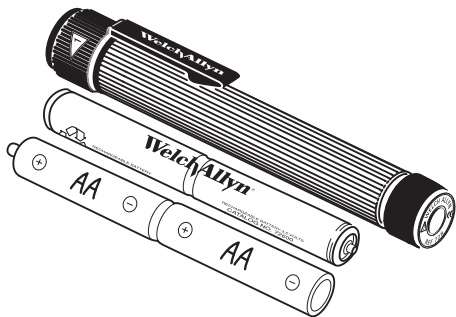


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## Convertible PocketScope Handles (72800) For use with AA and Welch Allyn rechargeable batteries

This handle can be used with either AA batteries or with Welch Allyn's PocketScope rechargeable battery (#72600) and Desk Charger.

**NOTE:** Only use the Welch Allyn Universal Charger or PocketScope Desk Charger (obsolete) with the Welch Allyn Convertible PocketScope handle and rechargeable battery (#72600). Do not use the Universal Charger or PocketScope Desk Charger when using AA batteries.



## Recharging Batteries (72800 only)

1. Plug charger into outlet:  
Product No. 71140 in the U.S.  
(120V, 50-60 Hz)  
Product No. 71145 outside the U.S.  
(specify country and voltage)
2. To insure full charge and long lamp life,  
turn instrument(s) to "off" position.
3. Insert handle(s) into charger. Green indicator  
lights will illuminate when handles are  
charging properly. **NOTE:** AA batteries will  
not charge and will not cause indicator  
lights to illuminate.

**NOTE:** Only Welch Allyn rechargeable  
battery (#72600) is approved for use with  
these handles.



**#72600 Nickel Cadmium  
Rechargeable Battery**

## Changing Batteries

1. Remove (unscrew) bottom cap.
2. Tap handles on palm of hand until battery  
slides out.
3. Insert new battery:  
Rechargeable: Insert in either direction.

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AA cells: Use alkaline cells for best performance. **Insert positive (+) end first for both cells.**



"AA" Cells

## Recycling Batteries

Welch Allyn now employs the services of an agency which can disassemble and recycle all components of nickel-cadmium batteries so that nothing gets land-filled or incinerated. Should you wish to dispose of your expended Welch Allyn rechargeable battery via recycling (in the U.S. and Canada only), please send to:

**Welch Allyn**  
**RECYCLE BATTERY**  
4341 State Street Road  
Skaneateles Falls, NY  
13153-0220

**Welch Allyn Canada**  
**RECYCLE BATTERY**  
160 Matheson Blvd. East  
Mississauga, Ontario  
CANADA L4Z 1V4

For locations outside the U.S. and Canada, consult your local recycling authority for correct disposal of batteries.

## Cleaning Recommendations

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**Ophthalmoscopes** – Cleaning (and repair) should be performed at Welch Allyn. **DO NOT** apply alcohol to mirror or lenses as this may degrade optical quality.

**Otoscope/Retinoscope/Transilluminator** – Do not use abrasive cleaners, alcohol or other

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chemicals. Lens may be cleaned with warm water and soap.

**Handle** – The PocketScope handle wipes clean with a damp cloth.

**Desk/Wall Charger** – DO NOT pour water or any cleaning solution into charging wells. DO NOT autoclave Desk/Wall Charger, instruments or handles.

## Replacement Parts

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To order replacement parts, use these numbers:

|                |                                                                 |
|----------------|-----------------------------------------------------------------|
| No. 08400      | Retinoscope Lamp                                                |
| No. 03900      | Ophthalmoscope Lamp                                             |
| No. 03400      | Otoscope/Transilluminator Lamp                                  |
| No. 13000      | Ophthalmoscope without handle                                   |
| No. 16210      | Retinoscope without handle                                      |
| No. 42000      | Transilluminator without handle                                 |
| No. 21111      | Otoscope/Throat Illuminator without handle                      |
| No. 21130      | Otoscope without handle                                         |
| No. 211024-501 | Lamp and shroud assembly                                        |
| No. 211005     | Otoscope Lens                                                   |
| No. 21504      | Insufflator                                                     |
| No. 72800      | PocketScope Convertible Handle with #72600 Rechargeable Battery |
| No. 72801      | PocketScope Convertible Handle (without battery)                |

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|                                                            |                                                                                                   |
|------------------------------------------------------------|---------------------------------------------------------------------------------------------------|
| No. 72830                                                  | PocketScope AA Handle<br>with Alkaline Batteries                                                  |
| No. 72831                                                  | PocketScope AA Handle<br>(without batteries)                                                      |
| No. 72837                                                  | Upgrade kit to convertible<br>handle (bottom cap &<br>rechargeable battery)                       |
| No. 72860<br>( <i>Domestic</i> )                           | Upgrade kit to convertible<br>handle (bottom cap,<br>rechargeable battery<br>& Universal Charger) |
| No. 72865<br>( <i>International,<br/>specify country</i> ) | Upgrade kit to convertible<br>handle (bottom cap,<br>rechargeable battery<br>& Universal Charger) |
| No. 72600                                                  | Replacement nickel<br>cadmium 2.5v rechargeable<br>battery                                        |
| No. 24400                                                  | Set of 4 reusable polypropy-<br>lene specula (2, 3, 4, 5mm)                                       |
| No. 24420                                                  | Set of 3 reusable SofSpec<br>Specula (3, 5, 7mm)                                                  |
| No. 52432                                                  | Disposable specula – box of<br>1000 – 2.5mm pediatric size                                        |
| No. 52434                                                  | Disposable specula – box of<br>1000 — 4mm regular size                                            |

For repairs, send unit to:

Welch Allyn, Inc.  
Service Department  
4341 State Street Road  
Skaneateles Falls,  
NY 13153-0220

