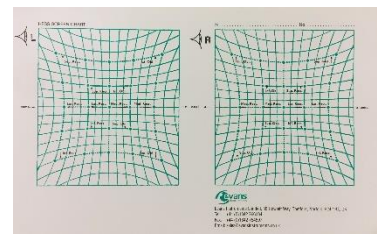
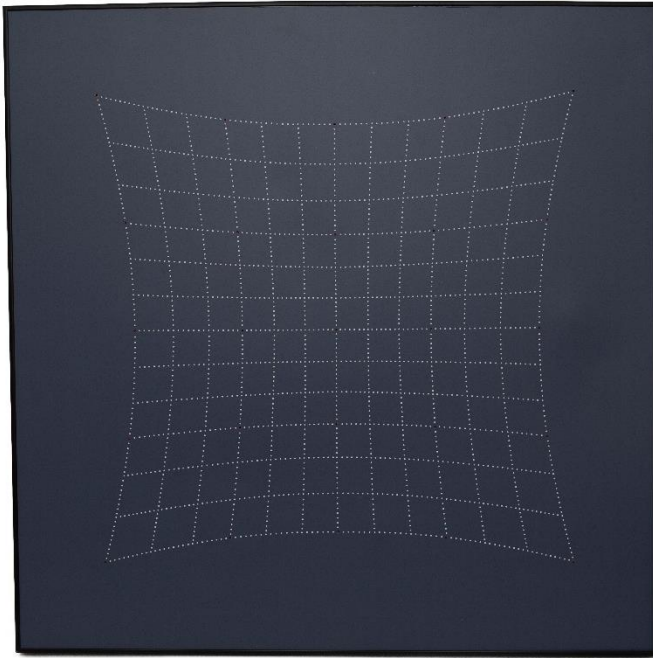


HESS SCREEN



The purpose of the Hess Screen is to test the function and co-ordination of the extra-ocular muscles. By disassociating one eye from the other and monitoring their fixation separately on the screen, it is possible to record fields of ocular movement and thereby diagnose disorders. The electronic Hess Screen is marked out with fixation points, at angles up to 35 degrees, in each of the four directions, in steps of 5 degrees. The complete array allows for any combination of eye movement, eg, 30 degrees to the right, followed by 15 degrees depression; elevation followed by leftward movement, etc. All of the fixation points are tangentially compensated in the way normal for any flat screen. Each of the twenty-five cardinal positions, at 15 degree intervals, have red lights which can be illuminated one at a time, as selected by an operator holding the control unit with twenty five contacts.

The subject is seated 50cm distant from the screen, centrally placed, so that their normal sight line corresponds with the screen central point. It is recommended that a head and chinrest be used to steady the subject's head during screening. To disassociate the eyes, the subject wears standard diplopia goggles, in which the green lens is complementary to the red screen lights. They will also hold a laser pointer which projects a small green image on to the screen. Hence, the red-covered eye only can fixate on the screen light, whilst the green-covered eye directs the pointer. In trying to achieve coincidence of the two, a subject will reveal the extent of any non-coordination.

The Hess Screen is designed to be wall mounted, usually in a room which can be darkened to a level suitable for both operator and subject. The screen unit is provided with two hanging plates. Seating and other equipment is as detailed later.

Screen Mounting

Unpack the screen from its' box, taking care not to damage the front face (carrying the "pin cushion" pattern) and LEDs, which project slightly at the cardinal points. Note the two hanging plates at the top – the distance between the centres of these should be approximately 54 cm, however, this can be altered to suit individual requirements by undoing the adjusting screw and sliding the bracket along. The wall where the screen is to hang should be marked at two points, 54cm apart, at a height approximately 185cm above the floor, in order to give the optimum recommended eye level of 137cm at the screen centre. The wall must be drilled and plugged, if necessary, to provide a secure hold for the screws. Use screws which will allow the screen to be "un-hung" from the walls, at any time, for cleaning and general access.

The Laser Pointer is battery powered and uses 2 x AAA batteries. Please ensure the instructions for use included in the box are carefully read and followed, including battery installation/replacement.

The Hess Screen is powered by connecting the power supply unit to the mains and connecting the output lead to the screen via the input socket marked on the screen's side.

A high seat will be required for the subject, preferably one which can be raised and lowered to adjust their sight line to correspond with the centre height of the screen. The operator may choose to work in either a standing or seated position, where they can see the screen clearly and can mark the chart on a desk or work top, whilst examining a subject. The means of reducing the level of room lighting should, for convenience, be close at hand.

When the screen is installed, test the electrical functioning of the screen lights, as described below:

1. The contacts on the control box correspond with the light positions at the cardinal points of the screen – touch each in turn to establish that all the lights will come on singly, one after another.
2. Turn the brightness control on the screen and check that the intensity of the screen lights can be varied thereby. Replace control plug into rest position – all lights should be extinguished.
3. Check the operation of the laser pointer and instruct the patient in the use of the green laser onto the Screen.

Method of Use

Preparation:

Adjust the subject's seating, so they are squarely in front of the screen, with their eye level at the centre height of the screen, distanced 50cm, from it. Disassociate the subject's eyes with the diplopia goggles, noting that the eye covered with the red lens will be the fixation eye, and that covered by the green lens will aim the pointer. Set the room lighting to a reduced level. For full mesopic adaptation, it will be necessary, subsequently, to adjust the brightness control on the screen to balance the intensity of the screen lights in conjunction with room lighting.

Screening and recording:

The points chosen and the order in which they are presented will obviously depend on the type of test and previous record of the subject.

The recommended method of recording is as follows:

Put the diplopia goggles on the subject so that the right eye is covered by the red lens. The left, green covered eye will be disassociated from the screen lights and the subject will therefore fixate on the selected light with the right eye when so instructed.

They will then attempt to direct the pointer so that the green light which it creates is co-incident with the screen light. The pointer can be aimed only by the left eye and the position of the green light on the screen must be recorded on the chart entitled "field of left eye". Make a cross or heavy dot on the chart to correspond with the position of the pointer light in relation to the selected point on the screen. Repeat at all the points required.

Continue the screening by inverting the diplopia goggles so that the left eye is the fixating one and the right eye aims the pointer. Mark the second chart with crosses or dots to complete the "field of right eye".

Examination of the left and right eye charts in association will reveal any non-conformities relating to preliminary and secondary deviations in cases of incomitant strabismus.

SPECIFICATION:

Model: 331
Colour: Grey

GS1-GTIN: 5060660330249

<u>Product Dimensions/cm</u>	<u>Crated (1/2 pallet)</u>	<u>Crated c/w Chin-Rest (pallet)</u>
Height: 92	25	60
Width: 92	116	116
Depth: 3.5	116	116
Weight: 8.25k	50k	75k

Electrical Rating: EN60601-1: Approved
 (power supply unit) Input: 100-240v/AC, 50-60Hz, 160-80mA
 Output (to Evans unit): 5v/DC, 1400mA, 7w

Lighting: 25 x LED (Red)

Pointer: Green Laser Pointer (532nm): 2 x AAA battery
 (approx. 3 hrs continuous use)
 Continuous wave 1mW (Class II)
(Please read full instructions included with product.)

Control Box Lead Length: 3m
Power Input Lead Length: 1.5m

Maintenance

Screen Illumination:

LEDs should not require replacement under normal use.

Cleaning Instructions:

Disconnect from mains.

The front screen can be gently cleaned by wiping with a damp cloth and a weak solution of detergent/disinfectant. Please note, alcohol-based cleaning fluids should not be used.



Guarantee

If this product becomes defective due to faulty materials and workmanship, within 12 months from the date of purchase, we guarantee to either replace all defective parts (with the exception of LEDs and batteries) or, at our discretion, replace the unit free of charge, provided that:

- The product is returned to us or our authorised repairers, with evidence of date of purchase;
- The product has not been subjected to misuse or neglect;
- The product has not sustained any damage through foreign objects, substances or accidents;
- Repairs have not been attempted by anyone other than our own service staff or authorised repair distributors.

This guarantee is offered as an extra benefit and is additional to the customer's statutory rights.

HEAD AND CHINREST ASSEMBLY

Product Code: 331/CRA

Unpacked Weight of Chin-Rest: 5.7 kilos

Packed Weight (when shipped alone): 8.4 kilos

The head and chinrest assembly is shown installed in the diagram overleaf, in its working position.

Installation:

Position the head and chinrest frame (1) in its keyed slot at the top of the chrome leg (2) and hold the whole assembly vertically in front of the screen. Adjust the height, using the sliding lower portion of the leg (3), so that the grooves (7) near the top of the chinrest frame are at the same height as the screen centre. Tighten leg locking screw (4). Holding the hinge bracket (5) against the wall with its centre line offset 14cm from the vertical centre line of the screen, the four fixing hole positions can be marked on the wall. Use substantial masonry plugs (approximately 10mm in diameter, 63mm in length) in drilled holes, to provide a secure holding for the hinge bracket screws.

The foregoing instructions also apply when the screen height is varied from that recommended.

Storage:

The head and chinrest assembly folds flat to the wall when not in use. Whilst being moved, its weight is taken by the leg which has a bearing at the bottom to roll freely on any reasonably flat floor surface. A lock screw in the lower part of the wall hinge bracket will hold the rest in the folded or working position. The chinrest frame, located by the keyed slot in the top of the leg when in use, can be raised and placed flat to the wall when folded.

Method of Use:

Adjust the subject's seating at the screen, so they are squarely in front of it and have their natural eye level at the centre height, distanced 50cm from it.

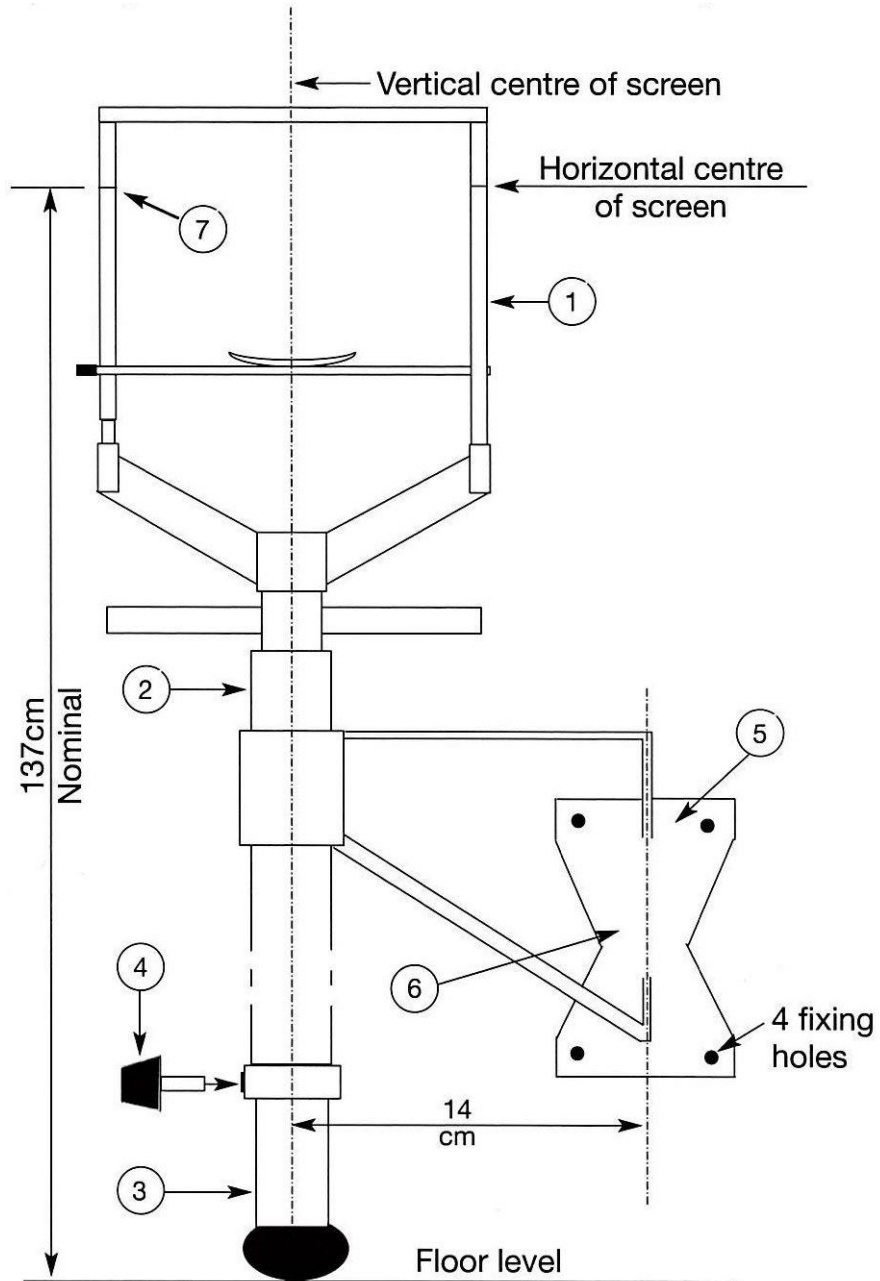
Cleaning Instructions:

Disconnect from mains.

The head and chinrest assembly can be gently cleaned by wiping with a damp cloth and a weak solution of detergent/disinfectant. Please note, alcohol-based cleaning fluids should not be used.



HEAD & CHINREST ASSEMBLY



Symbols



Type B Equipment (when Head and Chinrest Assembly in use).



Operating Instructions.



The CE mark on this product indicates it has been tested and conforms with the provisions noted within the Medical Device Regulations (EU)2017/745.



The UKCA mark on this product indicates it has been tested and conforms with the provisions noted within the UK Medical Device Regulations 2002 (as amended).



Medical Device.



Caution.



Class II Equipment.



Serial Number.



Catalogue Number.



Date of Manufacture.



Manufacturer Details.



European Authorised Representative.



The Waste Electrical and Electronic Equipment Directive (WEEE Directive) is the European Community Directive 2012/19/EU on waste electrical and electronic equipment (WEEE) which, together with the RoHS Directive 2011/65/EU, became European Law in February 2003.

Terms of Use

- This product is intended for use within a professional optical practice/clinic environment.
- We cannot be held responsible for accidents that may occur after installation of equipment.
- For indoor use only – protect from moisture.

Disposal and Recycling



The Evans Hess Screen and Head & Chinrest Assembly are manufactured using environmentally friendly materials, where possible. Evans recommend that the equipment is dismantled as far as possible for recycling purposes. Electrical parts and cables should be disposed of as electric waste, in accordance with local legislation. Batteries should be disposed of in compliance with the user's local regulations.

Serious Incident Statement:

Please immediately report any serious incident involving this product back to Evans (Instruments) Limited, together with the competent authority within your country (MHRA in the UK).



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