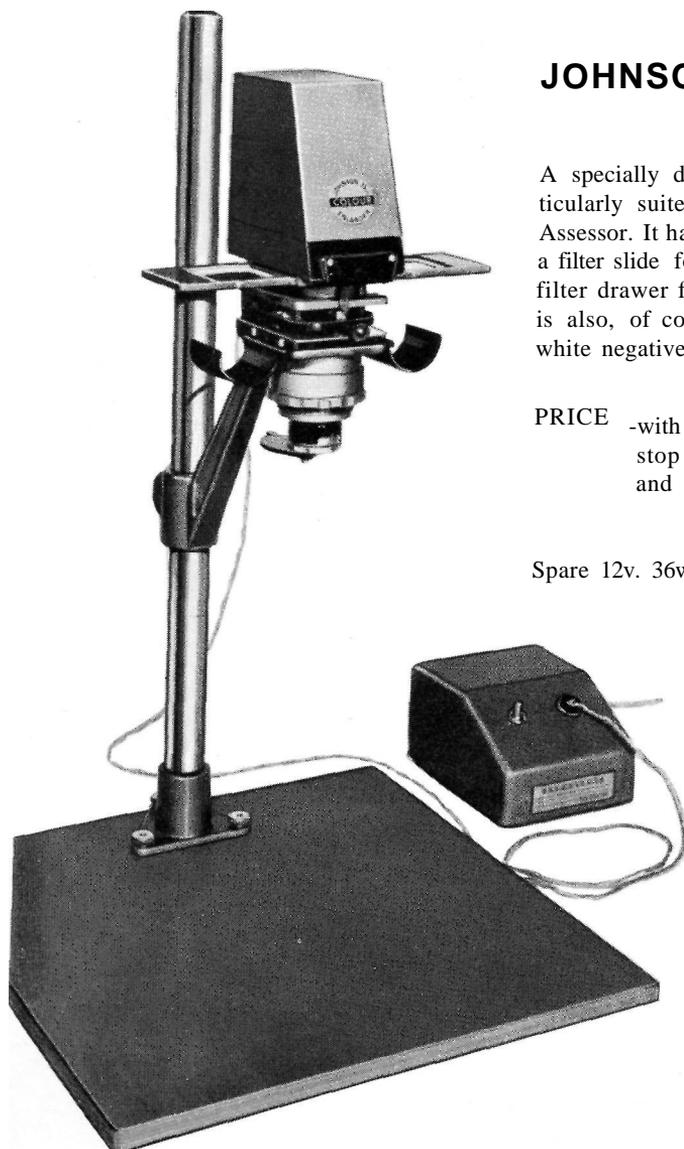


## JOHNSON COLOUR PRINTING SYSTEM

A set of matched equipment at a reasonable cost that enables the amateur photographer to make his own colour prints from 35 mm. negatives. It makes small scale colour printing a practical and economic proposition by reducing uncertainty and waste, and bridges the gap between the fully automatic commercial printing systems and the trial-and-error method the amateur has hitherto been forced to use.

As supplied, the equipment is adjusted for printing Kodacolor negatives on Ektacolor paper. Should other suitable materials become available, recommendations for using them will be given.



### JOHNSON 35 mm. COLOUR ENLARGER

A specially designed dual-purpose instrument particularly suited for use with the Colour Negative Assessor. It has a low voltage 'point' light source and a filter slide for tri-colour printing. There is also a filter drawer for 'white light' printing. The enlarger is also, of course, equally suitable for black and white negatives.

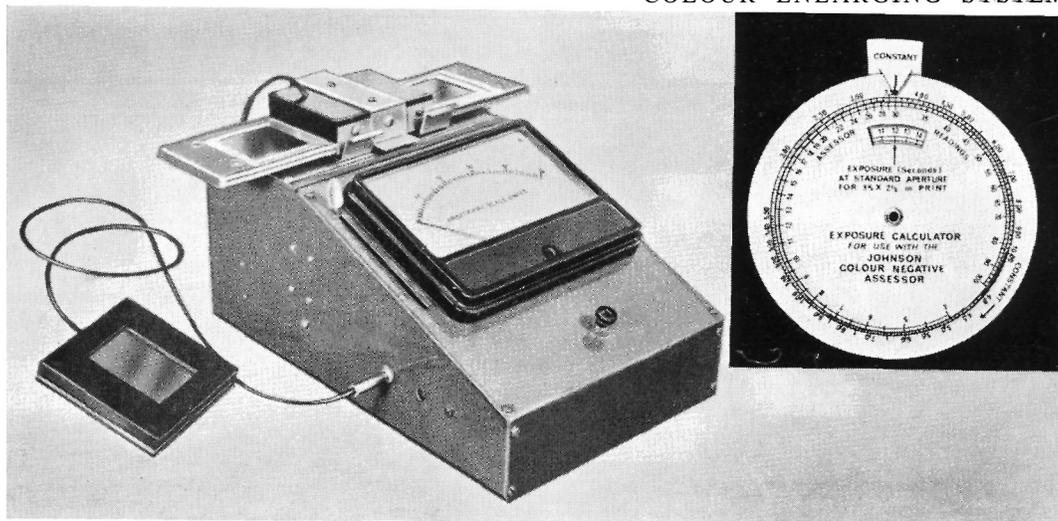
PRICE <sup>(o)</sup> -with Wray f/4.5 2 in. coated lens, click stop iris, two lamps (including one spare) and condensers, but without transformer  
£34 6 0 £29 10 0

Spare 12v. 36w. s.c.c. lamp for enlarger <sup>(G)</sup>  
3s. 10d. 3s. 3d.

### CONSTANT VOLTAGE TRANSFORMER

This is essential for the operation of both the enlarger and the Colour Negative Assessor. It obviates all inaccuracies which could result from mains current fluctuations. Only one transformer is required if both the other instruments are purchased.

PRICE  
£10 9 3 £9 0 0



**JOHNSON COLOUR  
NEGATIVE ASSESSOR**

Designed to measure the light transmission of a negative through each of a set of tri-colour analysing filters. From the readings obtained, it is a simple matter to calculate the printing exposures.

PRICE, complete with Subsidiary Cell, filters for Kodacolor negatives and Exposure Calculator.

£36 12 4    £31 10 0

Tri-colour analysing filters for Kodacolor negatives. Per set of 3 .. 14s. 7d.    12s. 6d.

**EXPOSURE  
CALCULATOR**

Enables the user to calculate rapidly the correct exposures through each of the three printing filters, using the readings obtained on the Negative Assessor. (Supplied with the Assessor.)

'White-light' scale for use with Assessor (with instructions) .. .. 5s. 0d.

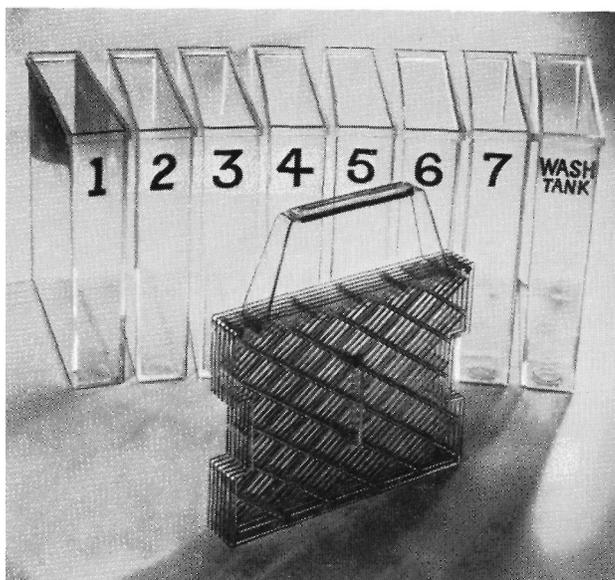
**JOHNSON COLOUR  
PRINT PROCESSING  
TANK SET**

Seven clear plastic tanks (as required for processing Ektacolor paper) and a washing tank. Each has a capacity of one litre. A print carrier is also supplied to take five 7 x 5 in. prints, ten 5 x 3½ in. prints or twenty 3½ x 2½ in. prints. This enables all the prints to be processed together in less than an hour.

PRICE    No P.T.    £7 0 0

*Parts also available separately:*

Carriers, each	£1 18 6
Processing Tanks, each	17 6
Washing Tanks, each	18 6



# THE JOHNSON COLOUR PRINTING SYSTEM

- an important modification reviewed by the head of the CP  
Colour Print Clinic

WHEN CP REVIEWED the Johnson Colour Printing System, I made the following statement at the end of the review:

'In spite of some correspondence between us on the subject, I still think that Johnson's are ignoring a large potential market in not supplying instructions for using the assessor for subtractive printing. This should not prove as difficult as they seem to believe ...'

Well, of course, it was not difficult as long as the instrument employed a logarithmic scale - which it does - and I am gratified to note that Johnson have now introduced a modification which allows the assessor to be used for white light printing.

The conversion consists of an alternative scale, calibrated in cc. filter densities, which is placed over the existing scale of the meter and lined up with the pointer zero. A comprehensive (almost!) instruction book is supplied.

The method of operation retains its original simplicity and is basically as follows:

A first-class standard print, using a standard negative, is made subtractively by trial and error methods. With the new scale in the meter, the negative is then analysed through the red, green and blue filters. The scale numbers are noted down under *complementary* headings; for example, Red 35 is written Cyan 35, Green is Magenta and Blue is Yellow.

Suppose the printing filter-pack of the standard negative was 40 Yellow + 10 Magenta, and the subsequent analysis gave assessor readings of R20, G15 and B40. These numbers are then added:

	C	M	Y
Assessor	20	15	40
Filter-Pack		10	40
Standard No.	20	25	80

Now take any other negative and analyse it on the assessor; for example, R15, G20, B35.

Subtract these figures from the Standard Number:

	c	M	Y
Standard No.	20	25	80
Assessor No.	15	20	35
New Filter-Pack	5	5	45

As we now have *three* filters in the new pack, there is a neutral density which we can remove by subtracting the *lowest* number (in this case 5) from all three numbers. We would be left with a new printing filter-pack of 40 Magenta.

It is obvious that as filters have been changed, an adjustment of *exposure* will be required to allow for densities added or subtracted, and it is here that I find Johnsons' instructions incomplete, as I do not think they are using the equipment to its full capacity. I will add my own suggestion and hope that the distributors may think fit to incorporate it in future editions of their booklet.

When the initial standard print is being made, adjust the enlarger aperture to give an exposure time of at *least* 10 sec. and then - using the supplementary photo cell on its long lead - take a reading of the light coming from the lens with the *negative and printing filter-pack* in position.

When the pack for the new negative has been calculated, place it and the negative in the enlarger, and place the supplementary photo cell in the *same position* under the lens. Adjust the aperture until the same reading is obtained on the meter and the *exposure time will automatically be the same as that of the standard negative*. Using this method it is never necessary to calculate an allowance for a change in filtration. K.L