# INSTRUCTION MANUAL - ACP 200

The ACP 200 is a print processor for processes with development times of 45, 120 or 210 sec.

It handles single prints from 9 x 13 cm to 20 x 25 cm (3 1/2 x 5 to 8 x 10 in.). The maximum feed width is 22 cm (8.6 in.). No plumbing is required, as prints are washed outside the processor.

<u>1. The ACP 200</u> consists of the following main items (see Fig. 1).

- The base unit A
- The cover B
- The developer rack C
- The bleach-fix rack D.

### 2. Setting up

- Run the processor only when filled with liquid.

- 2.1 Check that the voltage indicated on the processor matches that of your AC mains supply.
  - Remove the cover of the processor. Disengage the drive from the developer rack and the bleach-fix rack: First release the securing comb, then push the red coupling sleeve (1) back against the rack. Lift out both racks. Place the base unit on the bench and level by adjusting the screw feet (2) until the base unit is truly horizontal. Take care over this step; the processor runs reliably only if correctly levelled.

2.2 Selecting alternative running speed (Fig. 2)

- The processor is factory-set to a 45 sec development time.
- To change this preset running speed turn the base unit round, unscrew the two screws (a) and remove the cover (b). Slack off the grub screw (c) and shift the coloured gear wheels on the shaft as follows:
- With the blue gear wheel engaged, the development time is 210 sec.
- With the green gear wheel engaged, the development time is 120 sec.
- With the red gear wheel engaged, the development time is 45 sec.
- If new processes appear requiring different times, we shall endeavour to prepare new gear wheel combinations to adapt the ACP 200 to any such process.
- 2.3 Clean the base unit with warm water and a moist fluffless rag. Close the drain hoses (E) and fill both trays with tempered water up to the mark (approx. 2.5 litres in each tray).
  - Clean the developer rack and the bleach-fix rack. The best way is to rinse with a hand shower unit.
- 2.4 Insert the racks in the base unit. Connect the drive by fitting together the two halfmoon-shaped ends of the shaft. Rotate the gear wheels to engage the shaft ends with each other and push the red sleeve over the joint. Fit the securing comb. Replace the cover.

- 2.5 Connect to the AC mains supply. Set the main switch (F) to ON. Set the temperature control (G) to the required process temperature. Press the key (H) to switch to TEMP. The signal (I) lights up while the unit warms up to the present temperature.
- 2.6 Calibrating the temperature control:
  - As soon as the signal lamp (I) has gone out, measure the actual temperature of the liquid in the developer bath.
  - If this is different from the temperature set on the temperature control (G), carefully pull off the control knob. Refit it so that the pointer of the knob points on the scale to the developer temperature you have just measured.
- 2.7 Run a few sheets of paper through the processor. To do that, open the hinged lid (J). Feed the paper vertically into the feed slot until the rollers seize it. As seen from the front of the unit, the emulsion side of the paper should face to the left.
  - Practise this feeding procedure a few times until you are thoroughly familiar with it. For eventually you will have to load the paper in the dark.
  - Locate a rinsing dish at the exit end of the unit to receive the developed and fixed print.
- 2.8 Switch off the unit, disconnect from the AC supply and drain by the drain hoses.

### 3. Operating the ACP 200 processor

3.1 Mix the working solutions as instructed by the chemistry supplier. Take special care to avoid contamination of either solution by

- 3 -

the other. So always use different (and distinctly marked) containers, funnels, stirring rods and measures for each solution.

3.2 Remove the developer and the bleach-fix rack from the base unit. Then pour in the solutions - first the bleach-fix into the tray section (D'), then the developer into the tray section (C'). Each takes 2.5 litres of solution.

Avoid any splashes. Carefully replace the racks and reconnect the drives. Replace the cover.

- 3.3 Connect the unit to the AC mains supply, set the main switch to ON and the switch (H) to TEMP. Check the temperature control. After about 20 min the solutions should have reached their present temperature. At this point the signal lamp goes out and the processor is ready to run.
- 3.4 Open the hinged lit (J) and <u>in the dark</u> insert an exposed print, with the <u>emulsion side to the left</u> (as seen from the front of the unit). You can switch on white light again as soon as the hinged lid is closed.
  - Once the print leaves the processor, it is fully developed and fixed. However, it still needs rinsing and drying. For this, follow the instructions of the chemistry or paper supplier.

### 4. Important notes

- Work in a well ventilated room.
- During idle periods leave the hinged lid open.
- To remove any condensation, periodically wipe dry the feed tray and the first pair of rollers.

- 4 -

- Before feeding in a fresh print check that the previous one is fully drawn in. (Feel for it in the feed slot.)
- When not in use, keep solutions in suitable bottles, rather than in the processor. That reduces the risk of oxidation.
- If a print should jam, immediately switch off the unit, open the cover and remove the rack involved. Remove the top guide (K); you can then pull out the stuck print. If necessary rotate the rollers by hand to release the print.
- Never run the unit empty only while filled with liquid. Otherwise you risk damaging the heating system or the recirculating pump.
- Always disconnect the mains plug before you open the unit, clean it or do anything else beyond normal operation.
- Before mixing chemicals, study the supplier's packing or instruction sheet. Note especially the first aid measures in case of chemical splashes in the eyes or on the skin. The general rule: Immediately rinse thorougly in running water, then get medical help.

## 5. Processing capacities

One tank batch, i.e. 2.5 litres of each solution, will process about 70 - 80 prints of 20 x 25 cm or 8 x 10 in. Note the recommendations of the chemistry supplier.

- Processing capacity also drops with increased storage time of the mixed solutions.

#### 5.1 Replenishment

It is possible to replenish the solutions by draining part of the used volume and replacing it by fresh solution. However, this makes sense only in large-scale continuous use, as the processor's work load is also important. Again follow the recommendations of the chemicals supplier.

## 6. Cleaning

The processor needs periodic cleaning.

- If you use your processor every day, thoroughly clean it once a week. Proceed as described in section 2: "Setting up". Remember that caked-on deposits, dirt and algae are very difficult to remove; so never allow the processor to dry out without first cleaning it.
- When not in use, clean the processor thoroughly before storing it. Proceed as described above, adding some neutral detergent to the washing water.
- Never use abrasives or chemical solvents.

Check with your dealer for pollution-free disposal of spent solutions. He will be pleased to advise you.

## 7. Recommended settings

Process	development time (without bleach-fix)		Temperature	
Ektaprint 2 *	210	sec	33°C	(91,4°F)
Ektaprint 200 *	120	sec	38°C	(100,4°F)
Ektacolor RA 4 *	45	sec	35°C	(95°F)
Agfa Color Process 92	210	sec	33°C	(91,4°F)
Tetenal Process PK	120	sec	35°C.	(95°F)
Ilfospeed 2000 * black-and white	45	sec	30°C	(86°F)
Agfa Agetol black-and-white	45	sec	29°C	(84,2°F)

\* = registered trade mark

These figures are approximate and may need adjustment in the light of tests. Also, chemical processes are always subject to modification, so the above settings are intended only as a guide.

## 8. Trouble shooting

- Streaks on the prints: Condensation of water on the first pair of rollers or in the feed tray.
- Scratched prints: Heavily soiled or damaged transport rollers.
- Black tarry deposits on rollers: Chemical decomposition of solutions. (Carefully remove with a little alcohol.)

- Uneven paper transport: Check firm location of grub screw (c).
- Prints too light; insufficient density, poor colour saturation: Insufficient exposure, solutions too cold or exhausted, wrong running speed.
- Prints too dark, degraded whites:
  Excessive exposure, solutions too warm, wrongly mixed chemistry,
  wrong running speed.
- Colour fog in whites: Contaminated developer, solutions too warm.
- Yellow stains: Wrong drying, stale paper.
- Tarry precipitate in developer: Wrongly mixed solutions.

Note also the recommendations of the paper and/or chemistry supplier.

# 9. Technical data

Size (length x width x height):	620 x 425 x 245 mm (24.4 x 16.7 x 9.7 in.)	
Weight (empty):	empty): 11,5 kg (25 1/4 lb)	
Solution capacity:	2.5 litres (each bath)	
Power supply:	220 volts, 50 Hz / 110 volts, 60 Hz	
Development times:	45, 120 or 210 sec	
Temperature range:	28° to 43° C (82° to 109°F)	
Print sizes:	9 x 13 to 20 x 25 cm	
	(3 1/2 x 5 to 8 x 10 in.)	





#### ACP 200 / HIGH SPEED

A conversion kit is available to provide alternative processing times of 30, 90 or 150 sec.

It needs a simple adaptation of the development rack and the bleach-fix rack.

To obtain processing times of 30, 90 or 150 sec., carry out the following steps on the two racks as shown in Fig. 3 (developer rack) and Fig. 4 (bleach-fix rack).

# Developer rack (Fig. 3)

Release the clip (O) from the drive shaft carrying the Z25 gear wheel (P) and withdraw this shaft. Remove the crossover plate (K). From inside unscrew the crosshead screw (Q) which holds the stud shaft for the Z13 cog (R) and fit this stud shaft in the upper right hole (S). Move also the stud shaft (T) carrying the Z35 gear wheel (U) to the adjoining hole (V), but first replace the Z35 gear by the white Z30 gear wheel (W) supplied. Refit the crossover plate (K) and then fit the drive shaft supplied with the white Z33 gear wheel (X).

Remember to refit the clip (0) on this shaft.

## Bleach-fix rack (Fig. 4)

Release the clip (o) from the drive shaft carrying the Z25 gear wheel (p) and withdraw this shaft. Remove the corssover plate (k). From inside unscrew the corsshead screws (q) which hold the stud shafts (v) for the Z12 cog and (t) for the Z13 cog, and fit these stud shafts in the holes (u) and (v) respectively. Refit the corssover plate (k) and then fit the drive shaft supplied with the white Z33 gear wheel (x).

Remember to refit the clip (o) on this shaft.

With the racks adapted as above (with white gear wheels), the basic gear settings (Fig. 2) yield the following processing times:

blue	150	sec.
green	90	sec.
red	30	sec.

**Important note:** Not more than one coloured gear wheel must be in engagement at any time.

