ANSER™
we know inkjet

External Encoder – TECHNICAL MANUAL

U2
INKNOVATION

INKJET PRINT

ANSER™ | U2
unbeatable worldwide
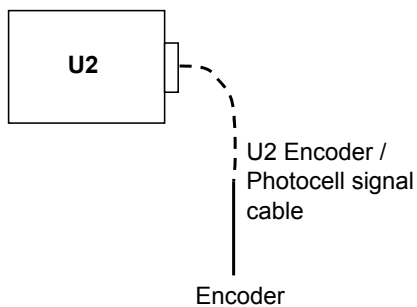
SAVING INKNOVATION

Ⅶ. How to connect U2 printers with external Encoder & Photocell

Ⅶ-1. Single U2 printer with Encoder

U2

U2 Encoder /
Photocell signal
cable
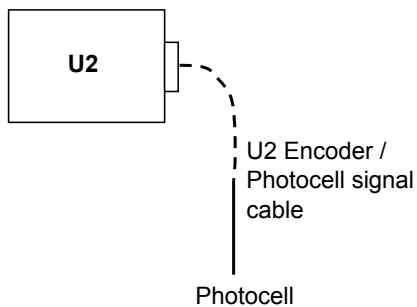
Encoder

So if you want to apply one Encoder signal for single U2 printer,
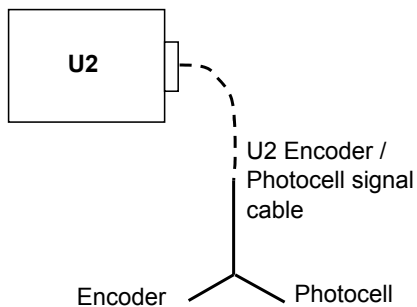you'll need:
a. 1 pc U2 Encoder / Photocell signal cable

Ⅶ-2. Single U2 printer with external Photocell

U2

U2 Encoder /
Photocell signal
cable

Photocell

So if you want to apply external Photocell signal for single U2
printer, you'll need:
a. 1 pc U2 Encoder / Photocell signal cable

Ⅶ-3. Single U2 printer with external Photocell and Encoder

U2

U2 Encoder /
Photocell signal
cable

Encoder   Photocell

So if you want to apply one Encoder & external Photocell
signals for single U2 printer, you'll need:
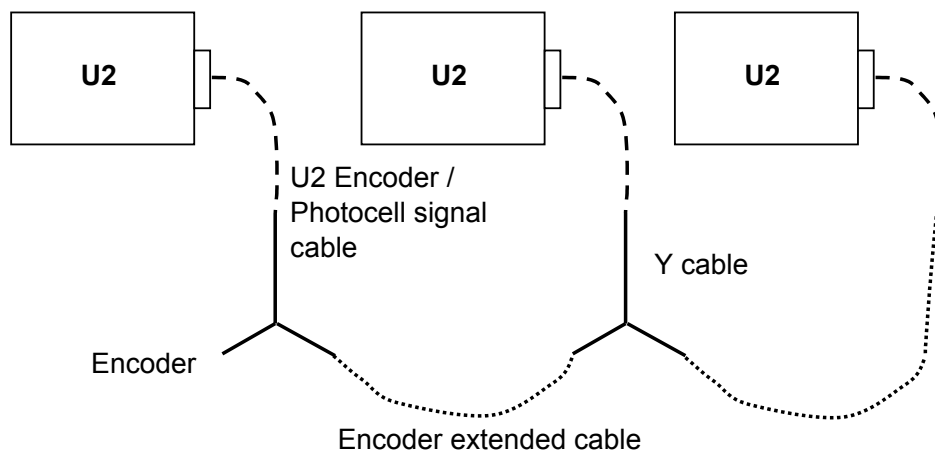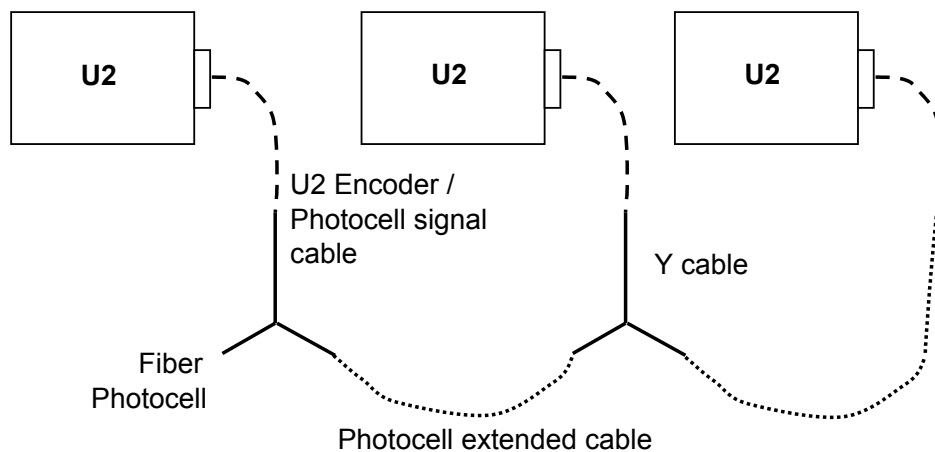a. 1 pc U2 Encoder / Photocell signal cable
b. 1 pc Y cable

Ⅶ-4. Multiple U2 printers with single Encoder

U2   U2   U2

U2 Encoder /
Photocell signal
cable

Y cable

Encoder

Encoder extended cable

So if you want to apply one Encoder signal for N pcs U2 printers, you'll need:
a. N pcs U2 Encoder / Photocell signal cables
b. N-1 pcs Y cables
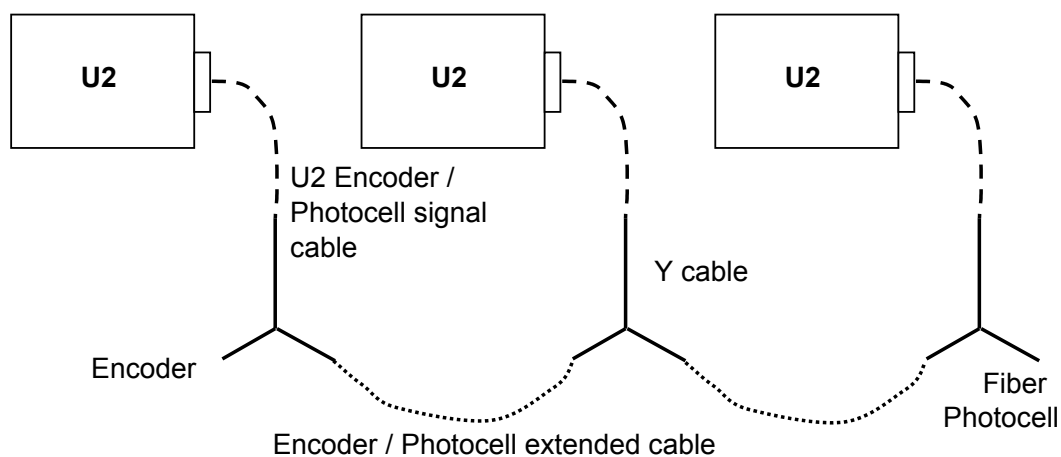c. N-1 pcs Encoder extended cables

Ⅶ-5. Multiple U2 printers with Fiber Photocell

U2   U2   U2

U2 Encoder /
Photocell signal
cable

Y cable

Fiber
Photocell

Photocell extended cable

So if you want to apply one Fiber Photocell for N pcs U2 printers, you'll need:
a. N pcs U2 Encoder / Photocell signal cables
b. N-1 pcs Y cables
c. N-1 pcs Photocell extended cables

Ⅶ-6. Multiple U2 printers with single Encoder & Fiber Photocell

U2   U2   U2

U2 Encoder /
Photocell signal
cable

Y cable

Encoder

Fiber
Photocell

Encoder / Photocell extended cable

So if you want to apply one Encoder signal and Fiber Photocell for N pcs U2 printers,
 you'll need:
a. N pcs U2 Encoder / Photocell signal cables
b. N pcs Y cables
c. N-1 pcs Encoder / Photocell extended cables

Ⅷ. U2 FAQ

The first step for perfect printing like below image is to set a guide bar on the conveyor.
The following examples are possible printing problems due to wrong settings.

123456789

Ⅷ-1. Incorrect conveyor speed setting

The conveyor speed must be stable in order to produce a perfect printing; otherwise, you may need to install encoder.

a. Conveyor Speed setting is too fast

b. Conveyor Speed setting is too slow

Solution：Press "FUNCTION → 5" to set up correct speed.

Ⅷ-2. Incorrect Encoder DPI setting

If the DPI setting is different with actual DPI, you'll get below printing even if you've installed Encoder.

Solution：Press "FUNCTION → 5" to set up correct "Pulse/Cycle" and "Diameter" based on the Encoder.

Ⅷ-3. Incorrect printing direction setting

You'll get below printing image in case you've set incorrect printing direction:

Solution：Press "FUNCTION → 5" to choose correct printing direction.

Ⅷ-4. Build up on the nozzle

123456789

Solution：a) Use lint-free soft cloth to clean the cartridge nozzle;   b) Change a new cartridge

Ⅹ-3. For U2 Encoder (Option)

Proposal：

a). Preferably install Encoder right under the U2 Printhead

b). Wheel surface must be vertical with Conveyor belt

c). Encoder Tension direction should be positive

If the conveyor belt is not flat enough to install Encoder directly, we may have following two substitutes.

1). If the printed carton is long and heavy enough, It'll be available to get the undistorted Encoder
    signal once the wheel is attacked by the coming carton.

2). In case the carton is too small and too light, there is another solution to get the accurate
   Encoder signal.

For any conveyor belt, there must be a main wheel and secondary wheel. You need to make a flat wheel whose diameter is equal to:
[diameter of the main wheel + 2 * thickness of the belt].
Then, please embed an axletree into the right center of the main wheel and the man-made wheel. After that, you can install Encoder on the man-made wheel. This is the proper way to ensure the speed read by the Encoder is the same as the actual speed of printing.
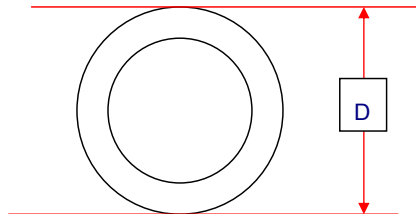
Ⅹ-4. For U2 external Photocell (Option)
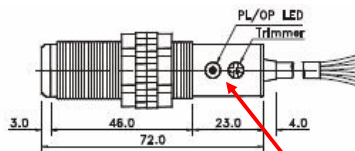
Adjusting screw

If you wanna adjust detecting distance, you can rotate the adjusting screw as Figure showed above.

(If you want to lengthen detecting distance, please rotate the screw to be "max" direction as it shows you; if you wanna shorten it, please rotate the screw to "min" direction as it shows you)

The range is from 0 to 10 cm.

★ It's highly recommended to adjust the printing position via Photocell location adjustment, instead of adjusting Delay!