

## JoeScan Scanner Cable Specifications

JoeScan JS20/JS-25 model scanners require only two connectors: an Ethernet connector and a circular connector for power and control signals.

### Ethernet Cable Specifications

The Ethernet connector is the industrial version of a simple RJ45 jack. It is sealed but otherwise identical to standard networking connectors. We highly recommend using the cables supplied by JoeScan. These cables are manufactured to a higher standard and contain additional shielding to function in noisy electrical environments.

- JoeScan offers the following Ethernet cable lengths:
  - 10 meter (part# LTW\_10M) – often paired with a 20-ft. or 35-ft. control cable
  - 30 meter (part# LTW\_30M) – often paired with a 100-ft. control cable
- **Connector type:** RJ45 plug
  - Locking
  - Right angle
  - Watertight (Rated IP67)
  - Molded to Cat5e cable with strain relief
- **Number of conductors:** 8 (4 pair)
- **Diameter of outer jacket:** 0.25in
- **Gauge of conductors:** 24AWG
- **Wiring standard for the CAT-5 connection:** T568B

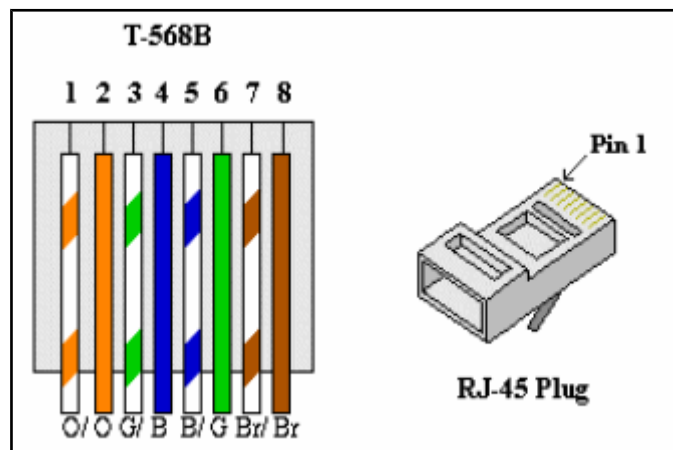


Figure 1. Wiring standard for the CAT-5 connection – T568B.

## Power/Control Signal Connector

The other connector, an iCONN Systems waterproof 8-pin circular connector, carries power and control signals (Encoder and StartScan). The pin-out of the connector is listed in Table 1.

JoeScan sells power/control cables in varying lengths, with the iCONN Systems waterproof 8-pin connector on one end and pigtails (bare wire ends) on the other. Scanners operate on 24VDC and draw a current of approximately 0.35 Amps, so a sufficiently sized power supply is needed.

## Power/Control Cable Specifications

- JoeScan offers the power/control cable in the following lengths:
  - 20 ft. (part# INT8\_20ft) – often paired with a 10-meter Ethernet cable
  - 35 ft. (part# INT8\_35ft) – often paired with a 10-meter Ethernet cable
  - 100 ft. (part# INT8\_100ft) – often paired with a 30-meter Ethernet cable
- **Connector type:** Power plug
  - Locking
  - In-line Receptacle
  - Watertight (Rated IP67)
  - Molded to 8-conductor cable with strain relief
- **Number of conductors:** 8 (4 pair)
- **Diameter of outer jacketing:** 0.245in
- **Diameter of insulated conductors:** 0.045in
- **Gauge of conductors:** 22AWG

iCONN Systems Waterproof Connector		
Wire Color	Pin	Function
White	1	Encoder B -
Green	2	Encoder B +
White/Black	3	Start Scan -
White/Red	4	Start Scan +
White/Yellow	5	Encoder A -
White/Green	6	Encoder A +
Black	7	Ground
Red	8	+24VDC

Table 1. iCONN Systems Waterproof Connector pin-out.