The experiments on x-ray backlighting of wire-array Z-pinch using X-pinches as x-ray sources were performed. A wire-array z-pinch was placed between the anode and the cathode. The anode plate was normally mounted on return-current rods, but here two of these rods were replaced by two X-pinches. In order to obtain two time-resolved images, we need to know the current division among the paralleled X-pinches and the return-current rods so as to choose right wires for these two X-pinches since the timing of the x-ray burst from an X-pinch is current and wire mass dependent. For this purpose the currents flowing through these two paralleled X-pinches were measured with two Rogowski coils. It was found that two currents are almost the same each other even though the diameter and material of the wires used for these two X-pinches are significantly different. In order to explain this phenomenon, a circuit analysis was carried out. An X-pinch was electrically equivalent to an inductor in series with a resistor. The impedance of an X-pinch was determined by measuring the current and the voltage of the X-pinch. The inductance of the X-pinch was assumed to be a constant and estimated by the calculation of the magnetic field based on the well-known Biot-Savart’s Law. The voltage of the inductance was calculated with $L \cdot \frac{di}{dt}$ and subtracted from the measured voltage of the X-pinch. Then, the evolution of the resistance was determined and is consistent with the theory of electrical exploding wire. At the start of the current the resistance of the exploding wires is several tens of Ohms, one order of magnitude higher than the metallic resistance of the wires at room temperature, and then it falls down quickly to about $1 \Omega$, which reflects the physical processes occurring in the electrical exploding wires, i.e., a current transition from the overheated and highly resistive wire core to the highly conductive plasma. The resistance is only a little bit lower than the impedance, indicating that the resistance predominates over the inductance in determining the voltage across the X-pinch. It seems no strong influence of the wires on the resistance, which may be explained by the fact that the current flows through the surrounding plasma rather than the metallic wires itself. It was concluded that the current is almost equally divided between two paralleled X-pinches even though the diameter and material of the wires used for these two X-pinches are significantly different. The reasons for this roughly equal division are that the resistance is dominant in the impedance of an X-pinch and there is no strong influence of the wires on the resistance.