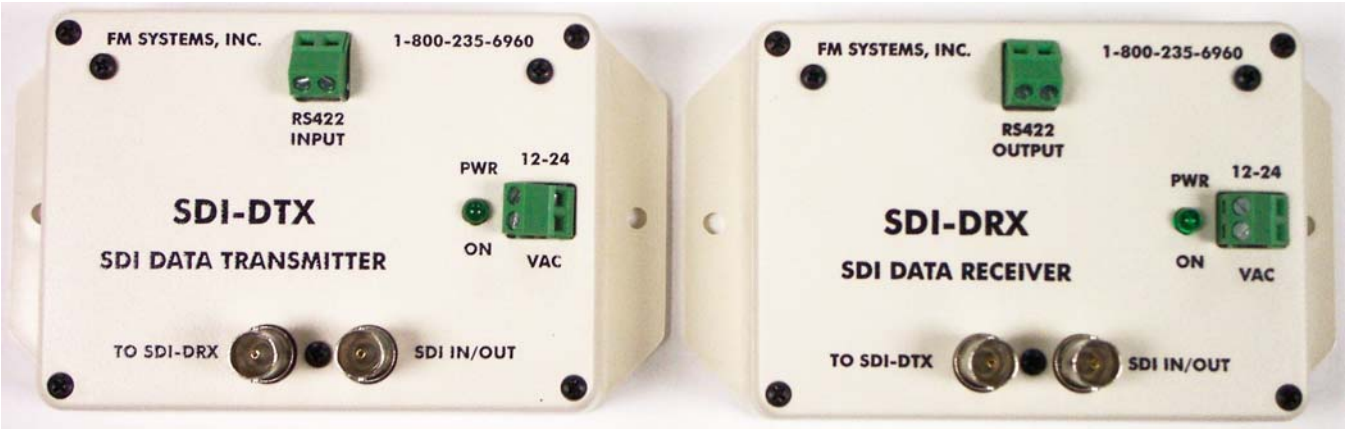
SDI-D



SDI RS422 DATA LINK

INSTRUCTION BOOK

IB6454-01

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DESCRIPTION

These units provide an RS422 PTZ Data Link on any coaxial cable SDI video path. Use it to add (PTZ) Pan Tilt Zoom control to any existing SDI video camera without running additional wires where vertical interval control equipment will not work. The RS422 control signal shares the SDI video path in the opposite direction to deliver the camera control without interfering with the SDI video image.

The units can also be used in the reverse direction to deliver RS422 data from the camera location back to the monitor location. Applications like cash register data or card access data can ride on the existing video return without the need to pull extra wires. This is particularly useful when cable access is limited or the expense of digging up sidewalks or breaking into walls is prohibitive. You can insert your data anywhere on the SDI cable and recover the data at any other location along the cable path up to 150 meters.

The system is housed in Bone colored ABS enclosures that have a UL flame rating of 94-VO and is powered by 24 Volt AC or DC power transformers (24 Volt AC transformers are supplied with the units). The receiver unit can be powered from 12-24 Volts AC. The current draw is low allowing the units to be connected to the same power supply as the camera. Both the units have LED indicators for easy set-up.

MOUNTING INSTRUCTIONS

The rugged one piece mounting structure allows you to mount the unit firmly in place with two screws. Select a place to mount the unit away from harsh or wet environments, indoors is recommended. The SDI-DRX should be located near the camera you wish to use and the SDI-DTX near your monitors or the place you wish to control the camera from. Select a position that gives you the best access to cable the system and reduces the labor in installation.

HOW TO CABLE THE SDI-DRX

Connect the SDI camera's output cable to the BNC connector marked "SDI IN/OUT". Then connect the cable going back to the monitor point to the BNC connector marked "TO SDI-DTX". It is not necessary for power to be on at this time, the video path will only be interrupted during the cable attachment.

Next connect the 12-24 AC power cube or power source to the green terminal block marked "12-24 AC". It is also possible to use the existing camera power supply if it can handle the extra 150mA load.

Next connect the data line going to the PTZ equipment at the camera. Be sure to observe the data polarity "+ and -". This input is designed for use with an RS422 data standard, balanced twisted pair wires should be used.

HOW TO CABLE THE SDI-DTX

Connect the video cable coming from the SDI-DRX to the BNC connector marked "TO SDI-DRX". Then connect a cable from the BNC connector marked "SDI IN/OUT" to the SDI monitor, recorder or other SDI video equipment. **BE SURE TO TERMINATE THE END OF THE VIDEO CABLE WITH A 75 OHM TERMINATION OR PROPERLY TERMINATE INTO OTHER EQUIPMENT.** Next connect a 24VAC power cube to the green terminal block marked "12-24 AC".

POWER SUPPLY INSTALLATION

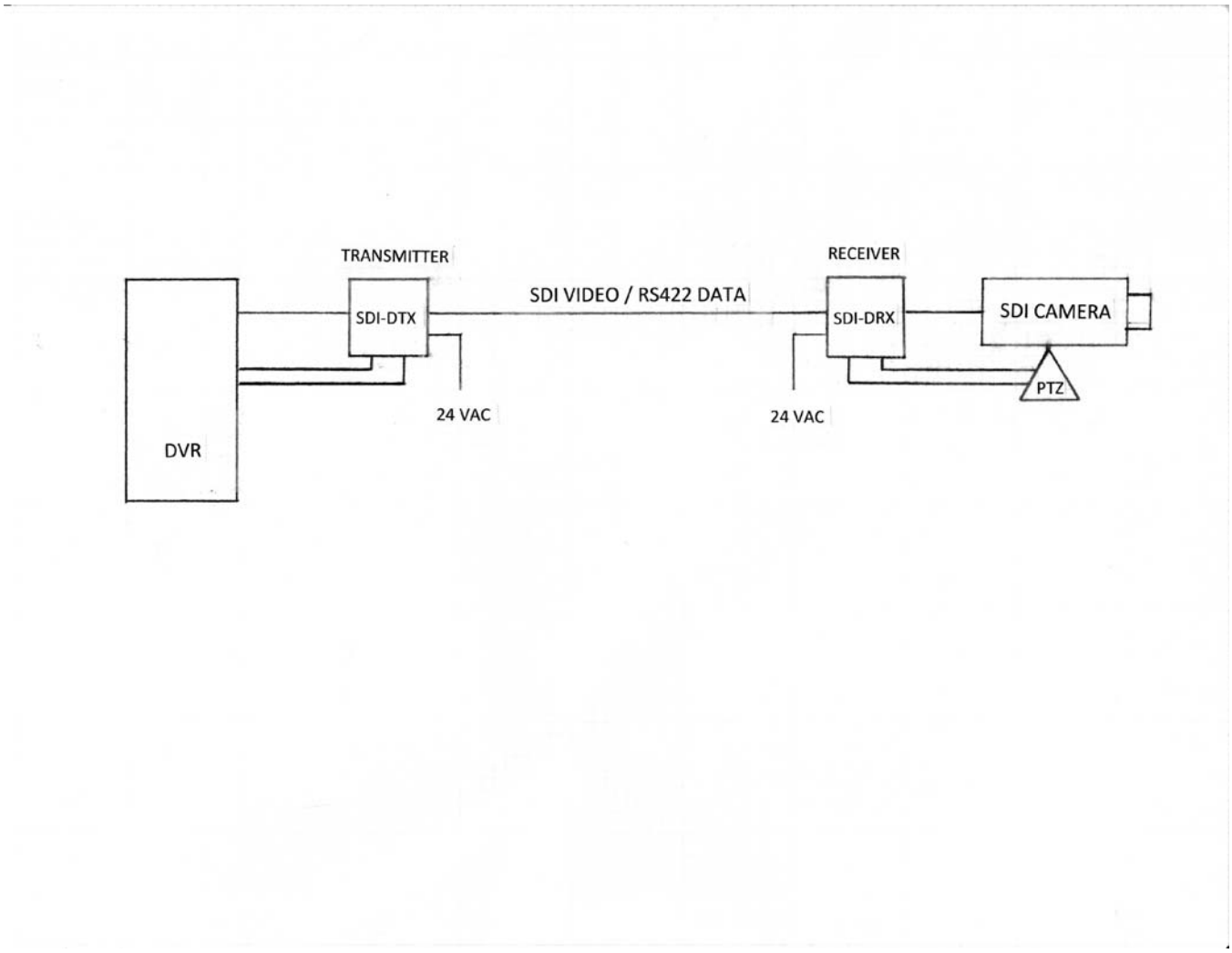
The SDI-DTX and SDI-DRX are powered by a 24 VAC wall mount power transformers. However they can be power by the existing camera power supply if it has the current and voltage requirement of 12-24 VAC and can handle an additional 150mA. Connect the 24 VAC power transformer to the Green terminal block marked 12- 24VAC.

OPERATION

Standard data transmission is used to relay the information from the monitor point to the camera PTZ equipment via RS422 data format. This equipment can transmit a PTZ signal over coax cable up to 150 meters.

CARE AND MAINTENANCE

There is no routine maintenance or calibration required with this equipment. There are no field adjustable controls inside the box. Opening the box will void your warranty.

APPLICATIONS (WHERE TO USE THE SYSTEM)

This system can be used anywhere that a video signal in coax cable exists. Some uses are in a CCTV camera "original build", or in an add-on installation. The units can also be used in the reverse direction to deliver RS422 data from the camera location back to the monitor location. Applications like cash register data or card access data can ride on the existing video return without the need to pull extra wires. This is particularly useful when cable access is limited or the expense of digging up sidewalks or breaking into walls is prohibitive.