Installation and Operation Manual

For Models ER8200C, ER16200C and ER24200C

IMPORTANT SAFETY INSTRUCTIONS

- Read all safety instructions.
- Keep these instructions.
- Heed all warnings.
- Follow all instructions.
- Do not use this apparatus near water.
- Clean only with a dry cloth.
- Refer all servicing to qualified service personnel.
- Install in accordance with the manufacturer's instructions.
- Do not install near any heat sources such as radiators, heat registers, stoves or other apparatus that produce heat.

Reduce risk of fire or electrical shock. Do not expose this product to rain or moisture.

This installation should be made by a qualified service person and conform with local codes.

NITEK ®

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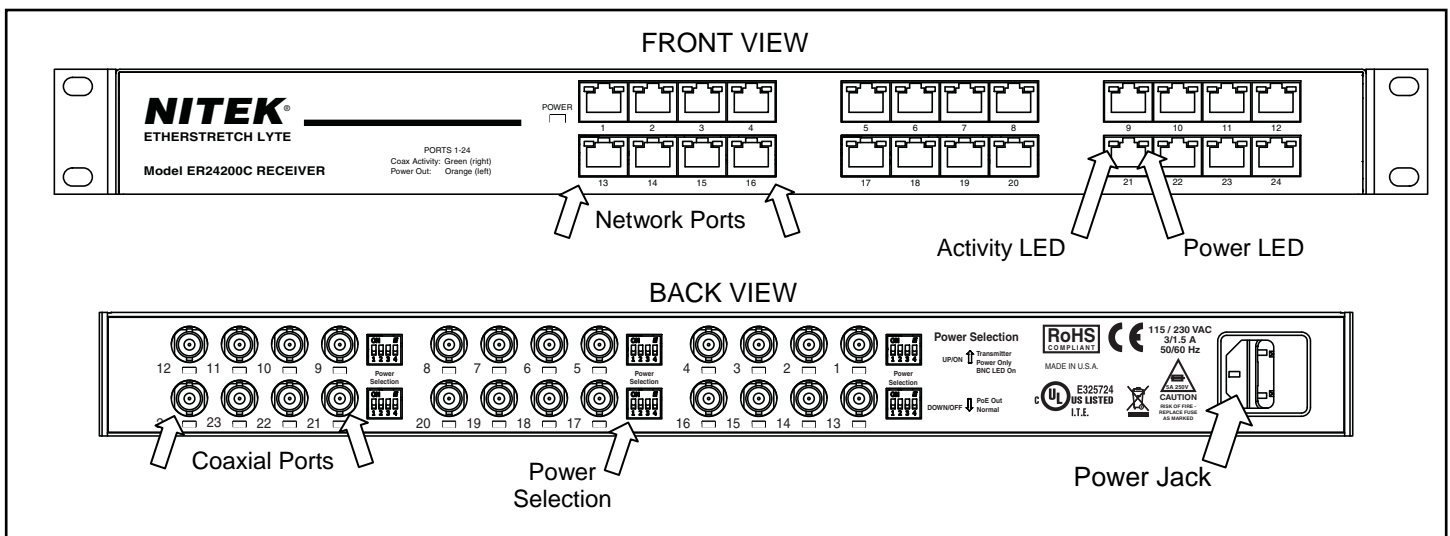E-mail: info@nitek.net
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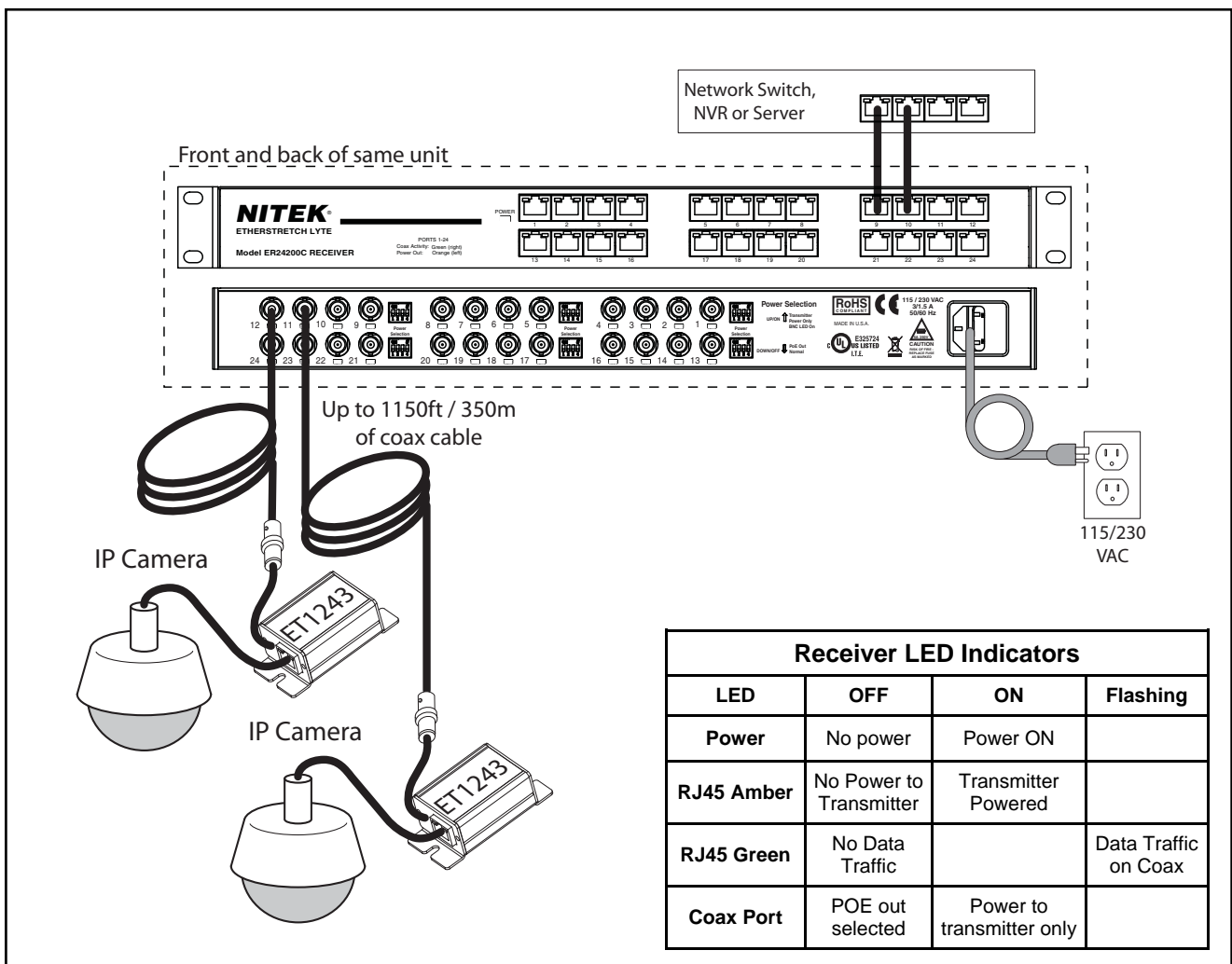E-mail: info@nitekeurope.net
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Head-end Installation
ER8200C, ER16200C and ER24200C

1) The ER8200C / ER16200C / ER24200C can be rack mounted, wall mounted or used as desk top unit. Use the included mounting ears in the front or back of the unit depending on your needs. The mounting ears can also be turned to the bottom of the unit for wall mounting if needed. When mounting the unit, be sure to follow these guide lines.
   a. Operating Ambient - Do not install the unit in an assembly where the ambient temperature could exceed 52°C (125°F). NOTE: the ambient temperature in a closed or multi-unit rack assembly could greatly exceed the ambient temperature outside that assembly.
   b. Air-Flow – Leave space on the sides of the unit for airflow into the cooling fans and some space on top of the unit for air to exit the unit. Adequate air flow is required for safe operation.
   c. Mechanical Loading – The mounting ears were designed for two ears to support one unit. Other configurations, such as mounting other equipment directly on top of the unit or using only one mounting ear, could cause a hazardous condition due to uneven or excessive mechanical loading.
   d. Circuit Loading - Do not connect the unit to an electrical supply if the wiring or over current protection of the supply could be overloaded when the ratings listed on the unit are considered.
   e. Grounding (Earthing) - Reliable earth grounding of rack-mounted equipment should be maintained, use only 3 conductor equipment power cords. If the unit is plugged into a power strip or extension cord, that strip or cord should have a ground (third) pin on its plug.

Rack Mounting Options	Wall Mounting Options
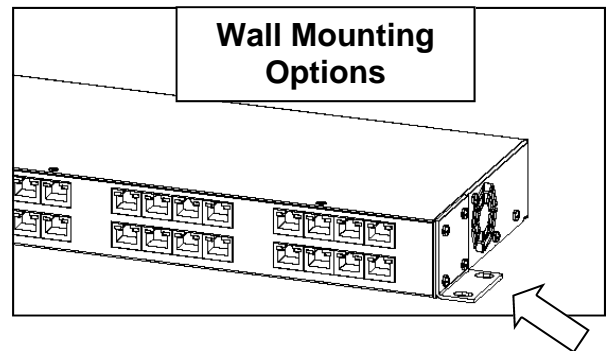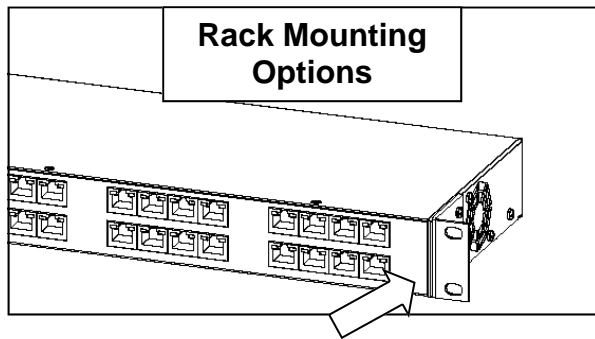
2) The EtherStretch Lyte system is designed to be used with an external network switch. The network switch can be POE or a standard non-POE switch. With a POE switch the transmitter and camera must be connected for the POE voltage to operate and power the transmitter and camera. The EtherStretch Lyte receiver and transmitter are shipped configured to be used with a POE switch. If a non-POE switch is used the camera must be powered directly and the receiver and transmitter units must be configured properly. For non-POE applications, look at the rear panel of the receiver unit and turn "ON" the matching Power Selection DIP switch for a port. On the transmitter the POE Out jumper must be in the "OFF" position. When the DIP switch is turned "ON" power is sent to the transmitter and an LED below the BNC port will light.

FRONT VIEW

NITEK®
ETHERSTRETCH LYTE
Model ER24200C RECEIVER

POWER

PORTS 1-24
Coax Activity: Green (right)
Power Out: Orange (left)

1 2 3 4   5 6 7 8   9 10 11 12
13 14 15 16   17 18 19 20   21 22 23 24

Network Ports

Activity LED   Power LED

BACK VIEW

12 11 10 9   8 7 6 5   4 3 2 1
Power Selection   Power Selection   Power Selection

23 22 21   20 19 18 17   16 15 14 13
Power Selection

Power Selection
UP/ON ⬆ Transmitter Power Only BNC LED On
DOWN/OFF ⬇ PoE Out Normal

RoHS COMPLIANT
CE
115 / 230 VAC
3/1.5 A
50/60 Hz

MADE IN U.S.A.

c(UL)US LISTED
E325724
I.T.E.

CAUTION
RISK OF FIRE -
REPLACE FUSE
AS MARKED
5A 250V

Coaxial Ports   Power Selection   Power Jack

Front and back of same unit

Network Switch, NVR or Server

NITEK®
ETHERSTRETCH LYTE
Model ER24200C RECEIVER

PORTS 1-24
Coax Activity: Green (right)
Power Out: Orange (left)

Up to 1150ft / 350m of coax cable

IP Camera

ET1243

IP Camera

ET1243

115/230 VAC

| Receiver LED Indicators			
LED	**OFF**	**ON**	**Flashing**
Power	No power	Power ON	
RJ45 Amber	No Power to Transmitter	Transmitter Powered	
RJ45 Green	No Data Traffic		Data Traffic on Coax
Coax Port	POE out selected	Power to transmitter only	

3) Connect up the coaxial outputs of the unit. The coaxial ports are designed for connection with 75 ohm solid copper coaxial cable, commonly RG-59 or RG-6. The coaxial port is a 100Mb network port. It is important that the coaxial connectors be in good condition. The speed of the connection and power status is indicated on the front panel of the unit. A transmitter must be connected to the other end of the coaxial cable for the connection to be indicated and for the POE to turn ON.

4) A main power outlet shall be installed near to the equipment and easily accessible. Connect main power to the ER8200 / ER16200 / ER24200C using a proper IEC power cord. A power cord is supplied in the box with your receiver unit. Disconnect main power before removing cover.

5) After completing the installation of the Head-end equipment, the transmitter units must be installed at the camera/remote end.

Transmitter-end Installation
ET1243C Units

6) At the camera location securely mount the transmitter.

7) Find the coaxial cable from the head-end and make sure it is properly terminated RG59 or RG6 (75 ohm type) solid copper cable. Connect coaxial cable to the BNC jack of the transmitter. If the camera is to be powered directly then you must move the POE Out jumper to the "OFF" position.

8) Finally, connect an Ethernet device to the transmitter "Network Port". For POE powered cameras, all connection must be completed for the camera to power up.

9) If all connections are completed and the camera is properly configured you should now be able to ping the camera and receive video.

Transmitter Hookup Diagram

IP Camera

Coax to Head-end

ET1243

Network Port
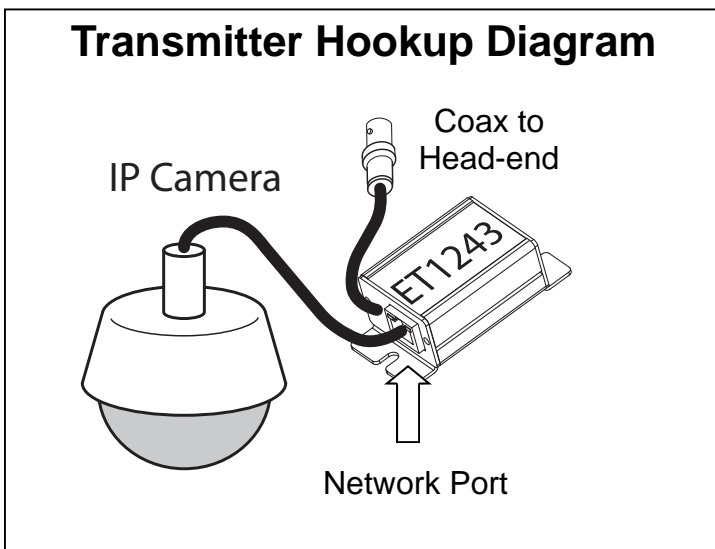
PoE Device Power RG59 Coax *	
Distance	**Power at PoE Port**
328ft/100m	25.2 watts
656ft/200m	19.0 watts
984ft/300m	15.2 watts
1312ft/350m	13.6 watts

*Results with ER16200C Receiver 52VDC PoE switch and using RG59 SBC Type Cable with 20AWG Center

ET1243C LED INDICATORS			
Connector	**LED**	**OFF**	**ON**
Network Port	Power	No power	Power Good
	Link	No Ethernet Link	Ethernet Link Good
Rear Panel	PoE Out	No PoE Power Out	PoE Power Good
	Coax Link	No Link	100Mb

Troubleshooting the System

1) Check the power LED on the receiver front panel.
2) Check that a network switch is connected to the front network port of the receiver unit and that there is a link indication on your network switch.
3) You must have the transmitter and the camera connected.
   With a POE Switch - The Orange LED on the front of the receiver should be on. If not check your connections in the system.
   Non POE Switch - The Orange LED on the front of the receiver should be on. If not check the DIP switch on the back panel of the receiver. Also remember that the Jumper on the transmitter must be moved to the PoE OFF position. The yellow LED below the rear panel BNC jack will also be "ON".
4) Check the green LED on the receiver network port. It should be "Flashing" when data is flowing over that port. This shows you have a transmitter and camera are connected and data is moving over the port.

Nitek Technical Support is (800)528-4343 or 847-259-8900. International calls 001-847-259-8900