

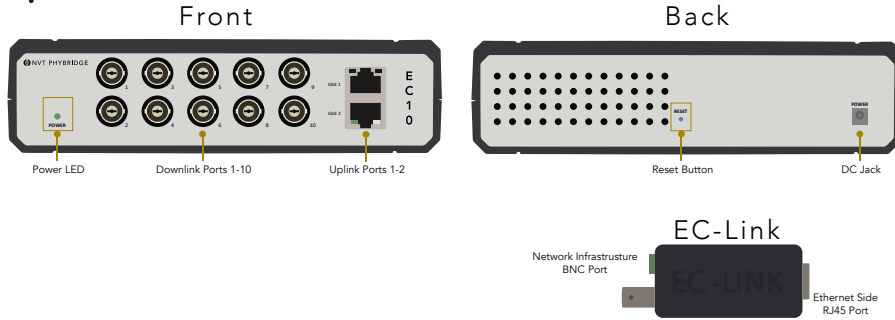
QUICK INSTALL GUIDE - EC10

The plug and play EC10 switch is a ten port unmanaged Ethernet over Coax switch. This powerful switch delivers fast ethernet and PoE+ over coax cable with 3,000 ft (915m) reach. EC10 was designed to make the migration to IP quick, easy and cost effective by leveraging an existing coax infrastructure. For complete details refer to the Hardware Installation Guide at www.nvtpybridge.com.

NOTE: Please see page 3 for important safety instructions



EC10 SWITCH



EC10 Switch Package Includes:

- 1 x EC10 Unit
- 1 x AC/DC Power Adapter
- 1 x Quick Install Guide

EC-Link Package (Sold Separately) Includes:

- 1 x EC-Link

Installation Details

Location Requirements:

- Power** – The AC/DC Power Adapter must be placed within 6 feet of an available power source.
- Ventilation** – To ensure proper ventilation of the EC10, leave at least 2 inches of unobstructed space on all sides of the unit.
- Downlink** – The EC-Link adapters should be installed a minimum of 6 feet away from the EC10 switch.

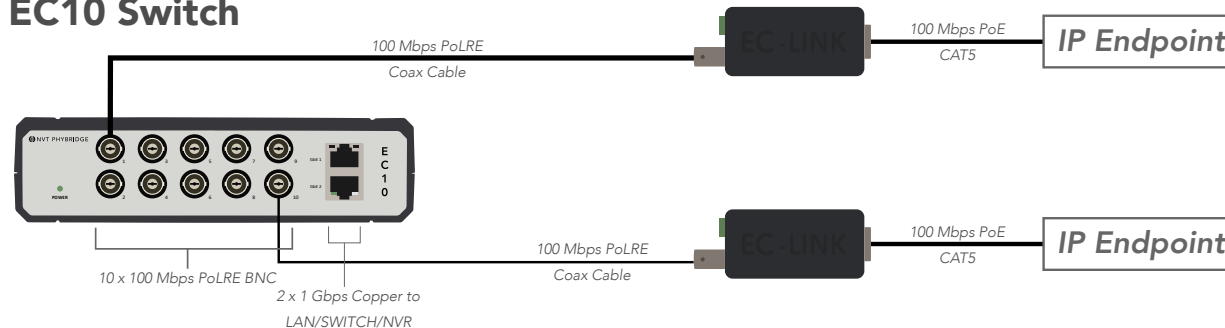
Installation procedures will be trouble-free if you ensure that the following items are available before you begin:

- The CLEER switch model EC10, and all cables and accessories you received in the EC10 package
- All EC-Link Adapters required for connecting the IP endpoint devices.
- Standard CAT5e copper LAN cables for the uplink trunks (user-supplied).
- Coax cable for the downlink ports (user-supplied).

HARDWARE TOPOLOGY AND INSTALLATION OVERVIEW

1. Remove the EC10 switch and all accompanying accessories.
2. Remove all legacy cameras from the Coax cable.
Note: It is extremely important that non-IP, non-PoE cameras are not connected when you power on the EC10.
3. Connect an EC-Link to the Network jack on the IP endpoint and connect the BNC Jack on the EC-Link to one end of the Coax cable.
4. Connect the other end of the Coax cable to BNC connectors on the EC10 switch.
5. Connect the uplink cable from a Gigabit port to the IP PBX or network switch.
6. Power up the EC10.
7. For troubleshooting, please refer to the Hardware Installation Guide located at www.nvtpybridge.com.
8. To reset the unit, press the reset button.

EC10 Switch



NOTE THE FOLLOWING:

All of the above instructions provide basic installation information necessary for the proper and safe functioning of this equipment. Persons installing or maintaining this product must read all of the safety instructions and the parts of system grounding, which are applicable to the system being maintained. Only trained, qualified service personnel shall install or maintain this product.

WARNINGS

FAILURE TO FOLLOW ALL INSTRUCTIONS MAY RESULT IN IMPROPER EQUIPMENT OPERATION AND/OR RISK OF ELECTRICAL SHOCK.

ANY CONNECTION TO AN OUTSIDE PLANT LEAD, AN OFF-PREMISE APPLICATION, OR ANY OTHER EXPOSED PLANT APPLICATION MAY RESULT IN A FIRE OR SHOCK HAZARD, AND/OR DEFECTIVE OPERATION, AND/OR EQUIPMENT DAMAGE.

Keep these instructions with the equipment.

Do not attempt to install or service this equipment unless you are skilled in the installation and maintenance of electronic telecommunications equipment and have successfully completed specific training for this equipment.

SAFETY WARNINGS AND PRECAUTIONS

- Access to the interior of this unit shall be made only by a qualified technician.
- To ensure adequate cooling of the equipment, a 2-inch unobstructed space must be provided around all sides of the unit.
- To prevent the risk of shock or fire hazard, replace fuse with same type and rating.
- Der Zugang ins Innere des Gerätes ist nur einem fachlich qualifizierten Techniker gestattet.
- Um die Kühlung des Gerätes nicht zu beeinträchtigen, ist es notwendig, an allen Seiten des Gerätes ca 5 cm Raum zu lassen.
- Zur Vermeidung der Stromschlag- und Feuergefahr beim Auswechseln Sicherungen des gleichen Typs und der gleichen Nennleistung einsetzen.
- Seul un spécialiste doit avoir accès l'appareil.
- Afin de ne pas nuire au processus de refroidissement, il est nécessaire de laisser un espace d'environ 5 cm de chaque côté de l'appareil.
- Afin d'éviter tout risque d'incendie ou d'électrocution, remplacez les fusibles par des fusibles de même type et ampérage.
- El acceso al interior de esta unidad deberá ser realizado únicamente por un técnico cualificado.
- Para asegurar un enfriamiento adecuado del equipo, se debe proporcionar un espacio sin obstrucciones de 2 pulgadas alrededor de todos los lados de la unidad.
- Para evitar el riesgo de choque o peligro de incendio, reemplace el fusible con el mismo tipo y clasificación.
- L'accesso all'interno di questa unità deve essere effettuata solo da un tecnico qualificato.
- Per garantire un adeguato raffreddamento dell'apparecchiatura, uno spazio libero da 2 pollici deve essere fornita intorno a tutti i lati dell'unità.
- Per evitare che la prevenzione del rischio di scossa o di pericolo di incendio, sostituire il fusibile con lo stesso tipo e valore.
- Достъп до вътрешността на този уред трябва да се извършва само от квалифициран техник.
- За да се осигури подходящо охлаждане на оборудването, трябва да се осигури 2-инчово свободно пространство около всички страни на устройството.
- За да предотвратите опасност от удар или пожар, сменете предпазителя със същия тип и квалификация.
- Juurdepäas interjööri selle üksuse tehakse ainult kvalifitseeritud tehnik.
- Jahutuse tagamiseks seadme, 2-tolline vaba ruum peab olema ümber kõik küljed üksus.
- Selleks, et vältida riski ning tulekahjuoht, vaheta kaitse sama tüüpi ja hinnang.
- Η πρόσβαση στο εσωτερικό της μονάδας πρέπει να γίνεται μόνο από εξειδικευμένο τεχνικό.
- Για να εξασφαλιστεί η κατάλληλη ψύξη του εξοπλισμού, πρέπει να υπάρχει ένας ελεύθερος χώρος 2 ιντσών γύρω από όλες τις πλευρές της μονάδας.
- Για να αποφύγετε τον κίνδυνο κρούσης ή πυρκαγιάς, αντικαταστήστε την ασφάλεια με τον ίδιο τύπο και την ίδια βαθμολογία.
- Pieļāve interjera šīs vienības veic tikai kvalificēts tehniķis.
- Lai nodrošinātu pietiekamu dzesēšanu iekārtu, 2 collu aizsegts telpu jānodrošina ap visām pusēm vienības.
- Lai novērstu risku, ka trieciena vai ugunsgrēka briesmas, nomainīt drošinātāju ar tāda paša veida un reitingu.
- Prieiga prie šio įrenginio viduje, turi būti atlikti tik kvalifikuotas specialistas.
- Siekiant užtikrinti tinkamą aušinimą įranga, 2 colių užgriozdinti erdvę turi būti pateikta apie visus įrenginio pusių.
- Siekiant užkirsti kelią šoko ar gaisro pavojus riziką, pakeiskite saugiklį su tos pačios rūšies ir įvertinimas.
- A készülék belsejét csak szakképzett szakember végezheti.
- A berendezés megfelelő hűtésének biztosítása érdekében egy 2 hüvelykes, akadálytalan helyet kell biztosítani a készülék minden oldalán.
- Az ütésveszély vagy a tűzveszély elkerülése érdekében cserélje ki az azonos típusú és minősített biztosítékot.
- Toegang tot het interieur van dit toestel wordt alleen door een gekwalificeerde technicus uitgevoerd.
- Om een adequate afkoeling van de apparatuur te garanderen, moet een 2-inch vrijstaande ruimte rondom alle kanten van het apparaat worden aangebracht.
- Om het risico op schokken of brandgevaar te voorkomen, vervang de zekering met hetzelfde type en de waarde.
- Tilgang til det indre av denne enheten skal kun utføres av en kvalifisert tekniker.
- For å sikre tilstrekkelig kjøling av utstyret, må det være 2 tommers uhindret plass rundt alle sider av enheten.
- For å unngå fare for støt eller brannfare, bytt sikring med samme type og karakter.

- Dostęp do wnętrza tego urządzenia wykonuje tylko wykwalifikowany technik.
- W celu zapewnienia odpowiedniego chłodzenia urządzenia, wokół wszystkich stron urządzenia musi być umieszczona 2-calowa przestrzeń bez przeszkód.
- Aby uniknąć ryzyka porażenia prądem lub pożaru, wymień bezpiecznik na ten sam typ i poziom.
- O acesso ao interior desta unidade deve ser efectuado apenas por um técnico qualificado.
- Para assegurar o resfriamento adequado do equipamento, um espaço sem obstruções de 2 polegadas deve ser fornecido em torno de todos os lados da unidade.
- Para evitar o risco de choque ou incêndio, substitua o fusível pelo mesmo tipo e classificação.
- Accesul la interiorul acestui aparat trebuie efectuat numai de către un tehnician calificat.
- Pentru a asigura o răcire adecvată a echipamentului, trebuie prevăzut un spațiu liber de 2 inci pe toate laturile unității.
- Pentru a preveni riscul de șoc sau de pericol de incendiu, înlocuiți siguranța cu același tip și clasificare.
- Dostop do notranjosti te enote se izvede le strokovnjak.
- Da bi zagotovili ustrezno hlajenje opreme, mora 2-palčni neoviran prostor, je treba zagotoviti okoli vse strani enote.
- Da bi preprečili nevarnost udara ali nevarnosti požara, zamenjajte varovalko iste vrste in jakosti.
- Prístup do interiéru tohto prístroja môže vykonať iba kvalifikovaný technik.
- Aby bolo zabezpečené dostatočné chladenie zariadenia, musí byť okolo všetkých strán jednotky k dispozícii 2-palcový neobmedzený priestor.
- Aby ste zabránili nebezpečenstvu výbuchu alebo požiaru, vymeňte poistku rovnakého typu a typu.
- Tämän laitteen sisätilojen saa suorittaa ainoastaan pätevä teknikko.
- Laitteen riittävän jäähdytyksen varmistamiseksi on järjestettävä 2 tuuman esteettömät tilat laitteen kaikkien puolien ympärille.
- Vaihda sulake saman tyyppisellä ja luokalla, jotta iskun tai tulipalon vaara ei onnistu.
- Tillgång till det inre av denna enhet ska endast utföras av en kvalificerad tekniker.
- För att säkerställa tillräcklig kylning av utrustningen måste ett 2-tums fritt utrymme tillhandahållas runt alla sidor av enheten.
- För att undvika risk för chock eller brandfara, byt ut säkring med samma typ och betyg.
- Prístup do interiéru tohoto prístroje může provádět pouze kvalifikovaný technik.
- Aby bylo zajištěno dostatečné chlazení zařízení, musí být kolem všech stran jednotky k dispozici 2-palcový neomezený prostor.
- Abyste zabránili nebezpečí výbuchu nebo požáru, vyměňte pojistku stejného typu a typu.
- Aðgangur að innanverðu þessa eininga skal aðeins gerð af viðurkenndum tæknimanni.
- Til að tryggja fullnægjandi kælingu búnaðarins verður að vera með 2 tommu óhindrað pláss fyrir alla hliðum tækisins.
- Til að koma í veg fyrir hættu á losti eða eldhættu skal skipta um öryggi með sömu tegund og einkunn.
- Access għall-intern ta 'din l-unità għandha ssir biss minn tekniku kkwalfikat.
- Biex jiġi żgurat tkessiġ adegwat tat-tagħmir, 2-pulzier spazju mhux mfixkel għandhom ikunu provduti madwar naħat kollha tal-unità.
- Biex ikun evitat ir-riskju ta 'xokk jew perikolu ta' nar, jissostitwixxu fjus bil istess tip u ratifika.
- Adgang til det indre af denne enhed skal kun foretages af en kvalificeret tekniker.
- For at sikre tilstrækkelig afkøling af udstyret skal der være en 2-tommers uhindret plads på alle sider af enheden.
- For at undgå risiko for stød eller brandfare udskiftes sikringen med samme type og rating.

COMPLIANCE AND ENVIRONMENTAL INFORMATION

All the compliance and environmental information is available on our website www.nvtphybridge.com.

TECHNICAL SUPPORT

The **NVT Phybridge Technical Support Group** is available to assist you with product installation, configuration, monitoring and troubleshooting procedures. Should you experience trouble with this equipment or for repair or warranty information, please contact NVT Phybridge Inc. at **+1 905.901.3633** or support@nvtphybridge.com.

TECHNICAL SPECIFICATIONS

Model	EC10
Part Number	NV-EC-10
Dimensions	(HxWxD) 1.77" x 7.01" x 4.72" (4.5cm x 17.8cm x 12cm)
Weight	0.763lb (0.346kg)
Interface: Ethernet Uplink (Trunk IP)	2 RJ45 ports: 10/100/1000 Base-T autosensing independent speed selection, Ethernet IEEE 802.3, CATe/6 copper cable
Interface: Downlink (PoE and IP to adapter)	10 x BNC Jacks Speed: 100Mb/s (full duplex) PoE Power: 25 Watts Maximum Maximum Distance: <ul style="list-style-type: none"> • 1,500ft (457m) over RG59 Coax Cable • 2,000ft (610m) over RG6 Coax Cable • 3,000ft (915m) over RG11 Coaxial Cable
Power Supply	48 – 56 VDC (55 VDC, 165W power supply included)
Power Consumption	3.8W
Power Injection (PoE)	48 – 56 VDC Endpoint devices must be compliant with IEEE 802.3af / 802.3at
Operating Temperature	14°F to 122°F (-10°C to +50°C)
Humidity	10% to 95% (non-condensing) at 35° C

Model	EC-Link
Part Number	NV-ECLK
Dimensions	(HxWxD) 0.83" x 1.23" x 3.46" (2.1cm x 3.2cm x 8.8cm)
Weight	1.26oz (36g)
Mounting	Inline between the CAT5 cable (to IP endpoint) and the COAX cable (to CLEER/EC Switch)
Interface Switch Side	1 BNC port: COAX cable – RG59, RG11, RG6
Interface Ethernet Side: For IP Endpoint Device	1 RJ45 port: 10/100 Base-T, IEEE 802.3af/at
Power Injection (PoE)	DC voltage on RJ45 port: 37V – 56V Endpoint devices must be compliant with IEEE 802.3af/at
DC IN (Screw Terminal)	Optional 48 – 56VDC via an external AC/DC Power Adapter (IEC Class II isolated only)
Power Consumption	0.9W
Operating Temperature	-58°F to +158°F (-50°C to +70°C) <i>Tests conducted against international safety standard at maximum ambient 50°C</i>
Humidity	10% to 95% (non-condensing) at 35° C

Specifications subject to change without notice.