

DITEK Corporation ONE DITEK CENTER 1720 Starkey Road Largo, FL 33771

## **INSTALL INSTRUCTIONS**

### **DTK-iBNCHD**

This Surge Protective Device (SPD) is a high performance solution, designed to provide protection for HD-SDI coaxial runs. Maximum protection will only be achieved if the SPD is properly installed. Please read and follow the installation instructions carefully.

**NOTICE:** This SPD should be installed and grounded, by a licensed contractor, per the applicable requirements of the NEC. These devices are only to be employed on the communication loop circuits which have been isolated from the Public Switched Telephone Network.

#### **APPLICATION**

Surge suppression for HDCCTV applications using BNC connections.

This device is intended for indoor use or intended for outdoor use within an enclosure which has been evaluated for the application.

#### **INSTRUCTIONS:**

#### Cautions:

Measure all voltages to insure applied voltage does not exceed the voltage rating of the unit. Improper installation voids the warranty.

Connect your HDCCTV camera and DVR system up prior to installing this surge protective device to establish a functional performance baseline.

This unit is polarity sensitive and must be connected in series with the equipment to be protected.

#### For Camera Side Protection:

- 1. Connect the BNC camera connection to the DTK-iBNCHD's "INPUT/CAMERA" side. This is also referred to as the "Unprotected Cable" side.
- 2. Connect a minimum 3' factory terminated BNC to BNC patch cord from the DTK-iBNCHD's OUTPUT/EQUIPMENT side to the camera.

This is also referred to as the "Protected Equipment" side.

#### For Head End Protection:

- 1. Connect the incoming BNC video input DVR connection to the DTK-iBNCHD's INPUT/CAMERA side. This is also referred to as the "Unprotected Cable" side
- 2. Connect a 3' factory terminated BNC to BNC patch cord from the DTK-iBNCHD's OUTPUT/EQUIPMENT side to the DVR's video input.

This is also referred to as the "Protected Equipment" side.

Note: The coaxial cable's shield must be grounded for the iBNC to perform as designed. Either at the camera/pole or the head end equipment/DVR chassis.

This device requires no external ground to function, it relies upon the coaxial cable shielding to dissipate overvoltage energy to.

Max ground resistance is 25 Ohms, 5 Ohms or less is optimum.

This cannot be an assumed value and must be measured to assure proper grounding.

## **Transmission Distance Expectations**

When using RG59 coax cable with a center conductor size of 20AWG or larger (ex. 20AWG, 18AWG), allow for a maximum transmission distance between camera and head end of 140 meters, this includes patch cords.

When using RG59 coax cable where the center conductor size is smaller than 20AWG

(ex. 22AWG, 24AWG, 26AWG), allow for a maximum transmission distance between camera and head end of 85 meters, this includes patch cords.

We recommend for best protection of both the camera and head end equipment, install a DTK-iBNCHD unit at both ends.

Use 3' BNC to BNC factory terminated patch cords for all connections between the DTK-iBNCHD and the protected equipment.

**Note:** If after install there is a loss of signal, you can use a "repeater" to extend a camera's HD-SDI output signal. Install this device between the DTK-iBNCHD and the DVR at the head end.

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Drawn By: R. Mitchell 10-6-14 Approved By: H.TU 10-6-14 Doc # INT-100153.001 Part No. 191577 Rev. 2





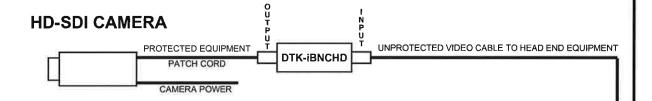
# **INSTALL INSTRUCTIONS DTK-iBNCHD**

# **Illustrations Page**

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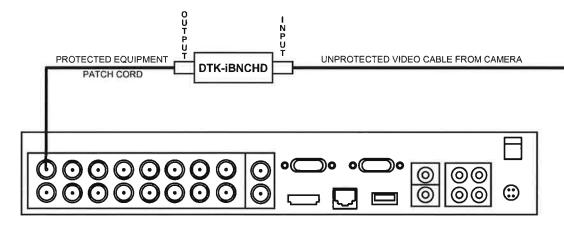
This is also referred to as the "Protected Equipment" side.



#### For Head End Protection:

- 1. Connect the incoming BNC video input DVR connection to the DTK-iBNCHD's INPUT/CAMERA side. This is also referred to as the "Unprotected Cable" side
- 2. Connect a 3' factory terminated BNC to BNC patch cord from the DTK-iBNCHD's OUTPUT/EQUIPMENT side to the DVR's video input.

This is also referred to as the "Protected Equipment" side.



**HD-SDI DVR** 

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