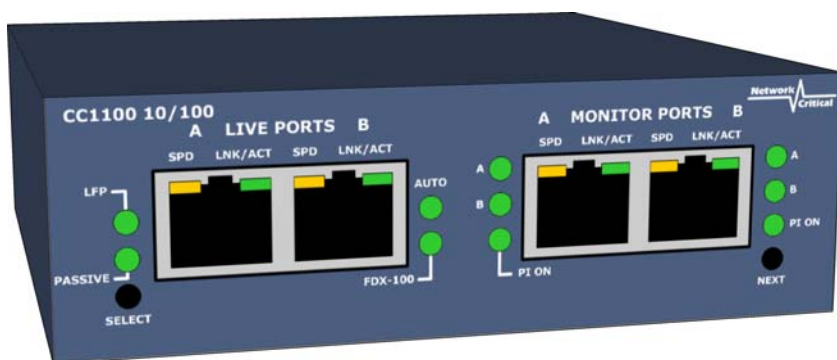# *CriticalConneX*™

10/100 CriticalTAP™ *User Guide*

CC1100: CriticalConneX™ *TAP Module*
CC1100-P: CriticalConneX™ *Portable TAP*

Models with Packet Injection permanently disabled:
CC1100-S: CriticalConneX™ *TAP Module*
CC1100-SP: CriticalConneX™ *Portable TAP*

User Guide

This user guide shows you how to install the CC1100, CC1100-P, CC1100-S or CC1100-SP into your Ethernet network.

What's in the box

Please check the box to make sure all parts are included:
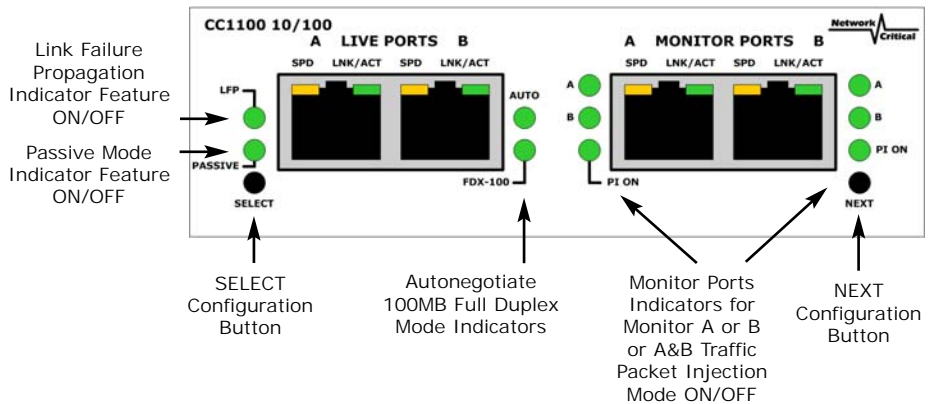
CC1100 (or CC1100-S):
    1 x CC1100: 10/100 Copper TAP Module with 2 Configurable Monitoring Ports
       - A CriticalConneX™ 1U Modular Chassis is required. Part Number CC1000 or CC1010
    1 x User Guide
    1 x Warranty Card

CC1100-P (or CC1100-SP):
    1 x CC1100-P: 10/100 Copper Portable TAP with 2 Configurable Monitoring Ports
    1 x Power Supply
    1 x User Guide
    1 x Warranty Card

Note: *If any items are missing or damaged in shipping please inform Network Critical or your local reseller immediately.*

Front Panel

Link Failure Propagation Indicator Feature ON/OFF

Passive Mode Indicator Feature ON/OFF

SELECT Configuration Button

Autonegotiate 100MB Full Duplex Mode Indicators

Monitor Ports Indicators for Monitor A or B or A&B Traffic Packet Injection Mode ON/OFF

NEXT Configuration Button

Port Status Indicators

Port Speed
ON=100MB
OFF=10MB

Link/Activity
ON=Link Up
BLINK=Activity
OFF=Link Down

Getting Started:

Configuring the TAP

1. Plug the power cord into the power supply and into the power inlet on the rear of the TAP. The CriticalConneX™ Modular Chassis comes with two (2) power cords. Only one power supply is required to support the unit.

2. Enter Configuration Mode by pressing SELECT and NEXT simultaneously.

Press both buttons at the same time
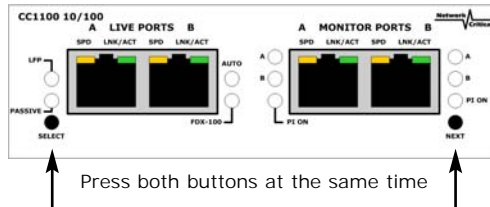
3. The NEXT button toggles you to each feature setting displayed on the faceplate and the SELECT button allows you to select the features ON or OFF.
FAST BLINKING is ON, SLOW BLINKING is OFF.

4. Once completed with the installation all the lights will blink several times.

5. If the light is GREEN, then the feature is selected.

6. If the light is OFF, then the feature is not selected.

7. The Default Configuration is below unless otherwise agreed upon at the time of order.
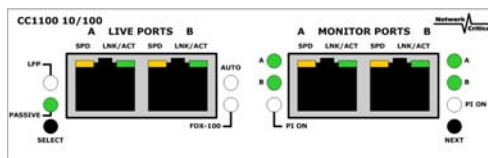
Factory Default Configuration

There are 8 Items to set-up:

1. **Passive Mode**

When selected the TAP will not support Packet Injection. This feature enables Zero Packet Loss on the LIVE PORTS during power ON and Power OFF; this means that in the event of a power loss the LIVE NETWORK TRAFFIC remains completely uninterrupted. When Passive Mode is NOT selected our Fail-Safe Technology is enabled. In the event of a power loss, the Network Link will be dropped as the fail-safe circuit closes, then the end points will re-link. Please note that this only occurs

on power loss. While power is ON or OFF there is ZERO PACKET LOSS on the LIVE NETWORK.

2. **Link Failure Propagation (LFP) Mode**

When selected the TAP will monitor each LIVE PORT link. If one of the devices connected to the LIVE PORT fails, then the other LIVE PORT will immediately drop. Once the failed connect ed device is back on-line, then the other LIVE PORT will immediately come back on-line. This feature is generally used in Redundant Configured Networks. (HSRP - Hot Standby Routing Protocol, OSFP - Open Shortest Path First protocol, etc.)

3. **AUTO Mode**

When selected the TAP will be in 10/100MB Auto-negotiate Mode.

Note: *In PASSIVE MODE this setting is not available. In PASSIVE MODE there is a PERMANENT LINK connection between the two (2) devices*

4. **FXD-100 Mode**

When selected the TAP will be in 100MB Full Duplex Mode

Note: *In PASSIVE MODE this setting is not available. In PASSIVE MODE there is a PERMANENT LINK connection between the two (2) devices*

5. **Monitor Port A Traffic Mode**

Configure to Monitor Directional Traffic from LIVE PORT A or LIVE PORT B or Monitoring Combi Traffic (combines LIVE PORT A & B TRAFFIC into a single Monitoring Port)

6. **Monitor Port A Packet Injection Mode**

When selected the sensor connected to MONITOR PORT A will have Packet Injection Mode enabled. The monitor port in Packet Injection Mode is bi-directional, thereby allowing the attached sensor to transparently inject packets back onto the network. The received packets are assigned high priority and are seemless switched into the live network traffic. Under full utilization instances, network traffic is buffered ensuring the injection of the packets and no network packet loss.

> **Note:** *If Passive Mode is selected, then Packet Injection cannot be turned on. In the CC1100-S and CC1100-SP Packet Injection is disabled*

7. **Monitor Port B Traffic Mode**

Configure to Monitor Directional Traffic from LIVE PORT A or LIVE PORT B or Monitoring Combi Traffic (combines LIVE PORT A & B TRAFFIC into a single Monitoring Port)

8. **Monitor Port B Packet Injection Mode**

When selected the sensor connected to MONITOR PORT B will have Packet Injection Mode enabled. The monitor port in Packet Injection Mode is bi-directional, thereby allowing the attached sensor to transparently inject packets back onto the network. The received packets are assigned high priority and are seemless switched into the live network traffic. Under full

utilization instances, network traffic is buffered ensuring the injection of the packets and no network packet loss.

> **Note:** *If Passive Mode is selected, then Packet Injection cannot be turned on. In the CC1100-S and CC1100-SP Packet Injection is disabled*

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Configuration Complete!
POWER OFF THE UNIT FOR INSTALLATION
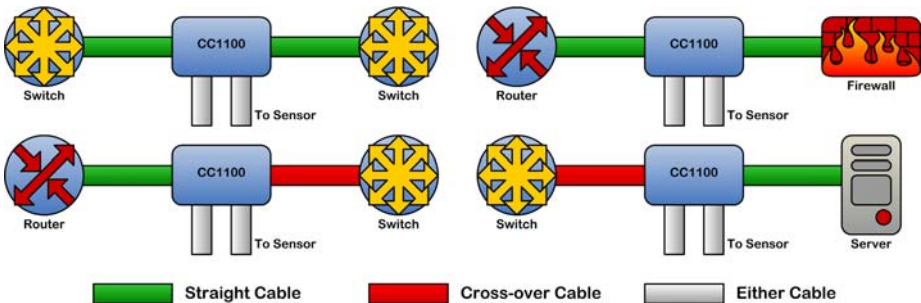
</div>

Installing the TAP

1. Configure the TAP (see above)

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Important! *Do not power up the TAP now.*

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2. Connect the proper cables for your configuration to the Live Ports A & B.

3. Check the Link/Activity indicators on your network device ports to verify whether data is flowing through the LIVE PORTS on the TAP WITH THE POWER OFF.

Note: *Most equipment vendors follow the above standard MDI or MDIX configurations; however, some vendors may not. To ensure proper connectivity, always verify link at the NETWORK DEVICES with the power OFF. If there is no link try changing one of the cables from Straight-thru to Cross-over.*

4. Reconnect the Power Connection.

5. The TAP will power up. The TAP speed indicator on the front of the unit will light, Link/Activity Indicators on the LIVE PORTS show activity, and the Monitor Port Lights will show selected configuration.

6. Set-up sensor(s) and connect Ethernet cables from your sensor's monitoring port(s) to MONITOR PORT A and/or B

7. Check the Link/Activity indicators on your sensors' network ports to see whether data is flowing from the TAP to the sensor ports.

Note: *If the TAP fails to power up or fails to show link/activity on all connected ports make sure that the power source is turned on. Check all connections and verify that all cables used in working condition.*

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Installation Complete!

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Further Information & Support

For more information and technical support on this product please contact us at the following locations:

Web	http://www.criticaltap.com/
UK Phone	+44 (0) 1189 543210
USA Phone	+1 716-833-2422
Email	support@networkcritical.com