

# GIGAMEDIA

## Quick Installation Guide GGM 741

### 1. Overview

The GGM 741 Converter is used to connect devices with 10/100/1000Base-T cable to fiber-based Ethernet. The GGM 741 is enhanced with Link Fault Signaling, Loop-back Testing and SFP dual speed setting.

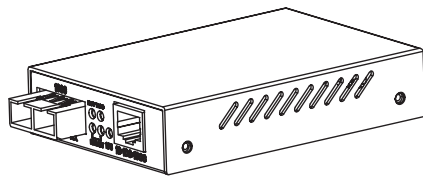
### 2. Package Checklist

Before installing the GGM 741, verify that the package contains the following items:

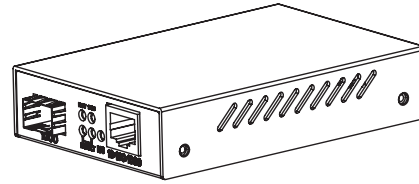
- 1 x GGM 741 Converter
- Power adapter (Check for area type)
- Quick Installation Guide

### 3. Hardware Installation Procedure

- STEP 1: Remove from packaging and connect the 12V DC adapter to the power input on rear panel.
- STEP 2: Connect the Ethernet (RJ-45) port to the networking device. See the LNK/ACT LED to confirm if the connection is established.
- STEP 3: Connect the fiber cable to the fiber port.
- STEP 4: See DIP switches on rear panel to enable/disable the required features per application

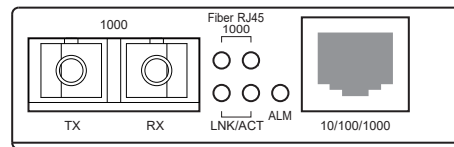


Converter with 1x9 SC and RJ45 connectors

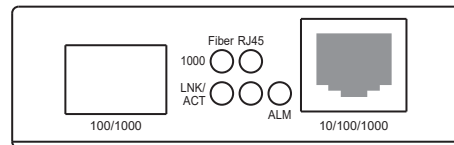


Converter with SFP and RJ45 connectors

#### Front Panel View

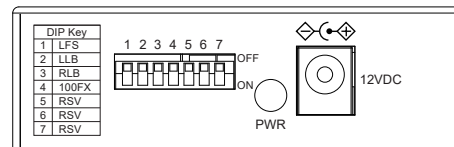


Fiber Port LED Indicators Copper Port

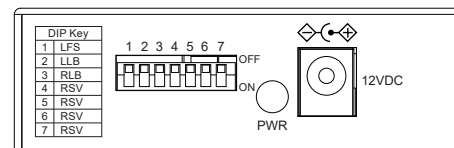


Fiber Port LED Indicators Copper Port

#### Rear Panel View with DIP Switches



SFP Type Media Converter



1x9 Type Media Converter

### 4. DIP Switches

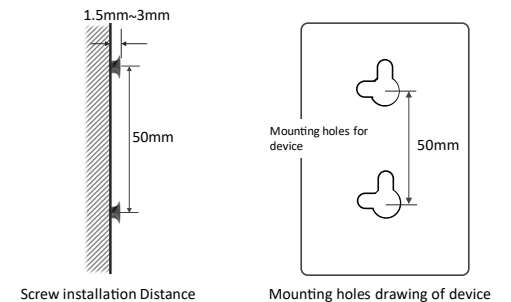
1. LFS	ON : Link fault signal function is enabled OFF: Link fault signal function is disabled. (Default)
2. LLB	ON : Local loopback function is enabled OFF: Local loopback function is disabled. (Default)
3. RLB	ON : Remote loopback function is enabled OFF: Remote loopback function is disabled. (Default)
4. 100FX	This function is only for SFP type media converter ON : When install the 100FX SFP transceiver, please set this DIP to ON. OFF: When install the 1000Base-X SFP transceiver, please set this DIP to OFF. (Default)
5~7 RSV	The DIP means Reserve. The default is in OFF position.

### 5. Location

The GGM 741 can be placed on a desktop or horizontal surface, it can be wall-mounted.

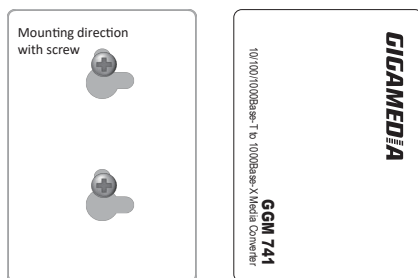
Step1: The wall-mount direction can be straight or horizontal.

Step2: Please this device by using mounting holes on the wall at the appropriate place.

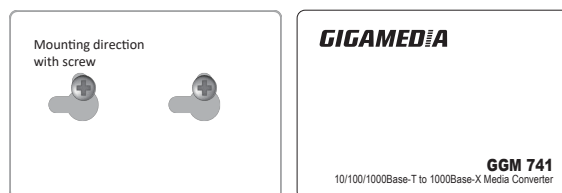


Screw installation Distance

Mounting holes drawing of device



Straight direction installation



Horizontal direction installation

## 6. Cabling RJ45

Connect Ethernet/RJ45 cable into Ethernet port of media converter and other end to attached networking device.

- Copper of the media converter supports Fast Ethernet as well as Gigabit Ethernet (10/100/1000Base-T RJ45 Port)
- The RJ45 port on the media converter supports auto negotiation and auto MDI/MDI-X to eliminate the need for crossover cabling.

Note: Category 5e cable or above should be used.

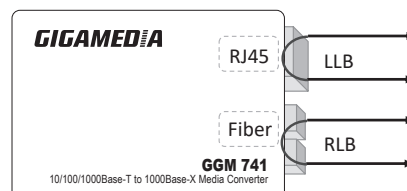
## 7. Link Fault Signaling (LFS)

The LFS LED will immediately light to indicate when a cable has been severed or when some other cause of disruption in service has occurred. The LFS function monitors both copper and fiber segment giving a total connection status report.

DIP Switch 1: Set LFS to ON for normal operational use; OFF when installing cables or when testing the network connection.

## 7. Loop back Test

This Converter features DIP switches to activate both local and remote loopback diagnostic test functions. Use local loop back (LLB) to check if the copper segment is connected properly, and use remote loop back (RLB) to check if the fiber segment is connected properly.



Note: When enabling loopback testing in one side, another's traffic will be blocked until the loopback is disabled.

## 8. LED Indicators

PWR (Green)	<div> <div>illuminated</div> <div>Off</div> </div>	<div>Power On by 12VDC power input</div> <div>Power fails or is not available</div>
ALM (Red)	<div> <div>illuminated</div> <div>Off</div> </div>	<div>LFS enabled and link fault happened</div> <div>LFS disable or no link fault happened</div>
RJ45		
1000	<div> <div>illuminated</div> <div>Off</div> </div>	<div>links speed at 1000Mbps</div> <div>Link speed at 10/100Mbps or link failed</div>
LNK/ACT	<div> <div>illuminated</div> </div>	Copper port link-up
	<div> <div>Blinking</div> <div>Off</div> </div>	<div>Data is transmitting / receiving</div> <div>Link failed</div>
Fiber		
1000	<div> <div>illuminated</div> <div>Off</div> </div>	<div>links speed at 1000Mbps</div> <div>Link speed at 100Mbps or link failed</div>
LNK/ACT	<div> <div>illuminated</div> </div>	Fiber port link-up
	<div> <div>Blinking</div> <div>Off</div> </div>	<div>Data is transmitting / receiving</div> <div>Link failed</div>

## 9. Environmental limits

Operating Temperature	0°C~50°C
Storage Temperature	-20°C~70°C
Altitude	Up to 2000m
Ambient relative humidity	10 to 95% (non-condensing)



### ATTENTION:

This device complies with Part 15 of the FCC rules. Operation is subject to the following conditions:

1. This device may not cause harmful interference.
2. This device must accept any interference received including interference that may cause undesired operation.



### ATTENTION:

If the equipment is used in a manner not specified by the VOLKTEK, the protection provided by the equipment may be impaired.