BEFORE INSTALLATION

**CAUTION**

Erratic System Operation Hazard. Failure to follow proper wiring practices can introduce disruptive electrical interference (noise). Keep wiring at least one foot away from large inductive loads such as motors line starters, lighting ballasts, and large power distribution panels. Shielded cable is required in installations where these guidelines cannot be met. Ground the shield only to the grounded controller case.

**IMPORTANT**

All wiring must comply with local electrical codes and ordinances or as specified on installation wiring diagrams.

- For recommended maximum distances (in dependence upon the number and type of Syik devices) between the controller and Syik devices, see Table 1 on pg. 3.
- All wiring is polarity-insensitive.
- Compatible with controllers with Syik communication and firmware able to support CLCMTR71s with full functionality.

**INSTALLATION**

Mount the wall module on an inside wall approximately 1.4 m (4-½ ft) from the floor (or in the specified location), to allow exposure to the average zone temperature. Do not mount the wall module on an outside wall, on a wall containing water pipes, or near air ducts. Avoid locations that are exposed to discharge air from registers or radiation from appliances, lights, or the sun.

The wall module can be mounted on a wall, on a standard utility conduit box using No. 6 (3.5 mm) screws or on a 60 mm (2-3/8") wall outlet box (see Fig. 3). When mounting directly on a wall, use the type of screws appropriate for the wall material.
Wiring

All terminal connections can be made to the backside of the module. There are no field adjustable/replaceable components inside the module.

Power: 18 Vdc power is supplied to the wall module from the 2-wire Syilk connection to the LYNX controller.

Attach the two wires from the "s-bus" terminal on the LYNX controller to terminals 1 and 2 of the wall module (see Fig. 5 on pg. 3). See Table 1 on pg. 3 for recommended wire type and distance.

Wiring is polarity-insensitive and free topology (star, daisy-chain, or single point-to-point).

CAUTION

Improper Electrical Contact Hazard. Screw-type terminal blocks are designed to accept no more than one 2.5 mm² (AWG 14) conductor. Connect multiple wires that are 2.5 mm² (AWG 14) with a wire nut. Include a pigtail with this wire group and attach the pigtail to the individual terminal block.

Wiring Wall Modules

Wire the terminal block shown in Fig. 5 as follows:

1. For single wires, strip 5 mm (3/16”); for multiple wires going into one terminal, strip 13 mm (½”) insulation from the conductor. See Fig. 4 for wiring multiple CLCMTR40/42s.

2. Insert the wire in the required terminal location and tighten the screw to complete the termination. 3. Review and verify the terminal connection wiring shown in Fig. 5.
### Table 1. Recommended max. distances from controller to Sylk device

<table>
<thead>
<tr>
<th>No. / type</th>
<th>Single twisted pair, non-shielded, stranded or solid</th>
<th>Standard non-twisted thermostat wire, shielded or non-shielded, stranded or solid</th>
</tr>
</thead>
<tbody>
<tr>
<td>A)</td>
<td>0.33…0.82 mm² (18…22 AWG) 0.20 mm² (24 AWG)</td>
<td>0.20…0.82 mm² (18…24 AWG)</td>
</tr>
<tr>
<td>10 wall modules, any type</td>
<td>150 m (500 ft) 120 m (400 ft) 30 m (100 ft)</td>
<td></td>
</tr>
<tr>
<td>4 Sylk devices, any type (incl. Zeix)</td>
<td>120 m (400 ft) 100 m (300 ft) 30 m (100 ft)</td>
<td></td>
</tr>
<tr>
<td>10 Sylk field devices, any type (excl. Zeix)</td>
<td>120 m (400 ft) 100 m (300 ft) 30 m (100 ft)</td>
<td></td>
</tr>
</tbody>
</table>

A) In the case of LYNX controllers, use the Resource Usage View in the LYNX Tool to determine the max. no. of devices.  
B) As a rule of thumb, single twisted pair (two wires per cable, only), thicker gauge non-shielded cable yields the best results for longer runs.  
C) The 30 m (100 ft) distance for standard thermostat wire is conservative, but meant to reduce the impact of any sources of electrical noise (incl. but not limited to VFDs, electronic ballasts, etc.). Shielded cable recommended only if there is a need to reduce the effect of electrical noise.  
D) These distances apply also for shielded twisted pair.

#### Wiring

Each wall module on a Sylk bus must use a different bus address. To change the bus address of a wall module, adjust the address dipswitches to match that of the desired bus address (1-15). Use the bus address label, shown in Fig. 6, as a reference. The default address for both the CLCMTR40 and the CLCMTR42 is 1. The address on the wall module must match the address in the LYNX configuration tool.

#### Attaching the Wall Module to the Sub-Base

When all wiring is complete, hook the top side, and then snap down like on a hinge (see Fig. 7).

#### Removing the Wall Module from the Sub-Base

To remove the wall module from its sub-base:  
1. Locate the two snaps on the bottom of the IFC.  
2. Push a screwdriver into each snap to release the IFC from the sub-base.  
3. Pull the wall module up and away from the sub-base. See Fig. 7.

**Fig. 5. Terminal connections**

**Fig. 6. Bus address settings label**

**Fig. 7. Removing the wall module from the sub-base**
POWER UP

After the wall module is properly wired to the controller, it will power up. Upon initial power up, the wall module’s LCD panel displays three screens for two seconds each, shown in Fig. 8 through Fig. 10, while the configuration file is being loaded. Once the configuration file has been loaded and the start-up screens have cycled through, the LCD panel will then display the home screen. If these screens continuously cycle, this indicates there is no program downloaded to the controller, that or the bus addresses don’t match between the wall module and the workbench config tool.

Fig. 8. CLCMTR42 Wall Module LCD display start-up screen 1

Fig. 9. CLCMTR42 Wall Module LCD display start-up screen 2

Fig. 10. CLCMTR42 Wall Module LCD display start-up screen 3