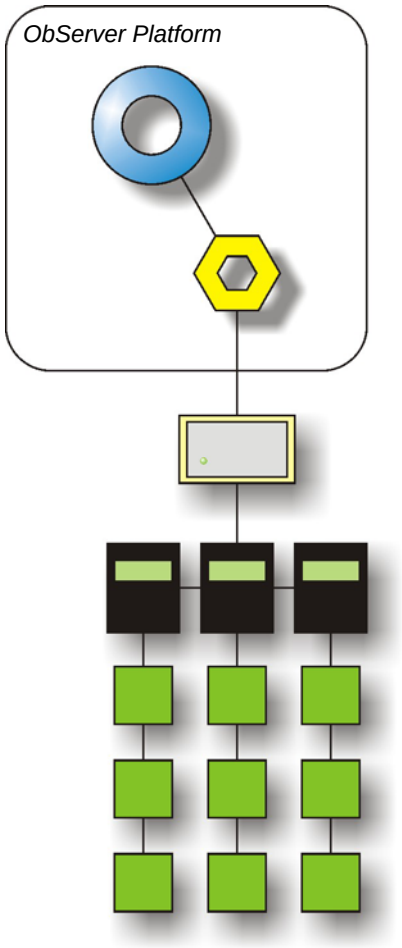
Product Engineering Guide

OSM v20 Hiross v10

Introduction

The Hiross OSM links a Hiross air-conditioning system, via a Hirolink, to the ObServer. The Hirolink provides a gateway on to a network of Hiromatics, each with their own sub-network of controllers. Each Hiromatic and controller is able to generate 'events' which are stored in the Hiromatic's Status Report. The Hiross OSM polls the Hiromatics' Status Reports for any events that have occurred. The Hiross OSM is capable of storing the states of 102 events on up to 6 Hiromatics, each with up to 16 controllers. An event number can relate to various occurrences, depending on the type of Hiromatic used. To determine the meaning of each event, refer to the relevant Item List within the Hirolink for Modbus family of documents, available from Hiross.



Engineering

Step 1 – Install OSM

The Hiross OSM is installed automatically with all ObSys editions. Refer to the 'ObSys CD sleeve' for details on how to install ObSys.

Step 2 – Configure Hirolink

The Hirolink needs configuring before the Hiross OSM can communicate with it. Within the unit are two blocks of jumpers. The 5 jumpers located in the first block are used as follows:

Jumper	***Setting***
1: Communications Mode	Always UNSET
2: Parity	UNSET=Even, SET=Odd
3: Stop Bits	UNSET=2, SET=1
4: Parity Enable	UNSET=Enabled, SET=Disabled
5: Status Report Acknowledge	Always UNSET

The 5 jumpers located in the second block are used as follows:

Jumper	***Setting***
1: Interface Type	UNSET=RS232, SET=RS485
2-5: Baud Rate	*See below*

	Jumper			
Baud Rate	***2***	***3***	***4***	***5***
1200	SET	UNSET	SET	SET
2400	SET	UNSET	SET	UNSET
4800	SET	UNSET	UNSET	SET
9600	SET	UNSET	UNSET	UNSET
19200	UNSET	SET	SET	SET

Certain Hirolinks require even parity, 1 stop bit, 9600 baud.

Step 3 – Connect COM Port to Hirolink

Using cable, connect the Hirolink to a COM port of the PC. Refer to the section 'Cable' below for details of the cable.

Step 4 – Plug in Hiross OSM to ObServer

Use object engineering software to locate the ObServer Setup object. Assign the Hiross OSM to an available channel. Refer to *'ObServer v20 Application Engineering Guide'.*

Note: After inserting the OSM, your engineering software may need to re-scan the ObServer object in order to view the OSM.

Step 5 – Configure Hiross OSM

The COM port, baud rate, byte format, device number, address information, alarm polling facilities, and alarm destination are configured using objects. Use object engineering software to view and modify the module objects within the OSM.

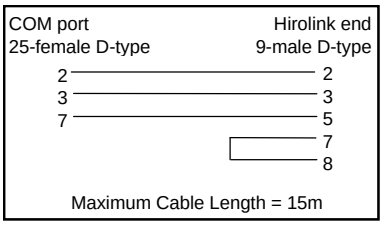
Step 6 – Access Objects within the Hiross System

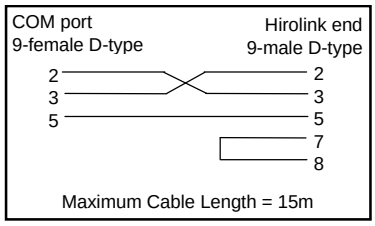
Values from the Hiross system are made available as objects from ObServer. Any object software that is connected to the ObServer can access these objects.

Engineering Reference

Cable Specification

The cable between COM port and the Hirolink is as follows:





Objects

When the OSM is loaded the following objects are created within ObServer, use object software to access these objects.

Object [1]	***Label***	***R/W***	***Type***
S*c*	Hiross System connected to channel *c*	-	*[Hiross]* [2]
M*c*	Hiross Module connected to channel *c*	-	*[OSM v20\Hiross v10]*

Notes

[1] The ObServer channel number, *c*, is a number in the range 1…40.

[2] This object has a variable content and as such requires scanning.