Beijer ELECTRONICS

HMI I/O Controller

Installation Manual

English

MAEN987, 2009-06

HMI I/O Controller Installation Manual

Foreword

The H-T40m-P operator panel can be equipped with the HMI I/O Controller, an expansion I/O module aimed at providing smaller system applications with simple I/O control interface without the need for a PLC. The compact expansion module is easy to install and fits seamlessly on the back of the operator panel.

This manual describes the installation and operation of the HMI I/O Controller.

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Please read the entire installation manual prior to installing and using this equipment.
Only qualified personnel may install, operate or repair this equipment. Beijer Electronics AB is not responsible for modified, altered or renovated equipment.
Because the equipment has a wide range of applications, users must acquire the appropriate knowledge to use the equipment properly in their specific applications.
Only parts and accessories manufactured according to specifications set by Beijer Electronics AB may be used.
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1 Introduction

The HMI I/O Controller is used to add inputs and outputs to the H-T40m-P operator panel.

The HMI I/O Controller has a built-in processor and does not affect the performance of the operator panel.

The HMI I/O Controller is available in different configurations:

Module	Specification of inputs	Specification of outputs	Grounding
EM-IOB-88-00-RC	8 digital inputs	8 digital relay outputs	Common grounding
EM-IOB-C4-00-RC	12 digital inputs	4 digital relay outputs	Common grounding
EM-IOB-84-00-RS	8 digital inputs	4 digital relay outputs	Separate grounding

2 Package Contents

Unpack and check the delivery. If damage is found, notify the supplier.

The package includes:

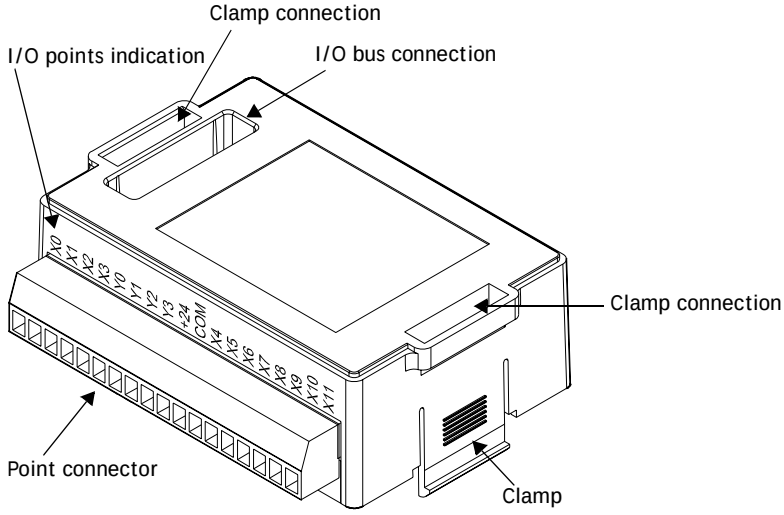
– HMI I/O Controller

– Point connector, attached to HMI I/O Controller

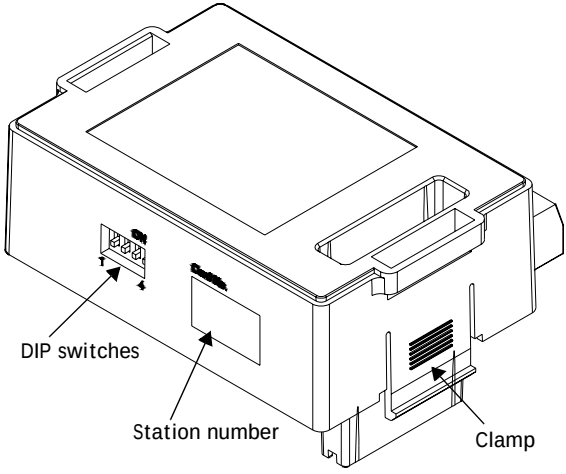
– This installation manual (MAEN987)

3 Product Description

Front View



Back View



4 Installation

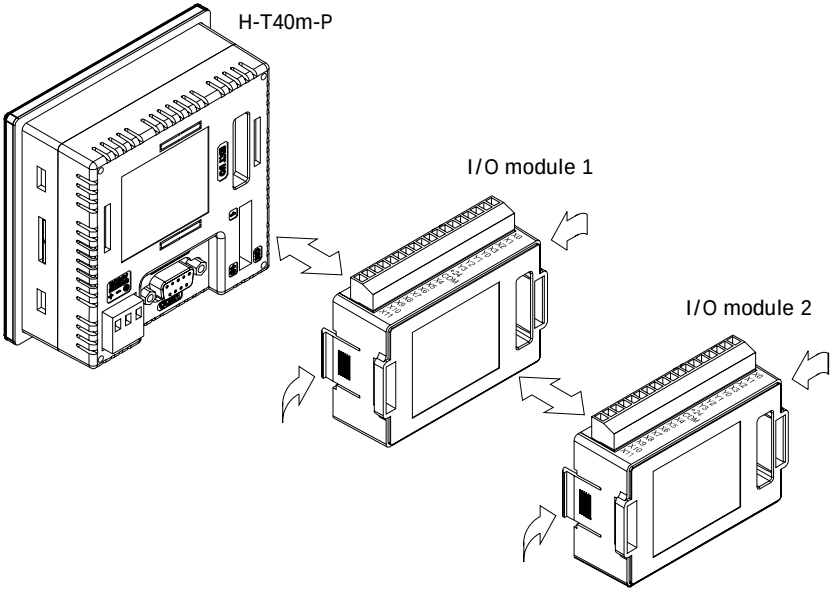
Note:
Place the panel on an stable surface during installation. Dropping it or letting it fall may cause damage.

1. Disconnect the operator panel from the power supply.
2. Secure the HMI I/O Controller in position, using the clamps.
3. Connect the operator panel to the power supply.

4.1 Connection

A maximum of 16 HMI I/O Controllers can be used in an application.

Each HMI I/O Controller can be set as an individual station.



Note:
The HMI I/O Controller is only supported for the H-T40m-P operator panel model.

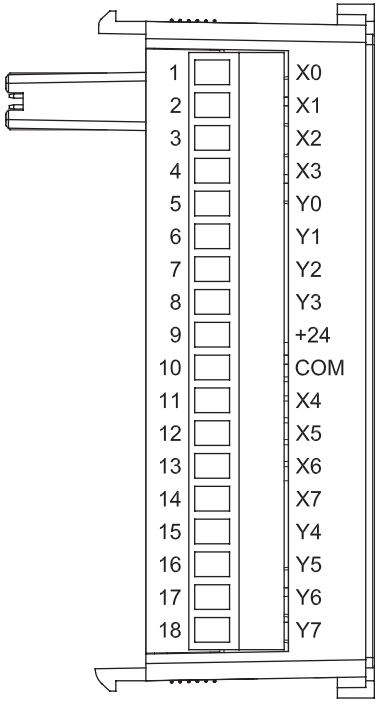
5 Technical Data

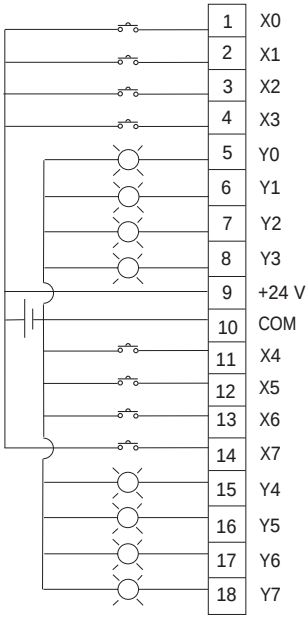
Parameter	EM-IOB-88-00-RC	EM-IOB-C4-00-RC	EM-IOB-84-00-RS
Size, W x H x D	80.6 x 52.5 x 42.9 mm		
Weight	0.1 kg		
Response time	ON: max. 10 ms, OFF: max. 5 ms		
Input voltage	+24 V DC, ± 10%		
Isolation	Opto-coupler		
Operating temperature	-10 ° to +60 °C		
Storage temperature	-20 ° to +70 °C		
Relative humidity	5 - 85 % non-condensed		
Vibration resistance	10 to 55 Hz (double amplitude of 1.5 mm)		
Shock resistance	100 m/s2 (11 ± 1 ms)		
Input points	8	12	8
Type	DC		
Input voltage	5 mA @ 24 V		
Operating voltage	24 V		
Input per common	8	12	8
Outputs	8	4	4
Type	DC		DC / AC
Max. voltage	24 V / 250 V		
Max. amp.	0.5 A		
Output per common	8	4	1

6 Pin Assignment Drawings

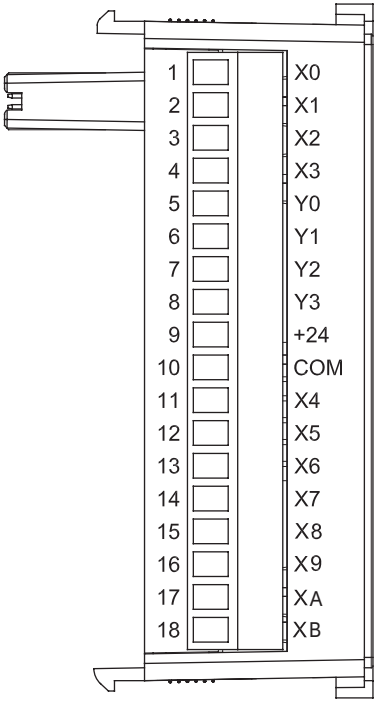
Note:
Input and output points are counted by hexadecimal, e.g. the 10th input point is XA, and the 11th input point is XB.

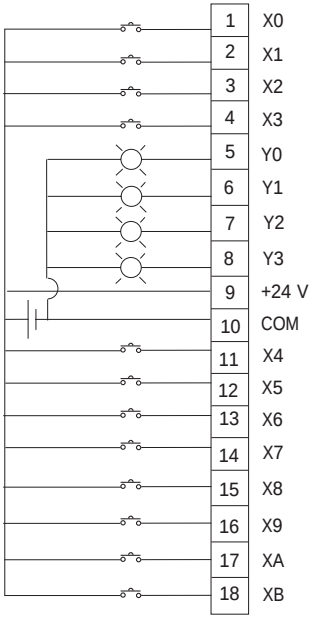
EM-IOB-88-00-RC



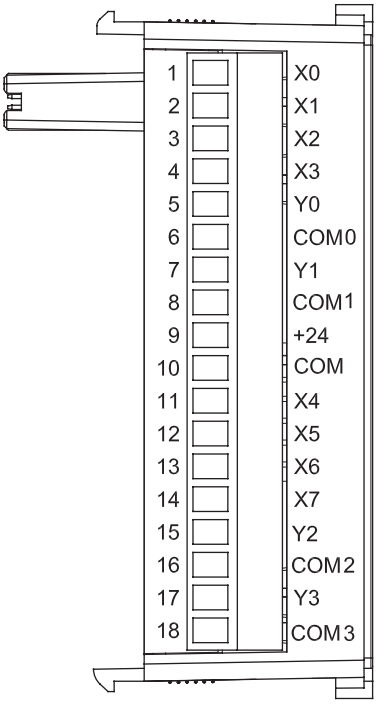


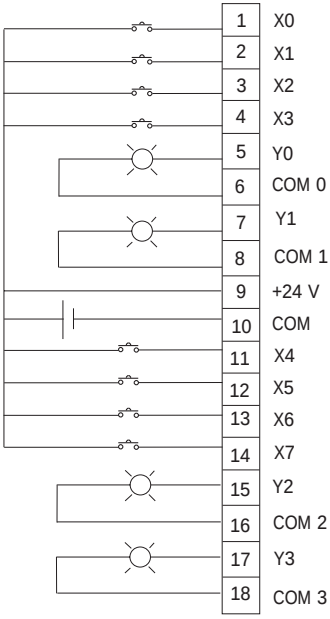
EM-IOB-C4-00-RC





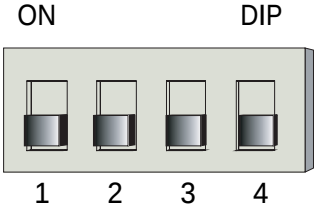
EM-IOB-84-00-RS





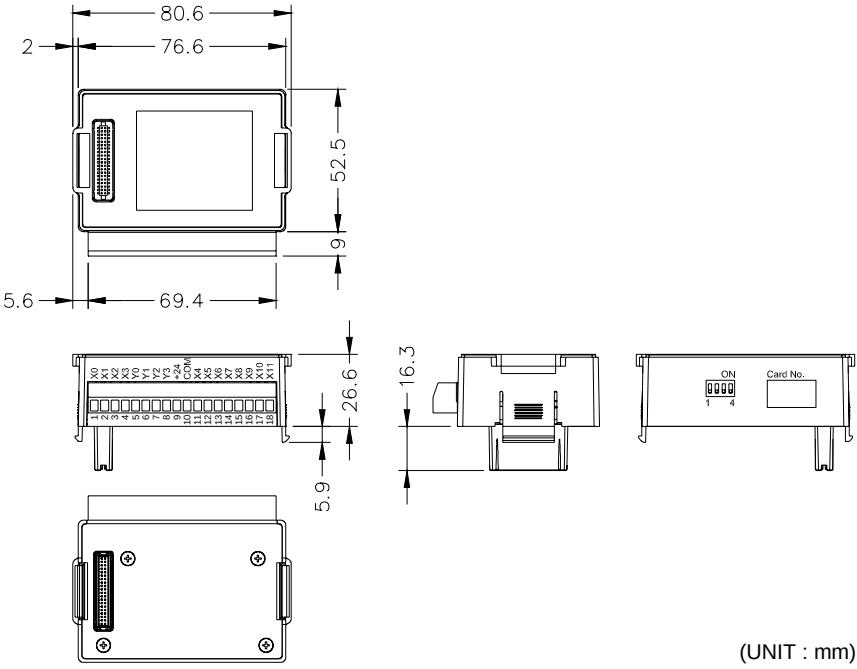
7 DIP Switch Settings

DIP switches are used to determine station number for each HMI I/O Controller. Each HMI I/O Controller in an application has to use a different station number.



Station number	SW1	SW2	SW3	SW4
0	OFF	OFF	OFF	OFF
1	ON	OFF	OFF	OFF
2	OFF	ON	OFF	OFF
3	ON	ON	OFF	OFF
4	OFF	OFF	ON	OFF
5	ON	OFF	ON	OFF
6	OFF	ON	ON	OFF
7	ON	ON	ON	OFF
8	OFF	OFF	OFF	ON
9	ON	OFF	OFF	ON
A	OFF	ON	OFF	ON
B	ON	ON	OFF	ON
C	OFF	OFF	ON	ON
D	ON	OFF	ON	ON
E	OFF	ON	ON	ON
F	ON	ON	ON	ON

8 Outline Drawing



(UNIT : mm)

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