Introducing the Easy Series
Essential automation & control products

When just enough is just right!

Easy Harmony GXU

Human Machine Interfaces
Essential touch screen panels for simple machines
General contents

Easy Harmony GXU Essential touch screen panels

■ Presentation
  - A user-oriented range of products ................................................................. page 2
  - Presentation and applications ....................................................................... page 3

■ Functions and operating modes
  - Functions ........................................................................................................ page 4
  - Operating modes:
    - Edit mode .................................................................................................... page 4
    - Communication with RS-422/RS-485 serial link mode ................................. page 5
    - Communication with RS-232C serial link mode ........................................ page 5

■ Description
  - Easy Harmony GXU basic touch screen panels ............................................ page 6
  - Easy Harmony GXU universal touch screen panels ....................................... page 6

■ References
  - Easy Harmony GXU basic touch screen panels ............................................ page 7
  - Easy Harmony GXU universal touch screen panels ....................................... page 7
  - Vijeo Designer Basic configuration software ................................................ page 7
  - Spare parts .................................................................................................... page 7
  - Connection accessories ................................................................................ page 8
  - Cables for connecting to Schneider Electric products ..................................... page 8
  - Cables for connecting to third-party PLCs .................................................... page 9
  - Connection via Modbus serial link ................................................................ page 9

■ Index
  - Product reference index ............................................................................... page 10
Easy Harmony GXU touch screen panels: an optimum investment for communication with simple machines

A user-oriented range of products
The Easy Harmony GXU range of touch screen panels is designed to provide just the right level of performance for communication with simple machines: non-critical functions have been reduced so as to offer easy-to-use products with the correct level of quality at an affordable cost.

Fit for purpose
- The panels feature the usual key-core characteristics (TFT color screens, USB connection, Ethernet port, etc.)
- Easy Harmony GXU panels have a compact design: the panels are no more than 38 mm/1.5 in. thick.
- These panels have a reserved space for the communication cable wiring.

Easy throughout the whole life cycle
- Easy to install using anti-drop hooks and screw fixings for one-handed installation
- Easy to set up and use with a simplified and intuitive programming software (Vijeo Designer Basic) and an illustrated online help for self-guided training
- Easy to connect to our range of Easy Modicon M100/M200 logic controllers
- Easy to connect thanks to an embedded USB stick (no accessory needed)
- Easy to maintain with a replaceable battery for RTC (1) and a self-diagnosis tool

Robustness
- Able to adapt to non-standard wiring environments thanks to an embedded isolated power supply and enhanced integrated circuit protection for the serial port
- Robust design for harsh environments:
  - a small vent hole prevents ingress of resist to splashing water and conductive dust
  - PCBA coating helps withstand high humidity and polluted environments.

Widely available everywhere
- Fast delivery through a large distribution network
- Fast access to information and support through Partner Relationship Management tool and dedicated network of engineers

(1) Battery for RTC (Real Time Clock): only for Harmony GXU universal touch screen panels.
Presentation and applications

The range of Easy Harmony GXU touch screen panels has been designed for manufacturers of simple machines and is dedicated to the following fields and types of machine:

- Textile
  - blowing and carding machines
  - winding and twisting machines
  - dyeing and finishing machines
  - etc.
- Packaging
  - vertical and horizontal packing
  - filling machine
  - labelling machine
  - etc.
- HVAC & pumping
  - air compressor
  - water pumping
  - etc.
- Miscellaneous activity sectors
  - machine tools (grinder, saw, etc.)
  - plastic and rubber (extruding machine, etc.)
  - printing (stamping and folding machines, etc.)
  - construction machines
  - etc.

This range of panels consists of 4 models with 2 sizes of color TFT screen:

- 7” Wide (HMIGXU3500 and HMIGXU3512)
- 10” Wide (HMIGXU5500 and HMIGXU5512)

Operation

Easy Harmony GXU touch screen panels are designed to fit for the essential needs of information and communication technologies, which, depending on the model, include:

- Essential level of communication (Serial multilink, USB downloading port)
- High level of communication (Embedded Ethernet, multilink) (1)
- External data storage (on a USB memory stick) for storing production data and backing up applications (1)
- Management of peripheral equipment: printers, barcode readers, etc. (1)

These panels offer an excellent level of technical performance and are designed for use mainly by OEM customers.

Configuration

Easy Harmony GXU touch screen panels are configured using Vijeo Designer. Basic software in Windows XP Professional, Windows 7 (Service Pack 3) and Windows 8.1 (32-bit and 64-bit) environments. This simplified configuration software boasts an intuitive user interface with many configurable windows, enabling projects to be developed quickly and easily.

Communication

Easy Harmony GXU touch screen panels communicate with our Easy Modicon M100/200 PLCs via one or two integrated serial links, using communication protocols:

- Schneider Electric (Modbus)
- Third-party: Mitsubishi Electric, Omron, and Siemens

(1) Except HMIGXU3500 and HMIGXU5500.
**Functions**

Easy Harmony GXU touch screen panels offer the following functions:
- Display of animated mimics with 8 types of animation (pressing the touch panel, color changes, filling, movement, rotation, size, visibility and value display)
- Control, modification of numeric and alphanumeric values
- Display of date and time
- Real-time curves and trend curves with log
- Alarm display, alarm log and management of alarm groups
- Multi-window management
- Page calls initiated by the operator
- Multilingual application management (10 languages simultaneously)
- Recipe management
- Data processing via JavaScript
- Application and logs stored on external application memory card in USB stick format (1)
- Management of printer and barcode reader

**Operating modes for Harmony GXU touch screen panels**

**Edit mode**

Easy Harmony GXU panel

(1) Except HMIGXU3500 and HMIGXU5500.
Human Machine interfaces
Easy Harmony GXU
Essential touch screen panels for simple machines

Operating modes for Harmony GXU touch screen panels (continued)

Communication with RS-422/RS-485 serial link mode

Examples of connection to RS-422/RS-485 serial port (3)

Communication with RS-232C serial link mode

Examples of connection to RS-232C (3)

(1) M221/M241/M251/M218/M258 logic controllers.
(2) M100/M200 logic controllers. For all other products, consult your Customer Care Centre.
(3) Non-exhaustive examples; consult your Customer Care Centre for more information.
**Easy Harmony GXU basic touch screen panels**

The basic touch screen panels offer the following features:

**On the front panel**
1. An LED on/off indicator
2. A 7” Wide color touch screen for HMIGXU3500
3. A 10” Wide color touch screen for HMIGXU5500

**On the rear panel**
4. Screw fixings supplied with the panels:
   - 4 fixing points for HMIGXU3500
   - 6 fixing points for HMIGXU5500
5. A slide-open compartment containing a replaceable battery to power the embedded real-time clock *(1)*
6. A USB mini-B port

**On the underside**
7. A 24 V power supply connector supplied with the panels
8. A 9-way male SUB-D connector for RS-422/RS-485 serial link (COM1 port)

**Easy Harmony GXU universal touch screen panels**

The universal touch screen panels offer the following features:

**On the front panel**
1. An LED on/off indicator
2. A 7” Wide color touch screen for HMIGXU3512
3. A 10” Wide color touch screen for HMIGXU5512

**On the rear panel**
4. Screw fixings supplied with the panels:
   - 4 fixing points for HMIGXU3512
   - 6 fixing points for HMIGXU5512
5. A slide-open compartment containing a replaceable battery to power the embedded real-time clock *(1)*
6. A USB mini-B port
7. A USB type A stick
8. A 24 V power supply connector supplied with the panels
9. A 9-way male SUB-D connector for RS-232C serial link (COM1 port)
10. A 9-way male SUB-D connector for RS-422/RS-485 serial link (COM2 port)
11. An Ethernet port, 10/100 Base-Tx type
12. A USB type A port

*(1)* Replace battery only with identical type: BR2032. Replacement with another type of battery may cause a fire or explosion.
Human Machine interfaces
Easy Harmony GXU
Basic and Universal touch screen panels
Software and spare parts

### Easy Harmony GXU basic touch screen panels (1) (2)

<table>
<thead>
<tr>
<th>Screen size and type</th>
<th>Number of ports</th>
<th>Memory capacity</th>
<th>Reference</th>
<th>Weight</th>
<th>kgs/ lbs</th>
</tr>
</thead>
<tbody>
<tr>
<td>7&quot; wide, color TFT screen</td>
<td>1 COM1 (RS - 422/485) 1 USB mini-B</td>
<td>32 MB 128 KB</td>
<td>HMIGXU3500</td>
<td>0.550/1.213</td>
<td></td>
</tr>
<tr>
<td>10&quot; wide, color TFT screen</td>
<td>1 COM1 (RS - 422/485) 1 USB mini-B</td>
<td>32 MB 128 KB</td>
<td>HMIGXU5500</td>
<td>1.050/2.315</td>
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</tr>
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### Easy Harmony GXU universal touch screen panels (1) (2)

<table>
<thead>
<tr>
<th>Screen size and type</th>
<th>Number of ports</th>
<th>Memory capacity</th>
<th>Reference</th>
<th>Weight</th>
<th>kgs/ lbs</th>
</tr>
</thead>
<tbody>
<tr>
<td>7&quot; wide, color TFT screen</td>
<td>1 COM1 (RS - 232C) 1 COM2 (RS - 422/485) 1 USB mini-B 1 USB A 1 10/100 Base-Tx</td>
<td>48 MB 128 KB</td>
<td>HMIGXU3512</td>
<td>0.560/1.235</td>
<td></td>
</tr>
<tr>
<td>10&quot; wide, color TFT screen</td>
<td>1 COM1 (RS - 232C) 1 COM2 (RS - 422/485) 1 USB mini-B 1 USB A 1 10/100 Base-Tx</td>
<td>48 MB 128 KB</td>
<td>HMIGXU5512</td>
<td>1.060/2.337</td>
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### Configuration software

<table>
<thead>
<tr>
<th>Description</th>
<th>Used for</th>
<th>Reference</th>
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</thead>
<tbody>
<tr>
<td>Vijeo Designer Basic</td>
<td>Easy Harmony GXU models</td>
<td>(3)</td>
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</tbody>
</table>

### Spare parts

<table>
<thead>
<tr>
<th>Description</th>
<th>Used for</th>
<th>Sold in lots of</th>
<th>Reference</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Set of fixing screws</td>
<td>Easy Harmony GXU models</td>
<td>24</td>
<td>HMIZGFIX3</td>
<td>–</td>
</tr>
<tr>
<td>Power supply connector</td>
<td>Easy Harmony GXU models</td>
<td>4</td>
<td>HMIZGPWS2</td>
<td>–</td>
</tr>
</tbody>
</table>

(1) Panels supplied with fixing screws, power supply connector and instruction sheet. Setup documentation for Easy Harmony GXU panels is included in electronic format with the Vijeo Designer Basic configuration software.
(2) Comprehensive information relating to Easy Harmony GXU panels is available on our website.
(3) To download this software, visit our website www.schneider-electric.com.
(4) Requires a software version ≥ 1.0 Service Pack 2. Cable for transferring application from PC to Easy Harmony GXU panels (BMXXCAUSBH018), to be ordered separately (see our website www.schneider-electric.com).
### Connection accessories

<table>
<thead>
<tr>
<th>Designation</th>
<th>Description</th>
<th>Length m/ft</th>
<th>Reference</th>
<th>Weight kg/lb</th>
</tr>
</thead>
<tbody>
<tr>
<td>USB cable for PC connection (USB type A/USB mini-B)</td>
<td>Enables connection of a PC (USB type A port) to Harmony GXU panels (USB mini-B port, all models) in order to transfer applications developed with Vijeo Designer Limited Edition.</td>
<td>1.8/5.91</td>
<td>BMXXCUSBH018</td>
<td>0.230/0.507</td>
</tr>
<tr>
<td>USB type A port remote-mounting cordset</td>
<td>Enables the USB type A port to be located remotely on HMIGXU3512 and HMIGXU5512 panels on a panel or cabinet door while providing IP 65 degree of protection (Ø 21 mm/0.83 in. fixing device).</td>
<td>1/3.28</td>
<td>XBTZGUSB</td>
<td>0.507/1.118</td>
</tr>
<tr>
<td>USB mini-B port remote-mounting cordset</td>
<td>Enables the USB mini-B port to be located remotely on Harmony GXU panels (all models) on a panel or cabinet door while providing IP 65 degree of protection (Ø 21 mm/0.83 in. fixing device).</td>
<td>1/3.28</td>
<td>HMIZSUSB</td>
<td>0.100/0.220</td>
</tr>
<tr>
<td>USB type A port/9-way SUB-D converter for serial printer</td>
<td>Enables connection of an RS 232 serial link printer (9-way SUB-D) to the USB type A port of HMIGXU3512 and HMIGXU5512 panels.</td>
<td>–</td>
<td>HMIZURS</td>
<td>–</td>
</tr>
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</table>

### Cables for connecting Easy Harmony GXU panels to Schneider Electric products

<table>
<thead>
<tr>
<th>Type of automation product</th>
<th>Type of connector (automation product end)</th>
<th>Protocol</th>
<th>Type of Harmony GXU panels</th>
<th>Physical link (panels port)</th>
<th>Length m/ft</th>
<th>Reference</th>
<th>Weight kg/lb</th>
</tr>
</thead>
<tbody>
<tr>
<td>Modicon M340</td>
<td>RJ45</td>
<td>Modbus</td>
<td>All models</td>
<td>RS - 485</td>
<td>2.5/8.20</td>
<td>XBTZ9008</td>
<td>–</td>
</tr>
<tr>
<td>Modicon M218</td>
<td></td>
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<tr>
<td>Modicon M258</td>
<td></td>
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<tr>
<td>Modicon M221</td>
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<tr>
<td>Modicon M241</td>
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<tr>
<td>Modicon M251</td>
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<tr>
<td>Easy Modicon M100</td>
<td>Panels block</td>
<td>–</td>
<td>All models</td>
<td>RS - 485</td>
<td>2.5/8.20</td>
<td>XBTZ9722</td>
<td>–</td>
</tr>
<tr>
<td>Easy Modicon M200</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>TeSys U/T starters</td>
<td>RJ45</td>
<td>Modbus</td>
<td>All models</td>
<td>RS - 485</td>
<td>2.5/8.20</td>
<td>XBTZ9008</td>
<td>–</td>
</tr>
<tr>
<td>Altitvar drives, Altistart starters, Lexium motion control, Preventa XPS MC</td>
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</table>
## Human Machine interfaces
### Easy Harmony GXU
#### Cables for third-party PLCs
##### Connection via Modbus serial link

### Cables and adapters for connecting Harmony GXU panels to third-party PLCs

<table>
<thead>
<tr>
<th>Description Driver used</th>
<th>Type of Harmony GXU panels</th>
<th>Type of connector (fitted to cable, excluding adapter)</th>
<th>Physical link (panels port)</th>
<th>Length m/ft</th>
<th>Reference</th>
<th>Weight kg/lb</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mitsubishi, Melsec PLCs</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Connection cable, Q Link (SIO)</td>
<td>HMIGXU3512 and HMIGXU5512 only</td>
<td>9-way SUB-D/9-way SUB-D</td>
<td>RS - 232C</td>
<td>5/16.40</td>
<td>XBTZG9772</td>
<td>–</td>
</tr>
<tr>
<td>Connection cable, Q CPU (SIO)</td>
<td>HMIGXU3512 and HMIGXU5512 only</td>
<td>9-way SUB-D/mini-DIN</td>
<td>RS - 232C</td>
<td>5/16.40</td>
<td>XBTZG9774</td>
<td>–</td>
</tr>
<tr>
<td>Connection cable, FX (CPU)</td>
<td>All models</td>
<td>9-way SUB-D/mini-DIN</td>
<td>RS - 422</td>
<td>5/16.40</td>
<td>XBTZG9775</td>
<td>–</td>
</tr>
<tr>
<td><strong>Omron, Sysmac PLCs</strong></td>
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<tr>
<td>Connection cables, Link (SIO)</td>
<td>HMIGXU3512 and HMIGXU5512 only</td>
<td>9-way SUB-D/25-way SUB-D</td>
<td>RS - 232C</td>
<td>5/16.40</td>
<td>XBTZG9731</td>
<td>–</td>
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<tr>
<td></td>
<td>HMIGXU3512 and HMIGXU5512 only</td>
<td>9-way SUB-D/9-way SUB-D</td>
<td>RS - 232C</td>
<td>5/16.40</td>
<td>XBTZG9740</td>
<td>–</td>
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<tr>
<td>Connection cable, FINS (SIO)</td>
<td>HMIGXU3512 and HMIGXU5512 only</td>
<td>9-way SUB-D/9-way SUB-D</td>
<td>RS - 232C</td>
<td>5/16.40</td>
<td>XBTZG9740</td>
<td>–</td>
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<tr>
<td><strong>Siemens, Simatic PLCs</strong></td>
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<tr>
<td>Connection cables, MPI port, ST 200 ST 300/400</td>
<td>All models</td>
<td>9-way SUB-D/9-way SUB-D</td>
<td>RS - 485</td>
<td>–</td>
<td>(1)</td>
<td>–</td>
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<tr>
<td><strong>Customizable cables</strong></td>
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<tr>
<td>Universal cable, RS-422</td>
<td>All models</td>
<td>9-way SUB-D/flying leads at other end</td>
<td>RS - 422</td>
<td>2.5/8.20</td>
<td>XBTZG9722</td>
<td>–</td>
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</table>

### Connecting Harmony GXU panels via Modbus serial link

<table>
<thead>
<tr>
<th>Type of bus/network</th>
<th>Tap-off units</th>
<th>Connector (tap-off unit end)</th>
<th>Type of Harmony GXU panels</th>
<th>Length m/ft</th>
<th>Reference</th>
<th>Weight kg/lb</th>
</tr>
</thead>
<tbody>
<tr>
<td>Modbus serial link</td>
<td>8-port Modbus splitter box LUGG93 2-port tap junction TDXXCAISO TWDXCAT3RJ</td>
<td>RJ45</td>
<td>All models</td>
<td>2.5/8.20</td>
<td>XBTZ9008</td>
<td>–</td>
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</table>

(1) Customized cable.
# Product reference index

<table>
<thead>
<tr>
<th>Index</th>
<th>Product reference index</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>BMXXCAUSBH018 8</td>
</tr>
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<td>HMIGXU3500 7</td>
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<td>B</td>
<td>HMIGXU3512 7</td>
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<td>HMIGXU5500 7</td>
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<td>HMIGXU5512 7</td>
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<td>HMIZGFIX3 7</td>
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<td>HMIZGPWS2 7</td>
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Photos: Schneider Electric

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