

# Signaling units Ø 60

Harmony<sup>®</sup> XVU modular tower lights

Catalog

March 2015



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# Signaling units

## Modular tower lights


### Harmony type XVU Ø 60

#### Harmony® XVU modular tower light with innovative features

The Harmony XVU modular range of tower lights are 360° pilot lights and commonly used signaling product for a wide range of applications. These tower lights are visual and audible signaling units that comes with a combination of innovative features, high performance and simplicity.

#### High performance light

- > True color and homogeneity light
- > Improved visibility
- > LED super-bright flash with long life performance

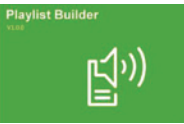


The mix of homogeneity light and true color improves the aesthetic of the tower light



#### Customized voice message

- > A free of charge configuration software allows to customize the audible signals via SD card
- > The sound module plays voice message when customer inputs PLC signals
- > Adjustable volume up to 86dB at 1m/3.281 ft



Configuration of audible signal via Playlist Builder software



## + Super bright LED technology

### Innovation

> These tower lights offer innovative features with:

#### Multi-color LED module

- Multi-color LED module with a choice of six colors and four light patterns



#### Height adjustable pole mounting

- Pole mounting with height adjustable tube allowing the adjustment of the column height without any tools



#### Flexible mounting module

- Flexible mounting module for use on horizontal or vertical support



#### Pulse signal module

- Pulse signal modules use pulse signals in single wire to control the tower light

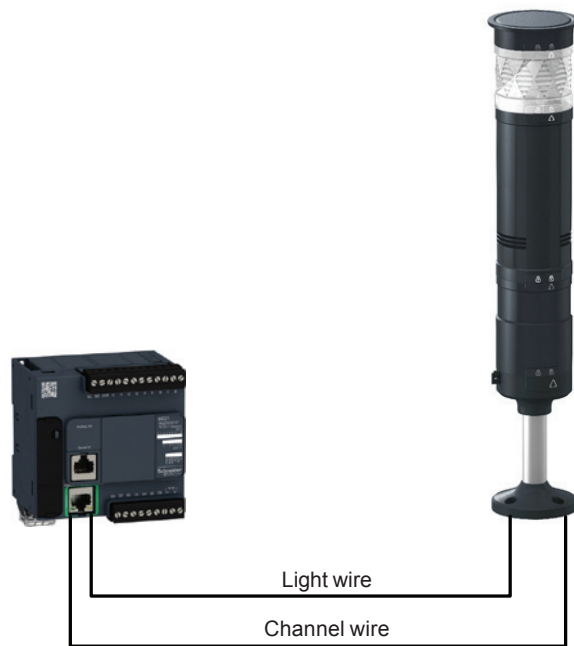


#### Simplified wiring

- > Pulse signal modules use one signal wire to define different types of signaling
- > Flexible and configurable light patterns
- > Up to 256 different combination of audible and visual signals
- > Up to 16 different combination of visual signals (color combination)
- > One pulse signal multi-color unit can be implemented instead of several single color illuminated units
- > Reduction in I/O wires to connect PLC with tower light
- > CE, UL, CSA, and PCT certified



Addition of pulse signal module to the existing range of Harmony XVU tower lights



#### Aesthetic design

- > Available in black and metallic silver body
- > Reduced diameter (Ø 60 mm/2.362 in.) makes them suitable for small equipment
- > Aesthetic design distinguishes them from other tower lights



Stylish design available in Black and metallic Silver body



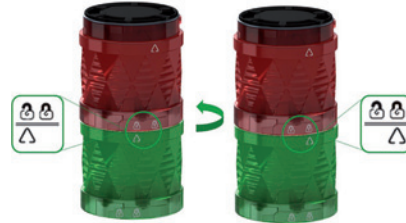
Pulse signal module enables up to 75% reduction in wiring

Simplicity

- > Simple and easy assembly without use of any tools
- > Convenient mounting option with: direct mounting, pole mounting and three-in-one adjustable wall mounting



With the indicator marks, the modules are simple and quick to assemble



Good resistance

- > Resistant to dust and water and are UL/CSA compliant
- > The illuminated units have IP 65 degree of protection, and are resistant to cutting oil
- > Audible units have IP 54 degree of protection

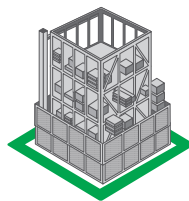
IP 65  
IP 54

Degree of protection and compliance

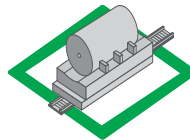


→ Industrial applications

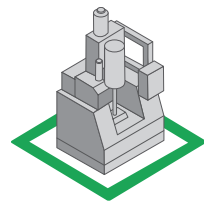
Ideally suited for automotive, machine tools, material handling and electronic equipment industry.



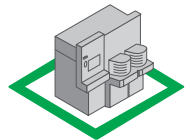
Automotive industry



Material handling



Machine tools



Electronic equipment





Harmony® type XV

Monolithic tower lights



<b>Type of products</b>	Pre-assembled and pre-cabled USB tower lights	Pre-assembled/pre-cabled tower lights Variable composition tower lights for customer assembly of up to 4 units
<b>Diameter</b>	Ø 60 mm/2.362 in.	Ø 60 mm/2.362 in.
<b>Degree of protection conforming to IEC 60529</b>	IP 42	IP 53 and IP 42 (base mounting) IP 23 (direct aluminium tube mounting, aluminium tube mounting and "L" bracket) IP 53 and IP 42 (aluminium tube mounting and fixing plate) IP 40 (aluminium tube mounting and foldable bracket)
<b>Type of signalling</b>	Steady Flashing "Flash" Sound	Yes Yes – –
<b>Light sources</b>	Incandescent bulb LED bulb Integral LED "Flash" discharge tube Halogen bulb	With buzzer (volume control and alarm type can be set with HMI) – – Yes – –
<b>Colors of illuminated units</b>	Multi-color LEDs (many possible combinations can be set with HMI) <input type="checkbox"/> Red <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Blue	With buzzer <input type="checkbox"/> Red <input type="checkbox"/> Green <input type="checkbox"/> Amber <input type="checkbox"/> Blue
<b>Connection</b>	USB power cable: - 300 mm/11.81 in. for tube mounting - 400 mm/15.75 in. for direct mounting	Flying leads, length 500 to 560 mm/19.68 to 22.05 in. for tube mounting according to model. Length 900 mm/35.43 in. for base mounting.
<b>Support panel drilling or cut-out</b>	Mounting on support tube with fixing plate: 4 x Ø 6 mm/0.236 in. Direct mounting on horizontal support: 3 x Ø 5 mm/0.197 in.	Base mounting: 3 x Ø 5 mm/0.197 in. Direct aluminium tube mounting: Ø20/0.787 in. Aluminium tube mounting and "L" bracket: 2 x Ø9/0.354 in. Aluminium tube mounting and fixing plate: 4 x Ø6/0.236 in. Aluminium tube mounting and foldable bracket: 4 x Ø6/0.236 in.
<b>Type references</b>	<b>XVGU</b>	<b>XVG</b>



<b>Type of products</b>	Pre-assembled and pre-cabled tower lights	Pre-assembled and pre-cabled tower lights	Pre-assembled and pre-cabled tower lights
<b>Diameter</b>	Ø 40 mm/1.575 in.	Ø 60 mm/2.36 in.	Ø 100 mm/3.937 in.
<b>Degree of protection conforming to IEC 60529</b>	IP 54 (flat surface installation) IP 23 (vertical surface installation)	IP 54 (flat surface installation) IP 23 (vertical surface installation)	IP 54 (flat surface installation)
<b>Type of signalling</b>	Yes Yes – –	Yes Yes – –	Yes Yes – –
<b>Light sources</b>	With buzzer – – Yes – –	With buzzer – – Yes – –	With siren or buzzer – – Yes – –
<b>Colors of illuminated units</b>	<input type="checkbox"/> Red <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Blue <input type="checkbox"/> Clear	<input type="checkbox"/> Red <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Blue <input type="checkbox"/> Clear	<input type="checkbox"/> Red <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Blue <input type="checkbox"/> Clear
<b>Connection</b>	Flying leads, length 450 mm/17.71 in. to 900 mm/35.43 in. according to model	Flying leads, length 450 mm/17.71 in. to 850 mm/33.46 in. according to model	Flying leads, length 500 mm/19.68 in.
<b>Support panel drilling or cut-out</b>	Mounting on support tube with bracket: 2 x Ø 9 mm/0.354 in. Direct mounting on horizontal support: 3 x Ø 5 mm/0.20 in. Other mounting possibilities with accessories	Mounting on support tube with bracket: 2 x Ø 11 mm/0.43 in. Direct mounting on horizontal support: 3 x Ø 5 mm/0.197 in. Other mounting possibilities with accessories	Direct mounting on horizontal support: - 3 x Ø 6 mm/0.236 in. (without siren) - 3 x Ø 7 mm/0.276 in. (with siren) Other mounting possibilities with accessories
<b>Type references</b>	<b>XVC4</b>	<b>XVC6</b>	<b>XVC1</b>

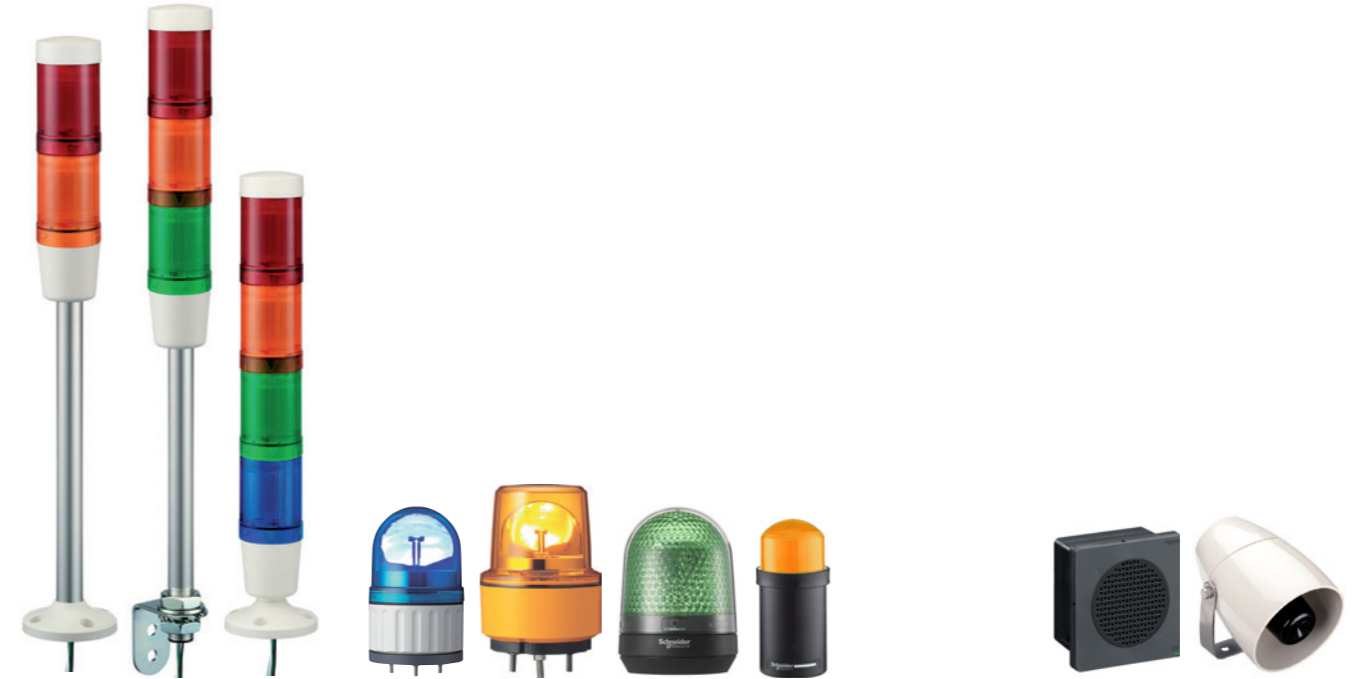


Harmony® type XV **Modular tower lights**



<b>Type of products</b>	Illuminated beacons Variable composition tower lights for customer assembly of up to 5 units	Tower lights for customer assembly of up to 5 units.
<b>Diameter</b>	Ø 70 mm/2.756 in.	Ø 60 mm/2.362 in.
<b>Degree of protection conforming to IEC 60529</b>	IP 65 (mounted on fixing base XVBZ0●) IP 66 (mounted on base unit)	IP 65 for illuminated units IP 54 for audible units IP 55 for flexible mounting module
<b>Type of signalling</b>	Steady Flashing "Flash" Sound	Yes Yes Yes Yes (buzzer or editable voice)
<b>Light sources</b>	Incandescent bulb LED bulb Integral LED "Flash" discharge tube Halogen bulb	– – Yes – –
<b>Colors of illuminated units</b>	<input type="checkbox"/> Green <input type="checkbox"/> Red <input type="checkbox"/> Orange <input type="checkbox"/> Blue <input type="checkbox"/> Clear <input type="checkbox"/> Yellow	<input type="checkbox"/> Green <input type="checkbox"/> Red <input type="checkbox"/> Orange <input type="checkbox"/> Blue <input type="checkbox"/> White <input type="checkbox"/> Yellow
<b>Connection</b>	Screw clamp terminals	Spring cage connection terminals
<b>Support panel drilling or cut-out</b>	Mounting on support tube: 4 x Ø 5.5 mm/0.217 in. or M5 Vertical mounting: 3 x Ø 5 mm/0.197 in. or M5 Direct mounting: 2 x Ø 4.5 mm/0.177 in. or M4	Mounting on support tube and adjustable support tube: 4 x Ø 6 mm/0.236 in. Flexible wall mounting: 3 x Ø 5 mm/0.197 in. Direct mounting: 2 x Ø 5 mm/0.197 in. 3 x Ø 5 mm/0.197 in. 4 x Ø 5 mm/0.197 in.
<b>Type references</b>	<b>XVBL, XVBC</b>	<b>XVU</b>

**Rotating beacons** **Sound solutions**



<b>Type of products</b>	Pre-assembled/pre-cabled tower lights Variable composition tower lights for customer assembly of up to 5 units	Pre-cabled rotating beacons Pre-cabled motor-less rotating/flashing beacons	Complete miniature beacons	Sirens and electronic alarms
<b>Diameter</b>	Ø 45 mm/1.772 in.	Ø 84 mm/3.31 in. to Ø 130 mm/5.12 in.	Ø 45 mm/1.772 in.	–
<b>Degree of protection conforming to IEC 60529</b>	IP 54 in vertical position (XVM with plastic fixing plate) IP 42 in horizontal position (XVM with metal bracket) IP 40 in other positions (all types of XVM tower lights)	Ø 84 mm/3.31 in. and Ø 106 mm/4.17 in.: IP 23 (IP 65 with accessory) Ø 120 mm/4.72 in.: IP 23 Ø 130 mm/5.12 in.: IP 66 and IP 67 (depending on voltage) Ø 100 mm/3.94 in.: IP 65 for upright position, IP 23 for sideways and inverted position	IP 40	IP 53 (sirens) IP 54 (electronic alarms) IP 65 (editable voice)
<b>Type of signalling</b>	Yes Yes Yes Yes	Yes – – Yes	Yes – Yes –	– – – Yes (editable voice)
<b>Light sources</b>	Yes Yes – –	– "Super Bright" – –	Yes – – Yes	– – – –
<b>Colors of illuminated units</b>	<input type="checkbox"/> Red <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Blue <input type="checkbox"/> Clear	<input type="checkbox"/> Red <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Blue	<input type="checkbox"/> Green <input type="checkbox"/> Red <input type="checkbox"/> Orange <input type="checkbox"/> Blue <input type="checkbox"/> Clear <input type="checkbox"/> Yellow	–
<b>Connection</b>	Flying leads, length 300 mm/11.81 in. or screw terminals	Flying leads, length 400 mm/15.75 in. (except XVR08: 500 mm/19.68 in.)	Screw clamp terminals	Screw clamp terminals (except XVS14: flying leads, length 500 mm/19.68 in.)
<b>Support panel drilling or cut-out</b>	Mounting on bracket: 2 x Ø 9 mm /0.354 in. Mounting on support tube: 4 x Ø 5.5 mm/0.217 in. or M5	Depending on model: - XVR08 (Ø 84 mm/3.31 in.): 3 x Ø 5 mm/0.197 in. - XVR10 (Ø 106 mm/4.17 in.): 3 x Ø 5 mm/0.197 in. - XVR12 (Ø 120 mm/4.72 in.): 3 x Ø 6 mm/0.236 in. - XVR13 (Ø 130 mm/5.12 in.): 3 x Ø 9 mm/0.354 in. - XVR13●●●L (Ø 130 mm/5.12 in.): 3 x Ø 7 mm/0.276 in. - XVR3 (Ø 100 mm/3.94 in.): 3 x Ø 6 mm/0.236 in.	3 x Ø 3.3 mm /0.130 in. or M3	3 x Ø 6.5 mm/0.256 in.
<b>Type references</b>	<b>XVM</b>	<b>XVR</b>	<b>XVDLS</b>	<b>XVS</b>

# Signaling Units

## Modular tower lights

### Harmony type XVU Ø 60

Tower lights for customer assembly (up to 5 units)



XVU tower lights

#### Presentation

The Harmony XVU modular range of tower lights are visual and audible signaling units indicating various states, operation sequence or installation of a machine. Their reduced diameter (Ø 60 mm/2.362 in.) makes them suitable for use on small equipment and their aesthetic design distinguishes them from other tower lights. The availability of black and metallic silver body makes them ideal for use in automotive, machine tools, material handling and electronic equipment industry.

This range has an advantage of:

- “Super bright” LED
- Easy installation and mounting without use of any tools
- Simple assembly due to the indicator marks on the modules
- Steady, blinking, flashing, or rotating multi-colored LED module for energy-efficient high priority signaling (colors and light patterns can be selected using 2 dip switches on top of the module)
- Height adjustment tube that solves the need to adjust height of the tower light
- Flexible mounting module which supports various customer needs for installation (for use on horizontal or vertical support)
- Power integrated base modules with two voltage solutions ( $\approx$  24 V and  $\sim$  100 to 240 V) which reduces the stock reference for LED modules
- High degree of protection against dust and water
- 100% configurable sound
- Innovative concept of controlling the tower light by sending pulse signals in single wire (1)

#### Illuminated LED units

The XVU range offers the following benefits for illuminated LED units:

- The LED units are visible throughout 360°
- Innovative mirror design of these units improve the brightness
- Pure colors avoid confusion between colors
- The “Super bright” LED technology consumes low power and has long life
- Continuous usage of LEDs up to 40,000 operating hours (2)
- Ultra brightness in 40° visualization
- Homogenous light improves luminosity from side view
- The mixture of homogenous light and pure color improves the aesthetics of tower light and machine
- Polycarbonate lens material for better shock resistance

#### Mounting

- Height adjustable tube with an adjustment from 210 to 385 mm / 8.268 to 15.157 in., mounted on a fixing plate for use on a horizontal support
- Flexible mounting option for use on horizontal or vertical support
- Direct mounting solutions (with two, three and four screws foot print)

#### Signaling type

- For illuminated units with green, red, orange, blue, and white color: steady
- For multi-color illuminated unit: steady, blinking, flashing (slow or fast) and rotating (slow or fast)
- For audible unit: customized sound, 86dB (at 1m/3.281 ft, 4 channels dedicated to 4 illuminated units)

(1) Pulse signals used for signaling are defined using different pulse width following the principle of frequency-division multiplexing

(2) In normal conditions of use (in 25 °C/77 °F environment)

## Signaling Units

Modular tower lights

Harmony type XVU Ø 60

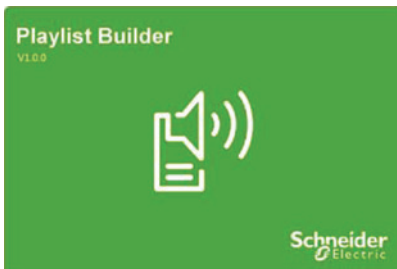
Tower lights for customer assembly (up to 5 units)

### Presentation (continued)

#### Environment

The performance features of the Harmony XVU range meet the following specifications:

- Degree of protection:
  - IP 65 for illuminated units
  - IP 54 for audible units
  - IP 55 for flexible mounting module
- International standards:
  - The whole range conforms with EN/IEC 60947-5-1 standard. Products are CE, UL and CSA certified.
- Product certifications:
  - UL, CSA, and CE



Playlist Builder configuration software window

### Software configuration

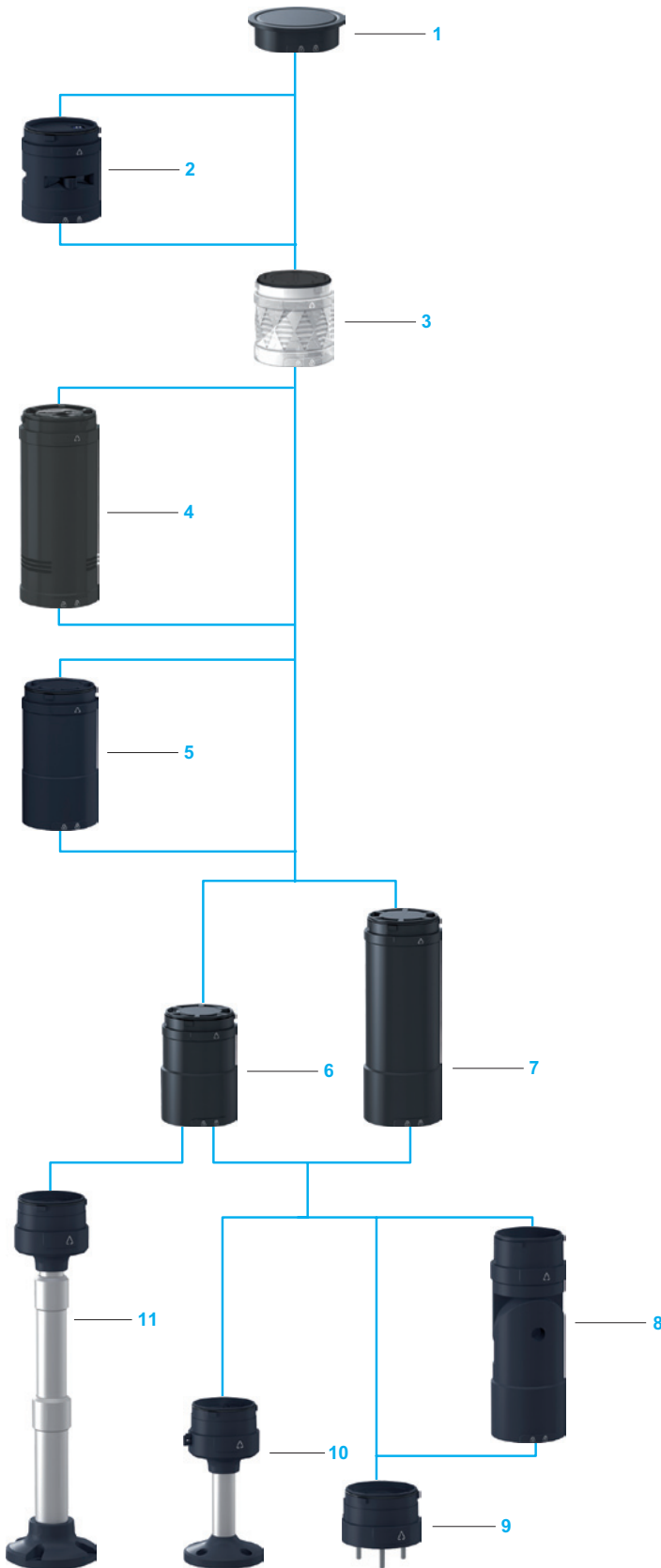
- The "Playlist Builder" software is used to configure the audible signals of XVU sound module
- This software can be downloaded from [www.schneider-electric.com](http://www.schneider-electric.com) for free of charge
- It is compatible with Windows XP® and Windows 7® (recommended) operating system
- It allows configuration of audible signals to be set on each 4 channels dedicated to 4 illuminated units

# Signaling Units

Modular tower lights

Harmony type XVU Ø 60

Tower lights for customer assembly (up to 5 units)



## Description

### Tower lights

The XVU tower lights are customer assembled products comprising:

- 1 Top cover (black or silver)
- 2 Buzzer unit (black or silver) (1)
- 3 Illuminated units: (2)
  - 3.1 LED illuminated units (colors: green, red, orange, blue, white, or yellow)
  - 3.2 Multi-color LED unit (colors: green, red, orange, blue, white, or yellow. Patterns: steady, blinking, flashing, or rotating)
  - 3.3 Pulse signal multi-color LED unit (colors: green, red, orange, or blue. Patterns: steady, blinking, flashing, or rotating) (3)
- 4 Sound unit (4)
  - 4.1 Sound unit
  - 4.2 Pulse signal voice unit
- 5 Body extender (black or silver)
- 6 DC body unit (black or silver)
- 7 AC body unit (black or silver)
- 8 Flexible mounting module
- 9 Direct mounting plate (black or silver)
- 10 100 mm/3.937 in. pole with fixing plate (black or silver)
- 11 Height adjustment pole from 210 to 385 mm/8.268 to 15.157 in. (5)

### Composition

- XVU tower lights are customer assembled signaling units that are mounted on the body of the unit with a mounting accessory.
- Maximum of 5 illuminated units or 4 illuminated units with 1 audible unit can be assembled. The illuminated or audible unit (6), stack vertically.
- With the indicator marks on these units they can be easily assembled.
- Electrical connections between each unit are made automatically as they are mechanically assembled.
- The signaling units are identical in size and their positioning is unrestricted.

### Mounting

Fixed into support panel using direct mounting plate, 100mm/3.937 in. pole with fixing plate or adjustment pole.

### Cabling

By means of spring cage connection terminal block incorporated in mounting unit (Direct mounting plate, pole with plate, adjustment pole)

- (1) Always mounted on the top
- (2) Up to 5 LED illuminated units without sound module;  
Up to 4 LED illuminated units with sound module
- (3) Pulse signal multi-color LED unit cannot be combined with standard sound unit (XVUC9V)
- (4) Sound module can work without LED unit
- (5) Only for DC body unit
- (6) Sound module cannot be combined with buzzer unit at the same time

# Signaling Units

Modular tower lights

Harmony type XVU Ø 60

Tower lights for customer assembly (up to 5 units)

Illuminated units



XVUC23



XVUC26



XVUC28



XVUC29

### Illuminated LED units: IP 65

Description	Signaling Type	Characteristics		Color	Reference	Weight kg/lb
		Voltage	Power			
High brightness LED units	Steady	24 V	2.5 W	Green	<b>XVUC23</b>	0.064/0.141
		24 V	2.0 W	Red	<b>XVUC24</b>	0.064/0.141
		24 V	2.0 W	Orange	<b>XVUC25</b>	0.064/0.141
		24 V	2.5 W	Blue	<b>XVUC26</b>	0.064/0.141
		24 V	2.5 W	White	<b>XVUC27</b>	0.064/0.141
		24 V	2.5 W	Yellow	<b>XVUC28</b>	0.064/0.141
	Steady/ blinking/ flashing/ rotating	24 V	1.5 W	Multi-color (green, red, orange, blue, white, and yellow)	<b>XVUC29</b>	0.064/0.141
<b>Pulse signal Multi-color LED unit (1)</b>	Steady/ blinking/ flashing/ rotating	24 V	1.7 W	Multi-color (green, red, orange, and blue)	<b>XVUC29P</b>	0.069/0.152

(1) 1 signal wire, 2 power wires. Adaptable for both NPN and PNP. Controlled by PLC dynamically.

# Signaling Units

## Modular tower lights

### Harmony type XVU Ø 60

Tower lights for customer assembly (up to 5 units)

Audible and body units



XVUC9S



XVUC9SQ



XVUC9V



XVUC21BQ



XVUC21M

#### Audible units: IP 54

Description	Characteristics		Color	Reference	Weight kg/lb
	Voltage	Power			
Buzzer, adjustable 70...85 dB at 1 m/3.281 ft (4 configurations of audible signal)	24 V	1.7 W	Black	XVUC9S	0.077/0.170
			Silver	XVUC9SQ	0.077/0.170
Sound, adjustable 0...86 dB at 1m/3.281 ft (4 channels)	24 V	1.7 W	Black	XVUC9V	0.217/0.480
Pulse signal voice unit 0...86 dB at 1m/3.281 ft (16 channels) (1)	24 V	4.1 W	Black	XVUC9VP	0.219/0.483

#### Body units: IP 65

Description	Voltage	Color	Reference	Weight kg/lb
Body unit with top cover (2)	≈ 24 V	Black	XVUC21B	0.110/0.243
		Silver	XVUC21BQ	0.110/0.243
	~ 100 to 240 V	Black	XVUC21M (3)	0.235/0.518
		Black	XVUC21MP (4)	0.235/0.518
		Silver	XVUC21MQP (4)	0.235/0.518

(1) 1 signal wire, 2 power wires. Adaptable for both NPN and PNP. 16 channels can be controlled by PLC.

(2) Direct mounting plate XVUZ01● needed for direct mounting

(3) NPN type

(4) PNP type

# Signaling Units

Modular tower lights

Harmony type XVU Ø 60

Tower lights for customer assembly (up to 5 units)

Accessories



XVUC020



XVUZ01Q



XVUZ02



XVUZ05



XVUZ06

## Accessories

Description	Voltage	Color	Reference	Weight kg/lb
Body extender	≈ 24 V	Black	<b>XVUC020</b>	0.093/0.205
		Silver	<b>XVUC020Q</b>	0.093/0.205
Direct mounting plate		Black	<b>XVUZ01</b>	0.063/0.139
			<b>XVUZ03 (1)</b>	0.063/0.139
			<b>XVUZ04 (2)</b>	0.063/0.139
Aluminium fixing plate with 100 mm/3.937 in. pole		Black	<b>XVUZ02</b>	0.132/0.291
			Silver	<b>XVUZ02Q</b>
Aluminium adjustment pole and fixing plate for height adjustment (3)		Black	<b>XVUZ05</b>	0.253/0.558
Flexible mounting element for use on horizontal or vertical support, IP 55		Black	<b>XVUZ06</b>	0.193/0.425

(1) Two-foot mounting

(2) Four-foot mounting

(3) Only for use with DC body unit.



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X	
XVUC9S	14
XVUC9SQ	14
XVUC9V	14
XVUC9VP	14
XVUC020	15
XVUC020Q	15
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XVUC21BQ	14
XVUC21M	14
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