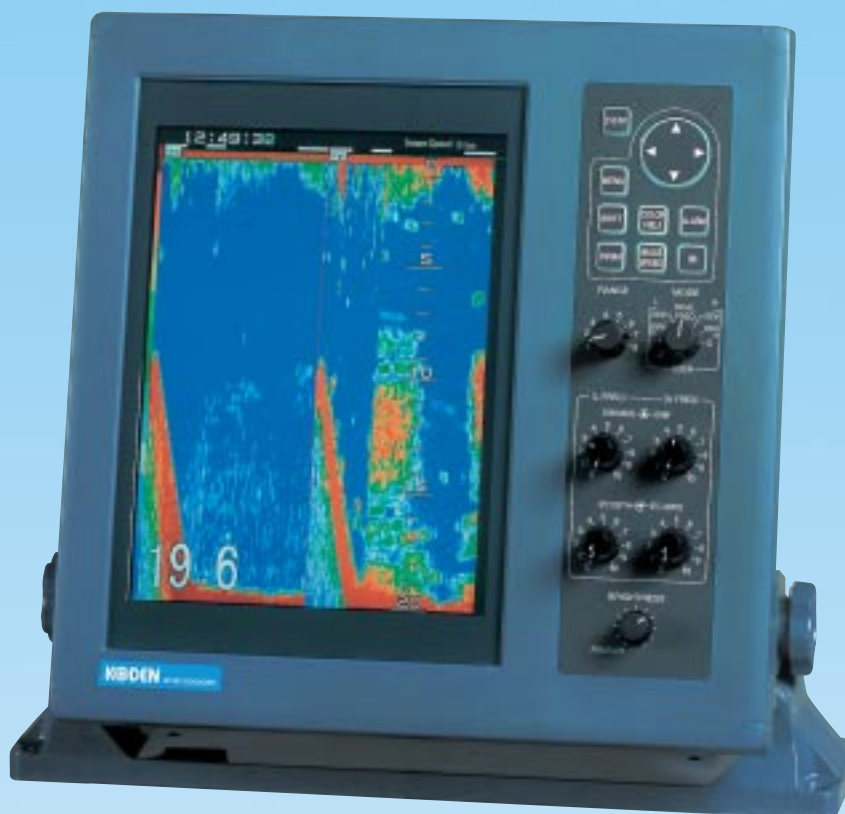


## CVS-841

- *Dual frequencies, selective output!*
- *Programmable built-in TX/RX unit!*
- *Operation “easy” design!*
- *Compact, high performance sounder is the best value for the money!*



### FEATURES

#### • Professional specifications

Advanced features such as dual frequencies, 1 kW or 3 kW output, unique signal processing make this sounder the best choice for the professional fisherman, wherever his fishing ground is shallow, mid or deep ocean.

#### • Programmable output and frequency

The frequency and output power level can be selected in the field. No need to change the transmitter and receiver module any more as often required in conventional units.

*NOTE: The transducer must be matched with transmitter's frequency and power output level.*

#### • High sensitivity

A higher rate of transmission and a unique interference rejection system greatly enhance echo detection ability. Plus, a newly developed log receiver provides low noise echoes due to its wide dynamic range. These features help the operator to detect fish in a more simple and a quicker way.

#### • Entire image control

Another unique feature is the ability to vary the gain of the entire image previously captured. Using this feature, the operator can go back and analyze ground that has already been covered in greater detail including density of fish school, activity and even type of fish.

#### • Bright and clear picture

A steady, flicker-free image is shown on a wide-angle, flat 10.4 inch Liquid Crystal Display. The clarity is retained even when the brightness is reduced for nighttime operation.

#### • Navigation display

Boat position, event, etc. can be displayed in Lat/Lon or LOP by connecting a navigator unit. Water temperature can also be displayed with an optional water temperature sensor being connected.

#### • Mixed echo display

Finding schools of fish often requires expertise backed by long-term experience. In this sounder KODEN's unique processing method allows the operator to find those weak "hard to find" echoes quickly by combining high and low frequencies echoes at the same time.

#### • Event marking

Combined with the provisioned event key and current ship's position information, this unit enables the skipper to mark an on-going event on the screen. The event location (latitude/longitude) can be output to an external plotter unit to be used in the planning of future fishing expeditions.

#### • Operation “easy” design

Taking into account the marine environment and the operational aspects of sounders, we designed all keypads and analog controls to be logically arranged for quick and effective operation.

#### • Compact and waterproof designs

The sounder can be installed anywhere on the boat; on the table, tilted console space or even on the fly bridge, thanks to a strengthened waterproof design.

## SPECIFICATIONS

Model name	CVS-841C (1 kW), CVS-841P (3 kW)																																																																												
Display	10.4 inch color TFT LCD (480 x 640 dots)																																																																												
Display colors	16 colors (Color pallet can be changed) / background: 9 colors																																																																												
Frequency	Dual, combination selected from 28, 38, 50, 75, 200 kHz																																																																												
Sounding range	(meter/hiro/fathom/Italian fathom, selected from the following range scale or auto RANGE) [1 kW / 3 kW] 2.5 to 10 (2.5 step), 10 to 100 (5 step), 100 to 400 (10 step), 400 to 1000 (50 step), 1000 to 1200 (100 step), [3 kW only] 1200 to 3000 (100 step) (feet) [1 kW / 3 kW] 10 to 20 (5 step), 20 to 60 (10 step), 60 to 400 (20 step), 400 to 1600 (40 step), 1600 to 4000 (200 step), [3 kW only] 4000 to 7200 (200 step), 7200 to 8000 (400 step)																																																																												
Bottom range / zoom range	2.5, 5, 7.5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, 70, 80, 90, 100, 110, 120, 130, 140, 150, 160, 180, 200 meter, hiro, fathom, or Italian fathom, one range selected 10, 15, 20, 30, 40, 50, 60, 80, 100, 120, 140, 160, 180, 200, 220, 240, 260, 280, 320, 360, 400, 450, 500, 550, 600, 650/ feet																																																																												
Image shift	Automatic / Manual, deepest displayed depth is 3000 (1 kW) / 3000 (3 kW) meter, hiro, fathom, Italian fathom (1 step increment) 8000 (1 kW) / 8000 (3 kW) / feet (1 step increment)																																																																												
Presentation mode	Single display      Dual display (Vertical split) <table border="1" style="display: inline-table; margin-right: 20px;"> <tr><td>N</td><td>N</td><td>N</td><td>N</td></tr> <tr><td>(H)</td><td>(L)</td><td>(L)</td><td>(H)</td></tr> </table> <table border="1" style="display: inline-table; margin-right: 20px;"> <tr><td>Z</td><td>N</td><td>Z</td><td>N</td></tr> <tr><td>(H)</td><td>(L)</td><td>(L)</td><td>(H)</td></tr> </table> <table border="1" style="display: inline-table; margin-right: 20px;"> <tr><td>M</td><td>N</td><td>M</td><td>N</td></tr> <tr><td>(H)</td><td>(L)</td><td>(L)</td><td>(H)</td></tr> </table> <table border="1" style="display: inline-table; margin-right: 20px;"> <tr><td>E</td><td>N</td><td>E</td><td>N</td></tr> <tr><td>(H)</td><td>(L)</td><td>(L)</td><td>(H)</td></tr> </table> <table border="1" style="display: inline-table; margin-right: 20px;"> <tr><td>BZ</td><td>BZ</td></tr> <tr><td>(L)</td><td>(H)</td></tr> </table> Dual display (Horizontal split)      (V-3 Div.)      (4 Div.) <table border="1" style="display: inline-table; margin-right: 20px;"> <tr><td>N</td><td>N</td><td>N</td><td>N</td></tr> <tr><td>(H)</td><td>(H)</td><td>(L)</td><td>(H)</td></tr> </table> <table border="1" style="display: inline-table; margin-right: 20px;"> <tr><td>N</td><td>N</td><td>N</td><td>N</td></tr> <tr><td>(L)</td><td>(L)</td><td>(H)</td><td>(H)</td></tr> </table> <table border="1" style="display: inline-table; margin-right: 20px;"> <tr><td>BZ</td><td>BZ</td></tr> <tr><td>(H)</td><td>(L)</td></tr> </table> <table border="1" style="display: inline-table; margin-right: 20px;"> <tr><td>M</td><td>N</td><td>N</td><td>N</td></tr> <tr><td>(L)</td><td>(H)</td><td>(L)</td><td>(H)</td></tr> </table> <table border="1" style="display: inline-table; margin-right: 20px;"> <tr><td>N</td><td>N</td><td>N</td><td>N</td></tr> <tr><td>(L)</td><td>(H)</td><td>(H)</td><td>(H)</td></tr> </table> <table border="1" style="display: inline-table; margin-right: 20px;"> <tr><td>Z</td><td>Z</td></tr> <tr><td>(L)</td><td>(H)</td></tr> </table> The following displays can be added: A-scope (except the combined picture)	N	N	N	N	(H)	(L)	(L)	(H)	Z	N	Z	N	(H)	(L)	(L)	(H)	M	N	M	N	(H)	(L)	(L)	(H)	E	N	E	N	(H)	(L)	(L)	(H)	BZ	BZ	(L)	(H)	N	N	N	N	(H)	(H)	(L)	(H)	N	N	N	N	(L)	(L)	(H)	(H)	BZ	BZ	(H)	(L)	M	N	N	N	(L)	(H)	(L)	(H)	N	N	N	N	(L)	(H)	(H)	(H)	Z	Z	(L)	(H)
N	N	N	N																																																																										
(H)	(L)	(L)	(H)																																																																										
Z	N	Z	N																																																																										
(H)	(L)	(L)	(H)																																																																										
M	N	M	N																																																																										
(H)	(L)	(L)	(H)																																																																										
E	N	E	N																																																																										
(H)	(L)	(L)	(H)																																																																										
BZ	BZ																																																																												
(L)	(H)																																																																												
N	N	N	N																																																																										
(H)	(H)	(L)	(H)																																																																										
N	N	N	N																																																																										
(L)	(L)	(H)	(H)																																																																										
BZ	BZ																																																																												
(H)	(L)																																																																												
M	N	N	N																																																																										
(L)	(H)	(L)	(H)																																																																										
N	N	N	N																																																																										
(L)	(H)	(H)	(H)																																																																										
Z	Z																																																																												
(L)	(H)																																																																												
Image split	Horizontal split: 1:1 (See NOTE), Vertical split: 1:1, Vertical split to 3 divisions: 1:1:1, Vertical split to 4 divisions: 1:1:1:1 NOTE: Zoomed horizontal split division ratio is approx 2:1.																																																																												
Audible alarm	Fish alarm, Depth alarm																																																																												
Image speed	Fixed 12 speed (4/1, 3/1, 2/1, 1/1, 1/2, 1/3, 1/4, 1/6, 1/8, 1/12, 1/16, 1/32) and stop																																																																												
Interference rejection	3 steps (Off, 1, 2)																																																																												
Color rejection	15 steps (one out of 15 colors)																																																																												
Depth marker	VRM (Variable Range Marker), scale, zoom range marker, guard zone marker, division marker, time marker, color pattern																																																																												
Controls	Brightness, gain, enhance, STC, depth range, image mode																																																																												
Auto function	Depth range, shift																																																																												
Navigation data	Ship's position (Lat/Lon every 0.001 Min, Loran C LOP), Water temperature (°C, °F, Graph display), Ship's speed (km/h, mph, kt), Own ship's bearing																																																																												
Input data format	NMEA 0183 Ver 2.0/1.5 (GGA, GLL, GTD, MTW, VTG)																																																																												
Output data format	NMEA 0183 Ver 2.0 (DBS, DBT, DPT, MTW, TLL)																																																																												
Power supply voltage	10.8 to 31.2 VDC																																																																												
Power consumption	45 W or the less at 24 VDC																																																																												
Operating temperature	-15°C to +55°C																																																																												
Waterproof grade	IPX5																																																																												

## EQUIPMENT LIST

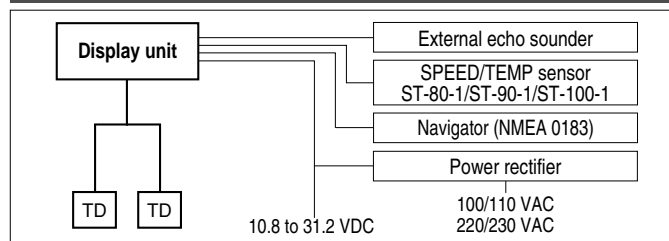
### Standard equipment

Display	CVS-841C/P	With base mount and hard cover	6.8 kg	1
DC cable	CW-253-2M	For Display Unit	2m	1
TD cable	CW-836-3M	For Transducers	3 m	1
Fuse	10 A	For Spare		1
Operation manual		English		1 set

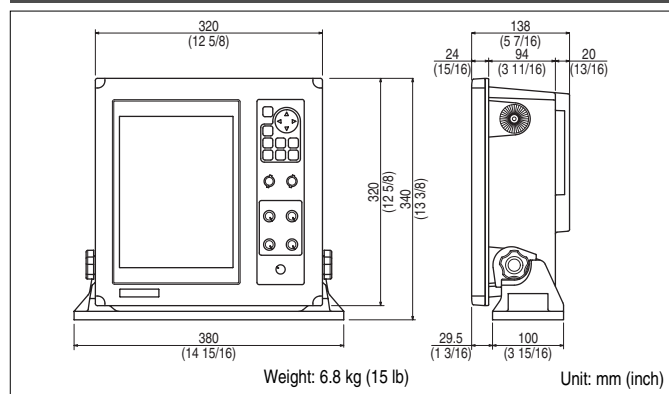
### Optional items

Temperature/speed sensor	ST-80-1	Transom (Plastic, with 9 m cable)
	ST-90-1	Inner hull (Plastic, with 9 m cable)
	ST-100-1	Through hull (Bronze, with 9 m cable)
TD Switch	J7-101	Single frequency
	J8-201	Dual frequency
Inner hull kit	MFB-04W	Plastic, applicable for 1kW only
Kingston kit	MFB-05W	Applicable for 1kW only
Junction Box for TD connections	JB-32	For dual frequency
Junction Box for Navigator unit connection	JB-10	1 input, 3 outputs x 2 circuits
	JB-12	1 input, 3 outputs, 3 inputs, 1 output
AC/DC Rectifier	PS-006	With 2 pcs of 10A fuse attached
Extension cable	VV-2D8-3M	Both ends fly leads (For power supply)
	VSV-2T11-3M red/white	Both ends fly leads (For TD)
Earthing lead	OW7/1.6S-3M	
Connectors	LTWBD-05BFFA-L180	For external sounder
	LTWBD-06BFFA-L180	For NMEA connector
	LTWBD-08BFFA-L180	For water / speed sensor

## CONNECTIONS



## DIMENSIONS AND WEIGHT



• Design and specifications are subject to change without notice.

**KODEN** Kodens Electronics Co., Ltd.

Tamagawa Office:  
2-13-24 Tamagawa, Ota-ku, Tokyo, 146-0095 Japan  
Tel: +81-3-3756-6501 Fax: +81-3-3756-6509  
Uenohara Office:  
5278 Uenohara, Uenohara-shi, Yamanashi, 409-0112 Japan  
Tel: +81-554-20-5860 Fax: +81-554-20-5875

overseas@koden-electronics.co.jp

[www.koden-electronics.co.jp](http://www.koden-electronics.co.jp)



**Safety precaution**

To ensure proper and safe use of the equipment, please carefully read and follow the instructions in the Operation Manual.

For details, please contact: