

Operation guide



Installation Instructions

- 1. Log on to Windows with in an account with the administrator rights.
- 2. Please close them if there are other running applications.
- 3. When a **RebroViewer** installation media is put into the optical drive on a PC, the installer for 32-bit or 64bit starts automatically according to the PC. Note: If the installer does not start, browse through the installation media with My Computer or Explorer and execute "RebroViewerInstaller.exe".
- The necessary software (Microsoft .NET Framework 4.0, Microsoft Visual C++ 2012 Update 4 Redistributable Package) will be installed to start RebroViewer.
 Note: In the user account control dialog, please select "allow to make changes".
- Confirm the license agreement that appears and if you agree, select "I accept the terms in the license agreement" to left-click [Next].

Follow the on-screen instructions for installation.

6. When you start RebroViewer after completion of installation, the latest version will be checked on the Internet. If the latest version exists, a web updater will start. Note: Select "allow to make changes" in the user account control dialog. Also, please allow communications for "RebroViewerUp.exe" if your security software interrupts Internet connections.

Uninstallation Instructions

Start [Start Menu]-[Control Panel]-[Program]-[Programs and Features]. Select [RebroViewer] and left-click [Uninstall].

Note: The setting file for each user remains on the computer so that it can be used even if RebroViewer is reinstalled. Delete the folders below when deleting the setting.

C: ¥User¥(Login user name)¥AppData¥Local¥NYK Systems¥RebroViewer LocalData

System requirements

OS: Microsoft Windows10, Windows8/8.1, Windows7 SP1, (64bit/32bit compatible) Graphics boards: Graphics boards or on-board chips with which DirectX9 works comfortably Display resolution: 1280×1024 (800) dots per inch or more Internet connection environments: Required (for the web update)

-RebroViewer is a free redistributable viewer.

-Always use the latest version of **RebroViewer**. If you use an older "**Viewer**" version than the "**Rebro**" on which the drawing was created, the "**Viewer**" may not correctly show the newly added functions to "**Rebro**".

-No individual support for RebroViewer is available.

1.Open a drawing

Open a Rebro drawing file.

Home Tool									
Open Den	Print ①Left-click	< [Open]. omatic hice line	Iden 🗸 Around view	Panel New window Point Change of d	▼ □ □ □ ∂ rawing ▼	CG G	 Viewpoint appointment Indication of viewpoint ment view 	•	▼3FL ▼2FL ▼1FL Setting of floor
Open	Print	Indication Hidden line p	rocess	Window			CG		Floor
Open drawing				×					
← → ~ ↑ <mark>→</mark> → T	his PC > Desktop > 2020	~	Search 2018	م					
Organize 👻 New fold	ler			III - III (?)					
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V Quick access	Machine room_sample.reb	2018/07/20 11	:16 Rebro 図面	4,796 KB					
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> 💻 This PC						a filo (* role			
> 🥩 Network					Redio di awii	ig nie (* .red	<i>)</i>).		
File r	name: Machine room_sample.reb		✓ Drawing file	(*.reb) ~ (3 Left-click [C	penj.			
			Open	Cancel					

2.Set up the displays

How to enlarge, reduce, or move screens

-Enlarge or reduce

You can enlarge or reduce a screen by rotating a wheel around the mouse position.

-Enlarge a specified area

Right-drag the area where you want to enlarge. Note: Press End key to revert to the previous display area.

-Move a screen

Press $\uparrow \downarrow \leftarrow \rightarrow$ keys.

Drag a wheel to move a screen.

Also, drag scroll bars that are placed on the right or bottom on a screen to move a screen.

-Show entirely

Left-click [Fitting of indication area] button on the status bar, or press Home key.



How to change a background color

You can select a background color either white or black.



How to switch between layer displays

You can switch between Indication/Non-indication for each layer.

Solution Home Tool			
Deen Open ✓ Continuous Open Print	List of layers Indication	Image: Construction of the construc	¥3FL ¥ZFL ¥1FL tting of floor Floor
Open Print List of layers Whole Layout group 1 - 4 direction drawing - Whole ground plan - Whole ground plan - Pipe section plan - Duct section plan - Unit plot plan	2)Select the labetween Indice # Compose Building # Compose Build	en line process Window CG F ①Left-click [List of layers]. ayout or view to switch cation/Non-indication. Ar conditioning Santary Electricity Coll and warm B B B Coll and warm B Coll and warm Coll and warm water (supply) Ar conditioning Coll and warm water (supply) Ar conditioning Coll and warm water (supply) Ar conditioning Coll water (supply) Ar conditioning Coll water (supply) Ar conditioning Coll water (returm) Ar conditioning Coll water (returm)	Floor
유 전 교 등 Air conditioning - pipe 중 전 교 등 - Duct 중 전 교 등 Sanitary - water supply and drainage 중 전 교 등 - Fire extinguishing 중 전 교 등 - Gas 중 전 교 등 Electricity		③ Left-click [Indicate] icon to change the settings.	



How to set up an automatic hidden line

If an automatic hidden line is set for the drawing that you want to open, the setting is reflected.



3. Check a drawing

How to measure a distance or an angle

You can determine a distance and coordinate values between the two specified points.



For [Distance]



The distance between two specified points appears in the result field.

For [Coordinate value]



How to measure the area

Measure the area by specifying vertices.



How to check the floor height

You can check the floor height set in a drawing.

🖭 Home Tool



As for zoom panels

You can enlarge an area around a mouse pointer on a drawing.



As for property panels

You can check attributes of an element.



As for around-view

You can show the chosen elements from another direction.



You can switch the viewpoints in around-view.



2	Left-click a pipette button and c according to the line angle.	hoose a line on the drawing to change the viewpoint							
	Switch around-view to CG display.								
b	Change transparency of CG disp	play in around-view.							
	Display or hide of element Display additionally Only drawn view Across all floor plan view Additional line Indication of the grid Setting Grid line Floor line Single line/Double line Double line indication Single line indication As original	Switch the expression of around-view. [Display or hide of element]: You can set up display or hide for each element type, and settings of CG transparency for around-view. [Display additionally]: You can switch display or hide for elements Only drawn view or Across all floor plan view. [Additional line]: You can switch display or hide for Indication of the grid, Grid line, or Floor line. [Single line/Double line]: You can switch between single-lines and double-lines in around-view.							
	Switch the automatic hidden lin	e between on and off.							
*	In the ON state, right-drag a m you to turn the around-view are	ouse to turn the around-view.Choosing an element allows ound the chosen element.							
4	Print the around-view.								
1	Save the image as an image file [Save in file]: You can save the	e. images into BMP, JPEG, GIF, TIFF, and PNG image format.							

	[Save in clipboard]: You can paste the images onto Word or Excel.
	[Send by email]: You can send the saved images by e-mail. Left-click [Setting of email
	sending point] to enter an email address, subject, and main text.
	[Setting the resolution]: You can set the resolution for a captured image.
<u>6</u>	Display additionally the selected element on the current around-view.
<u>e</u>	Hide the selected element on the current around-view.
8	Start an around-view in the same state of display.

You can start multiple around-views.



As for confirmation mode

In the case that Room, System management, Custom property, etc. are set, you can left-click

[Confirmation mode] to color-code and show drawings or CGs.



For Color-coding, Custom property, Zone type, etc., confirm at "▼" next to the "Confirmation mode" icon.

Confirm system management Color-code each line of routes that is System management ۱. System management set for the element. Floor Floor+Room Color coding Supply air/Duct Room Blink segment Supply air/Hopper Custom property Circuit number • Supply air/Elbow Supply air/straight tap-in (Hopper) Zone ► Outside air/Duct Control area of board Outside air/S pipe Quit confirmation mode 🔀 😽 Confirmation mode 16133 3255 **□**?₀ 4 zza 🛛 🔄 jaugt 1556 zz 🕫 🖓 😨 Talegit 🔤 🖓 📰 🖓 🔛 The line of routes that is set for the element will have a color.









Confirm control area of board



How to detect clashes

You can confirm the clash detection results by opening the drawing for which Rebro detected clashes.



Need t output output Positio Numb	o execute detect clash and editing / of detect clash result in Rebro Detect cla result of detect clash needs to be done in in of interference List of exclusion per of indication(62) / The number of clas	sh and edit / Rebro. shes(62)					On the drawing, switch between balloon shapes, or Indication/Hide for clash points.
Filter						~	
NO.	©Element name @Element name	X	Y	Z	The quantity of clashes (upper)	The quantity of clas	shes (lower)
1	Waste water Pipe Floor 150H	X1+0	Y3+2800	4FL+3650	657	123	
2	Waste water Pipe Floor 150H	X1+0	Y4-1300	4FL+3650	677	123	
3	Waste water Pipe Floor 150H	X1+1884	Y3+2022	4FL+3725	686	446	
4	Water supply Pip Floor 150H	X1+1784	Y3+2022	4FL+3725	263	412	
5	Waste water Pipe Floor 150H	X1+284	Y3+2022	4FL+3725	670	446	
6	Water supply Pip Floor 150H	X1+984	Y3+2022	4FL+3725	263	412	
7	Water supply Pip Floor 150H	X1+184	Y3+2022	4FL+3725	263	412	
8	Ventilation Pipe 5 Beam 200×600H	X2+5	Y4-2854	4FL+3300	381	281	
9	Waste water Pipe Floor 150H	X1+1084	Y3+2022	4FL+3725	678	446	
10	Soil water Pipe 80A Floor 150H	X1+1360	Y4-478	4FL+3725	843	151	
11	Soil water Pipe 1 Floor 150H	×1+1000	Y4-1000	4FL+3725	817	1323	
12	Waste water Pipe Floor 150H	X1+357	Y4-543	4FL+3725	672	151	
13	Ventilation Pipe 1 Floor 150H	X1+500	Y4-150	4FL+3725	6551	1165	
14	Spiral duct fitting (Spiral duct fitting (X1+1915	Y4-326	4FL+3201	125	158	
						Left the	t-click the table to confirm e quantity of clashes.

When you double left-click the table or balloon, CG screen appears and brings the viewpoint close to the clash point.



How to search for characters and so on

By entering keywords, you can search for characters, parts and so forth on the drawing.





If you select the part from the search results, you can confirm the part on a drawing, around-view, or CG.

[Layer]Equipme

1FL+339 . 10 [Equipment number [Maker name] Start CG

How to capture images

You can save a specified area on Rebro screen as an image.



4.CG

۲	Home	Tool

🕙 Home Tool							
Deen	Print Ust of layers	Automatic hidden -	Around view Panel	▼ □□□□∂ awing ▼	CG CG From ourrent vi	vpoint appointment cation of viewpoint vew	₩3FL ₩2FL ₩1FL Setting of floor
	min indication	Hidden line process	Window			,a	FIOOI
		2CG anot	screen starts in her window.			①Left-click [(CG].

As for mouse actions

Wheel	Go forward or backward by rotating. Move the screen by dragging.
Left-drag	Turn the screen up, down, left, and right around the current position.
Right-drag	Rotate the screen around the position (on the element) where the mouse points.
Double left-click (sweeping)	Bring the viewpoint closer to the specified element.
Double right-click	Make the screen level.

Note: If you rotate the wheel while pressing Ctrl, the screen moves at twice the distance.

How to operate screens on a CG console panel

•	•	CG conse	ole	×
Forward or backward	Move the viewpoint forward or backward.	NR	Forward	Pan(Up)
Turn to the left or turn to	Turn the viewpoint to the left or right.	Turn upwar	de	9 100 mm
the right		🕨 - Tu	integ C	× Pan(Down)
Turn upward or turn	Turn the viewpoint upward or downward.	th Turr	e left 1₽ t	he right
downward		downw	ard Backward	
Slider handle	Adjust the speed and quantity of movement	Move	1000 mm	
	when moving on the screen.	Height	1500 mm 🖌 1FL	Fix height
Move	Specify a moving distance. Set the distance at	a		
	pitch of one-click for moving forward or backw	ard.		
Pan (Up) or (Down)	Move the viewpoint up or down at the input va	lue.		
Pan (Left) or (Right) < 🕨	Move the viewpoint to the left or right.			
Height	Select the floor name and enter the viewpoint			
	height directly to move the screen.			
Fix height	Checkmark in the box, to fix the current height			
	and move the screen forward, backward, left,	or		
	right.			

As for layers

On CG screens, you can set up Indication/Non-indication layers and layers transparency.



As for a movie

You can play movies created with Rebro, or [CG movie output] output with [Clash detection].



As for Scenes

You can register the currently shown CG screen as Scene, and fill out with characters, dimension lines, or figures on it by using [Annotation] tab.

The registered Scene can be printed, saved, and also passed to Rebro.



Comments on Scene can be exchanged in [Comment] tab. You can also pass the data to Rebro, if you save or read in BCF, you can pass it to other CAD.



As for equipment

You can check the position of placed parts on CGs or drawings.



As for hyperlinks

On CG, you can refer to the linked files or URLs for the equipment that you set up hyperlinks.



How to cut a cross section

You can cut a cross section of element on CG.



How to set up the displays and so on

In [Setting] 🚳 , you can set up the indications and movements on CG screens.



As for "Drawing mode"

"High-speed quality mode": Move a screen even in the middle of drawing while keeping the image quality of Quality mode.

"Quality mode": Move a screen after showing all elements.

"Performance mode": Move a screen while drawing the screen.

Indication	CG - Movement			
Other format file Operation environment Other format file Operation environment Operation environment Operation environment Operation Other format Other for	Operation of console Distance to move in 1 click 100 Height to move in 1 click 100 Angle for direction to turn in 1 click Angle for elevation to turn in 1 click Distance to move for one second Direction angle to instate for one second Distance to move for one second Angle to rotate for one second	0 mm mm 10° 2000 mm nd 45° 100 mm 0.7°	Action of sweep Distance with aim Angle with aim(0~30') Distance to move for one Operation of mouse Distance to move with 1 w Angle to turn at 1mm	2000 mm 45 ° second 3000 mm heel 1000 mm 3 °
	Drawing mode High-speed quality mode # High-speed quality mode make Quality mode Deformance mode Frame ra- Display current coordinate on CG	e data for high-speed te 0.15	indication, and improves drawin	g speed.

5.Print

How to print

You can print Rebro drawings.



When printing, you can change the line thickness per scale in [Pen setting].

Pen setting													>	< .
Set name	Normal		~	New addition	(Сору	Read	from file						
				Change of na	ame		S	ave in a file						
Thickn	Remarks	1/10	1/20	1/30	1/50	1/100	1/200	1/300	1/400	1/500	1/600	1/601	^	
0.01mm	The thinnest lin	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01		
0.05mm		0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05		
0.07mm		0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07		
0.09mm		0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09		
0.10mm		0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1		Dripting line thickpasses per
0.13mm		0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13		Printing line tricknesses per
0.15mm		0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15		
0.18mm		0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18		
0.20mm	Pipe arrangeme	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2		
0.25mm	1	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	~	
1.5 times	✓ does item	which I chose	P	erformance			-					-		
Reset											OK	Cance	;	
	Line thic	knesses	on th	ne drawi	ing									

How to print continuously

You can print layouts of multiple Rebro drawings collectively.



②Select a printer.	Continuous printing						×
③Select multiple drawing files in [Addition of file]. You can also select drawing files collectionly by	Printer name Output setting Monochrome Print painting Change scale of line class, thickness to print scale Print unoperatable layers with original color Print the external reference data with an original color Delation of file	Gray scale	Paper setting Number of copies 1 Paper size A4 (210 x 22 Paper direction O length Paper feed tray	Property	Pen setting Print scale © Equal C Filtering Drawing size V Mark 0 Mark 0	Setting of the offset) Fit to paper A1(841mm×594mm) ☑ Mark@ ☑ Mark@] ~
specifying a folder with [▼] on the right of the tab.	File name CG-eng.reb CG.eng.reb CG-eng.reb CG.eng.reb CG-eng.reb	Layout name Layout group Layout group Layout group	1-Whole ground plan 1-Section plan of pipe 1-Equipment layout drawing	Drawing size A1(841mm×594mm) A1(841mm×594mm) A1(841mm×594mm)	Mark 0 Mark 0 Mark 0 Mark 0	State	
④Checkmark the layout to print.	OFFice building en reb	Sanitary,Air o Sanitary,Air o Sanitary,Air o Sanitary,Air o Sanitary,Air o	onditioning, Electricity-5F Sa onditioning, Electricity-4F Duct onditioning, Electricity-RF Ele onditioning, Electricity-Groun onditioning, Electricity-4 direc	A1(841mm×594mm) A1(841mm×594mm) A1(841mm×594mm) A1(841mm×594mm) A1(841mm×594mm)	Mark® Mark® Mark® Mark® Mark®		
L]	Select all Cancel all Number of drawin	ngs(8)			Print	Close	

⑤Left-click [Print].

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